



Whatcom County

COUNTY COURTHOUSE
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Agenda Bill Master Report

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Assigned to:	Council	Final Action:	09/24/2024		
Agenda Date:	09/24/2024	Enactment #:	ORD 2024-047		

Related Files:

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TITLE FOR AGENDA ITEM:

Ordinance adopting the 2020 Shoreline Management Program Periodic Update

SUMMARY STATEMENT OR LEGAL NOTICE LANGUAGE:

An ordinance adopting the 2020 Shoreline Management Program, including amendments to the Whatcom County Comprehensive Plan (Chapters 8 (Resource Lands), 10 (Environment), and 11 (Shorelines)) and WCC Titles 22 (Land Use & Development) and 23 (Shoreline Management Regulations), and WCC Chapter 16.16 (Critical Areas)

HISTORY OF LEGISLATIVE FILE

Date:	Acting Body:	Action:	Sent To:
09/10/2024	Council	INTRODUCED FOR PUBLIC HEARING Aye: 7 Buchanan, Byrd, Donovan, Elenbaas, Galloway, Scanlon, and Stremier Nay: 0	Council
09/24/2024	Council	ADOPTED Aye: 6 Buchanan, Byrd, Donovan, Galloway, Scanlon, and Stremier Nay: 1 Elenbaas	

Attachments: Staff Report (revised), Ordinance, Exhibit A - CP Ch. 10 Env't, Exhibit B - CP Ch. 11 Shorelines, Exhibit C - CP Ch. 8 MRL, Exhibit D - WCC Title 23 SMP, Exhibit E - WCC Title 22 Permitting, Exhibit F - WCC 16.16 CAO, Exhibit G - Shoreline Map, Exhibit I - No Net Loss Memo, Exhibit J - Restoration Plan Addendum

PROPOSED BY: _____

INTRODUCTION DATE: September 10, 2024

ORDINANCE NO. 2024-047

AN ORDINANCE ADOPTING THE 2020 SHORELINE MANAGEMENT PROGRAM, INCLUDING AMENDMENTS TO THE WHATCOM COUNTY COMPREHENSIVE PLAN (CHAPTERS 8 (RESOURCE LANDS), 10 (ENVIRONMENT), AND 11 (SHORELINES)) AND WCC TITLES 22 (LAND USE & DEVELOPMENT) AND 23 (SHORELINE MANAGEMENT REGULATIONS), AND WCC CHAPTER 16.16 (CRITICAL AREAS)

WHEREAS, the Shoreline Management Act (SMA) requires Whatcom County to develop and administer a Shoreline Master Program (SMP); and,

WHEREAS, Whatcom County is subject to the requirements of the Washington State Growth Management Act (GMA), RCW 36.70A.480 'Shorelines of the State; and,

WHEREAS, on February 27, 2007 (Ordinance # 2007-017), Whatcom County adopted a comprehensive update to the SMP as required by law. This comprehensive SMP update review included but was not limited to assessment of ecological functions, baseline conditions, and SMP environmental designations. This local adoption was approved by the Washington State Department of Ecology (Ecology); and,

WHEREAS, the Washington State Shoreline Management Act (SMA), RCW 90.58.080 (4)(a)(ii), mandates Whatcom County shall periodically review its SMP every 8-years. This periodic update was due June 30, 2021. The purpose of this periodic review is to update the local SMP to reflect changes to state law and associated rules and guidance, ensure internal consistency with the Whatcom County Comprehensive Plan and associated development regulations, as well as provide an opportunity to improve usability and predictability of the SMP; and,

WHEREAS, the GMA, RCW 36.70A.130(1), also mandates that Whatcom County's Comprehensive Plan and development regulations are subject to continuing review and evaluation; and,

WHEREAS, the review process is intended to bring the SMP into compliance with requirements of the act or state rules that have been added or changed since the last SMP amendment, ensure the SMP remains consistent with amended comprehensive plans and regulations, and incorporate amendments deemed necessary to reflect changed circumstances, new information, or improved data; and,

WHEREAS, Whatcom County Planning and Development Services (PDS) applied to make various amendments to Whatcom County's Shoreline Management Program (PLN2020-00006); and,

WHEREAS, on May 21, 2019, and in accordance with WAC 173-26-090(3)(a), Whatcom County developed a public participation program for this periodic review in to inform, involve, and encourage participation of interested persons and private entities, tribes, and applicable agencies having interests and responsibilities relating to shorelines, which was submitted to Ecology; and,

WHEREAS, Whatcom County has followed its adopted public participation program, including:

- a. A dedicated project webpage;

- b. Legal notices published in the official newspaper of record for Whatcom County;
- c. Electronic announcements and notifications to:
 - Subscribers of relevant lists in the Kitsap County Electronic Notification System;
 - Relevant County advisory groups; and
 - Relevant local, state and federal agencies, and community groups;
 - Federally recognized tribes with usual and accustomed areas in Whatcom County and relevant tribal organizations;
- d. Three public open houses;
- e. Meetings with citizen advisory groups and various interested parties;
- f. Two 30-day public review periods of the amendments, one prior to the Planning Commission review workshops (August – September 2020) and a joint public comment period with the Department of Ecology prior to their joint public hearing (March – April 2021).
- g. Eleven public workshops and a joint public hearing with the Planning Commission and Department of Ecology; and
- h. Ten public workshops and public hearings with each of the Planning Commission and County Council; and,

WHEREAS, Whatcom County used Ecology’s checklist of legislative and rule amendments to review amendments to chapter 90.58 RCW and department guidelines that have occurred since the master program was last amended, and determine if local amendments are needed to maintain compliance in accordance with WAC 173-26-090(3)(b)(i); and,

WHEREAS, with the assistance of a consultant and development of a consistency analysis, Whatcom County PDS proposed amendments to the Whatcom County Comprehensive Plan (Chapters 8 (Resource Lands), 10 (Environment), and 11 (Shorelines)) and WCC Titles 22 (Land Use & Development) and 23 (Shoreline Management Regulations), and WCC Chapter 16.16 (Critical Areas); and,

WHEREAS, following review and approval by the Whatcom County Council, a public participation plan, consistency analysis, and scoping document was developed to aid in developing the draft amendments; and,

WHEREAS, Whatcom County reviewed changes to the comprehensive plan and development regulations to determine if the shoreline master program policies and regulations remain consistent with them in accordance with WAC 173-26-090(3)(b)(ii); and,

WHEREAS, Whatcom County considered whether to incorporate any amendments needed to reflect changed circumstances, new information or improved data in accordance with WAC 173-26-090(3)(b)(iii); and,

WHEREAS, the Whatcom County Planning Commission and County Council held public hearings on July 25 and August 7, 2019 (respectively) to receive testimony on topics the public believed should be addressed during the periodic review; and,

WHEREAS, the Whatcom County Planning Commission completed a review of staff recommendations and prepared initial amendments; and,

WHEREAS, Whatcom County consulted with the Department of Ecology early and often during the drafting of the amendments. Whatcom County worked collaboratively with the Department of Ecology

to address local interests while ensuring proposed amendments are consistent with the policy of RCW 90.58.020 and applicable guidelines in accordance with WAC 173-26-104; and,

WHEREAS, a State Environmental Policy Act (SEPA) environmental checklist was prepared and the Whatcom County SEPA responsible official issued and circulated a copy of the checklist and a Determination of Non-Significance (DNS) on February 18, 2021; and,

WHEREAS, Whatcom County conducted a formal joint public comment period with the Department of Ecology in compliance with requirements of WAC 173-26-104; and,

WHEREAS, Whatcom County published a legal notice in the Bellingham Herald on April 17, 2021, for a public hearing on the proposed staff recommendations, including a statement that the hearings were intended to address the periodic review in accordance with WAC 173-26-090(3)(c)(ii); and,

WHEREAS, the Planning Commission took public testimony on the proposed staff recommendations at a public hearing on April 22, 2021; and,

WHEREAS, the Planning Commission reviewed the public testimony and written comments on the proposed SMP revisions, and suggested revisions to the proposed amendments; and,

WHEREAS, the Planning Commission recommended approval of the proposed amendments and forwarded it to the County Council for review and adoption on May 13, 2021; and,

WHEREAS, notice of the subject amendments was submitted to the Washington State Department of Commerce on March 12, 2021, for their 60-day review in accordance with WAC 173-26-100(5); and,

WHEREAS, the Council held six public workshops to review the Planning Commission's recommendations; and,

WHEREAS, a Council Public Hearing Notice was posted in the Bellingham Herald on November 14, 2021; and,

WHEREAS, the Council received public testimony at the public hearing of November 23, 2021, and reviewed said public testimony and written comments at a study session on December 7, 2021; and,

WHEREAS, after considering all public comments and evidence, the Council determined that the proposed amendments comply with all applicable laws and rules; and,

WHEREAS, as evidenced by the recommendation of the Surface Mining Advisory Committee, Title 23 already meets Council's intent to allow sand and gravel extraction within shoreline jurisdiction under certain circumstances as described in PLN2019-00011 and thus no amendments are proposed to achieve this; and,

WHEREAS, on June 25, 2024, the County received Ecology's conditional approval, requiring that three amendments be made, and which were incorporated into the attached exhibits; and,

WHEREAS, on September 24, 2024, the County Council held a duly noticed public hearing to receive comments on and consider Ecology's required three amendments; and,

WHEREAS, RCW 36.32.120(7) provides that the county legislative authorities shall make and enforce, by appropriate resolutions or ordinances, all such police and sanitary regulations as are not in conflict with state law; and,

WHEREAS, the amendments are consistent with the Shoreline Management Act, Growth Management Act, Whatcom County Comprehensive Plan, and other applicable requirements; and,

WHEREAS, the proposed amendments reflect current local circumstances and promote the general public health, safety, morals and welfare; and,

WHEREAS, on December 7, 2021, the County Council approved Resolution 2021-056, declaring the Council's approval and intention to adopt the proposed periodic update, and authorizing Planning and Development Services to forward the periodic review documents to the Department of Ecology for its review and approval; and,

WHEREAS, on May 10, 2022, the County Council, via Resolution 2022-027, amended Resolution 2021-056, to make further amendments, including a few errors, but primarily to comply with a settlement agreement with the Petitioners in Western Washington Growth Management Hearings Board Case No. 18-2-0001, in which the Council agreed to consider certain amendments to WCC Chapter 16.16; and,

WHEREAS, the Whatcom County Council held an additional duly noticed public hearing on May 24, 2022, to receive testimony on the proposed amendments; and,

WHEREAS, Resolution 2022-027 again authorized Planning and Development Services to forward the periodic review documents to the Department of Ecology for its review and approval; and,

WHEREAS, the Department of Ecology completed its review and on June 25, 2024, conditionally approved the proposed periodic update, requiring three amendments to Exhibits D and F; and,

WHEREAS, on September 17, 2024, the County Council held a public hearing to receive public testimony and consider these required amendments and agreed to make them, as shown in Exhibits D and F of this ordinance; and,

WHEREAS, this completes the County's required process for periodic review in accordance with RCW 90.58.080(4) and applicable state guidelines (WAC 173-26).

NOW, THEREFORE, BE IT ORDAINED BY THE WHATCOM COUNTY COUNCIL:

Section 1. Review and Evaluation. The Council hereby finds that the review and evaluation required by RCW 90.58.080(4) has occurred, as described in the recitals above.

Section 2. Revisions. The Whatcom County Comprehensive Plan, Chapters 8 (Exhibit C), 10 (Exhibit A), and 11 (Exhibit B); Whatcom County Code Titles 22 (Exhibit E) and 23 (Exhibit D) and Chapter 16.16 (Exhibit F); the Official Shoreline Map (Exhibit G); Whatcom County's No Net Loss Analysis (Exhibit I); and Whatcom County's Shoreline Restoration Plan (Exhibit J) are hereby amended to read as set forth in the exhibits, which are attached to this ordinance and incorporated herein by this reference. The remaining portions of the County's SMP shall remain unchanged.

Section 3. Adoption. The Council hereby finds the amended SMP consistent with the requirements of RCW 90.58 and WAC 173-26, as they apply to these amendments, and adopts of the above referenced exhibits attached to this ordinance.

Section 4. Effective Dates. The amendments shall become effective as follows:

- a) The amendments to Exhibits A, B, C, G, I, and J shall become effective 14 days from the Department of Ecology's written notice of final action.
- b) The amendments to Exhibits D, E, and F become effective 14 days from the Department of Ecology's written notice of final action or January 1, 2025, whichever is the latter so that Planning and Development Services can have time to advise the public, consultants, and staff on the changes to the code.

Section 5. Scrivener's Errors. Staff is authorized to work with Code Publishing to correct and update any cross-references made ineffective by these amendments or other scrivener's errors.

Section 6. Severability. Should any part of these regulations be held to be illegal, unconstitutional, or otherwise unenforceable, the remainder of the regulation shall still apply.

ADOPTED this 24th day of September, 2024.

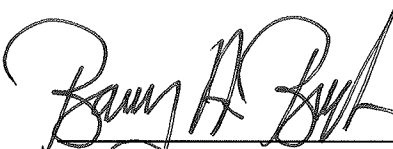
WHATCOM COUNTY COUNCIL
WHATCOM COUNTY, WASHINGTON

ATTEST


Cathy Halka, Council Clerk

APPROVED as to form:


George Roche, Civil Deputy Prosecutor


Barry Buchanan, Council Chair

☒ Approved () Denied


Satpal Sidhu, Executive

Date: 9/30/24

Chapter Ten Environment

Introduction

Each person in Whatcom County has a fundamental right to a healthful and safe environment in which to live and grow. With this right comes a responsibility to contribute to the protection and enhancement of our natural environment. Consequently, an important goal of the Whatcom County Comprehensive Plan is to protect or enhance the county's environmental quality. This means that, individually and collectively, we have the obligation to protect these resources for our children and their children. Essential to this is the establishment of safe development practices and patterns that do not significantly disrupt ecosystems and that ensure the continuation of ample amounts of clean water, natural areas, farmlands, forest lands, and fish and wildlife habitat.

Chapter Organization

This chapter is composed of an introduction and four sections organized by topic heading. The first section, entitled "General Environmental Management," addresses general environmental goals and policies. The remaining three sections deal with Natural Hazards, Water Resources, and Ecosystems. Together, the sections of this chapter provide the direction necessary to ensure and promote long-term sustainability of the environment in Whatcom County.

Purpose

Whatcom County's natural environment, with its seasonally abundant supply of water, its beauty, and its other natural resources, has attracted people to our community for generations. This setting is important to our sense of well-being, to our health, to our economic well-being, and to our future. Sustaining these assets in the face of increasingly intense human activity becomes more difficult each year. The challenge of protecting this environment while accommodating growth requires maintaining guidelines for development so that growth does not ultimately overrun the very assets that brought most of us here. The purpose of this chapter is to create such guidelines.

GMA Goals and Countywide Planning Policies

GMA Planning Goal 10, "Environment" (RCW 36.70A.020(10)), provides the directive for much of this chapter. It requires Whatcom County to "protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water." In addition, some of the goals and policies of this chapter support Planning Goal 9, "Open Space and Recreation" (RCW 36.70A.020(9), which directs the county to "conserve fish and wildlife habitat."

Relative to environmental protection, Whatcom County's Countywide Planning Policies (CWPP) give the most attention to water issues. They state, "The quality of life and economic health of Whatcom County communities depend on the maintenance of a safe and reliable water supply. All jurisdictions and water purveyors

1 should cooperate to ensure the protection and quality of the area's water resources."
2 Specific policies address water, promoting inter-jurisdictional cooperation in
3 conserving, protecting, and managing the water resource, and in reducing water
4 pollution (CWPP Policies N.1 – 6). The CWPPs also support protecting wildlife habitat
5 and corridors, natural drainage features, and "other environmental, cultural and
6 scenic resources."

7 **GMA Requirements**

8 The GMA requires Whatcom County to identify and manage critical areas in such a
9 manner as to prevent destruction of the resource base and reduce potential losses to
10 property and human life. The GMA has identified Critical Areas to include the following
11 areas and ecosystems:

- 12 • Wetlands
- 13 • Critical Aquifer Recharge Areas
- 14 • Fish and wildlife habitat conservation areas
- 15 • Frequently flooded areas
- 16 • Geologically hazardous areas

17 **Environmental Setting**

18 Whatcom County bedrock geology can be divided into five bedrock geologic
19 provinces. From east to west these provinces are the Methow terrain, the Cascade
20 Crystalline Core, the Northwest Cascades System, the Fraser Lowland, and the San
21 Juan Island system. Tectonic activity over the past 15 million years has created the
22 present North Cascades and the formation of Mount Baker, a 10,000-foot high
23 composite volcano.

24 The mountains of Whatcom County, as well as the streams, lakes, valleys, hills, and
25 shoreline features are the result of millions of years of geologic events. Over 2.5
26 million years ago, during the Ice Ages, glacial ice invaded the Puget Sound lowlands
27 from the north at least four times, with the last major glacial event, the Fraser
28 Glaciation, ending approximately 12,000 years ago. A minor advance of glacial ice,
29 the Sumas Advance, ended approximately 10,000 years ago. The ice formed from
30 the accumulation of snow in the British Columbia Coast Range and interior of British
31 Columbia. Numerous glaciers are still present within the mountains of Whatcom
32 County, and some of these mountain glaciers formerly extended far down the
33 mountain valleys of the County. The underlying bedrock was deeply eroded during
34 these glacial events creating very steep mountainsides, and in some areas,
35 particularly in northwestern Whatcom County, a thick sequence of glacial related
36 sediments was deposited. The glacial ice was approximately 6,000 feet thick in the
37 vicinity of Bellingham.

38 Two main glacial advances are the most important to our area, the Salmon Springs
39 glaciation and the later Vashon glaciation. Each time the massive glacier advanced,
40 it dammed up the Puget lowlands to form a huge lake. As the floating ice melted,
41 sand, gravel, clay and occasional boulders would melt out of the ice and fall to the
42 sea floor. This deposit, the Bellingham Drift, covers the ground surface over a large
43 area of western Whatcom County. Each time the Ice Age glacier advanced, it also
44 compacted underlying sediments with its great weight. It created a concrete-like

1 material called "till" (also known as "hardpan") beneath it. Because the Bellingham
2 Drift consists primarily of clay and silt, it is relatively impermeable; water tends to
3 accumulate on the ground surface. Wetlands are common on the Bellingham Drift.

4 On the bottom of the lake, "rock flour", the finely ground remains of rocks pulverized
5 by glacial action, settled out. These deposits became the familiar "blue clays" of the
6 Puget lowland. The milky color of the Nooksack River is due to the same kind of rock
7 flour, created by glacial activity on the slopes of Mount Baker.

8 Additionally, each time the glacier retreated, water from the melting ice deposited
9 thick layers of sand and gravel known as "outwash." The outwash areas are typically
10 where we find our most productive aquifers, since these loose sands and gravel are
11 porous and drain rapidly. While these areas absorb rainwater for our later use from
12 wells, they are also vulnerable to contamination. An example of this phenomenon is
13 found in the outwash sands and gravels resulting from the Sumas Advance. Large
14 meltwater streams and rivers flowed from this glacier depositing the Sumas Outwash
15 sands and gravels. The Sumas Outwash sands and gravels make up the best non-
16 floodplain farmland in the County and some of the highest quality construction gravel
17 deposits. Abandoned outwash channels were formerly used as sources of peat.

18 Each of these glacial sediments, lake bed deposits, till and outwash is present in
19 various places and in varied combinations in Whatcom County. These sediments
20 provide both the formations that hold the groundwater for many of the area's wells,
21 and the parent material for most of the different soils.

22 Out of these long physical processes a complex natural ecology has emerged that
23 supports a diversity of wildlife. Many of our lakes, rivers, and streams support fish
24 including, but not limited to, native species such as the five pacific salmon (Chinook,
25 Coho, Sockeye, Chum, Pink) as well as Steelhead, Rainbow Trout, Cutthroat (coastal
26 and resident), Bull Trout, and Dolly Varden. Every year salmon return to spawn in
27 the streams and rivers of Whatcom County. Whatcom County is located within the
28 Pacific Migratory Flyway and serves as a stopover and critical habitat area for many
29 migratory birds. Bufflehead and goldeneye ducks winter here. Additionally, numerous
30 bird species including scoters, snow geese, trumpeter swans, canvasbacks,
31 cormorants, grebes, loons, and other migrating waterfowl pass through every spring
32 and fall as they travel between their breeding grounds in Alaska and Canada and
33 their wintering grounds in California and Mexico. Mallards, Canada geese, great blue
34 herons, and numerous songbirds live in the county year-round. Maintaining these
35 unique resources is a high priority for both present and future county residents.
36 Whatcom County is home to a distinct subspecies of the Great Blue Heron, which has
37 the third largest colony in the Puget Sound area. The wetlands, fields, streams, and
38 nearshore habitat in the county support many birds of special concern, such as the
39 bald eagle (protected under the Bald and Golden Eagle Protection Act), the pileated
40 woodpecker (candidate for State threatened list), and the peregrine falcon (ESA
41 candidate species). The National Audubon Society has designated Semiahmoo,
42 Drayton Harbor, and Birch Bay as "Important Bird Areas."

1 Environmental Management

2 Introduction

3 General environmental goals and policies are intended to provide guidance for
4 environmental management that will promote environmental protection and good
5 stewardship practices through a balance of public education and involvement;
6 incentives, acquisition, and voluntary programs; land use planning and regulations;
7 environmental monitoring; and intergovernmental cooperation. These goals and
8 policies are also intended to provide guidance to County government as it assists its
9 citizens in maintaining a balance between individual property rights, economic
10 development, and environmental protection.

11 Background Summary

12 Development in the last 100 years has had a significant impact on the natural
13 environment in Whatcom County. At the turn of the 20th century, some areas
14 surrounding Lynden, Sumas, and Ferndale were logged, drained, and converted to
15 agricultural land and other types of development. In the intervening years, many of
16 the remaining forests were logged, many streams re-routed and channelized, and
17 much of the native vegetation removed and replaced with a wide variety of introduced
18 vegetative types. Roads now crisscross most areas, with homes, farms, businesses,
19 and industries scattered throughout the county.

20 Issue, Goals, and Policies

21 There are designated lands in Whatcom County that can still accommodate
22 development. Whatcom County also has areas that are sensitive to human activity,
23 including wetlands, streams, lakes, and marine shorelines, and lands that can pose
24 a hazard to the community, including floodplains and unstable slopes. In these areas
25 development must be carefully planned or limited to maintain environmental quality
26 and public safety. This can be done through the creation and implementation of goals
27 and policies that seek to reduce hazards and prevent adverse environmental impacts.

28 Community and Environmental Protection

29 The elements of the natural environment: water, air, soil, plants, and animals; are
30 interconnected and interdependent, functioning as one dynamic ecosystem.
31 Environmental resources within this ecosystem are extensive and, in some cases,
32 irreplaceable. They provide important beneficial uses to the community such as: the
33 supply of clean drinking water; management of stormwater run-off and flood hazard
34 management; support for a wide variety of fish and wildlife; fresh air; and a sense
35 of place in which residents invest, enjoy, and expect.

36 Some of these same resources result in serious environmental constraints or pose a
37 hazard to development and a danger to the community. Flooding in the Nooksack
38 River is frequent and impacts much of the valley floor. There are numerous wetlands
39 and hydric soils throughout the lowlands that provide critical wetland functions and
40 are generally unsuitable for development. The steep gradient and geologic structure
41 of the mountain ranges in conjunction with heavy annual precipitation can contribute
42 to slope instability and flood-prone drainage basins.

Much of the environmental degradation and destruction to property occurs as a result of a lack of information or understanding rather than willful action. Ecosystems are subtle and complex. Too often both their benefits and hazards are not readily apparent to the community. Additionally, baseline information is not always available to help identify the real costs or hazards of building in Whatcom County. There is a need for further research and education.

Goal 10A: Protect natural resources and systems, life, and property from potential hazards.

Policy 10A-1: Support good stewardship of Whatcom County lands, and apply this principle to the management of public lands.

Policy 10A-2: Protect the environment through a comprehensive program that includes voluntary activity, education, incentives, regulation, enforcement, restoration, monitoring, acquisition, mitigation, and intergovernmental coordination.

Policy 10A-3: Continue to identify, designate, and protect Critical Areas and other important environmental features.

Policy 10A-4: Manage designated Critical Areas as needed, to minimize or protect against environmental degradation and reduce the potential for losses to property and human life.

Policy 10A-5: Actively pursue voluntary, cooperative, and mutually beneficial efforts aimed at advancing county environmental goals.

Policy 10A-6: Aim to meet or exceed national, state, and regional air quality standards. Work with the Northwest Clean Air Agency to ensure compliance with applicable air quality standards.

Policy 10A-7: Using Best Available Science, support efforts to educate and inform the public as to the benefits of a healthy and viable environment, ecologically fragile areas, and their economic and social value.

Policy 10A-8: Lead and/or coordinate efforts with property owners, citizen groups, and governmental and non-governmental agencies in furthering Whatcom County's environmental goals and policies.

Policy 10A-9: Cooperate with state and federal agencies and neighboring jurisdictions to identify and protect threatened and endangered fish and wildlife species and their habitats.

Policy 10A-10: Support acquisition, conservation easements, open space, and other such programs to protect high-value natural areas as identified through the GMA planning process, the Natural Heritage Plan, the state Priority Habitats and Species (PHS) program, the Lake Whatcom Management Program, and other sources.

Policy 10A-11: Designate high-value open space and natural areas for acquisition, conservation easements, open space, and other such programs to protect these natural areas upon request or consent of the property owner.

Policy 10A-12: Broadly inform the people of Whatcom County of the locations of potential development constraints associated with natural conditions. Information should include known natural hazards and an assessment of the potential danger to both the property owner and the public.

Administration and Regulation

There are currently a multitude of regulations and administrative processes at the federal, state and local level that, together, have become excessive and difficult to understand. Conflicting regulations and complicated administrative processes can create undue hardship on community members and result in reduced levels of environmental protection.

Goal 10B: Simplify and harmonize regulations relating to the identification, delineation, and protection of environmental features.

Policy: 10B-1: Develop, as a significant component of a comprehensive environmental management program, non-regulatory measures that include voluntary activity, education, incentives, restoration, acquisition, advanced mitigation (i.e., mitigation done in advance of impacts), and intergovernmental coordination.

Policy 10B-2: Provide incentives for good stewardship of the land through the use of non-regulatory and innovative land use management techniques.

Policy 10B-3: Support education as an important tool in developing public appreciation for the value of ecosystems and provide the public with informational materials and presentations relating to natural system functions, regulations, and issues.

Policy 10B-4: Promote cooperation and coordination among involved government agencies when multiple agencies have jurisdiction over aspects of a single project.

Policy 10B-5: Process the environmental review of building and development permit applications within an established timeframe that is predictable and expeditious.

Policy 10B-6: Provide clear, timely, appropriate, and understandable direction to citizens, developers, and property owners.

Policy 10B-7: Ensure regulations are as simple and easy to understand as possible and maintain effective inspection, compliance, and enforcement measures as necessary.

The Environment and Property Rights

Prior to the 1970s, growth in Whatcom County was relatively slow and received little management. As a result, private property owners were left to their own resources as they determined how best to use their land. However, as increasing numbers of

people moved to this area and settled, a greater demand was placed on Whatcom County's natural resources.

The problems that arise from this situation have caused many to realize what one person does with his/her property may have an impact on the larger environmental system that sustains us as a community and on the rights of other property owners.

Land use decisions can no longer be considered exclusively private matters. We are aware public actions impact every private citizen in Whatcom County and private actions may have public consequences as well. To that end, the law must protect the public good from detrimental private actions. Nevertheless, the right of the individual to use his or her property, within the bounds permitted by law, is a value supported by law and the community and must be recognized when making land use decisions in Whatcom County.

Goal 10C: In implementing environmental policies, provide for protection of private property rights, economic opportunities, and plan appropriately for growth.

Policy 10C-1: Actively pursue voluntary and cooperative efforts that advance Whatcom County's goals in a mutually beneficial manner.

Policy 10C-2: When adopting new environmental protection programs, consider multiple economic parameters including development objectives, impacts, and the economic benefits of the natural environment as both a resource and an amenity.

Policy 10C-3: Emphasize an approach to environmental protection by encouraging the use of conservation easements, open space taxation, land acquisition, purchase/voluntary, workable transfer of development rights, and other mechanisms that assist affected property owners.

Policy 10C-4: Avoid standards and procedures likely to require compensation to property owners or invalidation of such rules.

Climate Change

Climate change is a global phenomenon that has the potential for significant local impacts to natural resources, ecosystem functions, as well as human health, infrastructure, and the economy. In Washington State, the Climate Impacts Group (CIG), a consortium of scientists at the University of Washington, has done the most extensive analysis of potential local climate change impacts in the Pacific Northwest. Based on a range of climate change model projections, as well as peer-reviewed scientific publications, the CIG concludes that during the next 20-40 years the Pacific Northwest climate may change significantly. See *Climate Change Impacts and Adaptation in Washington State: Technical Summaries for Decision Makers*, Climate Impacts Group, University of Washington, December 2013. The CIG confirms that global climate models project mid-21st century temperatures in the Pacific Northwest higher than the natural range of temperature observed in the 20th century. The CIG reports that as a result of likely climate change, causing slightly higher average annual temperature, impacts to the Pacific Northwest will likely affect a broad

spectrum of the natural environment, but most notably changes to water resources, including:

- More precipitation falls as rain rather than snowfall in the Cascades due to an increased snow-line elevation;
- Decreased (winter) mountain snowpack and earlier (spring) snowmelt;
- Higher winter streamflow in rivers that depend on snowmelt;
- Higher winter streamflow in rain-fed river basins resulting in scouring floods that negatively affect salmon populations if winter precipitation and rain-on-snow events increases in the future as projected;
- Earlier peak (spring) streamflow in rivers that depend on snowmelt;
- Lower summer streamflow in rivers and streams; and,
- Decreased water in summer for irrigation, fish, human consumption and recreational use (more drought-like conditions).

Climate change impacts are likely to include longer-term shifts in forest types and species, potentially increasing wildfire risk and greater exposure to insects and disease. Nearshore and riverine fisheries may be subjected to increased stress due to even lower average summer stream flows (and higher summer stream temperatures) and increased acidity in Puget Sound. Agricultural sector concerns include the cost of climate adaptation, development of more climate-resilient technologies, and management and availability of adequate water supplies. Susceptibility to natural hazards is also expected to intensify due to climate change, including increased landslides, erosion, and coastal and riverine flooding due to more winter rainfall, and potential rising sea levels.

In 2007, Whatcom County completed a Climate Protection and Energy Conservation Action Plan that laid out specific actions and targets for reducing greenhouse gas emissions and increasing energy conservation efforts in response to potential climate change.

In addition many insurance industry experts are now factoring in the costs of climate change into insurance premiums as the increase in the frequency and severity of extreme weather events around the world results in a corresponding increase in claims costs.

Local government, residents and businesses must anticipate that as the climate changes, more frequent and severe damage to private and public infrastructure will occur. Maintenance costs and insurance premiums can be expected to increase accordingly.

Goal 10D: Strengthen the sustainability of Whatcom County's economy, natural environment, and built communities by responding and adapting to the impacts of climate change.

Policy 10D-1: Whatcom County's natural resource-based economic sectors, ecosystems, water resources, infrastructure, emergency management, and public health all face climate change related risks in the future. The County should consider potential long-

range climate change implications into its on-going functional planning and implementation actions. The County should:

1. Study the resilience of its natural and built environments to the potential impacts of climate change;
2. Identify the relative vulnerability of these sectors to climate change; and,
3. Examine the adaptive capacity of these sectors to cope with or mitigate climate change and take advantage of any beneficial opportunities.

Policy 10D-2: Develop strategies that encourage a diversified and sustainable economy that is resilient to the impacts of climate change.

Policy 10D-3: Promote the efficient use, conservation, and protection of water resources.

Policy 10D-4: Pursue strategies to reduce the vehicle miles traveled (VMT) in the county by encouraging expanded availability and use of public transportation, carpooling, and non-vehicular modes of transportation.

Policy 10D-5: Establish land use patterns that minimize transportation-related greenhouse gas emissions and encourage preservation of natural resource lands and the protection of water resources.

Policy 10D-6: Convene a climate impact advisory committee by 2017. The advisory committee should consist of (but not be limited to) experts in energy efficiency and carbon emission reduction, representatives from Whatcom County, and interested community members. The committee will be tasked with:

- Evaluating Whatcom County's compliance with meeting targets set forth in the 2007 Climate Plan;
- Establishing new targets that meet or exceed state and federal climate impact goals;
- Updating the Climate Plan, at minimum every five years, or as needed to meet targets;
- Recommending updates to the Whatcom County Comprehensive Plan in accordance with meeting Whatcom County's emission reduction goals;
- Ensuring that Whatcom County government facilities and operations are designed to meet or exceed goals and standards resolved in the current Climate Protection and Energy Conservation Action Plan; and
- Recommend updates to Whatcom County land use policies and development regulations to support renewable energy development goals.

Policy 10D-7: Encourage sustainability by developing strategies and practices to increase the use of renewable, net-neutral carbon energy in Whatcom County facilities and County vehicles, with a goal of net zero man-made carbon emission by 2050.

Policy 10D-8: Encourage sustainability by developing strategies and practices to reduce landfill waste from Whatcom County government facilities to near zero.

Policy 10D-9: Identify responsible parties and agencies and encourage them to identify and properly seal and/or burn methane that is escaping into the atmosphere from wells.

Policy 10D-10: Create updates to Whatcom County land use policies and development regulations to support renewable energy development goals.

Policy 10D-11: Protect ecological functions and ecosystem-wide processes of Marine Resource Lands and critical areas in anticipation of climate change impacts, including sea level rise.

Natural Hazards

Introduction

The location, climate, and geology of Whatcom County combine to create many natural hazards to people and their developments. Earthquakes, volcanoes, landslides, and flooding are some of the major natural hazards found in our region. Additionally, old mines are scattered around the county that could be dangerous to the community. Natural Hazards goals and policies are intended to provide guidance to county government as it assists its citizens in effectively managing natural hazards in a manner that minimizes the danger to each member of this community, while continuing to provide for economic opportunities.

Background Summary

Natural Hazards include the following (**Map 10-4**):

Landslide Hazards – The geologically recent retreat of glaciers from the Whatcom County landscape, succeed by contemporaneous geomorphic processes of erosion, sediment transport, deposition, isostatic rebound and tectonic uplift, has left many hillsides over-steepened and susceptible to naturally occurring and human-triggered slope failure and erosion. Several large, well-known landslides are presently active in Whatcom County, such as the Swift Creek Slide on Sumas Mountain. In addition, numerous large-scale, pre-historic slope failure deposits have been mapped by past workers and are readily identified in more recently available LiDar imagery. Various slope failure processes contribute to the mosaic of landslide hazards present in the county and the potential exists for a multitude of impacts ranging from periodic small-to large-scale rockfall and slides, massive debris slides and avalanches, destructive debris flows, and deep-seated earthflows, slumps and slides. These landslide processes act on large- and small-scale, and though much less catastrophic in nature, smaller landslides occur more frequently and pose a continual hazard to County

1 residents and infrastructure. Certain types of geologic conditions and formations
2 commonly cause landslides, namely the Chuckanut Formation and the Darrington
3 Phyllite, but are also frequently observed in unconsolidated glacial sediments, in the
4 presence of day-lighting groundwater seams and springs, on slopes in excess of 35
5 percent, along coastal bluffs, and in areas of fluvial erosion.

6 **Alluvial Fan Hazards** – Alluvial fan hazards areas exist where steep mountain
7 streams flow onto floodplains or into lakes and deposit debris and sediment. Because
8 these streams are steep and flow in confined canyons, they can carry more sediment
9 and debris than a similar-sized stream flowing over flat land. During a large storm,
10 streams on alluvial fans can create catastrophic flooding and debris floods, such as
11 were experienced in 1983 in the Lake Whatcom area. During this storm event, the
12 Sudden Valley development on Lake Whatcom incurred significant damage to
13 property from flooding and debris flows on the Austin Creek alluvial fan.

14 **Flood Hazards** – Heavy winter rains and a transient snowpack combined with the
15 steep and sometimes unstable slopes of Whatcom County's foothills create conditions
16 ideal for flooding and debris flows along many of our rivers and streams. The
17 Nooksack River floodplain alone covers 38,000 acres in Whatcom County. In 1989
18 and 1990, the Nooksack River overflowed and flooded lowland Whatcom County
19 causing millions of dollars of damage. During some extreme floods, the Nooksack
20 River overflows near Everson and adversely impacts residents along Johnson Creek
21 in Sumas, and in the Abbotsford area of British Columbia. It is projected that climate
22 change will increase flood risk, due to increased sea level and changes in rainfall
23 patterns. Significant damage may result from such floods. In 1991, Whatcom County
24 formed a countywide Flood Control Zone District to address the major flooding issues
25 in the county.

26 **Volcanic Hazards** – The presence of Mt. Baker is an asset to our region. Its 10,778-
27 foot peak is one of the dominant features of Whatcom County's landscape. However,
28 Mt. Baker is also considered one of the most active volcanoes in the Cascade Range,
29 and of the six major volcanoes in the range, Mt. Baker is considered by geologists to
30 be very hazardous during and after an eruption. Pyroclastic flows, ash flows, and
31 especially volcanic mudflows, also known as lahars, are believed to be the greatest
32 dangers to human life and development in Whatcom County. Geologic evidence
33 indicates that an eruption on Mt. Baker caused a major lahar about 6,600 years ago
34 that inundated the Middle Fork Nooksack Valley from its headwaters downstream
35 past the confluence with the North Fork at Welcome. The same lahar is now known
36 to have been over 300 feet deep in the upper reaches of the Middle Fork and extended
37 as far west as Nugent's Corner. A major lahar along the Nooksack would divert the
38 river from its channel and cause mass flooding. Fortunately, volcanic eruptions are
39 infrequent with periods of hundreds and thousands of years between events, but this
40 infrequency also makes forecasting a volcanic eruption extremely difficult. However,
41 a major eruption of Mt. Baker would pose a serious threat to human life and property.
42 The deeply weathered nature of the rocks forming Mt. Baker may also fail, triggering
43 a mudflow that would travel rapidly down the stream channels ringing the volcano
44 and result in damage similar to that from a volcanic eruption trigger. Mapping over
45 the past decade of other Cascade volcanoes has demonstrated massive mudflows

1 extending from the volcanoes to Puget Sound, and from Mount Rainier and Glacier
2 Peak.

3 **Earthquake Hazards** – Whatcom County lies within the influence of the convergent
4 plate margin between the Pacific and North American Plate termed the Cascadia
5 Subduction Zone. Regionally-extensive and damaging earthquakes, termed mega-
6 thrusts, are possible when stress generated between the subducting Pacific Plate and
7 over-riding North American Plate is released. A mega-thrust earthquake is capable of
8 generating an earthquake of magnitude 9, or greater, and research has indicated an
9 approximate recurrence interval of 500-600 years. Associated with the stresses
10 generated at the convergent plate margin are shallow, crustal faults that are mapped
11 throughout Whatcom County. Earthquake activity on these fault systems is much
12 more frequent than that observed at the Cascadia Subduction Zone, and the Deming
13 area is considered one of the most seismically active areas in Washington. Recent
14 research has shown these crustal faults are capable of generating a magnitude 7
15 earthquake with an average recurrence interval of 30 to 50 years. While all buildings
16 are susceptible to damage from seismic-shaking, structures built on peat soils, large
17 areas of non-structural fill, or liquefiable soils are prone to more severe shaking
18 during an earthquake. If the shaking is strong enough, or of sufficient duration,
19 structures may collapse or become damaged due to building fatigue, ground
20 settlement/liquefaction, and/or lateral spreading. In addition to seismic hazards
21 posed by the Cascadia Subduction Zone, a significant mega-thrust earthquake has
22 the potential to generate a large and destructive tsunami that has the potential to
23 affect most low-bank areas of the County.

24 **Mine Hazards** – Mine hazard areas are sites of abandoned underground mine shafts,
25 adits, and mine tailings. Coal mining was a major industry in Whatcom County in the
26 early part of the 20th century, and several major mines were developed in various
27 parts of the county. All of the formerly active mines are now no longer worked and
28 are abandoned. For the most part these mine locations are known and mapped, such
29 as the extensive coal mines under the northern part of the City of Bellingham and in
30 the Blue Canyon area of South Lake Whatcom.

31 **Issues, Goals, and Policies**

32 **Landslides** – Siting human development on or adjacent to known landslide hazard
33 areas can create health and safety risks. The risks can be elevated due to extreme
34 weather events and earthquakes, but may also occur with little or no warning. In the
35 case of the Swift Creek Landslide, the release of asbestos-laden sediment poses an
36 additional risk to public health. Development activity can de-stabilize naturally
37 unstable slopes and impact ecosystems. However, predicting the exact timing,
38 location, or extent of a damaging landslide is difficult, and in particular areas of the
39 county landslide hazards are not possible to completely mitigate or avoid. In some
40 circumstances, the development of upland properties may place downslope neighbors
41 and ecosystems at risk from rockfall or landslides. A similar relationship holds true
42 for development at the toe of a potentially unstable slope. In either event,
43 development in proximity to landslide hazards must proceed in consideration of
44 potential impacts in order to ensure life safety and preserve and protect public and
45 private infrastructure.

Alluvial Fans – Because alluvial fan areas are associated with streams, are generally gently sloping and elevated above the adjacent floodplain, and are located at the base of mountains, they have historically been popular places to develop. However, once every 10-25 years, a large storm event occurs in our area and streams flood homes and developments, causing damage to property, ecosystems, and sometimes loss of lives.

Flooding – Floodwaters from the Nooksack River can damage homes, agricultural areas, businesses, and industries in the small cities situated along the river; fish and wildlife habitat and other ecosystems; and disrupt transportation and utility corridors. Storm tides can flood homes and roads along low, exposed marine shorelines in the Birch Bay, Sandy Point, Point Roberts, and Gooseberry Point areas. Homes along Lake Whatcom, Lake Samish, and Cain/Reed Lakes have also been impacted by flooding during extreme storm events. Property and public safety are also impacted by rapid channel morphology events.

Volcanos – A volcanic eruption or mudflow at Mount Baker could potentially severely affect river flow on the Nooksack River or Baker River and cause severe property damage near the volcanoes or along lahar routes. A lahar is an extremely rare and unpredictable occurrence. Evacuation routes should be planned and made public. Development should be regulated according to the Critical Areas Ordinance.

Earthquakes – A major earthquake may likely and significantly affect Whatcom County. If the shaking is strong enough, buildings may collapse, roads could be damaged, and/or communications, power, and utilities could be severely disrupted, mud and rock slides could occur on unstable slopes, and local sea levels may change as shorelines assume altered post-quake elevations.

Mines – Some abandoned mine areas may pose a risk of ground subsidence from the collapse of abandoned mine shafts. Air and water pollution may also be hazards associated with abandoned mine tailings and trapped toxic gases. Development on or near mine hazards could be adversely impacted.

Gas wells – Several exploratory oil & gas wells have been drilled around the county over the last 70+ years. Some of these present potential environmental hazards due to ongoing leakage of gas.

Old Landfills – There are known abandoned landfills in the County and possibly some that are unknown. There are also several sites around the County that contain large numbers of abandoned vehicles and other debris. As with most landfills these locations pose some degree of risk of hazardous substances leaking into local aquifers.

Balanced Management – A central issue common to all development in natural hazard areas is the need for Whatcom County to balance the responsibility of local government to protect the public interest and provide for a safe and healthy environment while safeguarding the rights of private property owners.

Economic Impact – Damage to private and public property resulting from the siting of human development in areas of natural hazards is significant to the people of

Whatcom County. The 1990 Nooksack River floods caused over \$20 million dollars in damage to roads, bridges, buildings, and farmland. Disaster relief efforts are expensive and dangerous to conduct during an emergency. Public efforts to reduce hazards, such as the establishment of the Flood Control Zone District, are also expensive.

Goal 10E: Minimize potential loss of life, damage to property, the expenditure of public funds, and degradation of ecosystems resulting from development in hazardous areas such as floodplains, landslide-prone areas, seismic hazards areas, volcanic impact areas, abandoned mine and exploratory gas well locations, potentially dangerous alluvial fans, and other known natural hazards by advocating the use of land acquisition, open space taxation, conservation easements, growth planning, regulations, and other options to discourage or minimize development, or prohibit inappropriate development in such areas.

Policy 10E-1: Avoid or minimize public investments for future infrastructure development on known natural hazard areas.

Policy 10E-2: Use Best Available Science and data to research and investigate the nature and extent of known natural hazards in the county and make this information available to the general public and policy makers in an accessible and understandable form.

Policy 10E-3: Broadly inform the people of Whatcom County of the locations of known natural hazards, and the potential for adverse impacts of such natural hazards to the health, safety, and welfare of people and their properties.

Policy 10E-4: Establish acceptable levels of public risk for development in known natural hazard areas based upon the nature of the natural hazard and levels of public risk, and maintain regulatory criteria for approving, disapproving, conditioning, or mitigating development activity.

Policy 10E-5: Prohibit the siting of critical public facilities in known natural hazard areas unless the siting of the facility can be shown to have a public benefit that outweighs the risk of siting in the particular hazard area.

Policy 10E-6: Maintain a comprehensive program of regulatory and non-regulatory mechanisms to achieve Natural Hazard goals and policies. This program should include such mechanisms as education, tax incentives, zoning, land use regulations, conservation easements, purchase of development rights, transfer of development rights, and public acquisition.

- Policy 10E-7: Be consistent with the Natural Hazard goals and policies and consider the locations of Natural Hazard Areas when establishing or changing zoning patterns and densities.
- Policy 10E-8: To address the causes of flooding and avoid expensive and maintenance-intensive bank protection measures, the County should prioritize its floodplain property acquisition program.
- Policy 10E-9: Discourage new development in the floodplain.
- Policy 10E-10: Require applicants for development permits located in natural hazard areas to provide development plans designed to minimize the potential to exacerbate the natural hazard as well as the risk of damage to property or threats to human health and safety. In natural hazard areas where engineering solutions cannot be designed to withstand the forces expected to occur under the design event of a particular natural hazard, or off-site adverse impacts to adjacent properties or ecosystems cannot be adequately mitigated, Whatcom County may deny development permits intended for permanent or seasonal human habitation as described in the Critical Areas Ordinance.
- Policy 10E-11: Consider conducting a public process with affected citizens, technical experts, and decision-makers to establish recommended levels of public risk for each of the identified natural hazards. In developing recommended levels of public risk for natural hazards, consider the appropriate variables affecting developments in hazardous areas. These variables may include:
- Specific types of risk associated with the particular hazard area;
 - The gradation of hazards associated with a particular geo-hazard;
 - Level of detail necessary to map hazard areas;
 - Different levels of risk associated with different ownership classes (e.g. public ownership versus private ownership);
 - Different levels of risk associated with different types of land uses; and,
 - Mitigation measures related to specific adverse impacts of development in hazard areas.
- Once a set of risk levels has been identified, propose these risk levels for adoption of legislation by the County Council as the level to which future development must be designed.
- Policy 10E-12: Consider establishing acceptable levels of public risk for use in approving and conditioning development activity in known natural hazard areas. The established level of risk may be expressed as the potential hazard posed as determined by scientific and historical methods applicable to each specific natural hazard.

Policy 10E-13: Review the findings and recommendations of alluvial fan hazard evaluations and make appropriate recommendations for land use and zoning regulations to the County Council to assist in reducing the hazards posed on these fans. Whatcom County has completed or nearly completed alluvial fan evaluations of Canyon Creek, Jones Creek, and Glacier-Gallop Creeks.

Policy 10E-14: Review the findings and recommendations of the Comprehensive Flood Hazard Management Plan (CFHMP) and make appropriate recommendations for land use and zoning regulations to the County Council to assist in the implementation of the CFHMP.

Policy 10-15E: Identify known locations of abandoned wells that could produce methane and/or other hazardous substances and where immediate danger of methane and hazardous substance leaking exists, condition development approvals on affected parcels to mitigate those impacts.

Water Resources

Introduction

Water resources refer to the numerous surface waters such as lakes, streams, wetlands; groundwater; estuaries; and marine waterbodies within Whatcom County (**Map 10-1**). These waterbodies are often integrally linked through the complex network referred to as the water cycle. The water cycle describes the series of transformations that occur in the circulation of water from the atmosphere onto the surface and into the subsurface regions of the earth, and then back from the surface to the atmosphere. Water resources of Whatcom County provide: natural beauty; recreation; habitat for fish and wildlife; water for drinking, agriculture, and industry; and other benefits essential to the quality of life and economic health of the community. The quality of life and economic health of our county's communities depend on the maintenance of a safe and reliable water supply. Decisions affecting any element of the water environment must be based on consideration of the effects on other elements.

Background Summary

Whatcom County has 16 major freshwater lakes, 3,012 miles of rivers and streams, over 37,000 acres of wetlands, 134 miles of marine shoreline, and aquifers containing an undetermined amount of groundwater. These water resources serve multiple uses, including providing a source of drinking water for the people of Whatcom County. Surface water sources such as Lake Whatcom, the Nooksack River, and Lake Samish provide water to more than half the county residents, with the remainder relying on groundwater, either from individual wells or from about 300 public water systems. Agriculture relies on both ground and surface water for a variety of uses, including irrigation and drinking water for livestock. Businesses and industries may also require water, sometimes in substantial quantities, from non-potable and potable supplies. Water is also essential to meet many of what are referred to as "instream" uses, such

as recreation, shellfish growing and harvesting, fish and wildlife habitat, aesthetics, and other uses and benefits.

Groundwater is contained in aquifers, which are subterranean layers of porous rock or soil. Most of the surficial aquifers in Whatcom County are replenished by rainwater. Aquifers are often integrally linked with surface water systems and are essential for meeting instream and out-of-stream water needs such as for drinking water, agriculture, industry, and other uses.

Rainfall that runs into drainage courses such as ditches, streams, wetlands, rivers, lakes, and the Strait of Georgia supports local surface and marine waters. Natural drainage systems have many important functions, including storing excess water flow, purifying surface water, recharging groundwater, conveying water, and supporting important biological activities. As more areas in Whatcom County are being urbanized, natural water resource systems are being replaced with built systems, leading to permanent changes in hydrology.

Whatcom County government has a major role in helping to maintain these benefits through its many responsibilities and programs, particularly in the areas of health, safety, land use, and development. The intent of the following goals and policies is to provide guidance to Whatcom County government as it assists its citizens in effectively managing our water resources in a manner that ensures that the benefits of those resources are maintained far into the future. The water resource section focuses primarily on groundwater and surface water management. Surface water management relates generally to watershed protection and stormwater/ drainage systems. However, some policy direction may indirectly be provided for areas such as wetlands, estuaries, streams, and marine waterbodies within the Water Resource section. Some of these areas are covered in more detail in other sections within the Environment Chapter.

Whatcom County Water Resource Programs

Whatcom County has and/or participates in numerous water resource programs aimed at protecting and enhancing water quality and quantity, including:

- WRIA 1 Watershed Management Project;
- Lake Whatcom Watershed Management;
- Groundwater Protection & Management;
- Flood Hazard Management; and,
- Stormwater Management.

WRIA 1 Watershed Management Project

The WRIA 1 Watershed Management Project is the result of the 1998 Washington State Watershed Management Act, which required all participating local governments to address water quantity, with the option of addressing water quality, instream flows, and fish habitat. The WRIA 1 Watershed Management Project has brought together citizens, local governments, tribes, and state and federal agencies to address these issues.

The framework for watershed management in the state is based on geographic areas known as Water Resource Inventory Areas (WRIAs). WRIA 1 includes the Nooksack River basin and several adjoining smaller watersheds, such as the coastal drainages of Dakota and California Creeks, as well as Lake Whatcom.

Watershed planning in WRIA 1 started in 1998 with the signing of a Memorandum of Agreement (MOA) between the *Initiating Governments*. In the WRIA 1 the Initiating Governments are Whatcom County, City of Bellingham, Public Utility District No. 1, Lummi Nation, and Nooksack Tribe (the latter joining slightly later through a Letter of Agreement). The role of the Initiating Governments was to review a recommended Watershed Plan and take it to their governments' councils for adoption.

Historical Organization (1999-2016)

WRIA 1 Joint Board

In 1999, an Interlocal Agreement further formalized the government-to-government relationship essential to the tribes' participation in the process by creating a *Joint Board*. The Joint Board is comprised of the Initiating Governments, including the mayor of the City of Bellingham, executive for Whatcom County, manager of Public Utility District No. 1, and designated policy representatives of Lummi Nation and Nooksack Tribe. The Board manages the project's administrative functions such as contracts and budgets. Members of the Joint Board also sit on the Joint Policy Boards.

WRIA 1 Joint Policy Boards

The WRIA 1 Joint Policy Boards are comprised of members of the WRIA 1 Joint Board and Salmon Recovery Board. This organizational level interacts with federal, state, and regional organizations at a policy-level to coordinate the implementation and management of the WRIA 1 Watershed Management Plan – Phase 1, the WRIA 1 Salmonid Recovery Plan and other related activities.

Local Integrating Organization (LIO)

The Whatcom Local Integrating Organization (LIO) is a function of the WRIA 1 Watershed Joint Board and WRIA 1 Salmon Recovery Board (Joint Policy Boards). Local integrating organizations are designated by the Puget Sound Partnership. The two WRIA 1 Boards accepted the function of the Whatcom LIO in October 2010 under the integrated program structure, and was officially recognized by the Puget Sound Partnership's Leadership Council in November 2010. The purpose of the Whatcom LIO is to coordinate implementation of Puget Sound Action Agenda priorities that are consistent with or complement local priorities. One of its functions is to provide a local update to the Action Agenda for Puget Sound. Local updates are intended to identify local priorities in the form of near-term actions (NTAs), which are priority actions with measurable outcomes that can be implemented in the next two years and that align with strategies in the Action Agenda for Puget Sound.

WRIA 1 Planning Unit

The Initiating Governments established the Planning Unit to ensure representation of a broad range of water resource interests. The Planning Unit's role is to recommend actions for a Watershed Plan and to contribute knowledge, interests, technical expertise, and other resources to its development. The Planning Unit is made up of

representatives from the Initiating Governments, other governments, and various caucuses. There are 16 total caucuses on the WRIA 1 Planning Unit.

Organizational Update (2016)

Through an interlocal agreement entered into in 2016, the Watershed Management Project Joint Board and the WRIA 1 Salmon Recovery Board were dissolved and the duties and functions of those boards were assumed by the new WRIA 1 Watershed Management Board, consisting of one representative from the Lummi Nation, the Nooksack Tribe, the Washington State Department of Fish and Wildlife, Whatcom County, Whatcom County PUD No. 1, and the cities of Bellingham, Blaine, Everson, Ferndale, Lynden, Nooksack, and Sumas.

The primary functions of the WRIA 1 Watershed Management Board are to:

- Facilitate implementation and adaptive management of the WRIA 1 Watershed Management Plan-Phase 1 as currently constituted or subsequently amended;
- Coordinate the implementation and adaptive management of the WRIA 1 Salmonid Recovery Plan and associated implementation documents,
- Serve as the WRIA 1 Salmon Recovery Lead Entity pursuant to RCW 77.85,
- Coordinate participation in Puget Sound salmon recovery efforts,
- Coordinate the development, implementation and adaptive management of WRIA 1 watershed chapters of recovery plans for ESA listed salmonids and other salmonid species as warranted;
- Coordinate planning, implementation, monitoring and adaptive management of ecosystem recovery actions in WRIA 1 consistent with agreed local goals and objectives,
- Serve as the WRIA 1 Local Integrating Organization and a partner in the Puget Sound Partnership in representing WRIA 1 goals and priorities; and
- Participate in other related activities as agreed to by the Board.

The roles of the Local Integrating Organization and Planning Unit did not change.

2005 WRIA 1 Watershed Management Plan – Phase 1

The 2005 WRIA 1 Watershed Management Plan was approved in 2005 by the Joint Administrative Board, Planning Unit (by consensus), and the County Council. Pursuant to subsequent state requirements, a WRIA 1 Watershed Detailed Implementation Plan was approved by the Joint Administrative Board, Planning Unit, and County Council in 2007. It provides a roadmap for addressing water quantity, water quality, instream flow, and fish habitat challenges. The goals of the WRIA 1 Watershed Management Project are: water of sufficient quantity and quality to meet the needs of current and future human generations; restoration of salmon, steelhead, and trout populations to healthy harvestable levels; and the improvement of habitats on which fish and shellfish rely. These goals are addressed more specifically below:

- **Water Quantity** – To assess water supply and use, and develop strategies to meet current and future needs. The strategies should retain or provide

adequate amounts of water to protect and restore fish habitat, provide water for future out-of-stream-uses, and ensure adequate water supplies are available for agriculture, energy production, and population and economic growth under the requirements of the state's Growth Management Act.

- **Water Quality** – To ensure the quality of our water is sufficient for current and future uses, including restoring and protecting water quality to meet the needs of salmon and shellfish, recreational uses, cultural uses, protection of wildlife, providing affordable and safe domestic water supplies, and other beneficial uses. The initial objectives of the water quality management strategy will be to meet the water quality standards.
- **Instream Flow** – To supply water in sufficient quantities to restore salmon, steelhead, and trout populations to healthy and harvestable levels and improve habitats on which fish rely.
- **Fish Habitat** – To protect or enhance fish habitat in the management area and to restore salmon, steelhead, and trout populations to healthy and harvestable levels and improve habitats on which fish rely.

In 2010, the WRIA 1 Joint Board adopted a work plan, budget, and financing strategy, called the Lower Nooksack Strategy, to advance a negotiated settlement of Tribal and state instream flow water rights on the mainstem of the Nooksack River, while maximizing the economic and environmental benefits of out-of-stream water use in the Lower Nooksack sub-basin. The Joint Board adopted the Lower Nooksack Strategy consistent with WRIA 1 Watershed Management Plan priorities.

Lower Nooksack Strategy Objectives:

- Develop and implement a process for negotiating settlement of water rights on the Mainstem Nooksack River.
- Update and verify the Lower Nooksack River sub-basin water budget and develop a groundwater model.
- Determine out-of-stream water user needs:
 - Public water system needs determined by updated the Whatcom County Coordinated Water System Plan (CWSP).
 - Other out-of-stream user needs (e.g., agriculture, private domestic wells, industrial, etc.) determined through a regional water supply planning process.
- Continue and, if appropriate, enhance targeted streamflow and water quality sampling.
- Advance work on tools that foster water resource allocations consistent with long-term economic and environmental land-use goals for implementation in five years.

Streamflow Restoration Act (ESSB 6091)

The Streamflow Restoration Act (ESSB 6091), enacted by the Washington State Legislature on January 18, 2018 and effective on January 19, 2018, directs the Department of Ecology to work with the initiation governments (i.e., the WRIA I

Watershed Management Board), in collaboration with the planning unit established pursuant to chapter 90.82 RCW, on updating the WRIA 1 Watershed Management Plan for approval by the Whatcom County Council by February 1, 2019.

The Act requires that the updated plan include recommendations for projects and actions that will measure, protect, and enhance instream resources and improve watershed functions that support the recovery of threatened and endangered salmonids. Such recommendations may include, but are not limited to, acquiring senior water rights, water conservation, water reuse, stream gaging, groundwater monitoring, and developing natural and constructed infrastructure, which includes, but is not limited to, such projects as floodplain restoration, off-channel storage, and aquifer recharge. Qualifying projects must be specifically designed to enhance streamflows and not result in negative impacts to ecological functions or critical habitat.

At a minimum, the watershed plan must include those actions determined to be necessary to offset potential impacts to instream flows associated with permit-exempt domestic water use. The highest priority recommendations must include replacing the quantity of consumptive water use during the same time as the impact and in the same basin or tributary. Lower priority projects include projects not in the same basin or tributary and projects that replace consumptive water supply impacts only during critical flow periods. The watershed plan may include projects that protect or improve instream resources without replacing the consumptive quantity of water where such projects are in addition to those actions determined to be necessary to offset potential consumptive impacts to instream flows associated with permit-exempt domestic water use.

Until the updated watershed plan is approved and rules are adopted by the Department of Ecology, the County, in issuing building permits under RCW 19.27.097(1)(c) or approving subdivisions under chapter 58.17 RCW in WRIA 1, will comply with all of the specific requirements of ESSB 6091.

Lake Whatcom Watershed Management

Lake Whatcom is a large multi-purpose reservoir that is the source of drinking water for the City of Bellingham, Lake Whatcom Water and Sewer District, several other smaller water districts/associations, and about 250 homes that draw water directly from the lake. The lake provides water to about half the population of Whatcom County.

Lake Whatcom is a multiple use lake and watershed. In addition to providing water for drinking, commercial, and industrial uses, the lake is used for boating, swimming, and fishing. The majority of the watershed is forested, mainly surrounding the large southernmost portion of the lake. Other land uses include residential development (approximately 5,300 homes are located within the watershed), limited agriculture and commercial development, parks, and other public facilities. The on-going management challenge is trying to determine the extent to which these practices can occur while maintaining safe, clean drinking water. The challenge is further complicated by possible requirements related to the Endangered Species Act, tribal water rights, and the potential impact these issues may have on how the City's diversion from the Nooksack River is operated.

1 The watershed contains four developed areas: the City of Bellingham, which straddles
2 the upper portion of the northern-most basin of the lake; Geneva, which is
3 immediately south and east of Bellingham's city limits and is part of the city's urban
4 growth area; Hillsdale, which is immediately north and east of Bellingham's city limits
5 and is also part of the city's urban growth areas; and the Sudden Valley Rural
6 Community. In addition, it includes a variety of other zones, including resource, rural,
7 and residential rural zones. Outside the Bellingham City limits, approximately 70%
8 of the watershed is in Forestry zoning and more than 75% of the current land use is
9 forestry.

10 Water and sewer service are provided by the Lake Whatcom Water and Sewer
11 District. Capacity problems in the district's sewer line, which serves Geneva and
12 Sudden Valley, have caused overflows into the lake in the past. An aggressive
13 program to preclude stormwater infiltration has reduced the overflow problems to a
14 large extent. In addition, the district has a contractually limited flow capacity to
15 Bellingham. The Lake Louise Road sewage interceptor was constructed in January
16 2003 to carry waste water from Sudden Valley and Geneva and serves as a
17 complement to the Lake Whatcom Boulevard trunk line. The interceptor was designed
18 to service full build-out of Sudden Valley and Geneva.

19 The City of Bellingham and Lake Whatcom Water and Sewer District are responsible
20 for ensuring drinking water standards are met for their customers. To date water
21 supplies have consistently met standards. The ability to continue to economically
22 meet drinking water standards requires maintaining source water that requires
23 minimal treatment. For this reason the City of Bellingham maintains an on-going
24 source water-monitoring program. Other agencies including Western Washington
25 University, Department of Natural Resources, Department of Fish and Wildlife,
26 Department of Ecology, Lake Whatcom Water and Sewer District, and Whatcom
27 County, have also conducted monitoring, studies, and/or evaluations of the lake and
28 watershed.

29 Studies on Lake Whatcom conducted over a number of years indicate water quality
30 in the lake has declined. In 1998, the Washington State Department of Ecology listed
31 Lake Whatcom as an impaired water body and placed Lake Whatcom on the Federal
32 Clean Water Act 303(d) list because of low oxygen levels in the Lake and high bacteria
33 levels in streams that flow into the Lake. The 303(d) listing requires the
34 establishment of a Total Maximum Daily Loads (TMDLs). The Department of Ecology
35 issued the "Lake Whatcom Watershed Total Phosphorus and Bacteria Total Maximum
36 Daily Loads: Volume 1, Water Quality Study Findings" in 2008. This study
37 documented Lake Whatcom is impaired for dissolved oxygen due to phosphorus
38 loading and that streams flowing into Lake Whatcom do not meet fecal coliform
39 bacteria standards. Loading capacities for total phosphorus and bacteria reduction
40 targets were set forth in this document. In 2013 The Department of Ecology issued
41 a draft "Lake Whatcom Watershed Total Phosphorus and Bacteria Total Maximum
42 Daily Loads: Volume 2, Water Quality Improvement Report and Implementation
43 Strategy." This report identifies how much phosphorus can be discharged to the Lake
44 and identifies how the bacteria load should be allocated between the County and City
45 of Bellingham, in order to meet water quality standards.

A significant cause of declining oxygen levels has been from residential development in the watershed. Past development permitted by the City of Bellingham and Whatcom County has led to increased phosphorus loading into the lake, which stimulates algae growth. Bacteria that consume the dying algae deplete the dissolved oxygen, leading to lower oxygen levels in the lake. Past poorly managed forest practices may have led to significant increases in phosphorus loading to the lake.

Whatcom County has taken a number of actions to reduce phosphorus and otherwise address Lake Whatcom water quality. These include rezoning land to allow less development in the watershed, adoption of the Lake Whatcom Comprehensive Stormwater Management Plan, revising stormwater management standards for private development to significantly reduce potential phosphorus runoff, construction of stormwater capital improvement projects and adoption of regulations that restrict the application of commercial fertilizers.

In 2014, approximately 8,800 acres of forest lands around Lake Whatcom were transferred to Whatcom County from the Washington Department of Natural Resources through reconveyance. These lands will provide passive recreation opportunities with hiking and biking trails connecting various communities, neighborhoods, and parks throughout the watershed. Under County ownership, the forests will be allowed to mature to an older growth environment benefiting the watershed and helping to stabilize steep slopes that surround the lake.

In 2004, the Department of Natural Resources (DNR) Board on Natural Resources adopted the Lake Whatcom Landscape Plan. This plan provides additional protections on remaining state managed lands within the Lake Whatcom watershed. The plan provides additional protections on streams and potentially unstable slopes not normally included in forest practices in Washington State.

Lake Whatcom Watershed Management Program

A variety of agencies, organizations, and individuals play a role in managing and protecting Lake Whatcom. In an effort to coordinate efforts of these various players, in 1990, the City of Bellingham, Whatcom County, and Water District 10 (now known as the Lake Whatcom Water and Sewer District) began meeting to develop a joint management strategy for the Lake Whatcom watershed.

In November/December 1992, a joint resolution was passed by the Bellingham City Council, Whatcom County Council, and the Lake Whatcom Water and Sewer District (formerly Water District 10) Commissioners, which reaffirmed this position with six general goal statements and a set of specific goal statements in various categories. The specific goal statements for urbanization were the following:

- Prevent water quality degradation associated with development within the watershed.
- Review and recommend changes in zoning and development potential that are compatible with a drinking-water reservoir environment.
- In addition to zoning, identify and promote other actions to minimize potential for increased development in the watershed (i.e. land trust, development rights, cost incentives, etc.).

- Develop specific standards which reduce the impacts of urbanization, such as minimal lot clearing; clustered development to reduce infrastructure; collection and treatment of stormwater before entering the lake.
- Develop appropriate interlocal agreements with governing agencies to prohibit the potential for additional development once an agreed upon level is set.

The joint resolution included goals for watershed management that extended beyond urbanization. Goals were included for stormwater management, on-site waste systems, conservation, forest management, spill response, hazardous materials transport and handling, data/information management, education/public involvement, and other topics. A joint strategy was approved for developing specific plans to meet the adopted goals. Eight high priority goals were selected first and plans have been completed and jointly adopted for each of the goals.

In 1998, the City, County, and District 10 formalized their joint commitment to protect and manage the lake through the joint adoption of an interlocal agreement and allocation of funding toward protection and management efforts in the watershed. A five-year program plan was developed for ten program areas. Specific priority was placed on activities related to watershed ownership, stormwater management, and urbanization/land development.

The resulting Lake Whatcom Management Program guides actions to protect Lake Whatcom as a long-term supply of drinking water for the City of Bellingham and portions of Whatcom County. The program emphasizes protection over treatment in managing Lake Whatcom and its watershed. The structure of the Lake Whatcom Management Program includes legislative bodies, a management team, an interjurisdictional coordinating team, agency staff, and advisory committees.

The Lake Whatcom Watershed Management Program website (<http://www.lakewhatcom.whatcomcounty.org/resources>) contains the management plans, reports, and work programs, as well as the jurisdictions' pertinent regulations and brochures on the different programs aimed at the various efforts to improve water quality.

Sudden Valley

Sudden Valley is a community within the Lake Whatcom Watershed. It was established in the early 1970s as a recreation/resort area but over the last thirty years has developed into a significant residential area.

Since 1985, Sudden Valley has mandated the use of appropriate stormwater best management practices through standards for individual stormwater detention for all new construction. Any new building permits on existing lots must be able to demonstrate that stormwater detention is included in the plan as a precondition to issuance of a permit. Sudden Valley is also subject to additional regulatory protections that apply to the Lake Whatcom Watershed under the Water Resource Protection Overlay District, Stormwater Special District, and Water Resource Special Management Area requirements. Under the provisions of these special districts, potential impacts from impervious surfaces, stormwater runoff, and clearing activities are required to be addressed either on-site or through a community-wide process.

Groundwater Protection & Management

Groundwater is contained in aquifers, which are subterranean layers of porous rock or soil. Most aquifers are replenished by rainwater, though some may contain water trapped during glacial periods. Aquifers are often integrally linked with surface water systems and are essential for meeting instream and out-of-stream water needs, such as for drinking water, agriculture, and industry. Whatcom County residents rely heavily on groundwater for drinking water, agriculture, and commercial and industrial needs. Groundwater also plays an important role in maintaining stream flows.

Many studies have been conducted related to groundwater quality in Whatcom County documenting water quality issues, such as exceedances of standards for nitrate, ethylene dibromide (EDB) and 1,2-dichloropropane (1,2-D), pesticides, iron and other agricultural-related contaminants, particularly in the northern portion of the County. In general, groundwater in Whatcom County is very vulnerable to contamination because much of the County's groundwater lies within a shallow unconfined aquifer. Activities that occur on the surface of the ground directly affect groundwater quality. Shallow wells that draw water from unconfined water table aquifers are at highest risk.

Whatcom County's Critical Areas Regulations protect Critical Aquifer Recharge Areas (CARAs) during the development process, by precluding certain uses in CARAs and/or requiring certain precautions be taken in handling certain chemicals.

Flood Hazard Management

A comprehensive approach to flood hazard management planning provides a better understanding of the river and floodplain system. It also ensures flooding and channel morphology problems are not simply transferred to another location within the basin, but are addressed in a comprehensive, basinwide manner. This approach directs future flood hazard management expenditures in the most efficient and cost effective manner.

Whatcom County Public Works coordinates with the Flood Control Zone District Advisory Committee (FCZDAC) to identify and characterize flooding problems and provide recommendations for achieving consistent, long-term flood hazard reduction strategies. Some activities typically involved in developing a Comprehensive Flood Hazard Management Plan (CFHMP) include data collection, hydraulic modeling, alternatives analysis, floodplain mapping, and meander limit identification. In addition to the technical components in comprehensive flood planning, extensive coordination with the public and other agencies is required throughout the planning process.

Other County flood management programs include:

Early Flood Warning – Work with the United States Geological Survey (USGS) to maintain a network of early flood warning stations to help citizens prepare and take appropriate measures to protect lives and property from flood damages.

Flood Hazard Reduction Program – Implement projects to reduce future flood damages and public expenditures to repair damaged areas. Examples include construction of setback levees and overflow spillways, and designation of overflow

corridors in overbank areas. Two alluvial fan studies have been completed for Jones Creek and Canyon Creek. For Jones Creek, review of potential mitigation measures and concept design of a preferred approach has also been completed.

Comprehensive Flood Hazard Management Planning – Identify flooding problems and provide recommendations for achieving long-term flood hazard reduction strategies. The Lower Nooksack River Comprehensive Flood Hazard Management Plan was adopted in 1999. Implementation of the plan is ongoing.

Preparedness and Response – Plan for and implement a coordinated response during flood events to ensure public safety and minimize flood damages.

National Flood Insurance Program – Participate in the Congress-initiated National Flood Insurance Program (NFIP) of 1968, to make affordable flood insurance available to citizens of communities that adopt approved flood management regulations.

Repair and Maintenance Program – Address problem areas with rivers, streams, and coastlines of Whatcom County, and mitigate future flood damages in a proactive and cost-effective manner.

Technical Assistance – Provide technical assistance regarding drainage and flood issues to private citizens and businesses located along the many waterbodies within Whatcom County.

Organization

Flood Control Zone District (FCZD)

Following the severe floods of 1989 and 1990, in 1992 Whatcom County created the countywide Flood Control Zone District (FCZD), including both incorporated and unincorporated areas of the County. The FCZD is a quasi-municipal corporation that is a separate legal entity from Whatcom County government. Even though this legal separation exists, the Whatcom County Council and the County Executive (Board of Supervisors) and the Public Works Department (staff) perform the governance and administrative support for the district.

The primary purpose of the FCZD is flood hazard management. Revenue generated to for this purpose is accomplished in two ways: (1) a county-wide uniformly applied tax; and, (2) supplemental revenue generated within localized Diking Districts and Sub-Flood Districts where specific local project activity is planned.

While the primary purpose of the FCZD is flood hazard management, the district is allowed to address a wide variety of water resource issues. Due to this ability, revenue generated by the district is currently used to finance additional water supply and water quality related improvement projects.

Pertinent Documents

Lower Nooksack River Comprehensive Flood Hazard Management Plan (CFHMP)

In 1999, the county adopted the Lower Nooksack River Comprehensive Flood Hazard Management Plan (CFHMP). The CFHMP identifies projects, programs, and other

recommendations aimed at reducing future flood damages along the Lower Nooksack River.

Critical Areas Regulations (WCC 16.16)

Whatcom County's Critical Areas Regulations aim to protect people and property in Frequently Flooded Area (FFAs) by requiring development in these areas conforms to WCC Title 17, Flood Damage Prevention.

Stormwater Management

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the land surface. The addition of roads, driveways, parking lots, rooftops, and other surfaces that prevent water from soaking into the ground greatly increases the runoff volume created during storms. This runoff is swiftly carried to our local streams, lakes, wetlands and rivers and can cause flooding and erosion. Stormwater runoff also picks up and carries with it many different pollutants that are found on paved surfaces, such as sediment, nitrogen, phosphorus, bacteria, oil and grease, trash, pesticides, and metals.

County Stormwater Management Programs

National Pollutant Discharge and Elimination System (NPDES) Phase II Permit

Stormwater runoff picks up pollutants as it travels over our developed landscapes and is a major source of water quality problems. In 1987, the Federal Clean Water Act was amended to address stormwater pollution. As a result, the United States Environmental Protection Agency (EPA) created the National Pollutant Discharge Elimination System (NPDES) to address stormwater runoff. States are required to administer permits to local jurisdictions to regulate runoff as part of the NPDES Program. The Permit is referred to as the "NPDES Phase II Permit" or "Phase II Municipal Stormwater Permit".

In February of 2007, the Washington State Department of Ecology issued Whatcom County's Phase II Municipal Stormwater Permit. This permit regulates discharges from Small Municipal Separate Storm Sewers, and is part of the National Pollutant Discharge and Elimination System (NPDES) and State Waste Discharge General Permit. It sets forth requirements of municipalities to address stormwater runoff in areas determined to have population densities reaching urban standards. Whatcom County is required to implement various stormwater management strategies to comply with this State permit.

The current Permit boundary covers approximately 15,000 acres and generally includes the following areas (Figure 1):

- Bellingham Urban Growth Area
- Sudden Valley
- Portions of the Hillsdale and Emerald Lake area
- Portions along North Shore Drive on Lake Whatcom and Lake Whatcom Boulevard
- Ferndale Urban Growth Area

- 1 • Portions along Chuckanut Drive and Chuckanut Bay
- 2 • Birch Bay Urban Growth Area

3 Additionally, though not within the NPEDES permit area, the County has made the
4 entire Lake Whatcom watershed is subject to the illicit discharge detection and
5 elimination requirements of the Permit through ordinance and agreement with the
6 Department of Ecology.

7 Jurisdictions are allowed to discharge runoff into waterbodies of the State (such as
8 rivers, lakes, and streams) as long as they implement programs that protect water
9 quality by reducing pollutants to the maximum extent possible through requirements
10 of the NPDES Phase II Permit. Those requirements are reported and submitted to the
11 Department of Ecology through the Stormwater Management Program (SWMP) and
12 the Annual Compliance Report.

13 The Western Washington Phase II Municipal Stormwater Permit is required by the
14 State of Washington Water Pollution Control Law Chapter 90.48 RCW, and the Federal
15 Water Pollution Control Act Title 33 United States Code (Clean Water Act). The Permit
16 is administered by the Washington State Department of Ecology.

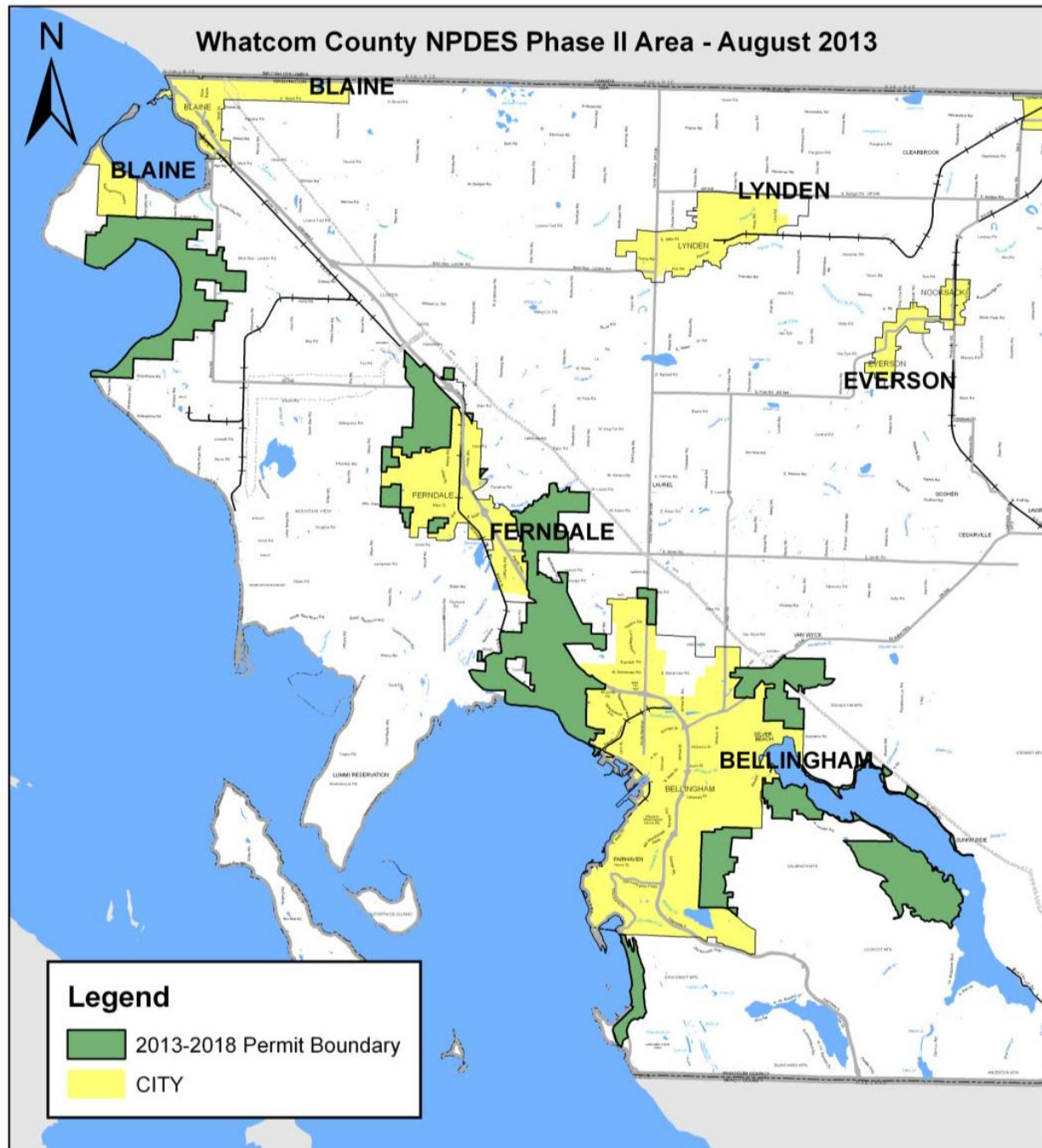


Figure 1. NPDES Phase II Boundaries

Pollution Identification and Correction (PIC) Program

Clean water supports healthy drinking water, safe recreational uses, quality water for irrigation and livestock, healthy fish, and shellfish that are safe to consume. Currently, many streams in Whatcom County do not meet water quality standards for fecal coliform bacteria. Fecal coliform bacteria are found in the intestinal tract of warm-blooded animals and when found in streams are an indicator of human or animal waste in the water. The higher the bacteria level, the greater the public health risk to people drinking water, wading, fishing, or consuming shellfish. The Pollution

Identification and Correction (PIC) Program was created to help implement community solutions to clean water.

Pollution – The key potential sources of bacteria that have been identified in Whatcom County coastal drainages are (1) **animal waste** from agricultural operations, domestic pets, waterfowl, and wildlife, and (2) **human sewage** from failing on-site sewage systems (OSS), leaking sewers, or cross-connections.

Identification – Whatcom County coordinates a routine water quality monitoring program at approximately 90 stations in watersheds that discharge to marine waters. Samples are collected on at least a monthly basis and analyzed for fecal coliform bacteria. Results are evaluated annually to identify focus areas with the largest bacteria problems. Within the focus areas, stream segments are monitored and potential bacteria sources are identified.

Correction – Technical and financial resources are offered to landowners to identify and implement solutions on their property. Residents can help improve the community's water quality by inspecting and maintaining septic systems and by fencing animals out of streams, ditches and swales. By actively managing pastures, creating protected heavy use areas, and covering manure storage areas, residents can prevent manure-contaminated mud from polluting surface water. Planting shrubs and trees along stream banks and picking up after dogs also contributes to better water quality.

Issues, Goals, and Policies

Watershed Planning and Management

Goal 10F: **Protect and enhance water quantity and quality and promote sustainable and efficient use of water resources.**

Policy 10F-1: Maintain as a high priority the protection of water quality and quantity.

Policy 10F-2: Actively participate in and support efforts to coordinate local, federal, tribal, and state agencies to achieve integration and/or consistency between the various levels of environmental regulations relating to the County.

Policy 10F-3: Work cooperatively with Federal, State, and local jurisdictions, Tribal governments, municipal corporations, and the public to implement the goals and policies of the Comprehensive Plan as well as state water resources and water quality laws.

Policy 10F-4: Participate in the coordination of all local water and land management efforts, plans, and data to ensure adequate oversight of water quantity and quality issues.

Policy 10F-5: Manage water resources for multiple instream and out-of-stream beneficial uses, including instream flows set by the State Department of Ecology.

Policy 10F-6: Actively promote and participate in education, research, and information opportunities that improve our understanding of the

county's complex water resource systems. New information should be considered in the development and evaluation of management actions.

Policy 10F-7: Pursue the most effective methods for protecting water quantity and quality, through both regulatory (e.g. zoning, enforcement, fines) and non-regulatory approaches (education, incentives, and technical/financial assistance). Emphasis shall be placed on non-regulatory approaches where possible and effective.

Policy 10F-8: Track the development of policies and regulations at the local, state, and federal level. Provide input to those regulations and policies as necessary to ensure that the interests of Whatcom County are considered.

Policy 10F-9: In conjunction with all jurisdictions, develop and adopt programs to protect water quality and quantity within watersheds, aquifers, and marine waterbodies that cross jurisdictional boundaries.

Policy 10F-10: Promote awareness and participation in management and protection efforts by individual citizens and the community as a whole.

Policy 10F-11 Pursuant to ESSB 6091, Whatcom County will work through the Planning Unit and WRIA 1 Watershed Management Board and its established processes to update the WRIA 1 Watershed Management Plan, consistent with ESSB 6091, for approval by the Whatcom County Council by February 1, 2019. The updated plan shall include recommendations for projects and actions that will measure, protect, and enhance instream resources and improve watershed functions that support the recovery of threatened and endangered salmonids.

At a minimum, the watershed plan must include those actions determined to be necessary to offset potential impacts to instream flows associated with permit-exempt domestic water use. The highest priority recommendations must include replacing the quantity of consumptive water use during the same time as the impact and in the same basin or tributary. Lower priority projects include projects not in the same basin or tributary and projects that replace consumptive water supply impacts only during critical flow periods. The watershed plan may include projects that protect or improve instream resources without replacing the consumptive quantity of water where such projects are in addition to those actions determined to be necessary to offset potential consumptive impacts to instream flows associated with permit-exempt domestic water use.

Watershed plan recommendations may include, but are not limited to, acquiring senior water rights, water conservation, water reuse, stream gaging, groundwater monitoring, and developing natural and constructed infrastructure, which

includes, but is not limited to, such projects as floodplain restoration, off-channel storage, and aquifer recharge. Qualifying projects must be specifically designed to enhance streamflows and not result in negative impacts to ecological functions or critical habitat.

Until the updated watershed plan is approved and rules are adopted, the County, in issuing building permits under RCW 19.27.097(1)(c) or approving subdivisions under chapter 58.17 RCW in WRIA 1 will comply with all of the specific requirements of ESSB 6091.

Surface Water and Groundwater

Goal 10G: Protect and enhance Whatcom County's surface water and groundwater quality and quantity for current and future generations.

Policy 10G-1: Manage surface water systems on a watershed basis.

Policy 10-2G: Coordinate efforts to bring all water users in Whatcom County into compliance with state and federal water laws in a way that enhances stream flows, water quality, and fish and wildlife habitat while advocating for adequate water for existing agriculture.

Policy 10G-3: In conjunction with the public and appropriate local, state, Tribal, and federal jurisdictions, define, identify, and develop management strategies for watershed basins and subbasins that may require special protection. These areas may include aquifers, critical aquifer recharge areas as defined under the Growth Management Act, Groundwater Management Areas, wellhead protection areas, and high priority watersheds such as those specified under WAC 400 (Local Planning and Management of Non-point Source Pollution), WRIA Watershed Management Planning, and under legislative policy direction (e.g. Nooksack Basin, Lake Whatcom, Lake Samish and Drayton Harbor).

Policy 10G-4: Management efforts should consider both water quality and quantity. Water quality efforts should help reduce the likelihood that potential contaminant sources will pollute water supplies. Water quantity efforts should include consideration and protection of recharge areas and potential effects on stream flow.

Policy 10G-5: Support the implementation of local and state Watershed Management Plans, the Lower Nooksack Strategy, the Lake Whatcom Management Program, NPDES Phase II Permitting, and the WRIA Watershed Management Projects.

Policy 10G-6: Pursue the adoption and implementation of ground and/or surface water management plans and their integration into local comprehensive plans. Designate the Lake Whatcom and Lake Samish Watersheds as high priorities in this effort.

- Policy 10G-7: Oppose the use of hydraulic fracturing in oil and gas wells (also known as “fracking”) to avoid the potential degradation of water quality in aquifers and other groundwater.
- Policy 10G-8: Monitor, prevent, and reduce the establishment of invasive species in Whatcom County waterbodies.
- Policy 10G-9: Identify and/or update wellhead protection areas and critical aquifer recharge areas and incorporate into the Critical Areas Ordinance. This information should be available to the public.

Stormwater and Drainage

Goal 10H: Protect water resources and natural drainage systems by controlling the quality and quantity of stormwater runoff.

- Policy 10H-1: Manage stormwater runoff to minimize surface water quality and quantity impacts and downstream impacts on channel morphology, property owners, and aquatic species and habitats.
- Policy 10H-2: Maintain or enhance, when appropriate, natural drainage systems and natural water storage sites in order to better protect water quality, moderate water quantity, minimize environmental degradation, and reduce public costs.
- Policy 10H-3: Limit the alteration of natural drainage systems and natural water storage sites without mitigating measures. Such measures should not degrade water quality or fish and wildlife habitat and should not increase hazards to the community.
- Policy 10H-4: Support the use by resource industries—such as agriculture, forestry, and mineral resource extraction—of management practices that minimize erosion and sedimentation, and significantly reduce pollutants.
- Policy 10H-5: Evaluate the role of watersheds in the maintenance of water quality and quantity and determine what cumulative impacts development activity may have on watershed hydrology.
- Policy 10H-6: Develop specific stormwater management programs for each drainage basin within the county's jurisdiction that may be impacted by urban levels of development. Recognize the Lake Whatcom Watershed, Lake Samish, and Drayton Harbor as high priorities in this effort. Coordinate efforts with the Lake Whatcom Policy Group, the various shellfish protection districts, and other watershed management entities.
- Policy 10H-7: Establish, as a high priority, a stormwater maintenance program that ensures that stormwater systems are adequately maintained and function at or near design capacity.
- Policy 10H-8: Strongly incentivize the use of low impact development strategies. Minimize the amount of impervious surface whenever practicable by using natural engineering design methods such as

- 1 the use of open, grassed, street swales and rain gardens instead
2 of curbs and gutters. Where feasible, encourage alternate
3 surfacing options and other techniques associated with low
4 impact development (see Glossary).
- 5 Policy 10H-9: Develop and administer stormwater management standards as
6 required by the NPDES Phase II Permit.
- 7 Policy 10H-10: Develop and administer regulations and incentives such that
8 there is no net loss of ecological functions and values of regulated
9 wetlands and fish and wildlife habitats.
- 10 Policy 10H-11: Place a high priority on integrating impervious surface reduction
11 incentives into policies, regulations, and standards.
- 12 Policy 10H-12: Develop and implement comprehensive stormwater management
13 programs and strategies designed to address runoff from all
14 private and public developments and facilities within regulated
15 and sensitive watersheds.
- 16 1. Implement the Western Washington Phase II Municipal
17 Stormwater Permit as part of the National Pollutant Discharge
18 Elimination System (NPDES) Program. Incorporate watershed
19 considerations into the development of a comprehensive
20 stormwater management strategy for designated areas.
- 21 2. Review Stormwater Special Districts Standards, Watershed
22 Protection Districts, and other related codes that address
23 runoff treatment from potentially polluting surfaces for their
24 applicability to other sensitive watersheds with the Technical
25 Advisory Committee and other appropriate agencies.
26 Coordinate efforts for ongoing monitoring and evaluation
27 within the sensitive watersheds and NPDES areas.
- 28 3. Amend subdivision, zoning, and other land use regulations and
29 design standards to encourage that land use activities
30 minimize the amount of impervious surface.
- 31 4. Identify and implement a long-term funding source to provide
32 for water resource protection services, including non-point
33 source identification and enforcement of applicable county
34 regulations.
- 35 5. Focus on the Lake Whatcom watershed as a high priority in
36 developing a stormwater management program. Develop a
37 stormwater management plan that achieves a uniform level of
38 protection throughout the Lake Whatcom watershed. Ensure
39 coordination and communication with the public and affected
40 jurisdictions, such as the Lake Whatcom Water and Sewer
41 District, the Sudden Valley Community Association, and the
42 City of Bellingham.

6. Ensure existing stormwater standards are adequately enforced within Stormwater Special Districts, Watershed Protection Districts, and the NPDES areas.

7. Prioritize stormwater polluting areas and develop retrofits for areas most likely to impact sensitive waters.

Water Conservation

Goal 10-I: Support water conservation, reclamation, reuse measures, and education as a means to ensure sufficient water supplies in the future.

Policy 10I-1: Support and assist water users in the development of cost-effective means of improving efficiency of water use.

Policy 10I-2: Support efforts to establish and protect sustainable water supplies to meet existing and future demands for water in the county.

Policy 10I-3: Develop and implement plans to comply with the Department of Ecology's instream flow and water management rules and water resources management programs.

Policy 10I-4: Coordinate local water and land management efforts, plans, and data to ensure adequate oversight of water quality and quantity issues.

Policy 10I-5: Quantify water use to promote conservation.

Policy 10I-6: Use water use data to encourage conservation and maintain availability of water for agriculture and instream flow.

Policy 10I-7: Encourage the Department of Ecology to provide flexibility in the application of the water relinquishment rule simultaneous with establishing a water bank/water exchange program in Whatcom County in cooperation with stakeholders.

Lake Whatcom Watershed

Goal 10-J: Prioritize the Lake Whatcom watershed as an area in which to minimize development, repair existing stormwater problems (specifically for phosphorus), and ensure forestry practices do not negatively impact water quality. Provide sufficient funding and support to be successful.

Policy 10J-1: Work with property owners to find acceptable development solutions at lower overall densities than the present zoning allows.

Policy 10J-2: Develop and implement the fair and equitable funding mechanisms called for in the 2008 Lake Whatcom Comprehensive Stormwater Plan to support lake water quality protections by 2018.

- 1 Policy 10J-3: Recognize that all users of Lake Whatcom water have an interest
2 in the resource and should share in the cost of its protection.
- 3 Policy 10J-4: Work cooperatively with the City of Bellingham, the Lake
4 Whatcom Water and Sewer District, and applicable associations
5 and organizations to identify, review, and, as appropriate,
6 recommend changes to existing monitoring programs to better
7 improve lake water quality.
- 8 Policy 10J-5: Evaluate and pursue, as appropriate, the use of incentives to
9 encourage voluntary lot consolidation, transfer or purchase of
10 development rights, current use taxation, and participation in
11 open space conservation programs.
- 12 Policy 10J-6: Do not allow density bonuses within the Lake Whatcom
13 Watershed.
- 14 Policy 10J-7: Work cooperatively with the City of Bellingham and the Lake
15 Whatcom Water and Sewer District to develop and track
16 benchmarks to determine: the effectiveness of management
17 options; when goals have been achieved; and/or when additional
18 actions are necessary.
- 19 Policy 10J-8: Continue to develop and refine structural and non-structural best
20 management practices (BMPs), both voluntary and required, to
21 minimize development impacts within the Lake Whatcom
22 watershed.
- 23 Policy 10J-9: Work to keep publicly-owned forest lands within the Lake
24 Whatcom watershed in public ownership, and support managing
25 forestry on these lands in a manner that minimizes sediment and
26 phosphorus yields from streams, and is consistent with Best
27 Available Science (BAS) data, in order to protect and enhance
28 water quality.
- 29 Policy 10J-10: Encourage the location of public services, such as schools,
30 libraries, parks/open space, and post offices within Sudden Valley
31 in an attempt to reduce the vehicle miles traveled within the
32 watershed.
- 33 Policy 10J-11: Continue to work with Bellingham and Lake Whatcom Water and
34 Sewer District to protect and manage the Lake Whatcom
35 watershed in accordance with the 1998 jointly adopted interlocal
36 agreement. Focus on continued implementation of the 5-Year
37 Work Plans of the Lake Whatcom Management Program. In
38 addition, work with the affected jurisdictions and secure funding
39 for programs that protect and enhance water quality.
- 40 Policy 10J-12: Review and modify (as needed) the current development review
41 process for projects in the Lake Whatcom Watershed to ensure
42 coordination with other jurisdictions to streamline regulations
43 that improve and protect water quality.

Policy 10J-13: The existence of sewer lines in the Rural and Rural Forestry comprehensive plan designations will not be used to justify rezoning property in the Lake Whatcom watershed to allow higher density land uses.

Policy 10J-14: Existing Urban Growth Areas shall not be expanded nor new Urban Growth Areas designated within the Lake Whatcom Watershed, and rezones that allow greater residential densities will not be allowed.

Ecosystems

Introduction

Ecological systems, or ecosystems, refer to the natural systems that have developed within the geologic and geographic setting of Whatcom County. Whatcom County contains a significant number of distinct ecosystem types, with associated fish, wildlife, and plant species, as well as many other living organisms. This biodiversity has evolved and adapted according to the specific physical and climatic conditions of the county (Map 10-2, Map 10-3). Ecosystem goals and policies are intended to provide guidance to county government as it assists people to manage and protect these ecosystems. Additionally they ensure other benefits are maintained far into the future.

Background Summary

Whatcom County provides a wide variety of natural habitats that support and shelter a diverse array of fish and wildlife species. The county's wildlife is particularly varied and abundant when compared to many other areas of Washington State. There are a number of factors that have contributed to this: abundant water resources, rich soils, mild climate conditions, and a moderate degree of urbanization are among the most important. Among the habitats of importance to fish and wildlife are the following:

- wetlands, lakes, and streams;
- nearshore, intertidal, estuarine habitats, and marine habitats including, but not limited to, kelp and eelgrass beds;
- riparian areas and other travel corridors;
- snags and downed logs;
- forested habitats in a variety of successional stages;
- caves, cliffs, rocky balds, and talus slopes;
- grasslands and cultivated fields; and,
- thickets and fence rows.

Aquatic habitats include rivers, streams, ponds, lakes, and their riparian borders. Together, these habitats are essential to Whatcom County's fish and wildlife. Twenty-six species of fish—including twelve economically important stocks of salmon and trout—inhabit fresh water in Whatcom County for all or part of their life cycles. Healthy flowing streams and rivers, as well as off-channel wetland habitats, are

essential to the survival of the majority of these fish. Wetland ponds, especially beaver ponds, provide optimal habitats for rearing and over-wintering of young fish, particularly Coho salmon and cutthroat trout juveniles.

Most wildlife species regularly use aquatic and riparian habitats for breeding, feeding, shelter, and migratory activities. Of this large grouping, over half are dependent upon wetland habitats at some point in their life cycles, and would decline or disappear in the absence of wetlands. Wetlands also contain unique vegetative communities that harbor many species of rare and unusual plants.

Fish and Wildlife Populations and Habitat

Optimum habitat for Pacific Northwest salmon and other fish is one that resembles the riparian landscape of pre-settlement times: braided streams wandering freely through nearly continuous forest; trees overhanging and partly fallen into streams; stream beds with abundant logs, step waterfalls, pools, and cutbanks; and vegetated marine and estuarine communities. In most cases, it is not realistic to return to that state. However, measures can be taken to retain or regain those features that provide the minimum requirements of a viable fishery.

The best habitat for native wildlife includes native plants, which are more closely matched to local soils, climate, and wildlife. They provide the right kinds of food, shelter, and diversity needed by wildlife. Native plants frequently need less watering, spraying, pruning, fertilizing, or other maintenance than do exotic or imported plants. Loss of native vegetation through conversion to ornamental vegetation and non-native species can result in loss of wildlife habitat, increased competition to native wildlife from introduced species, such as starlings, and increased maintenance needs. Loss of native vegetation also can occur through invasions of non-native species, such as the spread of *Spartina*, which can drastically displace important native eelgrass and mudflat communities.

Salmon Recovery Program

The decline of salmonids throughout Washington and the Pacific Northwest over the past century is well established. Since 1991, numerous evolutionarily significant units (ESUs) of Pacific salmonids have been listed as endangered or threatened under the Endangered Species Act (ESA), including those of chinook, coho, chum, sockeye, and steelhead. Decline in wild salmonid abundances have been attributed to widespread loss and degradation of habitat, due to hydropower, residential and urban development, agriculture, forestry, and fishing and hatchery production.

In the Nooksack basin, abundances of several salmonid stocks have diminished substantially from historical levels. The declines in local salmonid stocks, especially Chinook salmon, have had profound economic, cultural, and social impacts on the greater WRIA 1 community. Direct impacts include reduced jobs and income for commercial fisherman, severe curtailment of tribal and subsistence catch, and loss of tourism associated with recreational fishing. In addition, ESA listings impose constraints on the activities of local and tribal governments, businesses, the agricultural community, and citizens, who must seek to avoid or minimize take of listed species. Nonetheless, salmon remain an integral part of the natural and social landscape of Whatcom County and the Nooksack River Watershed. Recent watershed

recovery planning and restoration efforts by federal, state, local, and tribal governments, non-profit organizations, businesses, and private citizens demonstrate a commitment to salmon recovery in WRIA 1.

The WRIA 1 Salmon Recovery Program is a multi-government planning effort with a WRIA-wide scope to address salmon recovery and protection of ESA and non-ESA listed salmonids.

WRIA 1 Salmon Recovery Strategy

The ultimate goal for salmon recovery in WRIA 1 is to recover self-sustaining salmonid runs to harvestable levels through the restoration of healthy rivers and natural stream, river, estuarine, and nearshore marine processes; careful use of hatcheries; and responsible harvest, with the active participation and support of local landowners, businesses, and the larger community. The purpose of the *WRIA 1 Salmonid Recovery Plan* is to identify the actions necessary to recover WRIA 1 salmonid populations, especially listed species, and to outline the framework for implementation of recommended actions that have been agreed to by local, state, tribal, and federal governments and stakeholders in WRIA 1. In the near term, the objectives are to:

1. Focus and prioritize salmon recovery efforts to maximize benefit to the two Nooksack early chinook populations;
2. Address late-timed Chinook through adaptive management, focusing in the near-term on identifying hatchery versus naturally-produced population components;
3. Facilitate recovery of WRIA 1 bull trout and steelhead by implementing actions with mutual benefit to early chinook, bull trout, and steelhead, by removing fish passage barriers in presumed bull trout and steelhead spawning and rearing habitats in the upper Nooksack River watershed; and
4. Address other salmonid populations by (a) protecting and restoring WRIA 1 salmonid habitats and habitat-forming processes through regulatory and incentive based programs; and (b) encouraging and supporting voluntary actions that benefit other WRIA 1 salmonid populations without diverting attention from early chinook recovery.

Focusing efforts on early chinook is consistent with regional salmon recovery, current abundance and productivity for the two populations is very low and recovery of both populations is critical to delisting and recovery of the Puget Sound Evolutionarily Significant Unit (ESU) for Chinook salmon.

Salmon Recovery Board (SRB)

WRIA 1 Salmon Recovery Board membership includes the County Executive, Bellingham Mayor, Mayors of the Small Cities of Whatcom County, the regional director of the Washington Department of Fish and Wildlife, and policy representatives from Lummi Nation and Nooksack Indian Tribe.

The WRIA 1 Salmonid Recovery Plan (2005), a chapter of the Puget Sound Salmon Recovery Plan, guides restoration in the Nooksack River and adjacent watersheds.

1 This plan was developed in partnership with Nooksack Tribe, Lummi Nation,
2 Washington Department of Fish and Wildlife, Bellingham, Whatcom County
3 Government, and the small cities of Whatcom County. Chinook salmon populations
4 (listed as threatened with extinction under the Federal Endangered Species Act) are
5 prioritized, yet the plan also provides the template for recovery of threatened
6 steelhead and bull trout and the other salmon and trout populations native to
7 Whatcom County.

8 The salmon plan was developed in parallel with the WRIA 1 Watershed Management
9 Plan. Salmon habitat is intricately linked to watershed management; salmon recovery
10 will be most successful when fish habitat objectives are carefully coordinated with
11 watershed management objectives. Integrating salmon recovery with flood hazard
12 management and restoring fish passage under County roads are two primary areas
13 of focus.

14 **Marine Resources Management**

15 Marine habitats include all saltwater bodies and their shorelines, kelp and macro algae
16 beds, eelgrass meadows, salt marshes, beaches, and mudflats. These habitats play
17 a vital role in the health of the local environment, as well as of the broader Puget
18 Sound region. They provide spawning, rearing, and feeding grounds for a wide variety
19 of marine life, as well as refuge for juvenile and adult fish, birds, and shellfish. The
20 vegetation on back-shore marshes and within estuaries buffers adjacent upland areas
21 by absorbing wave energy and slowing erosion.

22 Symptoms of ecosystem stress include: declining stocks of salmon, bottomfish, and
23 forage fish; closures of recreational and commercial shellfish beds; degradation and
24 losses of eelgrass beds, kelp forests, and other marine habitats; and dwindling
25 populations of seabirds and marine mammals.

26 The Northwest Straits Marine Conservation Initiative was authorized by Congress in
27 1998. The Initiative established the Northwest Straits Commission and Marine
28 Resources Committees (MRCs) in seven western Washington counties, including
29 Whatcom County. The MRCs' main purpose is to guide local communities, using up-
30 to-date information and scientific expertise, to achieve the important goals of
31 resource conservation and habitat protection within the Northwest Straits. The
32 Whatcom County MRC acts as an advisory committee to the Whatcom County Council.

33 Shellfish Recovery

34 Many of the marine waterbodies in Whatcom County support natural and cultured
35 bivalve shellfish, including oysters and many species of clams. The warm, nutrient-
36 rich tide flats in and around Lummi, Portage, and Birch Bays; Drayton Harbor; and
37 Eliza and Lummi Islands represent unique water resources in this regard. Commercial
38 shellfish growers, recreational clam and oyster harvesters, and Native Americans
39 have used this resource for many years. It is an important part of our community's
40 heritage.

41 Our ability to grow and harvest shellfish that is safe for human consumption is directly
42 linked to surface water quality and the influence it has on marine waters. The primary
43 measure of water quality for shellfish harvesting is bacterial contamination. There
44 are many potential sources of fecal bacteria, such as municipal sewage treatment

plants, on-site sewage systems, boat waste, farm animals, pets, and wildlife. Since 1995, valuable shellfish beds in Portage Bay and Drayton Harbor have been downgraded (harvest prohibited) due to non-point pollution impacting recreational, tribal, and commercial harvesting. In 2014, Portage Bay was identified as a threatened Shellfish Growing Area by the Washington Department of Health. (Washington Department of Health, 2014)

Shellfish Protection Advisory Boards

Whatcom County has three Shellfish Protection District Advisory Committees, one for each of the Shellfish Protection Districts: Birch Bay, Drayton Harbor, and Portage Bay. Each advises the County Council on proposed actions and operations relating to the restoration of water quality in their respective watersheds.

Shellfish Recovery Plans

Shellfish Recovery Plans have been created for each of three districts. The plans outline the primary sources of bacteria and actions to improve water quality:

- Drayton Harbor Shellfish Recovery Plan (2007)
- Portage Bay Shellfish Recovery Plan (2014), Portage Bay Initial Closure Response Strategy (1998)
- Birch Bay Initial Closure Response Strategy (2009)

Pertinent Documents

- Whatcom Marine Resources Committee 2011 - 2015 Strategic Plan (2010)

This document outlines the MRC's mission, vision, values, goals, objectives, and strategies for achieving them.

Issues, Goals, and Policies

General – Ecosystems

Development and urbanization of the land base have and may continue to result in the degradation and reduction of ecosystem functions. Wetlands and estuaries continue to be lost incrementally. Streams and their adjacent riparian habitat are affected by land clearing, ditching, erosion, and road building. Lakeshore development degrades the foreshore environment for waterfowl and other species, as well as negatively affecting water quality. It is estimated that Washington has also lost approximately one-third of its historic eelgrass beds from a variety of causes, including dredging, shading, and filling. Large-diameter snags and downed logs, an essential feature for dozens of wildlife species, are lost during clearing or intensive forest management. Forested habitats are lost to a number of development processes including urbanization, agriculture, increased rural/ suburban housing density, and timber harvesting. The delicate environment of cliffs and caves may be affected by housing development, mining, and other activities. Conversely, grasslands, thickets, fields, and fence rows are habitats largely provided and enhanced by human activities, and are thus fairly abundant and stable within the developing county. The existence of farms, in particular, has contributed to an abundance of these more open, pastoral habitats.

Many stream systems in Whatcom County have been altered by agriculture, forestry, development, and flood control practices, contributing to low stream flows, fisheries

loss, water pollution, sedimentation and other problems. These impacts can directly affect the fisheries resources by depositing silt and debris into spawning beds, by removing trees that shade and cool the water, bank armoring, interfering with the recruitment and establishment of large woody debris (LWD), by obstructing fish passage with culverts and roads, by altering natural channels through filling, bank hardening, and channelizing. In addition, the physical processes that create functional habitats for fish life stages are altered by increasing flows through stormwater runoff or consuming water volume for other out-of-stream uses.

Finally, a healthy and functioning ecosystem, including forests, wetlands, fish, wildlife, and native plants they harbor, is an identified resource. A healthy ecosystem supports diverse and abundant wildlife, fish, and plant populations, and is necessary. The gathering of fish, game, and other natural resources forms a central aspect of many cultures in Whatcom County. The mere presence of these natural resources constitutes a community amenity that is a substantial part of our local economic base.

Goal 10K: Protect and enhance ecosystems, which provide economic, ecological, aesthetic, and cultural benefit.

Policy 10K-1: Define and identify species, habitats, and habitat features important to a balanced and sustainable web of life, biodiversity, and especially important to fish, native plants, and wildlife. Create, and regularly update an Ecosystem Report.

Policy 10K-2: Develop and adopt programs that protect habitats essential to the conservation of species that have been identified as endangered, threatened, or sensitive by the state or federal government as well as habitats identified as necessary in the Ecosystem Report. These programs should maintain and encourage restoration of habitat conditions for listed species of concern, as well as habitats identified as having significant biodiversity, connectivity, and other important features and functions.

Policy 10K-3: Develop incentives for protection of environmentally fragile areas or critical plant and wildlife habitats as well as habitats that provide connectivity (corridors).

Policy 10K-4: Where feasible, incorporate fish and wildlife habitats into public capital improvement projects.

Policy 10K-5: Provide measures to mitigate negative water quality and quantity impacts from both public and private alterations of natural drainage systems.

Policy 10K-6: Consider sensitive fish, shellfish, and wildlife species and their habitats when establishing zoning densities and patterns.

Policy 10K-7: Promote voluntary fish and wildlife habitat enhancement projects through educational and incentive programs, such as purchase of development rights or habitat conservation easements. These projects, which can be done by individuals, organizations, and businesses, will buffer and expand fish, plant, and wildlife habitat.

- 1 Policy 10K-8: Give careful consideration to the siting of industrial, commercial,
2 residential, and other land use designations when located near
3 important marine, terrestrial, or other critical habitats.
- 4 Policy 10K-9: Protect, retain, and enhance the beneficial uses and functions of
5 streams and rivers. Define and identify the beneficial uses and
6 functions of streams and rivers, including wildlife and fisheries
7 habitat, water quality, open space, aesthetics, and recreation.
- 8 Policy 10K-10: Protect and enhance ecosystem functions when flood hazard
9 management measures are used.
- 10 Policy 10K-11: Regulate the operation of river gravel extraction activities in such
11 a manner so as to provide long-term protection of fish and wildlife
12 habitat and water quality.
- 13 Policy 10K-12: Ensure design and development of residential and industrial
14 development minimizes disturbance to rivers, streams, and
15 functioning riparian areas.
- 16 Policy 10K-13: Evaluate the full value of the fishery; including its cultural and
17 economic value; in land use decisions that may impact that
18 fishery. Unavoidable impacts to an individual habitat or fishery
19 shall be mitigated.
- 20 Policy 10K-14: Continue to consider the value of wildlife populations for which
21 habitat conservation areas have been identified in PDS's wildlife
22 habitat mapping, their associated habitats, and connectivity in
23 land use planning that may impact them. This is not intended to
24 require landowners to pay for any additional studies.
- 25 Policy 10K-15: Mitigation to Habitat Conservation Areas should be tracked and
26 monitored to ensure no net loss to natural area.
- 27 Policy 10K-16: Monitor Habitat Conservation Areas to obtain a baseline of current
28 conditions and to ensure no net loss and avoidance of cumulative
29 impacts.

30 **Fish and Wildlife Populations and Habitat**

- 31 **Goal 10L: Protect and enhance ecosystems that support native fish**
32 **and wildlife populations and habitat.**
- 33 Policy 10L-1: Strongly discourage any activity that might cause significant
34 degradation of the fishery resource or habitat.
- 35 Policy 10L-2: Support the protection and enhancement of significant fish
36 spawning and rearing habitat, food resources, refugia (shelter),
37 and travel passages.
- 38 Policy 10L-3: Establish non-regulatory mechanisms and incentives for
39 development that accommodates the habitat needs of fish and
40 wildlife and encourages good stewardship practices.

- 1 Policy 10L-4: Support protection and enhancement of fish and wildlife habitat
2 through site design in new development.
- 3 Policy 10L-5: Native vegetation and soils on streambanks and shorelines should
4 be disturbed as little as possible. In situations where re-
5 vegetation is necessary to restore streambank or shoreline
6 stability and provide shading, site-specific native plants should be
7 used. Retention of vegetated riparian areas on all lake and marine
8 shorelines shall also be encouraged.
- 9 Policy 10L-6: Discourage shoreline armoring. Instead, encourage natural or
10 bio-engineering solutions such as planting native vegetation,
11 engineered log jams/LWD, and beach nourishment along eroding
12 banks to address stream and shoreline bank erosion problems.
13 Riparian buffers should be replanted with suitable native
14 vegetation as a part of all bank stabilization projects.
- 15 Policy 10L-7: Encourage native vegetation and soil retention and plantings that
16 provide or maintain the beneficial uses and functions of streams,
17 rivers, lakes, and marine shorelines.
- 18 Policy 10L-8: Maintain and encourage restoration of habitat functions for
19 threatened and endangered fish species.
- 20 Policy 10L-9: Use Best Available Science to inform the creation of regulations
21 to mitigate adverse impacts of development adjacent to rivers,
22 streams, and marine shorelines.
- 23 Policy 10L-10: Encourage landowners to voluntarily protect surface water quality
24 with filter strips or other appropriate water cleansing mechanisms
25 installed between lawns, landscaping, livestock pens, or
26 agricultural fields and waterbodies.
- 27 Policy 10L-11: Formulate and implement a comprehensive, landscape-based,
28 environmental management program to protect fish and wildlife.
29 The program should include the following:
- 30 1. Formulate an administrative approach to the review of
31 development and planning proposals that consider natural
32 system policies;
- 33 2. Investigate and develop programs for acquisition and
34 restoration of important fish and wildlife habitat areas;
- 35 3. Develop and enter into cooperative agreements with State and
36 Federal agencies and neighboring jurisdictions to identify and
37 protect ecosystems;
- 38 4. Identify and map important habitat corridors and connectivity
39 throughout the county; and,
- 40 5. Support the development of educational materials which list,
41 describe, and characterize the appropriate use of native
42 vegetation to enhance ecosystem functions in Whatcom
43 County.

- 1 Policy 10L-12: Consider establishing formal meander limits for the Nooksack
2 River, precluding additional development within this zone, and
3 promote the River and Flood property acquisition program within
4 these areas.
- 5 Policy 10L-13: Diligently work to prevent and/or reduce the establishment
6 and/or spread of invasive species.
- 7 Policy 10L-14: Actively participate in and support WRIA 1 Salmon Recovery
8 efforts to return self-sustaining salmonid runs to harvestable
9 levels through: the restoration of healthy rivers, marine
10 shorelines, and natural processes; the careful use of hatcheries;
11 and responsible harvest.
- 12 Policy 10L-15: Participate in protection and improvement of biodiversity.
- 13 Policy 10L-16: Consider establishing important habitat areas as sending
14 areas after creating a voluntary, workable transfer of
15 development rights (TDR) program.
- 16 Policy 10L-17: Mitigation of wetlands should be reviewed and tracked over time
17 to ensure no net loss of wetland function.
- 18 Policy 10L-18: A baseline of wetland identification and function should be made
19 to track and prevent net loss and avoid cumulative impacts.
- 20 Policy 10L-19: The County will support the work of the Fisheries Co-managers
21 (Lummi Nation, Nooksack Tribe, and the State Department of Fish
22 and Wildlife) and stakeholders to establish a sustainable salmon
23 harvest goal for the Nooksack Basin.

Wetlands

25 Wetlands are crucial environmental features in Whatcom County. Wetlands provide
26 invaluable functions in aquifer recharge, groundwater storage, floodwater detention,
27 pollutant removal and purification of water supplies, as well as provision of fish and
28 wildlife habitat. Loss of wetlands has been due to many factors, including
29 urbanization, agricultural development, and drainage projects.

30 A plethora of complex and often confusing laws govern the definition, delineation,
31 and protection of wetlands. These laws originate at national, state, and county levels.
32 Land managers and private citizens often experience difficulty in interpreting,
33 synthesizing, and applying wetland regulations. In general, however, state
34 regulations must comply with federal standards and local regulations must comply
35 with both federal and state standards.

Goal 10M: Conserve and enhance regulated wetlands.

- 37 Policy 10M-1: Recognize natural wetlands such as swamps, bogs, saltwater
38 marshes, and ponds for their value in cleaning water, reducing
39 flood damage, providing valuable habitat for plants, fish and
40 wildlife, and as sites for groundwater recharge.

Policy 10M-2: Develop and adopt criteria to identify and evaluate wetland functions that meet the Best Available Science standard and that are consistent with state and federal guidelines.

Policy 10M-3: Biological functions of wetlands are complex and interwoven. Evaluate the full range of potential and immediate economic impacts in land use decisions relating to wetlands, including fisheries, wildlife, recreation, farmlands, sustainable resources, air and water quality, flood hazard management, real estate, cultural attributes, and other uses.

Policy 10M-4: Encourage land development to avoid wetland impacts. Impacts to regulated wetlands should be contingent upon full mitigation measures that equitably compensate for wetlands impacts, on a case-by-case basis. Approved mitigation measures shall include resources for long-term monitoring and adaptive management of mitigation outcomes to assure effectiveness. Strongly discourage alteration of land that results in the degradation of type 1 and 2 wetlands.

Policy 10M-5: Property rights and public services are essential components of our political and economic system. Where such rights and public services are significantly compromised by the goal of wetland preservation, adverse wetland impacts may be permitted through standardized mitigation. This may include avoidance, impact minimization, restoration, enhancement, creation, or off-site compensation for loss of wetland functions in accordance with mitigation sequencing.

Policy 10M-6: Recognize beneficial wetland uses, functions, and values. Support protection of fish and wildlife habitat, water quality, plant diversity, flood attenuation and low-flow contribution, and water storage through planning, acquisition, incentive programs, and mitigation.

Policy 10M-7: Development applications should be assessed on a case-by-case basis so that marginal wetlands are not preserved at the expense of upland areas with higher habitat value.

Marine Habitat

Goal 10N: Protect and enhance marine ecosystems and resources in Whatcom County.

Policy 10N-1: Support the Whatcom County Marine Resources Committee in its pursuit of the Northwest Straits Commission benchmarks as follows:

- Broad county participation in MRCs;
- A net gain in high-value habitat and ecosystem functions;
- A net reduction in shellfish bed closures;

- 1 ▪ Measurable increases in factors supporting bottomfish
- 2 recovery;
- 3 ▪ Population increases in other key indicator species;
- 4 ▪ Coordination of scientific data;
- 5 ▪ Successful public education and outreach efforts; and,
- 6 ▪ The establishment of a regional system of Marine Protected
- 7 Areas (MPA's).
- 8 Policy 10N-2: Promote naturalized shoreline buffers and restoration of riparian
- 9 vegetation.
- 10 **Goal 10P: Protect and enhance shellfish habitat in commercial and**
- 11 **recreational areas to ensure a productive resource base for**
- 12 **long-term use.**
- 13 Policy 10P-1: Identify and designate marine shellfish habitat for commercial
- 14 and recreational uses.
- 15 Policy 10P-2: Restore degraded waters within the drainage basins of shellfish
- 16 growing areas to a level that allows/supports shellfish harvesting
- 17 by work with the Department of Ecology, Tribes, Department of
- 18 Health, Department of Fish and Wildlife, and affected property
- 19 owners to improve water quality.
- 20 Policy 10P-3: Protect shellfish resources by means of pollution prevention and
- 21 enforcement when necessary. This should include surface and
- 22 groundwater monitoring for early detection of pollution to
- 23 minimize the damage and cost of resource restoration.
- 24 Policy 10P-4: Improve knowledge of the importance of protecting, preserving,
- 25 and improving the quality of shellfish habitat within the County.
- 26 Seek out valuable partnerships that will raise awareness, provide
- 27 education, and enhance shellfish habitat.
- 28 Policy 10P-5: Develop Low Impact Development standards in shellfish habitat
- 29 areas.
- 30 Policy 10P-6: Identify and encourage the use of stormwater treatment systems
- 31 and Best Management Practices to reduce fecal coliform bacteria
- 32 levels in stormwater discharging directly into shellfish habitat
- 33 areas.
- 34 Policy 10P-7: Solicit input from the Shellfish Protection District advisory
- 35 committees and appropriate state, federal, and tribal agencies
- 36 when considering updates to the Comprehensive Plan that relate
- 37 to shellfish protection.
- 38 Policy 10P-8: Identify and restore functions, selected through best available
- 39 landscape-based science, of key wetland areas.
- 40 Policy 10P-9: Modify county roadside ditch maintenance procedures to protect
- 41 water quality.

- Policy 10P-10: Continue to partner with jurisdictions in British Columbia to minimize impacts on water quality, including what affects shellfish habitat.
- Policy 10P-11: Work within the structure of County programs such as the WRIA Watershed Management Planning process to achieve improvements in land use Best Management Practices that will positively affect change in marine water quality.
- Policy 10P-12: Continue to develop programs that identify potential pollution sources and ensure timely and science-based approaches are used in response to problems as they arise.
- Policy 10P-13: Develop educational tools and opportunities to raise public awareness of marine issues and to inform them of how they can have a positive impact by helping preserve these marine resources.
- Policy 10P-14: Identify areas (such as wetlands and the nearshore environment) that are important to shellfish habitat preservation. Also identify river and stream processes that adversely impact shellfish habitat. Use this information when making land use management and preservation decisions.
- Policy 10P-15: Create a tracking mechanism to document progress made toward improving downgraded shellfish areas. This information will be useful not only in supporting an upgrade when water quality shows improvement, but also in preventing degradation in currently approved shellfish areas.
- Policy 10P-16: Work with the County Shellfish Advisory Committees, Marine Resources Committee, Salmon Recovery Fund Board, WRIA Watershed Management Board, and other local, state, federal, and tribal agencies to address issues associated with shellfish, shellfish area closures, and shellfish habitat.
- Policy 10P-17: Consider establishing the Drayton Harbor Watershed as a sending area when considering a transfer of development rights (TDR) program in.
- Policy 10P-18 Support the Department of Health's On-Site Sewage System (OSS) Program as a means to lower degradation of our waterways.

Other Marine and Marine Dependent Organisms and Systems

Our Marine system supports not only local, critical, and global fisheries resources, but also a myriad of interdependent organisms, the importance of which we lack the capacity to fully grasp. The Marine ecosystem is a complex web of life that is increasingly affected by anthropogenic impacts. Toxics, hormones, heavy metals, and other harmful substances flushed into nearshore and marine environments with stormwater have been shown to have deleterious cumulative impacts on a range of aquatic and marine dependent organisms. Whatcom County will take steps to halt

- 1 the practice of treating its streams and rivers as a storm sewer and the marine system
- 2 as a water treatment facility.
- 3 Policy 10P-19: Promote Best Management Practices, land use, and stormwater
- 4 policies that result in a minimal release of harmful chemicals and
- 5 metallic substances into surface water and the marine
- 6 environment.

Chapter Eleven Shorelines

Introduction

The State Legislature passed the Washington State Shoreline Management Act (SMA) in June 1971. The SMA was overwhelmingly passed by public initiative in 1972. Under the SMA, each county and city were required to prepare a shoreline “master program” in accordance with the shoreline guidelines issued by the State Department of Ecology in 1972.

The Whatcom County Shoreline Management Program (SMP) is the set of policies and regulations that implement the goals and policies of the SMA at the local level. It was first adopted in 1976 in accordance with RCW 90.58. The goals and policies of the Whatcom County SMP constitute the shoreline component of the Whatcom County Comprehensive Plan.

The Whatcom County Shoreline Management Program jurisdiction includes:

- More than 130 miles of marine shoreline;
- More than 60 miles of lake shoreline;
- More than 220 miles of stream channels; and,
- All wetlands and floodways associated with the above shorelines, together with all upland areas within 200-feet of the Ordinary High-Water Mark (OHWM).

Whatcom County and the Washington State Department of Ecology (DOE) share joint authority and responsibility for the Whatcom County SMP. Whatcom County Planning and Development Services is the primary agency responsible for its implementation.

Chapter Organization

This chapter is composed of an introduction and five sections organized by topic heading. The first section, entitled "Overall SMP Goals and Objectives," addresses general shoreline goals and objectives. The next provides the purposes, designation criteria, and policies for the County’s various shoreline area designations. The third section contains the County’s policies for Shorelines of Statewide Significance. The fourth section provides the general policies that apply to all area designations. And the fifth section provides the policies specific to the type of use proposed. Together with the regulations of WCC Title 23, the sections of this chapter provide the direction necessary to ensure and promote long-term sustainability of the shorelines in Whatcom County.

Purpose

This chapter together with WCC Title 23 comprises Whatcom County’s Shoreline Management Program. This chapter contains the SMP’s goals, objectives, and policies, while its regulations are found in WCC Title 23. All development proposed within jurisdictional shorelines must be consistent with both the policies of this chapter and the regulations of WCC Title 23.

The Shoreline Management Act (SMA) was developed and adopted to protect “the most valuable and fragile of [the state’s] natural resources from the “inherent harm in uncoordinated and piecemeal development of the state’s shorelines” (quotes from RCW 90.58.020). The SMA in Chapter 90.58 RCW contains three distinct but related priorities:

1. The promotion of shoreline uses that are both water-oriented and appropriate for the broader environmental context. Developments such as single-family residences, recreational areas, and water-dependent businesses such as marinas are considered priority uses provided they are constructed in a manner “consistent with control of pollution and prevention of damage to the environment” (quote from RCW 90.58.020).
2. The SMA requires local governments to take an active role in protecting the shoreline ecology: the water, the land, the vegetation and the wildlife. The state guidelines are explicit: “Local master programs shall include regulations and mitigation standards ensuring that each permitted development will not cause a net loss of ecological functions of the shoreline.” (WAC 173-26-186(8)(b)(i).)
3. The SMA also promotes public access to the shoreline by requiring protection of existing public access features and requiring certain types of new development to include public access.

The SMP regulations (WCC Title 23) apply to individual projects, and impacts of shoreline development are evaluated on a project-by-project basis. However, the SMP goals and policies, shoreline designations, regulations, and the restoration plan are comprehensively structured to achieve no net loss of shoreline ecological functions as a whole in Whatcom County.

GMA Goals and Countywide Planning Policies

First adopted in 1990, The Growth Management Act (GMA) is a series of state statutes that requires fast-growing cities and counties to develop a comprehensive plan to manage their population growth. It is primarily codified under Chapter 36.70A RCW, although it has been amended and added to in several other parts of the RCW. Under RCW 36.70A.020, the GMA established a series of 13 goals that should act as the basis of all comprehensive plans. In 2003, the legislature added the goals and policies of the Shoreline Management Act as the fourteenth GMA goal (RCW 36.70A.480). The shoreline goals may be found at RCW 90.58.020.

As of this time, there are no Countywide Planning Policies that address development in the shoreline.

SMA Requirements

Under the provisions of the SMA, all development along shorelines of the state is required to comply with the provisions of local shoreline master programs. The Whatcom County SMP works with other chapters of the Whatcom County Code to protect and preserve saltwater and freshwater shorelines throughout the county by managing natural resources and directing development and land use suitable for the shoreline environment.

Governing Principles

The following principles, along with the policy statements of RCW 90.58.020 and the principles of Chapter 173-26 WAC, establish basic concepts that underpin the goals, policies, and regulations of the Shoreline Management Plan (SMP):

- A. Any inconsistencies between the SMP and the Shoreline Management Act (SMA) must be resolved in accordance with the SMA.
- B. The policies of the SMP may be achieved by diverse means, one of which is regulation. Other means authorized by the SMA include, but are not limited to: acquisition of lands and/or easements by purchase or gift, incentive programs, and implementation of capital facility and/or nonstructural programs.
- C. Protecting the shoreline environment is an essential statewide policy goal, consistent with other policy goals. Permitted and/or exempt development, actions taken prior to the SMA's adoption, and/or unregulated activities can impair shoreline ecological processes and functions. The SMP protects shoreline ecology from such impairments in the following ways:
 1. By using a process that identifies, inventories, and ensures meaningful understanding of current and potential ecological functions provided by shorelines.
 2. By including policies and regulations that require mitigation of adverse impacts in a manner that ensures no net loss of shoreline ecological functions. The required mitigation shall include avoidance, minimization, and compensation of impacts in accordance with the policies and regulations for mitigation sequencing in WCC 23 and the Whatcom County Critical Areas Ordinance (CAO, Chapter 16.16 WCC). The SMP and any future amendment thereto shall ensure no net loss of shoreline ecological functions and processes on a programmatic basis in accordance with the baseline functions present as of the date of adoption of the comprehensive SMP update, February 27, 2007.
 3. By including policies and regulations to address cumulative impacts, including ensuring that the cumulative effect of exempt development will not cause a net loss of shoreline ecological functions, and by fairly allocating the burden of addressing such impacts among development opportunities.
 4. By including regulations and regulatory incentives designed to protect shoreline ecological functions, and restore impaired ecological functions where such opportunities have been identified, consistent with the Shoreline Management Program Restoration Plan developed by Whatcom County.
- D. Regulation of private property to implement SMP goals such as public access and protection of ecological functions and processes must be consistent with all relevant constitutional and other legal limitations. These include, but are not limited to, civil rights guaranteed by the U.S. and state Constitutions, pertinent federal and state case law, and state statutes, such as RCW 34.05.328 and 43.21C.060 and Chapter 82.02 RCW.

E. Regulatory or administrative actions must be implemented consistent with the public trust doctrine and other applicable legal principles as appropriate and must not unconstitutionally infringe on private property rights or result in an unconstitutional taking of private property.

F. The regulatory provisions of the SMP are limited to jurisdictional shorelines, whereas the planning functions of the SMP may extend beyond the designated shoreline boundaries.

G. The policies and regulations established by the SMP must be integrated and coordinated with those policies and rules of the Comprehensive Plan and development regulations adopted under the GMA and RCW 34.05.328.

H. Consistent with the policy and use preferences of RCW 90.58.020, Whatcom County should balance the various policy goals of the SMP giving consideration to other relevant local, state, and federal regulatory and non-regulatory programs.

Overall Shoreline Management Program Goals and Objectives

This section contains overall SMP goals and objectives. They provide the foundation and framework upon which the shoreline area designations, policies, regulations, and administrative procedures are based.

The general policies and regulations (in a later section of this chapter and in Title 23 WCC, respectively) and the specific use policies and regulations (in a later section of this chapter and in WCC Title 23, respectively) are the means by which these goals and objectives are implemented.

Economic Development

The economic development element provides for the location and design of industries, transportation facilities, port facilities, tourist facilities, commerce, and other developments that are particularly dependent upon a shoreline location and/or use of the shorelines of the state.

Goal 11A: Create and maintain an economic environment that can coexist harmoniously with the natural and human environment.

Objectives11A-1: Encourage economic development that has minimal adverse effects and mitigates unavoidable impacts upon shoreline ecological functions and processes and the built environment.

11A-2: Encourage shoreline development that has a positive effect upon economic and social activities of value to the region.

11A-3: Encourage new water-dependent, water-related, and water-enjoyment economic development in priority order.

11A-4: Encourage economic development that is consistent with the adopted Comprehensive Economic Development Strategy (CEDS) for Whatcom County.

1 11A-5: Implement economic development policies contained in other
 2 chapters of the Comprehensive Plan in shoreline areas consistent
 3 with this chapter, WCC Title 23 and the SMA.

4 11A-6: Encourage new economic development to locate in areas that are
 5 already developed with similar uses.

6 11A-7: Discourage expansion of existing development that is
 7 incompatible with the Comprehensive Plan, WCC Title 23, or the
 8 character of the local area.

9 **Public Access**

10 The public access element provides for public access to publicly or privately-owned
 11 shoreline areas where the public is granted a right of use or access.

12 **Goal 11B: Increase the general public's ability to reach, touch, and**
 13 **enjoy the water's edge, to travel on the waters of the state,**
 14 **and/or to view the water and the shoreline from adjacent**
 15 **locations; provided, that private rights, public safety, and**
 16 **shoreline ecological functions and processes are protected**
 17 **consistent with the U.S. and state Constitutions, state case**
 18 **law, and state statutes.**

19 **Objectives:**

20 11B-1: Locate, design, manage, and maintain public access in a manner
 21 that protects shoreline ecological functions and processes and the
 22 public health and safety.

23 11B-2: Design and manage public access in a manner that ensures
 24 compatibility with water-dependent uses.

25 11B-3: Where appropriate, acquire access to publicly owned tidelands
 26 and shorelands. Encourage cooperation among the County,
 27 landowners, developers, and other agencies and organizations to
 28 enhance and increase public access to shorelines as specific
 29 opportunities arise.

30 11B-4: Provide and protect visual access to shorelines and tidelands.

31 11B-5: Require physical or visual access to shorelines as a condition of
 32 approval for shoreline development activities commensurate with
 33 the impacts of such development and the corresponding benefit
 34 to the public, consistent with constitutional limitations.

35 11B-6: Develop and manage public access to prevent adverse impacts to
 36 adjacent private shoreline properties and developments.

37 **Recreation**

38 The recreation element provides for the preservation and expansion of water-oriented
 39 recreational opportunities that facilitate the public's ability to enjoy the physical and
 40 aesthetic qualities of the shoreline through parks, public access to tidelands and
 41 beaches, bicycle and pedestrian paths, viewpoints, and other recreational amenities.

Goal 11C: Provide opportunities and space for diverse forms of water-oriented recreation.

Objectives:

11C-1: Locate, develop, manage, and maintain recreation areas in a manner that protects shoreline ecological functions and processes.

11C-2: Provide a balanced choice of water-oriented public recreational opportunities regionally. Ensure that shoreline recreation facilities serve projected County growth in accordance with the level of service standards established in the Comprehensive Plan and related goals and policies, the Comprehensive Park and Recreation Open Space Plan, the Whatcom County Bicycle Plan, and the Natural Heritage Plan.

11C-3: Acquire additional recreation and public access areas with a high recreation value prior to demand to assure that sufficient shoreline recreation opportunities are available to serve future recreational needs.

11C-4: Encourage cooperation among public agencies, nonprofit groups, private landowners, and developers to increase and diversify recreational opportunities through a variety of means including incorporating water-oriented recreational opportunities into mixed use developments and other innovative techniques.

11C-5: Recognize and protect the interest of all people of the state by providing increased recreational opportunities within shorelines of statewide significance and associated shorelands.

11C-6: Encourage private and public investment in recreation facilities.

11C-7: Locate, design, and operate recreational development in a manner that minimizes adverse effects on adjacent properties as well as other social, recreational, or economic activities.

Transportation and Essential Public Facilities

The transportation and essential public facilities element provide for the general location and extent of existing and proposed public thoroughfares, transportation routes, terminals, and other public utilities and facilities.

Goal 11D: Provide transportation systems and essential public facilities in shoreline areas without adverse effects on existing shoreline use and development or shoreline ecological functions and/or processes.

Objectives:

11D-1: Locate, develop, manage, and maintain transportation systems and essential public facilities in a manner that protects shoreline ecological functions and processes. Minimize and mitigate unavoidable impacts.

- 1 11D-2: Locate and design transportation systems and essential public
 2 facilities to be harmonious with the existing and future economic
 3 and social needs of the community.
- 4 11D-3: Discourage the development of non-water-dependent
 5 transportation systems and essential public facilities unless no
 6 feasible alternatives exist. Devote roads within the shoreline
 7 jurisdiction to low volume local access routes and shoreline public
 8 access where feasible.
- 9 11D-4: When appropriate, require appropriate compensation where
 10 transportation systems and essential public facilities reduce the
 11 benefits people derive from their property.
- 12 11D-5: Provide for alternate modes of travel, encourage freedom of
 13 choice among travel modes, and provide multiple use
 14 transportation corridors where compatible in association with
 15 shoreline transportation development.
- 16 11D-6: Require transportation system and essential public facility
 17 development in shoreline areas to protect and enhance physical
 18 and visual shoreline public access.

19 Shoreline Use

20 The shoreline use element prioritizes the use and development of shorelines and
 21 adjacent land areas for housing, business, industry, transportation, agriculture,
 22 forestry, natural resources, recreation, education, public institutions, utilities, and
 23 other categories of public and private land use with respect to the type, general
 24 distribution, location, and extent of such uses and developments.

25 **Goal 11E: Preserve and develop shorelines in a manner that allows** 26 **for an orderly balance of uses.**

27 Objectives: 11E-1: Give preference to water-dependent and single-family residential
 28 uses that are consistent with preservation of shoreline ecological
 29 functions and processes. Give secondary preference to water-
 30 related and water-enjoyment uses. Allow non-water-oriented
 31 uses only when substantial public benefit is provided with respect
 32 to the goals of the SMA for public access and ecological
 33 restoration.

34 11E-2: Designate and maintain appropriate areas for protecting and
 35 restoring shoreline ecological functions and processes to control
 36 pollution and prevent damage to the shoreline environment
 37 and/or public health.

38 11E-3: Ensure shoreline uses are consistent with the Comprehensive
 39 Plan.

40 11E-4: Balance the location, design, and management of shoreline uses
 41 throughout the County to prevent a net loss of shoreline
 42 ecological functions and processes over time.

11E-5: Encourage mixed use developments that include and support water-oriented uses and provide a substantial public benefit consistent with the public access and ecological restoration goals and policies of the SMA.

11E-6: Encourage shoreline uses and development that enhance shoreline ecological functions and/or processes or employ innovative features that further the purposes of the SMP.

11E-7: Encourage shoreline uses and development that enhance and/or increase public access to the shoreline.

Conservation

The shoreline conservation element provides for the protection of natural resources and shoreline ecological functions and processes. Resources to be conserved and protected include, but are not limited to, wetlands; riparian, nearshore, and aquatic habitats; priority fish and wildlife habitats and species; floodplains; feeder bluffs and other geological features; cultural and historic resources; as well as scenic vistas and aesthetics.

Goal 11F: Conserve shoreline resources and important shoreline features, and protect shoreline ecological functions and the processes that sustain them to the maximum extent practicable.

Objectives:11F-1: Maintain regulations and mitigation standards that ensure new shoreline developments prevent a net loss of shoreline ecological functions and processes. Implement such regulations and standards in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property.

11F-2: Protect critical areas in accordance with the County’s critical areas regulations (WCC Chapter 16.16), as adopted by reference in the SMP.

11F-3: Manage renewable natural resources on a sustained yield basis. Extract nonrenewable natural resources in a manner that maintains the quality of other resources and shoreline ecological functions and processes.

11F-4: Prioritize protection and/or conservation of shoreline areas that are ecologically intact and minimally developed or degraded.

Cultural Resources

The cultural resource element provides for protection, preservation and/or restoration of buildings, sites, and areas having archaeological, historical, cultural, or scientific value or significance. “Cultural resource” refers to any archaeological, historic, cemetery, or other cultural sites or artifacts; as well as those traditional food, medicine, fibers, and objects that sustain the religious, ceremonial, and social activities of affected Native American tribes that may be regulated under state or

federal laws administered by the Washington State Department of Archaeologic and Historic Preservation (DAHP).

Goal 11G: Protect shoreline features of historic, cultural, archeological, or scientific value or significance to prevent damage or destruction through coordination and consultation with the appropriate local, state and federal authorities, including affected Indian tribes.

Objectives:11G-1: Protect cultural resources in collaboration with appropriate tribal, state, federal, and local governments.

11G-2 Engage in and encourage public agencies and private parties to cooperate in the identification, protection and management of cultural resources.

11G-3: Consult with the Washington State Department of Archaeology and Historic Preservation (DAHP) and affected Native American tribes when developing local policies and regulations for identifying, protecting, and preserving cultural resources.

11G-4: Where appropriate, restore unique resources that have cultural, archaeological, historic, educational, or scientific value or significance to further enhance the value of the shorelines.

11G-5: Where appropriate provide access to cultural resources in a manner that is culturally sensitive and does not degrade the resource or impact the quality of the environment.

11G-3: Provide opportunities for education related to archaeological, historical, and cultural features where appropriate and incorporated into public and private programs and development.

Views and Aesthetics

This element provides for preservation and/or protection of scenic vistas, views of the water, and other aesthetic qualities of shorelines for public enjoyment.

Goal 11H: Assure that the public's ability and opportunity to enjoy shoreline views and aesthetics is protected.

Objectives:11H-1: Identify and protect areas with scenic vistas and areas where the shoreline has high aesthetic value.

11H-2: Design development to minimize adverse impacts on views from public property or views enjoyed by a substantial number of residences.

Restoration and Enhancement

This element provides for the timely restoration and enhancement of ecologically impaired areas in a manner that achieves a net gain in shoreline ecological functions and processes above baseline conditions set as of the date of adoption of the comprehensive SMP update, February 27, 2007.

Goal 11I: Reestablish, rehabilitate and/or otherwise improve impaired shoreline ecological functions and/or processes through voluntary and incentive-based public and private programs and actions that are consistent with the Shoreline Management Program Restoration Plan and other approved restoration plans.

Objectives:11I-1: Encourage and facilitate cooperative restoration and enhancement programs between local, state, and federal public agencies, tribes, nonprofit organizations, and landowners to address shorelines with impaired ecological functions and/or processes.

11I-2: Restore and enhance shoreline ecological functions, processes, and features through voluntary and incentive-based public and private programs, such as the Shore Friendly Program developed by the Washington State Department of Fish and Wildlife, Washington State Department of Natural Resources, and the Environmental Protection Agency.

11I-3: Target restoration and enhancement towards improving habitat requirements of priority and/or locally important wildlife species.

11I-4: Ensure restoration and enhancement is consistent with and, where practicable, prioritized based on the biological recovery goals for early Chinook and bull trout populations and other species and/or populations for which a recovery plan is available.

11I-5: Integrate restoration and enhancement with other parallel natural resource management efforts such as the WRIA 1 Salmonid Recovery Plan, Drayton Harbor and Portage Bay Shellfish Protection District Plans, WRIA 1 Watershed Management Plan, and the Puget Sound Salmon Recovery Draft Plan.

Shoreline Environment Designations

A set of 10 shoreline area designations has been developed as a part of the SMP. The purpose of the shoreline area designations is to provide a systematic, rational, and equitable basis upon which to guide and regulate development within specific shoreline reaches.

Shoreline area designations have been determined after consideration of:

1. The ecological functions and processes that characterize the shoreline, together with the degree of human alteration;
2. Existing development patterns together with WCC Title 20 Zoning designations, the Comprehensive Plan designations, and other officially adopted plans;
3. Federal and tribal ownership status;
4. The goals of Whatcom County citizens for their shorelines;

5. Pursuant to RCW 90.58.100(4), in designating state-owned shorelines, consideration has been given to public demand for wilderness beaches, ecological study areas, and other recreational activities; and,
6. Other state policies in the SMA and the SMP Guidelines (RCW 90.58.020 and Chapter 173-26 WAC, respectively).

Urban Shoreline Area

Purpose

The purpose of the urban shoreline area is to provide for intensive development of water-oriented commercial, transportation, and industrial uses and accommodate mixed use developments such as those consisting of urban density residential, commercial, and industrial uses, while protecting existing shoreline ecological functions and processes and restoring shoreline ecological functions and/or processes in areas that have been previously degraded.

Designation Criteria

The urban shoreline area is applied to shoreline areas zoned commercial, industrial, and urban density residential within urban growth areas and industrial or commercial areas in Limited Areas of More Intense Rural Development (LAMIRDs), if they:

- A. Are currently characterized by high intensity development and/or uses; are designated by the Comprehensive Plan for high intensity uses or intensive uses related to commerce, transportation or navigation; or are suitable and planned for high intensity mixed use; and
- B. Do not contain limitations to urban use such as geologic hazards, and have adequate utilities and access; and
- C. Do not provide important ecological functions that would be significantly compromised by high intensity residential, commercial, or industrial use.

Policies

Development within urban shoreline areas shall be consistent with the following policies:

- Policy 11J-1: New urban character development should be directed toward already developed or developing areas where compatible.
- Policy 11J-2: First priority should be given to water-dependent uses. Second priority should be given to water-related and then water-enjoyment uses. Non-water-oriented uses should not be allowed except as part of mixed-use developments. Non-water-oriented uses may also be allowed in limited situations where they do not conflict with or limit opportunities for water-oriented uses or on sites where there is no direct access to the shoreline, or where the needs of existing and future water-dependent uses are met.

1 **Urban Resort Shoreline Area**

2 **Purpose**

3 The purpose of the urban resort shoreline area is to provide for intensive residential
4 and commercial uses geared to the needs of tourists and day visitors while protecting
5 existing shoreline ecological functions and processes. Emphasis is on hotels, motels,
6 shops, restaurants, commercial rental campgrounds, rental cabins, and shoreline-
7 related recreation facilities.

8 **Designation Criteria**

9 The urban resort shoreline area is applied to shoreline areas identified in the
10 Comprehensive Plan as suitable for resort commercial development with substantial
11 features that might reasonably attract resort development compatible with other
12 development in the area, and which have existing and/or planned infrastructure
13 sufficient to support such development.

14 **Policies**

15 Development within urban resort shoreline areas shall be consistent with the
16 following policies:

17 Policy 11K-1: Scale and design of resort development should assure
18 compatibility with allowed uses of adjacent shoreline areas and
19 shoreline ecological functions and processes.

20 Policy 11K-2: Buildings over 35 feet in height may be permitted if additional
21 open space, view areas, public access and/or other amenities are
22 provided.

23 **Urban Conservancy Shoreline Area**

24 **Purpose**

25 The purpose of the urban conservancy shoreline area is to protect shoreline ecological
26 functions and processes in urban growth areas and Limited Areas of More Intense
27 Rural Development (LAMIRDs) that are not designated for high intensity residential
28 use and are not generally suitable for water-dependent uses. The primary
29 management goal is to preserve shoreline ecological functions and processes by
30 avoiding forms of development that would be incompatible with existing functions
31 and processes, as well as identify and focus restoration efforts in areas where benefits
32 to overall functions and processes can be realized. This policy should be furthered by
33 maintaining most of the area's natural character.

34 **Designation Criteria**

35 The urban conservancy shoreline area is applied to shoreline areas inside urban
36 growth areas where any of the following characteristics apply:

37 A. They support or retain important shoreline ecological functions and/or
38 processes, even though partially developed.

B. They have the potential for development at an intensity and character that is compatible with preserving and restoring ecological functions. They are generally not designated for high intensity residential use, commercial use, or industrial use.

C. They are characterized by critical areas or the presence of other valuable or sensitive ecological resources.

Policies

Development within urban conservancy shoreline areas shall be consistent with the following policies:

Policy 11L-1: Primary permitted uses should consist of low intensity residential uses or other low intensity uses that preserve the natural character of the area or promote preservation of open space and critical areas.

Policy 11L-2: Moderate to high intensity residential use may be permitted if the proposed uses and design result in substantial open space, public access and/or restoration of shoreline ecological functions and/or processes, and if compatible with surrounding uses.

Policy 11L-3: Public access and public recreation facilities are a preferred use if they will not cause substantial ecological impacts and when restoration of ecological functions is incorporated.

Policy 11L-4: Low intensity commercial uses may be permitted if the specific uses and design result in substantial open space, public access, and/or restoration of ecological functions, and if compatible with surrounding uses.

Shoreline Residential Area

Purpose

The shoreline residential shoreline area accommodates residential development and accessory structures that are consistent with this chapter.

Designation Criteria

The shoreline residential shoreline area is applied to shorelines if they have been predominantly developed with single-family or multifamily residential uses or are planned and platted for residential development. The designation is generally applied to residential densities of greater than one unit per acre.

Policies

Development within shoreline residential shoreline areas shall be consistent with the following policies:

Policy 11M-1: The scale and density of new uses and development should be compatible with, and protect or enhance, the existing residential

character of the area while sustaining shoreline ecological functions and processes.

Policy 11M-2: Public or private outdoor recreation facilities should be encouraged if compatible with the character of the area. Preferred uses include water-dependent and water-enjoyment recreation facilities that provide opportunities for substantial numbers of people to access and enjoy the shoreline.

Policy 11M-3: Commercial development should be limited to water-oriented uses. Non-water-oriented commercial uses may be permitted as part of mixed-use developments where the primary use is residential; provided that such uses provide a substantial benefit with respect to the goals and policies of the SMP, such as providing public access or restoring degraded shorelines.

Rural Shoreline Area

Purpose

The purpose of the rural shoreline area is to protect shoreline ecological functions in areas having a rural character characterized by open space and low-density development including, but not limited to: residences, agriculture, forestry, and outdoor recreation. Uses should be compatible with the physical capabilities and limitations, natural resources, and shoreline ecological functions and processes of the area.

Designation Criteria

The rural shoreline area is applied to shoreline areas outside urban growth areas, particularly areas designated as Rural in the Comprehensive Plan, and includes areas:

- A. Where the shoreline currently accommodates residential uses outside urban growth areas and is characterized by low density development, pasture, agriculture, woodlots, home occupations, and cottage industries. The distribution of rural land use is adjacent to agricultural, forestry, and urban land uses and often provides a transition between urban areas and commercial agriculture and forestry uses. Natural vegetative cover and topography have been altered in many rural areas, but substantial ecological functions, and/or the potential for restoration of ecological functions, are present.
- B. That are now used or potentially usable for a mix of agriculture, forestry, and residential use.
- C. Where residential development is or should be of low density, because of limitations by physical features, infrastructure, the presence of critical areas, and/or lack of utilities or access.
- D. That have high recreational value or unique historic or cultural resources.
- E. Where low intensity outdoor recreation use or development would be appropriate and compatible with other uses and the physical environment.

F. Where the shoreline has been developed with low intensity water-dependent uses.

Policies

Development within rural shoreline areas shall be consistent with the following policies:

Policy 11N-1: Uses in rural areas should protect or enhance the rural character of the shoreline and sustain the shoreline ecological functions and processes by limiting building density and height, and providing effective setbacks, buffers, and open space.

Policy 11N-2: Residential development consistent with the rural character of the area is permitted, provided it includes measures to protect ecological functions and processes. Related uses consistent with the rural character of the area are permitted.

Policy 11N-3: Public or private outdoor recreation facilities should be encouraged if compatible with the rural character of the area and developed in a manner that maintains shoreline ecological functions and processes. Preferred uses include water-oriented recreation facilities that do not deplete shoreline resources over time, such as boating facilities, angling, wildlife viewing trails, and swimming beaches.

Policy 11N-4: Industrial or commercial development should be limited to water-oriented commercial and industrial uses in the limited locations where such uses have been established or at sites in rural communities that possess appropriate shoreline conditions and services sufficient to support such developments. Non-water-dependent uses should only be allowed when they provide a substantial benefit with respect to the goals and policies of the SMP, such as providing public access and/or restoring degraded shorelines.

Policy 11N-5: Agriculture and forestry consistent with rural character and the maintenance of shoreline ecological functions and processes should be encouraged.

Resource Shoreline Area

Purpose

The purpose of the resource shoreline area is to protect shoreline ecological functions and processes in areas designated in the Comprehensive Plan as agriculture, forestry, and mineral resource lands and to protect the economic base of those lands and limit incompatible uses.

Designation Criteria

The resource shoreline area is applied to shoreline areas designated as agriculture, rural forestry, commercial forestry, and mineral resource lands in the Comprehensive

Plan and includes areas where the shoreline currently accommodates ongoing resource management, where natural vegetation cover has been altered but substantial ecological functions, or the potential for restoring ecological functions, are present.

Policies

Development within resource shoreline areas shall be consistent with the following policies:

Policy 110-1: Uses in resource areas should protect the economic base of those lands, limit incompatible uses, and sustain the shoreline area ecological processes and functions by limiting uses and intensity. Residential use is generally limited to one dwelling per existing parcel. The dwelling may be located within the shoreline jurisdiction only where no other building site is feasible on the parcel.

Policy 110-2: Public or private outdoor recreation facilities should be permitted if they do not displace designated resource lands and if they are developed in a manner that maintains shoreline ecological functions. Preferred uses include water-dependent and water-enjoyment recreation facilities.

Policy 110-3: Industrial or commercial use and development should be limited to uses that serve resource uses. Such uses may be located within the shoreline only if they are water-dependent, water-related, or if no other feasible location exists within the contiguous property.

Conservancy Shoreline Area

Purpose

The purpose of the conservancy shoreline area is to retain shoreline ecological functions in areas outside of urban growth areas and LAMIRDs where important ecological processes have not been substantially degraded by human activities. The primary management goal is to preserve shoreline ecological functions and processes by avoiding forms of development that would be incompatible with existing functions and processes, as well as identify and focus restoration efforts in areas where benefits to overall functions and processes can be realized. This policy should be furthered by keeping overall intensity of development or use low, and by maintaining most of the area's natural character.

Designation Criteria

The conservancy shoreline area is applied to shoreline areas outside urban growth areas and LAMIRDs that include areas:

A. Where development activities and uses are buffered from and do not substantially degrade ecological processes and functions.

B. Where ecological functions are more intact than in areas designated rural or resource.

- C. Of outstanding scenic quality or other aesthetic qualities of high value to the region, which would likely be diminished unless development is strictly controlled.
- D. Containing critical areas or other sensitive natural or cultural features that require more than normal restrictions on development and use.
- E. Having the potential to influence ecological processes in a manner that will produce ecosystem-wide benefits upon restoration.
- F. That contain valuable or sensitive natural or cultural features that preclude more than a low overall density of residents, recreation use, structures, or livestock, as well as extensive alterations to topography or other features.
- G. Have recreational value to the region that would likely be diminished unless development is strictly controlled.

Policies

Development within conservancy shoreline areas shall be consistent with the following policies:

- Policy 11P-1: Natural ecological processes should be protected and renewable resources managed so that ecological functions and the resource base are maintained. Nonrenewable resources should only be consumed in a manner compatible with conservation of other resources and other appropriate uses.
- Policy 11P-2: Permitted uses should be limited to those compatible with each other and with conservation of shoreline ecological processes and resources.
- Policy 11P-3: Shorelines should be protected from concentrations of people, livestock, buildings, or structures that would adversely impact shoreline ecological functions and processes.
- Policy 11P-4: Opportunities for ecological restoration should be pursued, prioritizing those areas with the greatest potential to restore ecosystem-wide processes and functions.
- Policy 11P-5: Outstanding recreational or scenic values should be protected from incompatible development.

Natural Shoreline Area

Purpose

The purpose of the natural shoreline area is to ensure long-term preservation of ecologically intact shorelines inside or outside urban growth areas.

Designation Criteria

The natural shoreline area is applied to shoreline areas where any of the following characteristics apply:

- A. The majority of natural ecological shoreline functions and/or processes are retained, often evidenced by the shoreline configuration and the presence of native vegetation. Generally, but not necessarily, they include ecologically intact shorelines that are free of structural shoreline modifications, structures, and intensive human uses.
- B. Forested areas that generally include native vegetation with diverse plant communities, multiple canopy layers, and the presence of large woody debris available for recruitment to adjacent water bodies.
- C. Valuable functions are provided for the larger aquatic and terrestrial environments, which could be lost or significantly reduced by human development.
- D. Ecosystems or geologic types that are of particular scientific and educational interest are represented.
- E. Largely undisturbed areas of wetlands, estuaries, unstable bluffs, coastal dunes, and spits are present.
- F. New development, extractive uses, or physical modifications cannot be supported without significant adverse impacts to ecological functions and/or processes or risk to human safety.

Policies

Development within natural shoreline areas shall be consistent with the following policies:

- Policy 11Q-1: Preservation of the area's ecological functions, natural features and overall character must receive priority over any other potential use. Uses should not degrade shoreline ecological functions or processes or the natural character of the shoreline area. New development or significant vegetation removal that would reduce the capability of the shoreline to perform a full range of ecological functions or processes should not be permitted.
- Policy 11Q-2: Private and/or public enjoyment of natural shoreline areas should be encouraged and facilitated through low intensity recreational, scientific, historical, cultural, and educational research uses; provided, that no significant ecological impact on the area will result.
- Policy 11Q-3: Agricultural and forestry uses of a very low intensity nature may be consistent with the natural shoreline area when such use is subject to appropriate limitations or conditions to assure that the use does not expand or alter practices in a manner inconsistent with the purpose of the designation.
- Policy 11Q-4: The following uses should not be permitted in the natural shoreline area:
1. Commercial uses.
 2. Industrial uses.

3. Non-water-oriented recreation.

4. Roads, utility corridors, and parking areas that can be located outside of natural shoreline areas.

Aquatic Shoreline Area

Purpose

The purpose of the aquatic shoreline area is to protect, restore, and manage the characteristics and resources of the areas waterward of the ordinary high-water mark.

Designation Criteria

The aquatic shoreline area is defined as the area waterward of the ordinary high-water mark of all streams, rivers, lakes, and marine waterbodies, constituting shorelines of the state together with their underlying lands and their water column.

Policies

Development within aquatic shoreline areas shall be consistent with the following policies:

Policy 11R-1: New over-water structures should only be permitted for water-dependent uses, public access, or ecological restoration. The size of new over-water structures should be limited to the minimum necessary to support the structure's intended use. In order to reduce the impacts of shoreline development and increase effective use of water resources, multiple use of over-water facilities should be encouraged.

Policy 11R-2: All developments and uses on navigable waters or their beds should be located and designed to minimize interference with surface navigation, to consider impacts to public views, and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

Policy 11R-3: Uses that adversely impact the ecological functions of critical saltwater and freshwater habitats should not be permitted except where necessary to achieve the objectives of RCW 90.58.020, and then only when all potential impacts are mitigated as necessary to assure maintenance of shoreline ecological functions and processes.

Policy 11R-4: Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural conditions.

Cherry Point Management Area**Purpose**

Washington State natural resource agencies and Whatcom County have identified certain portions of the Cherry Point management area as providing herring spawning habitat and other key habitat characteristics that warrant special consideration due to their importance to regional fisheries and other elements of the aquatic environment. The purpose of the Cherry Point management area is to provide a regulatory framework that recognizes and balances the special port, industrial, and natural resource needs associated with the development of this marine resource.

Designation Criteria

The Cherry Point Management Area is a geographic area lying between the eastern property boundary of Tax Lots 2.27 and 2.28 within the SE 1/4 of Section 11, Township 39 North, Range 1 West, as it existed on June 18, 1987, and the southern boundary of Section 32, Township 39 North, Range 1 East, extending waterward a distance of 5,000 feet and extending landward for 200 feet as measured on a horizontal plane from the OHWM. This area shall have the Cherry Point Management Area shoreline environment designation.

Policies

Policies applicable to the Cherry Point Management Area are found in the Shoreline Use and Modifications Policies section of this chapter; applicable regulations are found in WCC Title 23.

Shorelines of Statewide Significance

In accordance with RCW 90.58.020, the following management and administrative policies are adopted for all shorelines of statewide significance in unincorporated Whatcom County, as defined in RCW 90.58.030(2)(e) and identified in WCC 23.2.060. Consistent with the policy contained in RCW 90.58.020, preference shall be given to the uses that are consistent with the statewide interest in such shorelines. In the following order or preference, these are uses that:

- A. Recognize and protect the statewide interest over local interest.
- B. Preserve the natural character of the shoreline.
- C. Result in long-term over short-term benefit.
- D. Protect the resources and ecology of the shoreline.
- E. Increase public access to publicly owned areas of the shoreline.
- F. Increase recreational opportunities for the public in the shoreline.
- G. Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

Uses that are not consistent with these policies should not be permitted on shorelines of statewide significance.

The statewide interest should be recognized and protected over the local interest in shorelines of statewide significance. To ensure that statewide interests are protected

over local interests, the County shall review all development proposals within shorelines of statewide significance for consistency with RCW 90.58.030 and the following policies:

Policy 11-1: A. Redevelopment of shorelines should be encouraged where it restores or enhances shoreline ecological functions and processes impaired by prior development activities.

Policy 11S-2: The Washington Departments of Fish and Wildlife and Ecology, the Lummi Nation, the Nooksack Tribe, and other resources agencies should be consulted for development proposals that could affect anadromous fisheries.

Policy 11S-3: Where commercial timber cutting takes place pursuant to WCC 23.40.110 and RCW 90.58.150, reforestation should take place as soon as possible.

Policy 11S-4: Activities that use shoreline resources on a sustained yield or non-consuming basis and that are compatible with other appropriate uses should be given priority over uses not meeting these criteria.

Policy 11S-5: The range of options for shoreline use should be preserved to the maximum possible extent for succeeding generations. Development that consumes valuable, scarce, sensitive, or irreplaceable natural resources should be protected to the maximum extent feasible and should not be permitted if alternative sites are available.

Policy 11S-6: Potential short-term economic gains or convenience should be measured against potential long-term and/or costly impairment of natural features.

Policy 11S-7: Protection or enhancement of aesthetic values should be actively promoted in design review of new or expanding development.

Policy 11S-8: Resources and ecological systems of shorelines of statewide significance should be protected. Shorelands and submerged lands should be protected to accommodate current and projected demand for economic resources of statewide importance, such as commercial shellfish beds.

Policy 11S-9: Erosion and sedimentation from development sites should be controlled to minimize adverse impacts on ecosystem processes. If site conditions preclude effective erosion and sediment control, excavations, land clearing, or other activities likely to result in significant erosion should be severely limited.

Policy 11S-10: Public access development in extremely sensitive areas should be restricted or prohibited. All forms of recreation or access development should be designed to protect the resource base upon which such uses in general depend.

Policy 11S-11: Public and private developments should be encouraged to provide trails, viewpoints, water access points, and shoreline-related

recreation opportunities whenever possible. Such development is recognized as a high priority use.

Policy 11S-12: Development not requiring a shoreline location should be located inland so that lawful public enjoyment of shorelines is preserved.

Policy 11S-13: Lodging and related facilities should be located inland and provide for appropriate means of access to the shoreline.

General Policies

The following general policies apply to all use and development activities on shorelines.

Land Use

Policy 11T-1: Single-family residences should be given preference for location on shorelines in those limited instances when an alteration of the shorelines is authorized (RCW 90.58.020).

Policy 11T-2: Shoreline uses that are water-dependent or water-related should be given preference (RCW 90.58.020). Such uses should be located, designed, and maintained in a manner that minimizes adverse impacts to shoreline ecological functions and/or processes. Non-water-oriented development may be allowed; provided, that existing water-dependent uses are not displaced and the future supply of sites for water-dependent or water-related uses is not compromised.

Policy 11T-3: Adequate space should be reserved on shorelines to meet the current and projected demand for water-dependent uses, in conjunction with areas provided in cities, towns and areas under tribal jurisdiction.

Ecological Protection and Critical Areas

Policy 11U-1: Shoreline use and development should be carried out in a manner that prevents or mitigates adverse impacts so that the resulting ecological condition does not become worse than the current condition. This means assuring no net loss of ecological functions and processes and protecting critical areas designated in WCC Chapter 16.16, in a manner consistent with all relevant constitutional and other legal limitations on the regulation of private property. Permitted uses shall be designed and conducted to minimize, insofar as practical, any resultant damage to the ecology and environment (RCW 90.58.020). Shoreline ecological functions that should be protected include, but are not limited to, fish and wildlife habitat, food chain support, and water temperature maintenance. Shoreline processes that should be protected include, but are not limited to, water flow; littoral drift; erosion and accretion; infiltration; ground water recharge and discharge; sediment delivery, transport, and storage; large

1 woody debris recruitment; organic matter input; nutrient and
2 pathogen removal; and stream channel formation/maintenance.

3 Policy 11U-2: In assessing the potential for net loss of ecological functions or
4 processes, project-specific and cumulative impacts should be
5 considered.

6 Policy 11U-3: Development standards for density, frontage, setbacks,
7 impervious surface, shoreline stabilization, vegetation
8 conservation, buffers, critical areas, and water quality should
9 protect existing shoreline ecological functions and processes.
10 During permit review, the administrator should consider the
11 expected impacts associated with proposed shoreline
12 development when assessing compliance with this policy.

13 **Water Quality and Quantity**

14 Policy 11V-1: The location, construction, operation, and maintenance of all
15 shoreline uses and developments should maintain the quantity
16 and maintain or enhance the quality of surface and groundwater
17 over the long term.

18 Policy 11V-2: Shoreline use and development should minimize the need for
19 chemical fertilizers, pesticides, or other similar chemical
20 treatments to prevent contamination of surface and ground water
21 and/or soils, and adverse effects on shoreline ecological functions
22 and values.

23 Policy 11V-3: Appropriate buffers along all wetlands, streams, lakes, and
24 marine water bodies should be provided and maintained in a
25 manner that avoids the need for chemical treatment.

26 **Views and Aesthetics**

27 Policy 11W-1: Shoreline use and development activities should be designed and
28 operated to minimize obstructions of the public's visual access to
29 the water and shoreline.

30 Policy 11W-2: Shoreline use and development should not significantly detract
31 from shoreline scenic and aesthetic qualities that are derived from
32 natural or cultural features, such as shoreforms, vegetative cover
33 and historic sites/structures.

34 Policy 11W-3: Aesthetic objectives should be implemented through regulations
35 and criteria for site planning, maximum height, setbacks, siting
36 of buildings and accessories, screening, vegetation conservation,
37 architectural standards, sign control regulations, appropriate
38 development siting, designation of view corridors, and
39 maintenance of natural vegetative buffers.

40 Policy 11W-4: To protect shoreline ecological functions and aesthetics,
41 vegetation conservation should be preferred over the creation or
42 maintenance of views from shoreline properties. Clearing,

thinning, and/or limbing for limited view corridors should only be allowed where it does not adversely impact ecological and/or aesthetic values, and/or slope stability.

Vegetation Conservation

Policy 11X-1: Where new developments and/or uses are proposed, native shoreline vegetation should be conserved to maintain shoreline ecological functions and/or processes and mitigate the direct, indirect and/or cumulative impacts of shoreline development, wherever feasible.

Cultural Resources

The following policies apply to cultural resources that are (a) listed on the national, state, or local registers of historic places; (b) recorded by the Washington State Department of Archaeology and Historic Preservation (DAHP), a Native American tribe, and/or a local jurisdiction; or (c) undiscovered, inadvertently uncovered, or yet unrecorded.

Archaeological sites located in (as well as outside of) shoreline jurisdiction are subject to RCW Chapter 27.44 (Indian graves and records) and RCW Chapter 27.53 (Archaeological sites and records). Shoreline uses or development that may impact such sites shall comply with WAC Chapter 25-48 as well as the provisions of this Shoreline Master Program.

Pursuant to RCW 27.53.070, information and documents pertaining to the location of archaeological sites or resources are confidential and not considered public records that require disclosure.

Policy 11X-1: The County should work with tribal, state, federal, and local governments as appropriate to maintain an inventory of all known significant cultural resources in observance of applicable state and federal laws protecting such information from general public disclosure. As appropriate, such sites should be protected, preserved and/or restored for study, education, and/or public enjoyment to the maximum possible extent.

Policy 11X-2: Site development plans should incorporate provisions for cultural resource preservation, restoration, and education with open space or recreation areas whenever compatible and possible.

Policy 11X-3: Owners of property containing cultural resources are encouraged to make development plans known well in advance of application, so that appropriate agencies such as the Lummi Nation, Nooksack Tribe, Washington State Department of Archaeology and Historic Preservation, and others may have adequate time to assess the site and decide to preserve cultural values as applicable.

Policy 11X-4: Private and public owners of historic sites should be encouraged to provide public access and educational opportunities in a manner consistent with long-term protection of both historic values and shoreline ecological functions.

Policy 11X-5: Development on sites containing cultural resources should be planned and carried out so as to prevent impacts to the resource. Impacts to neighboring properties and other shore uses should be limited to temporary or reasonable levels.

Policy 11X-6: If development is proposed adjacent to an identified cultural resource, then the proposed development should be designed and operated so as to be compatible with continued protection of that resource.

Policy 11X-7: The cultural resource provisions of this program are consistent with Chapters 27.44 and 27.53 RCW and WAC 25-48-060. In accordance with state law, all applicants are subject to these requirements.

Policy 11X-8: The County shall consult with DAHP and affected Native American tribes as appropriate in implementing the cultural resource goals, objectives, policies, and regulations of this program.

Policy 11X-9: In reviewing development proposals, the County shall take, or cause project applicants to take, all required actions to:

1. Minimize the risk of disturbing cultural resources within Whatcom County shorelines.
2. Due to the limited and irreplaceable nature of the resource(s), prevent the destruction of or damage to any site having historic, cultural, scientific, or educational value as identified by the appropriate authorities, including affected Tribes and the DAHP.
3. Consult with professional archaeologists, DAHP, and affected Tribes before permitting or otherwise approving the use or development of shoreline areas containing cultural resources. This consultation shall be accomplished through the regulations and procedures provided in WCC Title 23.
4. Consult with DAHP and affected Tribes and coordinate with project archaeologists to establish site- and project-specific procedures for protection and management of cultural resources.
5. Make informed specific land use decisions based upon information provided by DAHP and Tribes.
6. Ensure the use of the best available information, technology, and techniques in identifying, protecting, preserving, and restoring cultural resources.

Public Access

Policy 11Y-1: Use and development that provide an opportunity for substantial numbers of people to enjoy the shorelines of the state are a preferred use.

Policy 11Y-2: Physical or visual access to shorelines should be incorporated in all new development when the development would either generate a demand for one or more forms of such access, and/or would impair existing legal access opportunities or rights. As required by the governing principles, all such conditions should be consistent with all relevant constitutional and other legal limitations on regulation of private property.

Policy 11Y-3: Public access should be provided for water-oriented uses and non-water-dependent uses and developments that increase public use of the shorelines and public aquatic lands, or that would impair existing, legal access opportunities.

Policy 11Y-4: Non-water-related uses or activities located on the shoreline should provide public access as a public benefit.

Policy 11Y-5: Public access area and/or facility requirements should be commensurate with the scale and character of the development and should be reasonable, effective, and fair to all affected parties including but not limited to the landowner and the public.

Policy 11Y-6: Public access design should provide for public safety and minimize potential impacts to private property, individual privacy, and shoreline ecological functions and processes.

Policy 11Y-7: Shoreline development by public entities, such as local governments, port districts, state agencies, and public utility districts, should provide public access measures as part of each development project, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline.

Site Planning

Policy 11Z-1: Development and use should be designed in a manner that directs land alteration to the least sensitive portions of the site to maximize vegetation conservation; minimize impervious surfaces and runoff; protect riparian, nearshore and wetland habitats; protect wildlife and habitats; protect archaeological, historic, and cultural resources; and preserve aesthetic values. This may be accomplished by minimizing the project footprint, the use of clustering, and other appropriate design approaches.

Policy 11Z-2: To maintain shoreline ecological functions and processes, low impact and sustainable development practices such as rain gardens and pervious surfacing methods including, but not limited to, porous paving blocks, porous concrete, and other similar materials, should be incorporated in developments where site conditions allow. Topographic modification, vegetation clearing, use of impervious surfaces, and alteration of natural drainage or other features should be limited to the minimum necessary to accommodate approved uses and development. An

engineering geologist should be consulted prior to using infiltration practices on shore bluffs.

Policy 11Z-3: Accessory development or use that does not require a shoreline location should be located outside of shoreline jurisdiction unless such development is required to serve approved water-oriented uses and/or developments. When sited within shoreline jurisdiction, uses and/or developments such as parking, service buildings or areas, access roads, utilities, signs, and storage of materials should be located inland away from the land/water interface and landward of water-oriented developments and/or other approved uses.

Policy 11Z-4: Development should be located, designed, and managed so that impacts on shoreline or upland uses are minimized through bulk and scale restrictions, setbacks, buffers, and control of proximity impacts such as noise or light and glare.

Policy 11Z-5: Shoreline uses should not deprive other uses of reasonable access to navigable waters. Public recreation activities such as fishing, clam digging, swimming, boating, wading, and other water-related recreation should be preserved and enhanced. The rights of treaty tribes to resources within their usual and accustomed areas should be accommodated.

Climate Change/Sea Level Rise

Policy 11AA-1: Coordinate with Tribal, Federal, State, and local agencies to address issues related to climate change and sea level rise as related to shoreline management.

Policy 11AA-2: Whatcom County should plan and prepare for the likely impacts of climate change on County-owned facilities, infrastructure, and natural resources and ensure that projects for major maintenance or replacement of utilities, roads, and other public infrastructure consider the impacts of sea-level rise in the location, design, and operation of the projects.

Policy 11AA-3: Whatcom County should strive to increase resident and business resiliency to the anticipated impacts of climate change by implementing land use regulations based on best available science, such as sea level rise, changes in rainfall patterns, changes in flood volumes and frequencies, and changes in average and extreme temperatures.

Policy 11AA-4: Habitat protection and restoration projects in shoreline jurisdiction should consider implications of sea-level rise and other climate change impacts to promote resiliency of habitats and species. Those that promote climate change and sea-level rise resiliency should be considered priority actions.

Policy 11AA-5: Whatcom County should monitor the impacts of climate change on Whatcom County’s shorelands, the shoreline master program’s ability to adapt to sea level rise and other aspects of climate change at least every periodic update, and revise the shoreline master program as needed. Whatcom County should periodically assess the best available sea level rise projections and other science related to climate change within shoreline jurisdiction and incorporate them into future program updates, as relevant.

Policy 11AA-6: Public infrastructure—such as transportation systems, utilities, flood hazard control, and instream structures—and essential public facilities in shoreline areas should be built in a manner that accounts for increased sea level rise and storm surge, and the flooding that may accompany it.

Policy 11AA-7: Whatcom County should evaluate opportunities to protect shoreline investments and infrastructure from the impacts of climate change, as necessary and feasible. Specifically, the County should maintain shoreline protection and erosion control by:

- Facilitating the installation and maintenance of native vegetation along appropriate areas of shoreline;
- Revisiting development policies with the objective of providing additional shoreline buffer area between developed areas and the shoreline; and
- Only consider structural shoreline stabilization structures when alternative options are unavailable.

Shoreline Use and Modification Policies

The following shoreline use and modification policies apply to specific development activities on shorelines.

Shoreline Bulk Provisions – Buffers, Setbacks, Height, Open Space and Impervious Surface Coverage

Policy 11BB-1: Standards for density, setbacks, height, and other provisions should ensure no net loss of shoreline ecological functions and/or processes and preserve the existing character of the shoreline consistent with the purpose of the shoreline area designation.

Agriculture

Policy 11BB-1: The SMP recognizes the importance of agriculture in Whatcom County and supports its continued economic viability. It allows for ongoing agricultural activities and should protect agricultural lands from conflicting uses such as intensive or unrelated residential, industrial, or commercial uses while also maintaining shoreline ecological functions and processes.

Policy 11BB-2: Agricultural uses and development in support of agricultural uses should be conducted in such a manner as to assure no net loss of shoreline ecological functions and processes and avoid substantial adverse impacts on other shoreline resources and values.

Policy 11BB-3: Conversion of agricultural uses to other uses should comply with all policies and regulations for nonagricultural uses.

Aquaculture

Policy 11CC-1: Aquaculture is a water-dependent use and, when consistent with control of pollution, avoidance of adverse impacts to the environment, and preservation of habitat for resident native species, is a preferred use of the shoreline (WAC 173-26-241(3)(b)).

Policy 11CC-2: Potential locations for aquaculture activities are relatively restricted because of specific requirements related to water quality, temperature, oxygen content, currents, adjacent land use, wind protection, commercial navigation, and salinity. The technology associated with some forms of aquaculture is still experimental and in formative states. Therefore, some latitude should be given when implementing the policies of this subsection and the regulations in WCC Title 23; provided, that potential impacts on existing uses and shoreline ecological functions and processes should be given due consideration.

Policy 11CC-3: Preference should be given to those forms of aquaculture that involve lesser environmental and visual impacts and lesser impacts to native plant and animal species. In general, projects that require submerged, intertidal, or no structures are preferred over those that involve substantial floating structures. Projects that involve little or no substrate modification are preferred over those that involve substantial modification. Projects that involve little or no supplemental food sources, pesticides, herbicides, or antibiotic application are preferred over those that involve such practices.

Policy 11CC-4: Aquaculture activities should be designed, located and operated in a manner that supports long-term beneficial use of the shoreline and protects and maintains shoreline ecological functions and processes. Aquaculture should not be permitted where it would result in a net loss of shoreline ecological functions; adversely affect the quality or extent of habitat for native species, including eelgrass, kelp, and other macroalgae; adversely impact other habitat conservation areas; or interfere with navigation or other water-dependent uses.

Policy 11CC-5: Aquaculture that involves significant risk of cumulative adverse effects on water quality, sediment quality, benthic and pelagic organisms, and/or wild fish populations through potential

contribution of antibiotic resistant bacteria, or escapement of nonnative species, or other adverse effects on ESA-listed species should not be permitted.

Policy 11CC-6: The County should actively seek substantive comment on any shoreline permit application for aquaculture from all appropriate federal, state, and local agencies; the Lummi Nation, Nooksack Tribe, and other affected tribes; and the general public regarding potential adverse impacts. Comments of nearby residents or property owners directly affected by a proposal should be considered and evaluated, especially in regard to use compatibility and aesthetics.

Policy 11CC-7: The rights of treaty tribes to aquatic resources within their usual and accustomed areas should be addressed through the permit review process. Direct coordination between the applicant/proponent and the tribe should be encouraged.

Policy 11CC-8: Consideration should be given to both the potential beneficial impacts and potential adverse impacts that aquaculture development might have on the physical environment; on other existing and approved land and water uses, including navigation; and on the aesthetic qualities of a project area.

Policy 11CC-9: Legally established aquaculture enterprises, including authorized experimental projects, should be protected from incompatible uses that may seek to locate nearby. Use or developments that have a high probability of damaging or destroying an existing aquaculture operation may be denied.

Policy 11CC-10: Experimental aquaculture projects in waterbodies should be limited in scale and should be approved for a limited period of time. Experimental aquaculture means an aquaculture activity that uses methods or technologies that are unprecedented or unproven in the state of Washington.

Marinas and Launch Ramps

Marina and launch ramp development are subject to the following policies. Moorage structures serving four or fewer users are only subject to the policies in Moorage Structures.

Policy 11DD-1: Boating facilities, including marinas and launch ramps, are water-dependent uses and should be given priority for shoreline location. Boating facilities should also contribute to public access and enjoyment of waters of the state. Shorelines particularly suitable for marinas and launch ramps are limited, and should be identified and reserved to prevent irreversible commitment for other uses having less stringent site requirements.

Policy 11DD-2: Regional needs for marina and boat launch facilities should be carefully considered in reviewing new proposals as well as in

- 1 allocating shorelines for such development. Such facilities should
2 be coordinated with park and recreation plans and, where
3 feasible, collocated with port or other compatible water-
4 dependent uses. Review of such facilities should be coordinated
5 with recreation providers, including cities, adjacent counties, port
6 districts, the Whatcom County Parks and Recreation department,
7 the Washington State Parks and Recreation Commission, and the
8 Washington State Department of Natural Resources to avoid
9 unnecessary duplication and to efficiently provide recreational
10 resources while minimizing adverse impacts to shoreline
11 ecological functions and processes.
- 12 Policy 11DD-3: Upland boat storage is preferred over new in-water moorage.
13 Mooring buoys are preferred over docks and piers. Boating
14 facilities that minimize the amount of shoreline modification are
15 preferred.
- 16 Policy 11DD-4: Boating facilities should provide physical and visual public
17 shoreline access and provide for multiple uses, including water-
18 related use, to the extent compatible with shoreline ecological
19 functions and processes and adjacent shoreline use.
- 20 Policy 11DD-5: Accessory uses at marinas or launch ramps should be limited to
21 water-oriented uses, or uses that provide physical or visual
22 shoreline access for substantial numbers of the general public.
- 23 Policy 11DD-6: New or expanding boating facilities including marinas, launch
24 ramps, and accessory uses should only be sited where suitable
25 environmental conditions are present and should avoid critical
26 saltwater habitat including kelp and eelgrass beds, and spawning
27 and holding areas for forage fish (such as herring, surf smelt and
28 sandlance); subsistence, commercial, and recreational shellfish
29 beds; mudflats, intertidal habitats with vascular plants; and areas
30 with which priority species have a primary association.
- 31 Policy 11DD-7: Boating facilities should be located and designed to avoid adverse
32 effects upon coastal, riverine, and nearshore processes such as
33 erosion, littoral or riparian transport, and accretion, and should,
34 where feasible, enhance degraded, scarce, and/or valuable shore
35 features including accretion shoreforms.
- 36 Policy 11DD-8: Launch ramps are preferred over marinas on accretion shores
37 because associated impacts are often reversible and such
38 structures will not normally interfere with littoral drift and
39 accretion unless offshore defense structures or dredging are also
40 required.
- 41 Policy 11DD-9: Nonregulatory methods to protect, enhance, and restore
42 shoreline ecological functions and processes and other shoreline
43 resources should be encouraged during the design, development,
44 and operation of boating facilities. Nonregulatory methods may

- 1 include public facility and resource planning, education, voluntary
2 protection and enhancement projects, or incentive programs.
- 3 Policy 11DD-10: Boating facilities should be located, designed, and operated so
4 that other appropriate water-dependent uses are not adversely
5 affected.
- 6 Policy 11DD-11: Location and design of boating facilities should not unduly
7 obstruct navigable waters and should avoid adverse effects to
8 recreational opportunities such as fishing, shellfish gathering,
9 pleasure boating, commercial aquaculture, swimming, beach
10 walking, picnicking, and shoreline viewing.
- 11 Policy 11DD-12: Boating facilities should be located, designed, constructed,
12 maintained, and operated to avoid adverse proximity impacts
13 such as noise, light and glare; aesthetic impacts to adjacent land
14 uses; and impacts to public visual access to the shoreline.
- 15 Policy 11DD-13: Live-aboards should be regulated so as to prevent adverse
16 impacts to public health and safety.
- 17 **Commercial Use**
- 18 Policy 11EE-1: In securing shoreline locations for commercial uses, preference
19 should be given first to water-dependent commercial uses, then
20 to water-related and water-enjoyment commercial uses.
- 21 Policy 11EE-2: Restoration of impaired shoreline ecological functions and
22 processes should be encouraged as part of commercial
23 development.
- 24 Policy 11EE-3: Commercial development should ensure visual compatibility with
25 adjacent noncommercial properties.
- 26 Policy 11EE-4: Commercial uses located in the shoreline should provide public
27 access in accordance with constitutional or other legal limitations
28 unless such improvements are demonstrated to be infeasible or
29 present hazards to life and property.
- 30 **Dredging**
- 31 Policy 11FF-1: Dredging should be permitted for water-dependent uses of
32 economic importance to the region and/or essential public
33 facilities only when necessary and when alternatives are
34 infeasible or less consistent with the SMP.
- 35 Policy 11FF-2: Dredging to provide water-oriented recreation should not be
36 permitted.
- 37 Policy 11FF-3: Minor dredging as part of ecological restoration or enhancement,
38 beach enhancement, public access, or public recreation should be
39 permitted if consistent with the SMP.

- 1 Policy 11FF-4: New development should be sited and designed to avoid or,
2 where avoidance is not possible, to minimize the need for new
3 maintenance dredging.
- 4 Policy 11FF-5: Dredging of bottom materials for the primary purpose of
5 obtaining material for landfill, construction, or beach
6 enhancement should not be permitted.
- 7 Policy 11FF-6: Spoil disposal on land away from the shoreline is generally
8 preferred over open water disposal.
- 9 Policy 11FF-7: Long-term cooperative management programs that rely primarily
10 on natural processes and involve landowners and applicable local,
11 state, and federal agencies and tribes should be pursued to
12 prevent or minimize conditions which make dredging necessary.

13 **Flood Hazard Reduction and Instream Structures**

- 14 Policy 11GG-1: New or expanding development or uses in the shoreline, including
15 subdivision of land, that would likely require structural flood
16 hazard reduction works within a stream, channel migration zone,
17 or floodway should not be allowed.
- 18 Policy 11GG-2: Flood hazard reduction works and instream structures should be
19 planned and designed to be compatible with appropriate multiple
20 uses of stream resources over the long term, especially in
21 shorelines of statewide significance.
- 22 Policy 11GG-3: Flood hazard reduction works should only be allowed in the
23 shoreline if they are necessary to protect existing development
24 and where nonstructural flood hazard reduction measures are
25 infeasible.
- 26 Policy 11GG-4: Flood hazard reduction works to protect existing development
27 should be permitted only when the primary use being protected
28 is consistent with the SMP, and the works can be developed in a
29 manner that is compatible with multiple use of streams and
30 associated resources for the long term, including shoreline
31 ecological functions, fish and wildlife management, and
32 recreation.

33 **Forest Practices**

- 34 Policy 11HH-1: Forest lands should be reserved for long-term forest management
35 and such other uses as are compatible with the primary use.
36 Other more intensive and incompatible uses tending to impair the
37 primary use should be discouraged from locating on forest lands.
- 38 Policy 11HH-2: Forest practices should maintain high levels of water quality, as
39 well as surface and groundwater movement patterns.
- 40 Policy 11HH-3: Forest practices should minimize damage to wetlands, fish and
41 wildlife species, and habitats, especially aquatic habitats.

Policy 11HH-4: Forest practices should maintain or improve the quality of soils and minimize erosion.

Policy 11HH-5: Where slopes are extremely steep or soils are subject to sliding, rapid erosion, or high-water table, special practices should be employed to minimize damage to shoreland and water features and adjacent properties.

Industrial and Port Development

The following policies apply to industrial and port development in shoreline areas.

Policy 11II-1: Shoreline sites particularly suitable for development such as deepwater harbors with access to adequate rail, highway, and utility systems should be reserved for water-dependent or water-related industrial and port development.

Policy 11II-2: In order to provide adequate shoreline for future water-dependent and water-related uses, industrial or port development at deepwater sites should be limited to those uses that produce the greatest long-term economic base. Industrial and port development that is consistent with the SMP should be protected from encroachment or interference by incompatible uses with less stringent siting requirements, such as residential or commercial uses. Mixed use development, including non-water-dependent uses, should only be allowed when they include and support water-dependent uses.

Policy 11II-3: Regional needs for port facilities should be carefully considered in reviewing new port proposals and in allocating shorelines for such development. Such reviews or allocations should be coordinated with port districts, adjacent counties and cities, and the state. Existing, officially designated State Harbor Areas should be used for new port development to the maximum extent whenever possible.

Policy 11II-4: Multiple use of industrial and port facilities is encouraged to limit duplicative facilities and reduce adverse impacts. Multiple use should be implemented in the following manner:

a. Cooperative use of piers, cargo handling, storage, parking and other accessory facilities among private or public entities should be required in industrial or port facilities whenever feasible. New facilities for water-dependent uses should be allowed only after assessment of the potential for shared use of existing facilities.

b. Industrial and port developments should provide opportunities for physical and/or visual public shoreline access in accordance with the public access policies, including recreational use of undeveloped shorelines not needed for port

or industry operations; provided, that such uses are safely compatible with facility operations.

Policy 11II-5: Industrial and port development in the shoreline should be located and designed to avoid significant adverse impacts to other shoreline uses, resources, and values, including shoreline geomorphic processes, water quality, fish and wildlife habitat, commercial aquaculture, and the aquatic food chain.

Policy 11II-6: Restoration of impaired shoreline ecological functions and processes should be encouraged as part of industrial and port development.

Cherry Point Management Area

Policy 11JJ-1: Development of the Cherry Point major port/industrial urban growth area will accommodate uses that require marine access for marine cargo transfer.

- a. Water-dependent terminal facilities are encouraged as the preferred use in the Cherry Point management area.
- b. Existing legal fossil fuel refineries should be allowed to continue and maintain their operations with limited expansions subject to environmental review, greenhouse gas emission mitigation, and conformance with the Shoreline Master Program and other applicable land use designation.
- c. It is the policy of Whatcom County to limit the number of industrial piers at Cherry Point to the existing three piers in operation or approved as of January 1, 1998, taking into account the need to:
 - Act conservatively in land use matters at Cherry Point to prevent further harm to habitat important to the Cherry Point herring stock and Southern Resident Orcas;
 - Optimally implement the Shoreline Master Program policy regarding shorelines of statewide significance per WCC 23.40;
 - Encourage the continued County use of best available science;
 - Support and remain consistent with the state Department of Natural Resources' withdrawal of Cherry Point tidelands and bedlands from the general leasing program and the species recovery goals of the Cherry Point Aquatic Reserve designation and Management Plan;
 - Recognize federal actions upholding treaty rights;
 - Protect traditional commercial and tribal fishing; and

- Prevent conflicts with vessel shipment operations of existing refineries that could lead to catastrophic oil or fuel spills.

Policy 11JJ-2: Whatcom County should ensure that shoreline development applicants demonstrate consistency with the State of Washington Department of Natural Resources' Cherry Point Aquatic Reserve Management Plan.

Policy 11JJ-2: Water-Dependent Industrial Development. Only water-dependent facilities that serve industrial facilities should be allowed in the Cherry Point management area. Industry within the major port/industrial urban growth area, as designated in the Comprehensive Plan, which is not water-dependent should locate away from shoreline jurisdiction.

Policy 11JJ-3: Multiple Use Facilities. Facilities that allow for multiple use of piers, cargo handling, storage, parking and other accessory facilities are encouraged.

Policy 11JJ-4: Public Access.

 - a. Where appropriate, industrial and port development within the Cherry Point management area should provide public beach and shoreline access in a manner that does not cause interference with facility operations or present hazards to life and property. This may be accomplished through individual action or by joint, coordinated action with other developers and landowners, for example, by setting aside a common public access area.
 - b. Special emphasis should be given to providing public beach and shoreline access for recreational opportunities including but not limited to crabbing, small craft launching, surf fishing, picnicking, clamming, and beach walking.
 - c. Public access within the Cherry Point management area should be consistent with the Whatcom County Parks and Recreation Open Space Plan.

Policy 11JJ-5: Shoreline Ecological Functions and Processes. In recognition of the diverse and vital ecological resources in the Cherry Point management area, consideration of probable effects of all development proposals on shoreline ecological functions and processes should be assessed with the other long-term statewide interests. New port development that requires dredge and fill should not be permitted in the Cherry Point management area due to potential adverse effects on ecological functions, including fish and shellfish habitat and geohydraulic processes.

Policy 11JJ-6: Aesthetics. All development should be designed to avoid or minimize negative visual impacts on the scenic character of the

area and to ensure visual compatibility with adjacent nonindustrial zoned properties.

Policy 11JJ-7: Site Development. All development should be constructed and operated in a manner that, while permitting water-dependent uses, also protects shoreline resources, their ecological functions and processes, and that incorporates the following:

a. Low impact development approaches to avoid or minimize adverse impact to topography, vegetation, water quality, fish and wildlife habitat, and other natural site conditions;

b. Adequate temporary and permanent management measures to control erosion and sediment impacts during construction and operation; and

c. Adequate stormwater management facilities.

Fill and Excavation

Policy 11KK-1: Landfill and excavation should only be permitted to the minimum extent necessary to accommodate an approved shoreline use or development and with assurance of no net loss of shoreline ecological functions and processes. Enhancement and voluntary restoration of landforms and habitat are encouraged.

Policy 11KK-2: Landfill in waterbodies, floodways, and/or wetlands should not be permitted for creation of new uplands, unless it is part of an approved ecological restoration activity. Landfill should be permitted in limited instances to restore uplands where recent erosion has rapidly reduced upland area, to build beaches and protective berms for shore stabilization or recreation, to restore or enhance degraded shoreline ecological functions and processes, or to moderately elevate low uplands to make such uplands more suitable for purposes consistent with the SMP.

Policy 11KK-3: Fill should not be allowed where shore stabilization works would be required to maintain the materials placed.

Policy 11KK-4: Landfills and excavation should be located and developed so that water quality, hydrology, and runoff patterns are not altered.

Policy 11KK-5: The predicted economic benefits of landfills and excavation should be weighed against long-term cumulative impacts on ecological processes and functions.

Mining

Policy 11LL-1: Mining should not be located on shorelines where unavoidable adverse impacts on other users or resources together equal or outweigh the benefits from mining.

Policy 11LL-2: Mining should not interfere with public recreation on the shoreline.

- Policy 11LL-3: Mining should be located and operated so as to provide long-term protection of water quality, fish and wildlife, and fish and wildlife habitat.
- Policy 11LL-4: Mining, particularly surface or strip mining, should provide for timely restoration of disturbed areas to a biologically productive, semi-natural, or other useful condition through a reclamation process consistent with regulations administered by the Department of Natural Resources and other applicable county standards.
- Policy 11LL-5: Mining of marine and lake shores or accretional shoreforms, such as point bars, that have a high value for recreation or as fish or wildlife habitat should generally not be permitted.
- Policy 11LL-6: Mining should only be permitted on accretion point and channel bars where appropriate studies and detailed operation plans demonstrate that:
- a. Fish habitat, upland habitat and water quality will not be significantly impacted; and
 - b. The operation will not adversely affect geohydraulic processes, channel alignment, nor increase bank erosion or flood damages.
- Policy 11LL-7: Mining operations should be located, designed, and managed so that other appropriate uses are not subjected to substantial or unnecessary adverse impacts from noise, dust, or other effects of the operation. The operator may be required to implement measures such as buffers, limited hours, or other mitigating measures for the purpose of minimizing adverse proximity impacts.

Moorage Structures

Moorage in shoreline areas are subject to the following policies. Moorage structures serving more than four users and boat launching facilities are also subject to the policies in Marinas and Launch Ramps.

- Policy 11MM-1: Moorage associated with a single-family residence is considered a water-dependent use; provided, that it is designed and used as a facility to access watercraft, and other moorage facilities are not available or feasible. Moorage for water-related and water-enjoyment uses or shared moorage for multifamily use should be allowed as part of a mixed-use development or where it provides public access.
- Policy 11MM-2: New moorage, excluding docks accessory to single-family residences, should be permitted only when the applicant/proponent has demonstrated that a specific need exists to support the intended water-dependent or public access use.

- 1 Policy 11MM-3: As an alternative to continued proliferation of individual private
2 moorage, mooring buoys are preferred over docks or floats.
3 Shared moorage facilities are preferred over single-user moorage
4 where feasible, especially where water use conflicts exist or are
5 predictable. New subdivisions of more than two lots and new
6 multifamily development of more than two dwelling units should
7 provide shared moorage.
- 8 Policy 11MM-4: Docks, piers and mooring buoys, including those accessory to
9 single-family residences, should avoid locations where they will
10 adversely impact shoreline ecological functions or processes,
11 including currents and littoral drift, and critical saltwater habitat
12 including kelp beds, eelgrass beds, spawning and holding areas
13 for forage fish (such as herring, surf smelt and sandlance);
14 subsistence, commercial and recreational shellfish beds;
15 mudflats, intertidal habitats with vascular plants; and areas with
16 which priority species have a primary association.
- 17 Policy 11MM-5: Moorage should be spaced and oriented in a manner that
18 minimizes hazards and obstructions to public navigation rights
19 and corollary rights thereto such as, but not limited to, fishing,
20 swimming, and pleasure boating, as well as private riparian rights
21 of adjacent landowners.
- 22 Policy 11MM-6: Moorage should be restricted to the minimum size necessary to
23 meet the needs of the proposed use. The size of piers and docks
24 should be no greater than that required for safety and practicality
25 for the primary use.
- 26 Policy 11MM-7: Pile supports are preferred over fills because piles do not displace
27 water surface and intertidal or aquatic habitat and are removable
28 and thus more flexible in terms of long-term use patterns. Floats
29 may be less desirable than pile structures where aquatic habitat
30 or littoral drift are significant.
- 31 Policy 11MM-8: The use of buoys for small craft moorage is preferred over pile or
32 float structures because of lesser long-term impact on shore
33 features and users; moorage buoys should be placed as close to
34 shore as possible to minimize obstruction to navigation.
- 35 Policy 11MM-9: Shoreline resources and water quality should be protected from
36 overuse by boaters living on vessels (live boards). Boaters living
37 on vessels are restricted to established marinas with facilities to
38 address waste handling and other sanitary services.
- 39 Policy 11MM-10: Vessels should be restricted from extended mooring on waters of
40 the state unless authorization is obtained from the DNR and
41 impacts to navigation and public access are mitigated.
- 42 Policy 11MM-11: Piers and docks should be constructed of materials that will not
43 adversely affect water quality or aquatic plants and animals in the
44 long term.

Policy 11MM-12: New pier and dock development should be designed so as not to interfere with lawful public access to or use of shorelines. Developers of new piers and shared moorage should be encouraged to provide physical or visual public access to shorelines whenever safe and compatible with the primary use and shore features.

Recreation

Policy 11NN-1: Shoreline recreational development should be given priority for shoreline location to the extent that the use facilitates the public's ability to reach, touch, and enjoy the water's edge, to travel on the waters of the state, and to view the water and the shoreline. Where appropriate, such facilities should be dispersed along the shoreline in a manner that supports more frequent recreational access and aesthetic enjoyment of the shoreline for a substantial number of people.

Policy 11NN-2: Recreational developments should facilitate appropriate use of shoreline resources while conserving them. These resources include, but are not limited to: accretion shoreforms, wetlands, soils, groundwater, surface water, native plant and animal life, and shore processes.

Policy 11NN-3: Recreational developments and plans should provide the regional population a varied and balanced choice of recreation experiences in appropriate locations. Public agencies and private developers should coordinate their plans and activities to provide a wide variety of recreational opportunities without needlessly duplicating facilities.

Policy 11NN-4: Trail links between shoreline parks and public access points should be encouraged for walking, horseback or bicycle riding, and other non-motorized vehicle access where appropriate. The Whatcom County Comprehensive Park and Recreation Open Space Plan should be considered in design and approval of public trail systems.

Policy 11NN-5: Access to natural character recreational areas, including but not limited to beaches and fishing streams, should be a combination of linear shoreline trails or easements and small parking or access tracts to minimize user concentration on small portions of the shoreline.

Policy 11NN-6: Recreation facilities should incorporate public education regarding shoreline ecological functions and processes, the role of human actions on the environment, and the importance of public involvement in shorelines management. Opportunities incorporating educational and interpretive information should be pursued in design and operation of recreation facilities and nature trails.

Policy 11NN-7: Reasonable physical or visual public access to shorelines should be provided and integrated with recreational developments in accordance with WCC 23.30.070 (Public Access).

Policy 11NN-8: Recreation development should be located only where utility and road capability are adequate, or may be provided without significant damage to shore features commensurate with the number and concentration of anticipated users.

Policy 11NN-9: Cooperative efforts among public and private persons toward the acquisition and/or development of suitable recreation sites or facilities should be explored to assure long-term availability of sufficient public sites to meet local recreation needs.

Residential

Policy 1100-1: Single-family residences are designated in Chapter [90.58](#) RCW as a priority use in those limited instances when authorization is given for alterations of the natural condition of shorelines of the state.

Policy 1100-2: New residential development is encouraged to cluster dwelling units together to reduce physical and visual impacts on shorelines and to reduce utility and road costs. Planned unit developments that include common open space and recreation facilities, or a variety of dwelling sizes and types, are encouraged at suitable locations as a preferable alternative to extensive single-lot subdivisions on shorelines. Planned unit developments (Chapter [20.85](#) WCC) may also include a limited number of neighborhood commercial business uses where consistent with the applicable zoning regulations.

Policy 1100-3: Allowable density of new residential development should comply with applicable Comprehensive Plan goals and policies, zoning restrictions, and shoreline area designation standards. The density of development should be appropriate to local natural and cultural features.

Policy 1100-4: Structures or development for uses accessory to residential use should preserve shoreline open space, be visually and physically compatible with adjacent cultural and shoreline features, be reasonable in size and purpose, and result in no net loss of shoreline ecological functions and processes.

Policy 1100-5: Buildings greater than 35 feet above average grade level that will obstruct the views of a substantial number of residences on areas adjoining such shorelines are limited by the SMA (RCW [90.58.320](#)) to those cases where the SMP does not prohibit such development and then only when overriding considerations of the public interest will be served. The SMP provides opportunities for buildings greater than 35 feet in height in limited

- 1 areas where consistent with development objectives and the
2 goals and policies of this chapter.
- 3 Policy 1100-6: New residential development should be planned and built to
4 minimize the need for shoreline stabilization and flood hazard
5 reduction measures.
- 6 Policy 1100-7: Measures to conserve native vegetation along shorelines should
7 be required for all residential development. Vegetation
8 conservation may include avoidance or minimization of clearing
9 or grading, restoration of areas of native vegetation, and/or
10 control of invasive or nonnative vegetation.
- 11 Policy 1100-8: Whenever possible, nonregulatory methods to protect, enhance,
12 and restore shoreline ecological functions and other shoreline
13 resources should be encouraged for residential development.
14 Such methods may include resource management planning, low
15 impact development techniques, voluntary protection and
16 enhancement projects, education, or incentive programs.
- 17 Policy 1100-9: New multiunit residential development, including subdivision of
18 land for more than four parcels, should provide substantial shore
19 recreational opportunities for residents and the public, unless
20 public access is infeasible due to incompatible uses, safety,
21 impacts to shoreline ecology, or legal limitations. Developments
22 of four or fewer units should provide private access to the shore
23 for those living in the development (non-public).
- 24 Policy 1100-10: Development should provide open space corridors between
25 structures, and along site boundaries, so as to provide space for
26 outdoor recreation, preserve views, and minimize use conflicts.
- 27 Policy 1100-11: Recreation-oriented residential development in the shoreline
28 should be located only where substantial recreation opportunities
29 are provided on site, and where nearby property owners and
30 other appropriate uses will not be adversely affected.

31 **Restoration and Enhancement**

- 32 Policy 11PP-1: The SMP recognizes the importance of restoration of shoreline
33 ecological functions and processes and encourages cooperative
34 restoration efforts and programs between local, state, and federal
35 public agencies, tribes, nonprofit organizations, and landowners
36 to address shorelines with impaired ecological functions and/or
37 processes.
- 38 Policy 11PP-2: Restoration actions should restore shoreline ecological functions
39 and processes as well as shoreline features and should be
40 targeted towards meeting the needs of sensitive and/or locally
41 important plant, fish and wildlife species, the biological recovery
42 goals for early Chinook and bull trout populations, and other
43 salmonid species and populations.

- Policy 11PP-3: Restoration should be integrated with other parallel natural resource management efforts such as the WRIA 1 Salmonid Recovery Plan and the WRIA 1 Watershed Management Plan.
- Policy 11PP-4: Priority should be given to restoration actions that:
- a. Create dynamic and sustainable ecosystems.
 - b. Restore connectivity between stream/river channels, floodplains and hyporheic zones.
 - c. Restore natural channel-forming geomorphologic processes.
 - d. Mitigate peak flows and associated impacts caused by high stormwater runoff volume.
 - e. Reduce sediment input to streams and rivers and associated impacts.
 - f. Improve water quality.
 - g. Restore native vegetation and natural hydrologic functions of degraded and former wetlands.
 - h. Replant native vegetation in riparian areas to restore functions.
 - i. Restore nearshore ecosystem processes, such as sediment transport and delivery and tidal currents that create and sustain habitat.
 - j. Restore pocket estuaries that support salmon life histories, including feeding and growth, refuge, osmoregulation, and migration.
 - k. Address contamination along industrial shoreline regions.

Shoreline Stabilization

- Policy 11QQ-1: Alternatives to structures for shore protection should be used whenever possible. Such alternatives may include no action (allow the shoreline to retreat naturally), increased building setbacks, building relocation, drainage controls, and bioengineering, including vegetative stabilization, and beach enhancement.
- Policy 11QQ-2: Single-family residences occupied prior to January 1, 1992, and their appurtenant structures should be protected against damage or loss caused by shoreline erosion; provided, that measures to protect single-family residences should be designed to minimize harm to the shoreline environment. After that date, all new single-family residences and their appurtenant structures should be built in a manner so as to not need protective measures.
- Policy 11QQ-3: New or expanded structural shore stabilization for new primary structures should be avoided. Instead, structures should be

- 1 located and designed to avoid the need for future shoreline
2 stabilization where feasible. Land subdivisions should be designed
3 to assure that future development of the created lots will not
4 require structural shore stabilization for reasonable development
5 to occur.
- 6 Policy 11QQ-3: New or expanded structural shore stabilization should only be
7 permitted where demonstrated to be necessary to protect an
8 existing primary structure that is in danger of loss or substantial
9 damage, and where mitigation of impacts would not cause a net
10 loss of shoreline ecological functions and processes.
- 11 Policy 11QQ-4: New or expanded structural shore stabilization for enhancement,
12 restoration, or hazardous substance remediation projects should
13 only be allowed when nonstructural measures, vegetation
14 planting, or on-site drainage improvements would be insufficient
15 to achieve enhancement, restoration, or remediation objectives.
- 16 Policy 11QQ-5: Shore stabilization on streams should be located and designed to
17 fit the physical character and hydraulic energy potential of a
18 specific shoreline reach, which may differ substantially from
19 adjacent reaches.
- 20 Policy 11QQ-6: Shore stabilization should not be permitted to unnecessarily
21 interfere with public access to public shorelines, nor with other
22 appropriate shoreline uses including, but not limited to,
23 navigation, seafood harvest, or recreation.
- 24 Policy 11QQ-7: Provisions for multiple use, restoration, and/or public shore
25 access should be incorporated into the location, design, and
26 maintenance of shore stabilization for public or quasi-public
27 developments whenever safely compatible with the primary
28 purpose. Shore stabilization on publicly owned shorelines should
29 not be allowed to decrease long-term public use of the shoreline.
- 30 Policy 11QQ-8: Shore stabilization should be developed in a coordinated manner
31 among affected property owners and public agencies for a whole
32 drift sector (net shore-drift cell) or reach where feasible,
33 particularly those that cross jurisdictional boundaries, to address
34 ecological and geohydraulic processes, sediment conveyance and
35 beach management issues. Where beach erosion threatens
36 existing development, a comprehensive program for shoreline
37 management should be established.
- 38 Policy 11QQ-9: In addition to conformance with the regulations in the SMP,
39 nonregulatory methods to protect, enhance, and restore shoreline
40 ecological functions and other shoreline resources should be
41 encouraged for shore stabilization. Nonregulatory methods may
42 include public facility and resource planning, technical assistance,
43 education, voluntary enhancement and restoration projects, or
44 other incentive programs.

Policy 11QQ-10: Shore stabilization should be located, designed, and maintained to protect and maintain shoreline ecological functions, ongoing shore processes, and the integrity of shore features. Ongoing stream, lake, or marine processes and the probable effects of proposed shore stabilization on other properties and shore features should be considered. Shore stabilization should not be developed for the purpose of filling shorelines.

Policy 11QQ-11: Failing, harmful, unnecessary, or ineffective structures should be removed, and shoreline ecological functions and processes should be restored using nonstructural methods or less harmful long-term stabilization measures.

Policy 11QQ-12: Structural shoreline stabilization measures should only be used when more natural, flexible, sustainable, nonstructural methods such as vegetative stabilization, beach enhancement, and bioengineering have been determined infeasible. Alternatives for shoreline stabilization should be based on the following hierarchy of preference:

a. No action (allow the shoreline to retreat naturally), increase building setbacks, and relocate structures.

b. Flexible defense works constructed of natural materials including soft shore protection, bioengineering, including beach enhancement, protective berms, or vegetative stabilization.

c. Rigid works constructed of artificial materials such as riprap or concrete.

Materials used for construction of shoreline stabilization should be selected for long-term durability, ease of maintenance, compatibility with local shore features, including aesthetic values, and flexibility for future uses.

Policy 11QQ-13: Larger works such as jetties, breakwaters, weirs, or groin systems should be permitted only for water-dependent uses when the benefits to the region outweigh resource losses from such works, and only where mitigated to provide no net loss of shoreline ecological functions and processes.

Policy 11QQ-14: Alternative structures, including floating, portable or submerged breakwater structures, or several smaller discontinuous structures, should be considered where physical conditions make such alternatives with less impact feasible.

Signs

Policy 11RR-1: Whatcom County recognizes the constitutional right for property owners to communicate using signs on their property. These policies are intended to ensure that signage within shoreline areas is consistent with the purpose and intent of the SMA and the SMP

- by addressing impacts to ecological functions, public safety, and visual aesthetics.
- Policy 11RR-2: Signs should be located, designed, and maintained to be visually compatible with local shoreline scenery as seen from both land and water, especially on shorelines of statewide significance.
- Policy 11 RR-3: Sign location and design should not significantly impair shoreline views.
- Policy 11 RR-4: As a preferable alternative to continued proliferation of single-purpose signs, communities, districts, and/or multiuse or multitenant commercial developments are encouraged to erect single, common use gateway signs to identify and give directions to local premises and public facilities.
- Policy 11 RR-5: Signs of a commercial or industrial nature should be limited to those areas or premises to which the sign messages refer.
- Policy 11 RR-6: Billboards and other off-premises signs are not water-dependent, they reduce public enjoyment of or access to shorelines, and they often lower values of nearby properties. Except for approved community gateway or directional signs, such signs should not be located on shorelines.
- Policy 11 RR-7: Signs near scenic vistas and viewpoints should be restricted in number, location, and height so that enjoyment of these limited and scarce areas is not impaired.
- Policy 11 RR-8: Freestanding signs should be located to avoid blocking scenic views and be located on the landward side of public transportation routes, which generally parallel the shoreline.
- Policy 11 RR-9: To minimize negative visual impacts and obstructions to shoreline access and use, low profile, on-premises wall signs are strongly preferred over freestanding signs or off-premises wall signs.
- Policy 11 RR-10: Signs should be designed mainly to identify the premises and nature of enterprise without unduly distracting uninterested passersby. Moving or flashing signs should be prohibited on shorelines.
- Transportation**
- Policy 11SS-1: New public or private transportation facilities should be located inland from the land/water interface, preferably out of the shoreline, unless:
- a. Perpendicular water crossings are required for access to authorized uses consistent with the SMP; or
 - b. Facilities are primarily oriented to pedestrian and non-motorized use and provide an opportunity for a substantial number of people to enjoy shoreline areas, and are consistent with the policies and regulations for ecological protection in

the General Policies section of this chapter and in WCC 23.30.010 (Ecological Protection), respectively.

Policy 11SS-2: Transportation facilities should be located and designed to avoid public recreation and public access areas and significant natural, historic, archaeological, or cultural sites.

Policy 11SS-3: Parking is not a preferred use in shorelines and should only be allowed to support authorized uses where no feasible alternatives exist.

Policy 11SS-4: New or expanded public transportation facility route selection and development should be coordinated with related local and state government land use and circulation planning.

Policy 11SS-5: Transportation system route planning, acquisition, and design in the shoreline should provide space wherever possible for compatible multiple uses such as utility lines, pedestrian shore access or viewpoints, or recreational trails.

Policy 11SS-6: Transportation system plans and transportation projects within shorelines should provide safe trail space for non-motorized traffic such as pedestrians, bicyclists, or equestrians. Space for such uses should be required along roads on shorelines, where appropriate, and should be considered when rights-of-way are being vacated or abandoned.

Policy 11SS-7: Public access should be provided to shorelines where safe and compatible with the primary and adjacent use, or should be replaced where transportation development substantially impairs lawful public access. Viewpoints, parking, trails, and similar improvements should be considered for transportation system projects in shoreline areas, especially where a need has been identified.

Policy 11SS-8: Public transportation routes, particularly arterial highways and railways, should be located, designed, and maintained to permit safe enjoyment of adjacent shore areas and properties by other appropriate uses such as recreation or residences. Vegetative screening or other buffering should be considered.

Utilities

Policy 11TT-1: New public or private utilities should be located inland from the land/water interface, preferably out of the shoreline jurisdiction, unless:

- a. Perpendicular water crossings are unavoidable; or
- b. Utilities are required for authorized shoreline uses consistent with the SMP.

- 1 Policy 11TT-2: Utilities should be located and designed to avoid public recreation
2 and public access areas and significant natural, historic,
3 archaeological, or cultural resources.
- 4 Policy 11TT-3: Utilities should be located, designed, constructed, and operated
5 to result in no net loss of shoreline ecological functions and
6 processes with appropriate mitigation as provided in
7 23.30.010 (Ecological Protection).
- 8 Policy 11TT-4: All utility development should be consistent and coordinated with
9 all local government and state planning, including comprehensive
10 plans and single purpose plans to meet the needs of future
11 populations in areas planned to accommodate growth. Site
12 planning and rights-of-way for utility development should provide
13 for compatible multiple uses such as shore access, trails, and
14 recreation or other appropriate use whenever possible; utility
15 right-of-way acquisition should also be coordinated with
16 transportation and recreation planning.
- 17 Policy 11TT-5: Utilities should be located in existing rights-of-way and corridors
18 whenever possible.
- 19 Policy 11TT-6: Utilities serving new development should be located
20 underground, wherever possible.
- 21 Policy 11TT-7: Development of pipelines and cables on aquatic lands and
22 tidelands, particularly those running roughly parallel to the
23 shoreline, and development of facilities that may require periodic
24 maintenance that would disrupt shoreline ecological functions
25 should be discouraged except where no other feasible alternative
26 exists. When permitted, provisions shall assure that the facilities
27 do not result in a net loss of shoreline ecological functions or
28 significant impacts to other shoreline resources and values.
- 29 Policy 11TT-8: Given the different scales of regional, local, and accessory utilities
30 and their potential impacts, the County may establish different
31 regulations regarding each.

Note: To be added to Ch 8

Chapter Eight Resource Lands

Marine Resource Lands

Introduction

Purpose

Marine resource lands, for the purpose of this plan, are defined as those marine areas waterward of the ordinary high-water mark, together with their underlying lands and their water column, within the jurisdiction of the Whatcom County Shoreline Management Program (WCC Title 23). Marine resource lands have the physical conditions and habitat required to generate and maintain fisheries of all types, including the commercial and recreational harvest of finfish, shellfish, algae, and other invertebrates including but not limited to mollusks, crab, and shrimp, etc. This section is intended to guide Whatcom County in the conservation of functioning marine resource lands of long-term commercial, ecological, cultural, and recreational significance, and to ensure that all water-dependent, water-related, and water-enjoyment uses requiring use or access to marine resource lands thrive in the years to come.

GMA Requirements

Goal 8 of the GMA (RCW 36.70A.020) guides the County to ***"Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries."*** While the GMA does not specifically require the designation of marine resource lands that support aquatic-based uses and industries, functioning marine resource lands are so intrinsically necessary for the creation and sustainability of historical fish and wildlife production that Whatcom County wishes to acknowledge them here.

Process

Per County Council direction, staff convened a working group comprised of members of the Marine Resource Committee, the Shellfish Protection Advisory Committee, and other local marine land experts. This working group developed a draft of this section of the Comprehensive Plan, as well as drafts of the goals and policies contained herein. The draft was then presented to the full membership of the Marine Resource Committee and Shellfish Protection Advisory Committees for review and recommendation to the County Planning Commission and Council.

Background Summary

The marine resource lands of Whatcom County have historically been one of the most important natural resources in the region. For thousands of years the shores of Whatcom County provided an important shellfish resource, sustaining our local tribes. More recently the tidelands of Drayton Harbor supported one of the earlier commercial oyster-farming businesses in the Salish Sea. The shore and nearshore lands of the County provided spawning, rearing, and forage areas for a diverse array

of finfish and shellfish species which together formed an incredible food web for ancestral tribes and early commercial fisheries. The County's marine resource lands are located along the coastal areas bordering the Salish Sea fed by the rivers, streams, and lakes that drain the upland areas of western Whatcom County. Marine resource lands include more than 130 miles of marine shoreline.

Marine resource lands in the area of Cherry Point are designated in the Shoreline Management Program as the Cherry Point Management Area to support adjacent Heavy Impact Industrial (HII) zoned industrial uses that require deep water access, such as the two existing refineries and an aluminum smelter. The harbor area and waterways in Bellingham Bay are designated for preservation of commerce and navigation along the Bellingham shoreline. The tidelands of Drayton Harbor are designated to support a small commercial wharf, marinas, residential shoreline development, shellfish production, and natural areas.

The majority of marine resource lands in Whatcom County are owned by the State of Washington (managed by Department of Natural Resources [DNR]), the Lummi Nation, and the Port of Bellingham (via a Port Management Agreement with DNR). These include many of the tidelands and subtidal lands in the County. Marine resource landowners also include some private entities that were sold tidelands prior to 1971, and who manage their marine resource lands for a variety of uses, including recreational, commercial, and industrial.

Historically, marine resource lands have been managed for natural and farmed shellfish production and harvest, fishing, transportation, utility corridors (oil/gas/natural gas pipelines; sewer and stormwater outfall pipes; communication lines (phone/fiber optic); power (electric) lines, and commercial, recreational and subsistence/cultural fishing and food gathering. Historic uses also included commercial and industrial uses, marinas (Bellingham, Blaine), municipal garbage dumps, public parks, etc.

With a growing population, there is increasing interest in improving public access to marine resource lands through the addition of boat ramps and access points for motor, wind, and human-powered craft. Over the last 20 years the desire to harvest more diverse aquatic resources, particularly from tidelands, has driven a number of significant efforts to improve water quality as well as innovative culturing techniques such as intertidal geoduck seeding, nori farming, etc.

Conservation efforts have resulted in protection of several areas including the Cherry Point Aquatic Reserve and two areas withdrawn from leasing in Bellingham Bay. These areas are valuable due to their high productivity of aquatic life that contributes to the economy and greater ecosystem of Whatcom County. Twenty years of effort and millions of dollars in public investment have kept Drayton Harbor a viable commercial and recreational shellfish growing area for future generations to enjoy.

Marine resource lands provide a huge economic benefit to the County, and the health of our stream, river, and estuarine environments and marine resource lands are the foundation of a critical tribal and non-tribal finfish and shellfish industry. In 2006, non-tribal commercial fish landings from Washington fisheries totaled nearly 109.4 million pounds, generating \$65.1-million in ex-vessel value (i.e., the price received by commercial fishers for fish). Whatcom County was the State's second-largest

commercial port area that year (after Grays Harbor County), with an ex-vessel value of commercial fish landings of more than \$13.5-million, accounting for nearly 21% of the total value of landings from Washington fisheries. Additionally, the North Puget Sound Region—which the Washington Department of Fish and Wildlife defines as including San Juan, Skagit, Snohomish and Whatcom counties—is also the most popular location for recreational shellfishing in the State. In 2006, the combined recreational shellfish catch in those four counties included more than 3.3-million pounds of Dungeness crab, 23,520 pounds of shrimp, 93,038 pounds of clams, and more than 19,000 individual oysters.¹ In 2016, the marine trades provided 6,033 jobs, or 7% of the County’s workforce.²

Whatcom County marine shorelines continue to provide income to over 250 Lummi Nation registered shellfish harvesters. Many other Lummi and Nooksack tribal members depend on finfish and crab harvest for a substantial part of their yearly family income. The Lummi Nation shellfish enterprise is highly productive and provides clam, oyster, and geoduck seed to a large part of the northwest shellfish industry. To the extent that the environmental health of these lands impacts the ability of Tribal Nations to practice fish and wildlife harvests and conduct ceremonial activities for their cultural, economic, and spiritual welfare, protection of these lands is a Treaty trust resource supporting Treaty reserved rights to take fish.

Other direct and indirect benefits to the County are even more substantial given the multiplier effect from marina-related boat works, electronics, fuel and supplies, charter and whale watching businesses, the Alaska Ferry service, sporting goods, kayaking, rowing, sailing, wind surfing, power boating, and all the sales, repair, maintenance, and provisioning that goes with these types of activities. Whatcom County’s marine resource areas are not only an international destination for water-dependent, water-related, and water-enjoyment activities, such as bird and wildlife watching, sailing and cruising, fishing and gathering, but they are also a gateway to the San Juan Islands, Gulf Islands, the greater Salish Sea environs, and international waters. Whatcom County’s marine resource lands are a renewable and sustainable economic driver that will serve this region well into the future.

Issues, Goals, and Policies

The following goals and policies apply to marine resource lands and address the issues of conserving productive aquatic land and meeting the goals of the Growth Management Act.

Marine Resource Land Base

Tidelands, marine waters, major lakes, and navigable rivers were owned by the State of Washington at the time of statehood unless reserved for other uses such as federal facilities or Indian reservations. Between 1889 and 1971, the State sold many of its tidelands to railroads, timber companies, and shellfish growers as a way to finance the State. As a result, the State owns only about 30% of the tidelands. The bulk of tidelands and many shoreland areas are owned or managed by ports, industries,

¹ Whatcom County, March 2015. *Whatcom County Comprehensive Economic Development Strategy*, prepared by the Whatcom Council of Governments.

² Center of Economic and Business Research, Western Washington University, July 2016. *Whatcom County Marine Trades Impacts*.

tribes, and private property owners. The State retains ownership of most all of the subtidal lands which were not sold.

Since their adoption, the marine resource land base in Washington State and in Whatcom County has largely been protected by the Washington State Shoreline Management Act, as well as Whatcom County's Shoreline Management Program (SMP), Critical Areas Ordinance, and other land use regulations such as stormwater, land disturbance, zoning, and other regulations.

Historically, shoreline modification, including filling, hardening, and diking of many natural shorelines has resulted in a significant reduction in acreage of functioning marine resource lands in many areas of the County. These modifications came as a result of transportation improvements (roads, railroads, barge landings, and ferry terminals), utilities (electrical, communications, sewer, stormwater, etc.), hydropower, water-dependent uses (marinas, fish processing, ship yards), non-water dependent uses (large industrial facilities), flood control efforts, residential development (including bulkheading, armoring,³ and docks), and parks.

The Washington State Legislature passed the State Shoreline Management Act (SMA) in June 1971. Under the SMA, each county and city are required to adopt and administer a local shoreline management plan to carry out the provisions of the Act. The Whatcom County Shoreline Management Program (SMP) is the document that implements the goals and policies of the SMA at the local level. The SMP was originally adopted by the County Council in May 1976 in accordance with the SMA and the shoreline guidelines issued by the Washington Department of Ecology. The SMP is implemented in coordination with other chapters of the Comprehensive Plan and the Whatcom County Code to protect and manage shorelines throughout the county. It is important to note that Whatcom County and Ecology share joint authority and responsibility for the administration and enforcement of the SMP. In addition, numerous other local, state and federal regulations, permits, and approvals apply to development or use in, on or above the County's marine resource lands. Some of the most common permits and approvals include:

³ Since adoption of the SMP, shoreline armoring, filling, and bulkheading is only allowed for the purpose of protecting existing structures.

Agency	Permit(s)
Whatcom County	<ul style="list-style-type: none"> • Shoreline statement of exemption • Substantial development permit • Shoreline conditional use permit • Shoreline variance • State Environmental Policy Act (SEPA) determination
Washington Department of Ecology	<ul style="list-style-type: none"> • Clean Water Act Section 401 Water Quality Certification • Coastal Zone Management Consistency Determination
Washington Department of Fish and Wildlife	<ul style="list-style-type: none"> • Hydraulic project approval (HPA)
Washington Department of Natural Resources	<ul style="list-style-type: none"> • Aquatic use authorization • Aquatic lands lease agreements
U.S. Army Corps of Engineers	<ul style="list-style-type: none"> • Clean Water Action Section 404 Permit • Rivers and Harbors Act Section 10 Permit

Goal 8T: Conserve and enhance Whatcom County's marine land base for the long-term and sustainable use and operation of water-dependent, water-related and water-enjoyment activities.

Policy 8T-1: Coordinate with public agencies, tribal governments, landowners, and private organizations to protect and maintain an appropriate, productive, and sustainable marine resource land base adequate to support marine-dependent commercial, industrial, recreational, and cultural needs.

Aquaculture, Fishing, and other Marine Resource Lands Activities

Goal 8U: Support measures to increase the viability and sustainability of Whatcom County's aquatic biodiversity and production.

Policy 8U-1: Help improve the efficiency and effectiveness of environmental regulations affecting marine resource lands in order to support environmental protection and improve predictability.

Policy 8U-2: Develop a range of non-regulatory programs, options, and incentives that owners of marine resource lands can employ to meet or exceed County environmental goals.

Policy 8U-3: Support the efforts of people in Whatcom County to operate in a long-term, sustainable manner as part of a stable, broad-based economy.

Policy 8U-4: Work cooperatively with the Washington State Departments of Natural Resources, Ecology, and Fish and Wildlife to protect productive and appropriate use of State marine resource lands within Whatcom County.

Policy 8U-5 Continue cooperation and funding for a comprehensive Pollution Identification and Correction (PIC) program as needed to reduce bacterial pollution to levels that meet National Shellfish Sanitation Program Growing waters criteria to allow reopening of closed shellfish beds, and to maintain the operation of those beds in a commercially viable manner.

Reducing Land Use Impacts

Different land owners have different goals for their property and employ different practices when using it, whether it be for their business, home, recreation, or personal enjoyment. But oft times, the practices one property owner employs can have detrimental effects on another property owner's use or enjoyment of their property, or the public when using public lands, which can lead to conflict amongst users. Improved communication and education between these groups would be beneficial for each to understand what the other is doing, how their actions affect one another, and how they plan to avoid such impacts.

Goal 8V: Aim to reduce land use conflicts between Whatcom County's Marine Resource Lands operations and upland property owners.

Policy 8V-1: Support improved communication and understanding between aquatic land landowners and the public through such mechanisms as community forums and educational programs.

Policy 8V-2: Work cooperatively with local, State, Federal and Tribal agencies, adjacent upland property owners, and the general public, as applicable, to address community concerns and land use conflicts that may affect the productivity of marine resource lands.

Policy 8V-3: Continue to implement land use, building, and transportation planning policies, regulations, and practices that help minimize adverse water quality inputs into waterbodies.

Policy 8V-4 Support and participate in education efforts and programs that emphasize the importance of and promote the benefits of marine resource lands.

Fish and Wildlife

Land use practices on marine resource lands can impact tidelands and other shallow and deepwater habitats that are important to a wide variety fish and wildlife.

Goal 8W: Ensure that operations associated with marine resource lands strive to avoid adverse impacts to the survival and habitat of aquatic species, particularly to threatened and endangered fish and wildlife species and shellfish resources.

Administration and Regulation

Goal 8X: Recognize the Shoreline Management Program (WCC Title 23) and Zoning Code (WCC Title 20) as the primary regulations used to implement this section.

Policy 8X-1: Pursuant to RCW 36.70A.480 and Comprehensive Plan Policy 10B-8, the Whatcom County Shoreline Management Program is an element of this Comprehensive Plan, and the goals and policies therein are recognized as additional goals and policies of this section.

Policy 8X-2: Those coastal aquatic lands waterward of the ordinary high-water mark are hereby designated as Marine Resource Lands, as shown on Map 8-5.

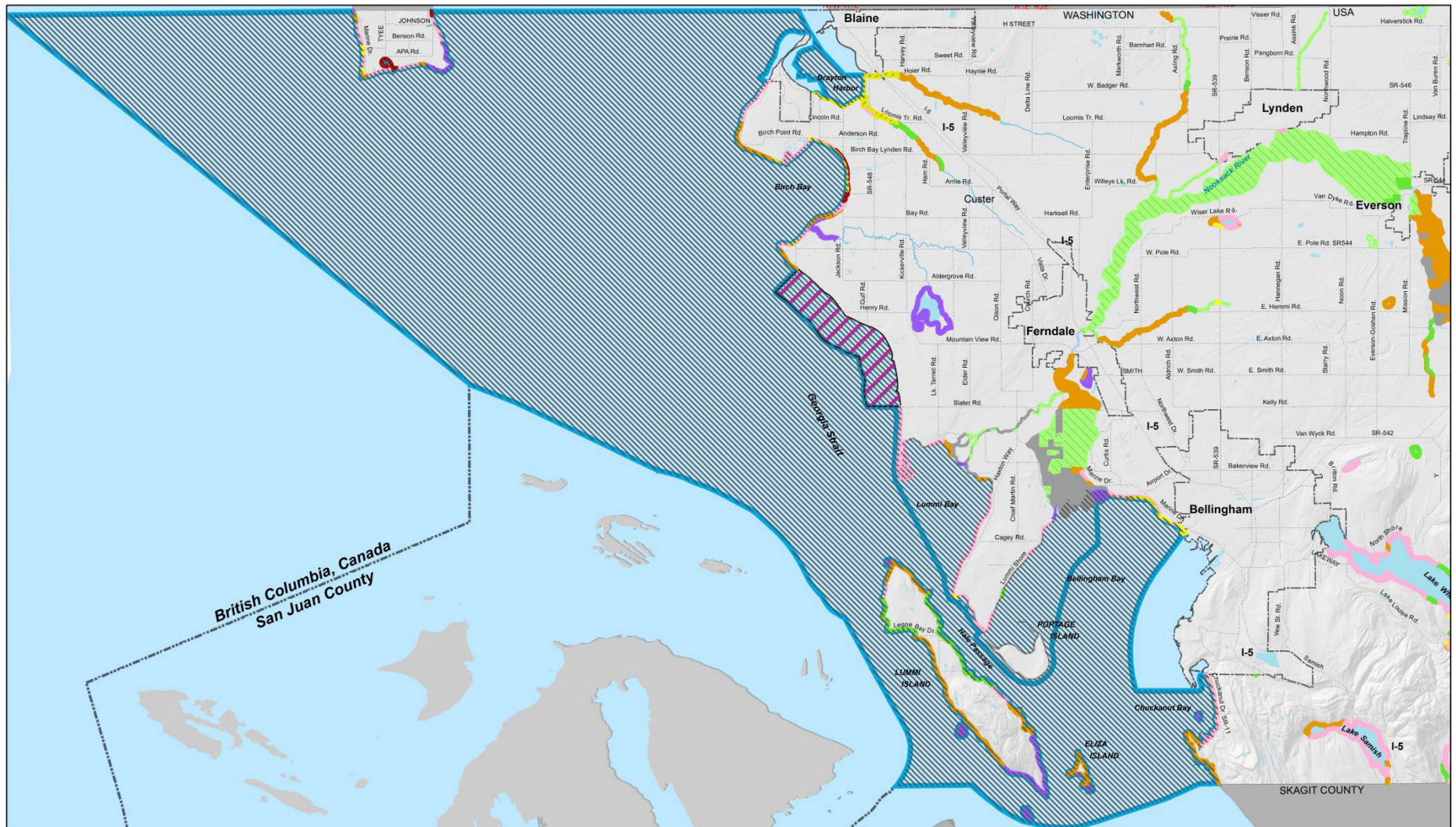
Policy 8X-3 Regulate land use on Marine Resource Lands within the County through the Shoreline Management Program, Zoning Code, and other appropriate means.

Policy 8X-4 When updating the Shoreline Management Program, consider new or amended policies to further these goals.

...

Whatcom County | Comprehensive Plan

Map 8-5
Designation of Marine Resource Lands



- Marine Resource Lands - 200' inland from OHW, waterward to County line
Shoreline Area Designations
 Urban
 Urban Resort
 Urban Conservancy
 Shoreline Residential
 Rural
 Resource
 Conservancy
 Natural
 Tribal
 Cherry Pt. Management Area
 Aquatic



USE OF WHATCOM COUNTY'S GIS DATA IMPLIES THE USER'S AGREEMENT WITH THE FOLLOWING STATEMENT:
 Whatcom County disclaims any warranty of merchantability or warranty of fitness of this map for any particular purpose, either express or implied. No representation or warranty is made concerning the accuracy, currency, completeness or quality of data depicted on this map. Any use of this map assumes all responsibility for use thereof, and further agrees to hold Whatcom County harmless from and against any damage, loss, or liability arising from any use of this map.

Source:
 -Whatcom County PDS 2018 (base)

0 0.75 1.5 3 4.5 6 Miles

1

2

Adopted by County Council 9/24/2024
Effective 1/1/2025

Exhibit D: Proposed Amendments to WCC Title 23

Shoreline Management
Program Periodic Update
2020

Whatcom County Planning and Development
Services

Title 23 – Shoreline Management Program

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Chapter 23.05 General Provisions

23.05.010 Authority.

Authority for enactment and administration of this program is the Shoreline Management Act of 1971, Chapter 90.58 RCW, also referred to herein as “the Act,” and the Washington Administrative Code 173-27 and 173-26.

23.05.020 Purpose and Intent.

As provided in the Whatcom County Comprehensive Plan, Chapter 11 (Shorelines), Whatcom County’s shorelines provide valuable habitat for fish and wildlife, economic diversity, and recreational opportunities used by residents of all ages. Shorelines play an important role in enhancing the quality of life for our county’s citizens. Therefore, the purpose of the master program is to guide the future development of the County’s shorelines in a manner consistent with the Shoreline Management Act of 1971 (hereinafter referred to as the “Act”). The Act and this program, in conjunction with other County land use regulations, comprise the basic state and County law regulating use of shorelines in the county.

23.05.030 Title.

This title, taken together with Chapter 11 (Shorelines) of the Whatcom County Comprehensive Plan, shall be known and may be cited as “The Whatcom County Shoreline Management Program.” Herein, this title together with Chapter 11 of the Comprehensive Plan may be referred to as the “SMP” or the “program.”

23.05.040 Relationship to the Comprehensive Plan and other Federal, State, and County Codes and Regulations.

- A. Consistent with RCW 36.70A.480, the goals and policies of this program approved under Chapter 90.58 RCW are included as Chapter 11 (Shorelines) of the County’s Comprehensive Plan. All regulatory elements of this program shall be considered a part of the County’s development regulations.
- B. Uses, developments, and activities regulated by this program may be independently subject to the Whatcom County Comprehensive Plan, the Whatcom County Code (WCC), the Washington State Environmental Policy Act, and various other federal, state, and county laws.
- C. Obtaining a shoreline permit or statement of exemption for a development or use does not excuse the applicant/proponent from complying with any other local, tribal, state, regional, or federal statutes or regulations applicable to such development or use. The responsibility for determining applicable statutes and regulations and complying with the same rests with the applicant/proponent or responsible person carrying out the use or development in question. The applicant must comply with all applicable laws prior to commencing any uses, development, or activity.
- D. Should a conflict occur between the provisions of this program or between this program and the laws, regulations, codes, or rules promulgated by Whatcom County or any other authority having jurisdiction within Whatcom County, the more restrictive requirements shall apply, except when constrained by federal or state law, or where specifically provided otherwise in this program.
- E. Relationship to other County regulations.
 1. Incorporation of the Whatcom County critical areas regulations, WCC Chapter 16.16, is addressed in WCC 23.05.050 (Critical Areas).

2. The permitting procedures necessary for implementing this program are found in WCC Chapter 22 (Land Use and Development).
 - a. All shoreline permits shall be obtained prior to issuance of a building permit provided, that any permit issued by the Building Official for such development shall be subject to the same terms and conditions that apply to the shoreline permit.
 - b. A statement of exemption shall be obtained prior to issuance of the building permit; provided, that review for compliance with this Title may be completed as part of a building permit or non-shoreline permit.
 - c. A record of review documenting compliance with bulk and dimensional standards as well as policies and regulations of this program shall be included in the permit review. Conditions of approval for compliance with this Title shall be added to such permit. The conditions of approval shall be enforced with the provisions of Title Section 23.10.060 (Violations, Enforcement, and Penalties).
 - d. Project permits are subject to consolidated review pursuant to Chapter 22.05 (Land Use and Development). The designated decision maker for such permits shall document compliance with the policies and regulations of this program and shall attach conditions to such approvals as required to make such development consistent with this program.
 3. Other local ordinances that may be applicable to shoreline development or use include, but are not limited to:
 - a. Building, plumbing, mechanical, and fire codes.
 - b. Boating and swimming, WCC Title 11.
 - c. On-site sewage system regulations, WCC Chapter 24.05.
 - d. Solid waste rules and regulations, WCC Chapter 24.06.
 - e. Zoning, WCC Title 20.
 - f. Land division regulations, WCC Title 21.
 - g. Development standards.
- F. Relationship to other state, tribal, and federal regulations.
1. Where this program makes reference to any RCW, WAC, or other state or federal law or regulation, the most recent amendment or current edition shall apply.
 2. This program shall be applied consistent with all federal, state, and local laws affecting tribal rights.
 3. The rights of treaty tribes to resources within their usual and accustomed areas shall be accommodated through the notification and comment provisions of the permit review process. Tribal treaty rights may be addressed through specific permit conditions. Direct coordination between tribes and the applicant/proponent is encouraged.
 4. Coastal Zone Management Act consistency reviews for sites within federal jurisdiction shall apply the shoreline environment designation criteria of Chapter 11 (Shorelines) of the Comprehensive Plan that most closely correspond to the project site in order to determine applicable program policies.

23.05.050 Critical Areas.

- A. The Whatcom County critical areas regulations (CAO), WCC Chapter 16.16 (Ordinance No. X, dated X), are hereby adopted in whole as a part of this program, except that the provisions of WCC [16.16.270](#) (Reasonable Use Exceptions), [16.16.275](#) (Nonconforming Uses, Structures, and Lots), [16.16.285](#) (Penalties and Enforcement) and as specifically excluded elsewhere within this Title shall not apply within shoreline jurisdiction. All references to the critical areas ordinance (CAO), WCC Chapter [16.16](#), are for this specific version.
- B. The adopted provisions of WCC Chapter 16.16 (Critical Areas) shall apply to any use, alteration or development within shoreline jurisdiction whether or not a shoreline permit or statement of exemption is required.

23.05.060 Program Effects on Property Values.

- A. As provided for in RCW 90.58.290, the restrictions imposed upon use of real property through implementation of policies and regulations of the Act and this program shall be duly considered by the County Assessor and the County Board of Equalization in establishing the fair market value of such properties.
- B. Designation of private property as a natural or conservancy shoreline environment pursuant to WCC Chapter 23.20 (Shoreline Jurisdiction and Area Environment Designations) shall qualify the property as meeting the definition of “open space land” under the Open Space Taxation Act of 1970, as amended (RCW 84.34.020(1)) and shall qualify such land for application for open space taxation in accordance with RCW 84.34.037 and WCC Chapter 3.28 (Open Space Land Classification).

23.05.070 Property Rights.

- A. Regulation of private property to implement program goals, such as public access and protection of ecological functions and processes, must be consistent with all relevant constitutional and other legal limitations. These include, but are not limited to, the protections afforded by the federal and state constitutions, and federal, state, and local laws.
- B. In issuing shoreline permits or statements of exemptions, the decision maker shall assure that conditions imposed relate to the governmental authority and responsibility to protect the public health, safety, and welfare, are consistent with the purposes of the Act, and are roughly proportional to the expected impact.
- C. This program does not alter existing law on access to or trespass on private property and does not give the general public any right to enter private property without the owner’s permission.
- D. Consistent with Whatcom County’s high standard of staff conduct, County staff shall observe all applicable federal, state, and County laws regarding entry onto privately owned property.

23.05.080 Severability.

The Act and this program adopted pursuant thereto, in conjunction with other applicable County land use regulations, comprise the basic state and County law regulating use of shorelines in the county. In the event provisions of this program conflict with other applicable County policies or regulations, the more restrictive shall prevail. Should any section or provision of this program be declared invalid, such decision shall not affect the validity of this program as a whole.

- 1 **23.05.090 Effective Date.**
- 2 This program and all amendments thereto shall become effective 14 days from the Department of
- 3 Ecology's written notice of final action.

Chapter 23.10 Administrative Provisions

23.10.010 Authorization.

RCW 90.58.140(3) requires local governments to establish a program, consistent with the rules adopted by Ecology, for the administration and enforcement of shoreline development. This program is intended to establish a cooperative program between Whatcom County and the state. Whatcom County shall have the primary responsibility for administering the regulatory program, and Ecology shall act primarily in a supportive and review capacity, in accordance with RCW 90.58.050.

23.10.020 Applicability.

- A. Unless specifically exempted by statute, or as excluded below, this program shall apply to any proposed development, use, or activity occurring within shoreline jurisdiction. Such development, use, or activity must conform to chapter 90.58 RCW, the Shoreline Management Act, and this master program whether or not a permit is required.
- B. Unless otherwise stated, no development shall be constructed, located, extended, modified, converted, or altered, or land divided, without full compliance with this program, including WCC Chapter 16.16 (Critical Areas).
- C. No substantial development shall be undertaken within shorelines by any person without first obtaining a substantial development permit from Whatcom County; provided, that such a permit shall not be required for the exempt activities listed in WCC 22.07.020 (Exemptions from Shoreline Substantial Development Permits).
- D. All developments, uses and activities on shorelines shall be subject to the policies and regulations of this program in addition to any other applicable regulations of the Whatcom County Code,.
- E. Application within Federal Reserves or Lands.
 1. Areas and uses in those areas that are under exclusive federal jurisdiction as established through federal or state statutes are not subject to the jurisdiction of RCW Chapter 90.58 (SMA).
 2. As recognized by RCW 90.58.350, nothing in this program shall affect any rights established by treaty to which the United States is a party.
 3. The Act and this program, including the permit system, shall apply to all nonfederal developments and uses undertaken on federal lands and on lands subject to nonfederal ownership, lease, or agreement, even though such lands may fall within the external boundaries of a federal ownership.
- F. Direct federal agency activities affecting the uses or resources subject to the Act must be consistent to the maximum extent practicable with the enforceable provisions of the Act and with this master program as required by WAC 173-27-060.
- G. This master program shall apply to all unincorporated urban lands until such time as a city meets the requirements of WAC 173-26-150 or 173-26-160 for pre-designation of urban growth areas (UGAs) or amends its master program as appropriate.
- H. This program shall not apply to:
 1. Activities undertaken to comply with a United States Environmental Protection Agency Superfund-related order, or a Washington Department of Ecology order pursuant to the Model Toxics Control Act (such as the Swift Creek Sediment Management Action Plan), or a

- 1 Department of Homeland Security order that specifically preempts local regulations in the
- 2 findings of the order.
- 3 2. Pursuant to RCW 90.58.045 regarding environmental excellence program agreements,
- 4 notwithstanding any other provision of law, any legal requirement under the Shoreline
- 5 Management Act, including any standard, limitation, rule, or order is superseded and replaced
- 6 in accordance with the terms and provisions of an environmental excellence program
- 7 agreement, entered into under chapter 43.21K RCW.
- 8 3. The holder of a certification from the governor pursuant to chapter 80.50 RCW shall not be
- 9 required to obtain a permit under chapter 90.58 RCW.
- 10 I. Pursuant to RCW 90.58.140(12), a permit is not required in order to dispose of dredged materials at
- 11 a disposal site approved through the cooperative planning process referenced in RCW 79.105.500,
- 12 provided the dredged material disposal proponent obtains a valid site use authorization from the
- 13 Dredged Material Management Program office within the Department of Natural Resources.

14 **23.10.030 Administrative Duties.**

15 A. The Director is hereby authorized to:

- 16 1. Administer this program.
- 17 2. Determine if a public hearing should be held on a shoreline permit application by the Hearing
- 18 Examiner pursuant to WCC Title 22 (Land Use and Development).
- 19 3. Grant or deny statements of exemption.
- 20 4. Authorize, approve, or deny shoreline substantial development permits, except for those for
- 21 which the Hearing Examiner or County Council is the designated decision maker.
- 22 5. Enforce the code pursuant to WCC 23.10.060 (Violations, Enforcement, and Penalties), including
- 23 issuing stop work orders pursuant to the procedure set forth in WAC 173-27-270 and this
- 24 program, upon a person undertaking an activity on shorelines in violation of Chapter 90.58 RCW
- 25 or this program; and seek remedies for alleged violations of this program's regulations, or of the
- 26 provisions of the Act, or of conditions of approval for all project permits with conditions of
- 27 approval for consistency with this program issued by Whatcom County.
- 28 6. Decide whether or not a proposal is subject to the consolidated review process of Chapter WCC
- 29 22.05 (Land Use and Development) and determine what other permits are required to be
- 30 included in the consolidated review.
- 31 7. Make field inspections as needed, and prepare or require reports on a shoreline permit or
- 32 statement of exemption application.
- 33 8. Make written recommendations to the County Council or Hearing Examiner as appropriate and
- 34 insofar as possible assure that all relevant information, testimony, and questions regarding a
- 35 specific matter are made available during their respective reviews of such matter.
- 36 9. Propose amendments to the Planning Commission deemed necessary to more effectively or
- 37 equitably achieve the purposes and goals of this program.
- 38 10. Advise interested persons and prospective applicants/proponents as to the administrative
- 39 procedures and related components of this program.
- 40 11. Collect fees as provided for in WCC Title 22 (Land Use and Development).

12. Assure that proper notice is given to interested persons and the public as required by Title 22 (Land Use and Development).
 13. Review administrative and management policies, regulations, plans, and ordinances relative to lands under County jurisdiction that are adjacent to shorelines so as to achieve a use policy on such lands that is consistent with the Act and this program.
 14. Review and evaluate the records of project review actions in shoreline environments and report on the cumulative effects of authorized development of shoreline conditions. The Director shall coordinate such review with the Washington Department of Ecology, the Washington Department of Fish and Wildlife, the Lummi Nation and Nooksack Tribe, and other interested parties.
 15. Develop administrative guidance materials related to the interpretations of principles and terms in this program as required to provide for consistent and equitable implementation of this program. Such administrative guidance documents shall be provided to Washington State Department of Ecology.
- B. The Whatcom County Planning Commission is hereby vested with the responsibility to periodically review the program as a major element of the County's planning and regulatory program, and make recommendations for amendments thereof to the County Council.
- C. The Whatcom County Council is hereby vested with authority to:
1. Initiate an amendment to this program according to the procedures prescribed in WAC 173-26-100.
 2. Adopt all amendments to this program, after consideration of the recommendation of the Planning Commission and pursuant to the procedural requirements of WCC Chapter 2.02; provided, that substantive amendments shall become effective 14 days from the Department of Ecology's written notice of final action.
 3. Make final County decisions or recommendations, as applicable, with regard to shoreline permit, shoreline variance, or shoreline conditional use applications that require County Council action on a consolidated review as provided by WCC Chapter 22.05.

23.10.040 Code Interpretation.

- A. The regulations of this Program shall be interpreted to allow the development, use, or activity as described in the General Regulations and/or Specific Use Regulations only when the proposal is designed, constructed, and/or mitigated to provide no net loss of or a net lift to ecological functions and ecosystem wide processes.
- B. The policies of Chapter 11 (Shorelines) of the Comprehensive Plan shall guide interpretation of the regulations.
- C. Conflict between the provisions of the this Program and the WACs implementing the Act must be resolved in accordance with the WACs; provided that conflict between the provisions of the WACs implementing the Act and the Act must be resolved in accordance with the Act.
- D. In case of conflict between the provisions of this program and Whatcom County Code or the laws, regulations, codes, or rules promulgated by any other authority having jurisdiction within Whatcom County, the more restrictive requirements shall apply, except when constrained by federal or state law.

E. As provided for in RCW 90.58.900, the Act is exempt from the rule of strict construction, and this program, including these regulations, shall therefore be liberally construed to give full effect to the purposes, goals, objectives, and policies of the Act for which this program was enacted and adopted, respectively.

F. Within shoreline jurisdiction, the regulations of WCC Chapter 16.16 adopted pursuant to 23.05.050 (Critical Areas) shall be liberally construed together with the program to give full effect to the objectives and purposes of the provisions of the program and Act.

23.10.050 Shoreline Permits Required.

A. To be authorized, all shoreline development, uses, or activities shall be done in a manner consistent with this program and the Shoreline Management Act as required by RCW 90.58.140(1), regardless of whether a shoreline permit, statement of exemption, shoreline variance, or shoreline conditional use permit is required.

B. The applicable provisions of WCC Title 22 (Land Use and Development) shall govern the processing of permits required under this Title. If any conflict should exist between Title 22 and this program, the provisions of this program shall prevail.

23.10.060 Violations, Enforcement, and Penalties.

A. The Director, when necessary in consultation with the Department of Ecology, is authorized to adopt such rules as are necessary and appropriate to carry out the provisions of the Shoreline Management Act (RCW 90.58.200) and Chapter 173-27 WAC, Part II. The Act calls for a cooperative program between local government and the state. It provides for a variety of means of enforcement, including civil and criminal penalties, orders to cease and desist, orders to take corrective action, and permit rescission.

B. In addition to the following provisions, this Title shall be enforced in accordance with WCC Chapter 20.94 (Enforcement and Penalties) and WAC 173-27-240 through 173-27-300 or their successors.

C. To achieve no net loss, if a development, use, or activity has occurred in violation of this program, prompt restoration or mitigation of any adverse impacts shall be provided. The standard mitigation ratio for the critical area or buffer impacts shall be doubled to address temporal loss when appropriate. If this provision is not complied with, the County may restore or mitigate the site and charge the responsible person for the full cost of such an activity. Additionally, any and all permits or approvals issued by the County may be denied for that property for a period of up to six years.

D. Any responsible party that willfully refuses to complete a required restoration plan pursuant to this section shall be guilty of a misdemeanor and, in addition to the requirement of subsection (C), shall provide shoreline restoration equal to double the square footage of the impacted area.

E. Pursuant to WCC 22.05.150 (Permit Revocation), the County may revoke a permit if the applicant violates the conditions or limitations set forth in the permit or exceeds the scope of the work set forth in the permit.

23.10.070 Abatement.

Structures or development on shorelines considered by the Director to present a hazard or other public nuisance to persons, properties, or natural features may be abated by the County under the provisions

of WCC Title 15 (Buildings & Construction) and WCC Chapter 22.15 (Code Enforcement) or successor, or by other appropriate means.

23.10.080 Financial Sureties.

In approving any application or exemption for a shoreline development, the Director may require the posting of a financial surety to ensure continued compliance with any conditions imposed, including the construction of improvements, the adherence to County standards, and/or maintenance, repair or replacement of such improvements. The financial surety shall be in a form acceptable to the County's attorney. In the event a condition occurs warranting the use of financial surety, the Director may act under such financial surety or may perform the work required at the County's expense, which expense shall be a lien against the property, enforceable as would be a judgment thereon.

23.10.090 Amendments.

- A. Amendments to the Shoreline Management Program—including both Comprehensive Plan polices and Title 23 regulations—shall be processed pursuant to WCC Chapter 22.10 (Legislative Action Procedures).
- B. All regulatory elements of this Program shall be considered a part of the County's development regulations. Certain non-regulatory elements of this master program, including but not limited to the Shoreline Restoration Plan or administrative procedures (WCC Title 22), may be updated and amended at any time without requiring a formal master program amendment. Future changes to WCC Title 22 shall remain consistent with the Shoreline Management Act and associated rules, specifically RCW 90.58.140, 90.58.143, 90.58.210, 90.58.220 and Chapter 173-27 WAC.
- C. After approval or disapproval of a program amendment by the Department of Ecology as provided in RCW 90.58.090, the County shall publish a notice that the program amendment has been approved or disapproved by the Department of Ecology. For the purposes of RCW 36.70A.290, the date of publication for the amendment of a program is the date the County publishes notice that the program amendment has been approved or disapproved by the Department of Ecology.
- D. The Director shall submit an annual report to the County Council reviewing the effectiveness of the program in achieving its stated purpose, goals, and objectives. Such report may also include any proposed amendments deemed necessary to increase its effectiveness or equity. If said report contains proposed amendments, the Council may schedule a public hearing to consider such matter in accordance with the procedure described in subsection (A). Said report shall also include a determination of whether or not the goal of no net loss of shoreline ecological function is being achieved and provide recommendations for achieving and maintaining the goal.

Chapter 23.20 Shoreline Jurisdiction and Environment Designations

23.20.010 Shoreline Jurisdiction.

- A. The provisions of this program shall apply to all shorelines of the state in unincorporated Whatcom County, including all shorelines of statewide significance and all shorelands and collectively referred to herein as “shorelines.” For the purposes of this program, jurisdictional shorelines are divided into segments or reaches. Each segment is assigned one or more shoreline environment designations pursuant to this chapter in order to provide for the management of use and development within shorelines.
- B. The shoreline master program jurisdiction applies to all shorelines of the state and their associated shorelands. This includes:
1. All marine waters;
 2. Rivers and streams with more than twenty cubic feet per second (cfs) mean annual flow;
 3. Lakes and reservoirs twenty acres and greater in area;
 4. Floodways and the entire 100-year floodplain;
 5. All associated wetlands and river deltas associated with the streams, lakes, and tidal waters that are subject to the provisions of the Act;
 6. Shorelands adjacent to these waterbodies, typically within two hundred feet of the ordinary high water mark (OHWM);
 7. Buffers necessary to protect critical areas that are located within shoreline jurisdiction as described in this program;
 8. Associated estuarine wetlands: the jurisdictional boundary shall extend two hundred feet landward of the OHWM of the wetland;
 9. Associated wetlands that extend greater than two hundred feet landward of the OHWM of the shoreline: the jurisdictional boundary shall extend to the delineated edge of the wetland;
 10. Critical areas designated pursuant to Chapter 36.70A RCW and located within shoreline jurisdiction shall be subject to the regulations of this program.

23.20.020 Official Shoreline Map.

- A. As part of this program, there is one official Whatcom County shoreline environment designations map, which shall be in the custody of the Planning and Development Services Department and available for public inspection during normal business hours and on the Whatcom County website. Unofficial copies of the official map or portions thereof may be included or distributed with copies of this program.
- B. The purpose of the official shoreline environment designations map is to depict graphically those areas of Whatcom County falling under the jurisdiction of this program, and the shoreline environment designations of those areas. The map does not necessarily identify or depict the lateral extent of shoreline jurisdiction nor does it identify all associated wetlands. The lateral extent of the shoreline jurisdiction shall be determined on a case-by-case basis based on the location of the ordinary high water mark (OHWM), floodway, floodplain, and presence of associated wetlands.
- C. Where questions arise regarding the precise boundaries of any shoreline designation, the Director will make the final determination following the guidance of 23.20.030 (Interpretation of Official Map

Boundaries) and 23.20.040 (Mapping Errors). Appeals of such interpretations may be filed pursuant to WCC 22.05.160 (Appeals).

D. All shorelines waterward of the OHWM shall be designated aquatic, except that in the Cherry Point Management Area the aquatic designation shall start waterward of the CPMA boundary (see subsection E).

E. The Cherry Point Management Area is a geographic area lying between the eastern property boundary of Tax Lots 2.27 and 2.28 within the SE 1/4 of Section 11, Township 39 North, Range 1 West, as it existed on June 18, 1987, and the southern boundary of Section 32, Township 39 North, Range 1 East, extending waterward a distance of 5,000 feet and extending landward for 200 feet as measured on a horizontal plane from the OHWM. This area shall have the Cherry Point Management Area shoreline environment designation.

F. Upland shoreline environment designations shall apply to shorelands, unless specifically stated to be applied to the aquatic designation by this program.

G. Only one shoreline environment designation shall apply to a given shoreland area. In the case of designations running parallel to one another (as along the coast), designations shall be divided along an identified linear feature. Such linear features shall be clearly noted in the metadata associated with the Official Shoreline Map.

H. All shorelines east of the Mount Baker National Forest western boundary are designated conservancy unless there are federal projects on federal lands.

I. All areas within shorelines that are not mapped and/or designated are automatically assigned a conservancy designation. Within urban growth areas, such shorelines shall be automatically assigned an urban conservancy designation until such time that the shoreline environment can be re-designated through a formal amendment.

23.20.030 Interpretation of Official Map Boundaries.

Where the exact location of an environment designation boundary line is uncertain, the official shoreline environment designations map will be used to determine the location of such line. When resorting to the shoreline environment designations map does not resolve the conflict, the following rules will apply:

1. Boundaries indicated as approximately following the center lines of streets, highways, alleys, other roadways, or railroads shall be construed to follow the nearest right-of-way edge;
2. Boundaries indicated as approximately following lot, fractional section, or other subdivision lines shall be construed as following such subdivision lines;
3. Boundaries indicated as approximately following any lines of corporate limits or other local government jurisdictional lines shall be construed as following such lines;
4. Boundaries indicated as parallel to or extensions of features identified in subsections (1) through (3) of this section shall be so construed; and,
5. Boundaries between parallel environment designations along the shoreline shall be construed as the top of the bluff or vegetation line that distinguishes existing development from the critical area abutting the shoreline.

23.20.040 Mapping Errors

Some mapping errors may be adjusted prior to a master program amendment to assign the appropriate designation to that area by the following methods:

1. The common boundary descriptions and the criteria in RCW [90.58.030](#)(2) and Chapter [173-22](#) WAC supersede the map when there are mapping error conflicts, other than those with a solution provided in this section.
2. In the event that a parcel was inadvertently assigned more than one designation, the more restrictive designation shall apply.
3. In the event that a parcel on the boundary between two designations appears to be a mapping error based on the criteria in this section, the County shall apply the most appropriate of the two designations, until such time as the map can be formally corrected consistent with WAC [173-26-100](#) and Section [22.500.105](#)(I) (Shoreline Master Program Amendment).
4. In the event of an environment designation mapping error where the master program update or amendment record, including the public hearing process, is clear in terms of the correct environment designation to apply to a property, the County shall apply the environment designation approved through the master program update or amendment process and correct the map.
5. If the environment designation criteria were misapplied, but the update or amendment record, including the public hearing process, does not clearly show that a different designation was intended to be shown on the map, a master program amendment may be obtained consistent with WAC [173-26-100](#) and Section [22.500.105](#)(I) (Shoreline Master Program Amendment). This process is intended to allow for reasonable corrections to the shoreline environment designation process. Such process shall include early consultation with the Department of Ecology and other agencies with jurisdiction, affected tribes, and appropriate public notification prior to local approval. Current designations are reflected in the shoreline environment designations map located pursuant to WCC Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).

23.20.050 Shoreline Environment Designations.

- A. Development, use, and activities within each designated shoreline environment shall occur consistent with this program, including but not limited to: the shoreline environment designation purpose, designation criteria, and policies found in Whatcom County Comprehensive Plan Chapter 11 (Shorelines); the general policies and regulations contained in Chapter 11 (Shorelines) and WCC Chapter 23.30 (Shoreline Management Program), and the use and modification policies and regulations provided in Chapter 11 (Shorelines) and WCC Chapter 23.40 (Shoreline Use and Modification Regulations), subject to the provisions of WCC Title 20 (Zoning) and other applicable land use regulations where more restrictive.
- B. Shoreline environment designations in Whatcom County include the following:
 1. Urban
 2. Urban Resort
 3. Urban Conservancy
 4. Shoreline Residential

5. Rural
6. Resource
7. Conservancy
8. Natural
9. Aquatic
10. Cherry Point Management Area

23.20.060 Designation of Shorelines of Statewide Significance.

In accordance with the criteria of RCW 90.58.030(2)(e), the legislature designated the following shorelines of unincorporated Whatcom County, including the shorelands and associated wetlands as therein defined, as having statewide significance:

A. Lakes:

1. Lake Whatcom;
2. Ross Lake; and
3. Baker Lake.

B. Rivers:

1. Nooksack River: its Mainstem downstream to Bellingham Bay, its North Fork upstream to the mouth of Glacier Creek, and its South Fork upstream to the mouth of Hutchinson Creek.
2. Skagit River: upstream of the Whatcom/Skagit County line to the point where the mean annual flow is measured at 1,000 feet per second or more, approximately, at the confluence of Newhalem Creek.

C. Marine:

1. Birch Bay from Birch Point to Point Whitehorn.
2. All other marine waters, water columns, and bedlands waterward of extreme low tide.

Chapter 23.30 General Regulations

23.30.010 Ecological Protection.

- A. Ecological protection of shoreline environments shall be achieved through compliance with the applicable provisions of WCC Chapter 16.16 (Critical Areas) and (B) and (C) of this subsection.
- B. Development, use, and activities within the shoreline jurisdiction shall avoid and minimize adverse impacts, and any unavoidable impacts shall be mitigated to meet no net loss of ecological function and ecosystem-wide processes pursuant to WAC 173-26-186.
- C. To provide for flexibility in the administration of the ecological protection provisions of this program, buffer modification and alternative mitigation approaches as provided for in WCC 16.16 may be approved within shorelines where such approaches provide increased protection of shoreline ecological functions and processes over the standard provisions of this program and are scientifically supported. Use of WCC 16.16.261 (Alternative Mitigation Plans) and 16.16.262 (Watershed-Based Management Plans) within shoreline jurisdiction shall require a Shoreline Conditional Use Permit.

23.30.020 Water Quality and Quantity.

- A. Shoreline use and development shall incorporate measures to protect and maintain surface and ground water quantity and quality in accordance with all applicable laws, including compliance with Whatcom County stormwater and drainage regulations in WCC 20.80.630 through 20.80.635.
 - 1. Development shall meet minimum requirements 1 – 9 of the current stormwater manual, as applicable. Deviations from these standards may be approved where it can be demonstrated that off-site facilities would provide better treatment, or where common retention, detention, and/or water quality facilities meeting such standards have been approved as part of a comprehensive stormwater management plan.
 - 2. Best management practices (BMPs) for control of erosion and sedimentation shall be implemented for all development in shorelines through an approved temporary erosion and sediment control (TESC) plan or administrative conditions.
- B. To avoid water quality degradation by malfunctioning or failing septic systems located within shoreline jurisdiction, on-site sewage systems shall be located and designed to meet all applicable water quality, utility, and health standards. The owner must be in compliance with WCC 24.05.160 (Operation and Maintenance).
- C. Septic tanks and drainfields are prohibited where public sewer is reasonably available.
- D. All materials that may come in contact with water shall be constructed of materials—such as untreated wood, concrete, approved plastic composites, or steel—that will not adversely affect water quality or aquatic plants or animals. Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave splash, rain, or runoff. Wood treated with creosote, copper chromium arsenic, or pentachlorophenol is prohibited in or above shoreline waterbodies.

- 1 E. Outfalls (including stormwater and sewer outfalls) and discharge pipes shall not be located in critical
2 saltwater habitats or areas where outfall or discharge will adversely affect critical saltwater habitat,
3 unless the applicant can show that all of the following can be met:
4 1. There is no feasible alternative location for the outfall or pipe;
5 2. The outfall or pipe is placed below the surface of the beach or bed of the waterbody, except at
6 the point of discharge;
7 3. The discharge point(s) on the outfall or discharge pipe is located so the discharges, including
8 nutrients and flow, do not adversely affect critical saltwater habitats; and
9 4. For public sewage outfalls:
10 1. The outfall discharges waterward of the intertidal zone.
11 2. The disturbed area will be revegetated with native vegetation.
12 F. The use of existing outfalls shall be maximized to limit the need for additional outfalls, provided the
13 existing outfall meets the standards of this section, or unless an alternatives analysis demonstrates
14 the dispersal is less impacting to the shoreline environment.

15 **23.30.030 Views and Aesthetics.**

- 16 A. When the two are in conflict, protection and/or enhancement of critical areas and their associated
17 buffers shall be preferred over provisions for new visual access except where otherwise allowed by
18 this program.
19 B. To protect views of the shoreline from existing structures, setbacks may be modified pursuant to
20 WCC 23.40.020(D) (Shoreline Bulk Provisions, Setbacks)
21 C. To minimize impacts to views from the water, the Director may require the planting of vegetation to
22 mitigate the impacts.
23 D. Where commercial, industrial, mixed use, multifamily, or multi-unit developments are proposed,
24 primary structures shall provide for reasonable view corridors between buildings.
25 E. Buildings shall incorporate architectural and/or landscape features that reduce scale or bulk, such as
26 setbacks, vegetation, pitched roofs, offsets, angled facets, and recesses.
27 F. Building surfaces on or adjacent to the water shall employ materials that minimize reflected light.
28 G. Building mechanical equipment shall be incorporated into building architectural features, such as
29 pitched roofs, to the maximum extent possible. Where mechanical equipment cannot be
30 incorporated into architectural features, a visual screen shall be provided consistent with building
31 exterior materials that obstructs views of such equipment.
32 H. Any other design standards included in community plans or regulations adopted by Whatcom
33 County shall apply.
34 I. Fences, walls, hedges, and other similar accessory structures, excluding those associated with
35 agricultural uses, and retaining walls necessary to protect existing primary structures from erosion,
36 landslides or other geologic hazards, shall be limited to four feet in height between the ordinary
37 high water mark and structures, and within shoreline view areas as defined in WCC
38 Chapter 23.60 (Definitions); provided, that, within shoreline view areas, the Director may approve a
39 greater height where a fence or other feature is parallel to the right-of-way and does not extend
40 above a line of sight between the ordinary high water mark and a point three and one-half feet
41 above the centerline of the road.

- J. Fences, walls, hedges, or accessory structures on public property shall not be permitted to obscure shoreline views within shoreline view areas as defined in WCC Chapter 23.60 or from existing residences on adjacent property, or views from the water, unless specific findings are made that the proposed view obstruction is justified by overriding considerations of the public interest.
- K. Interior and exterior lighting shall be designed and operated to avoid illuminating nearby properties or public areas; prevent glare on adjacent properties, public areas, or roadways; avoid infringing on the use and enjoyment of such areas; and to prevent hazards. Methods of controlling spillover light include, but are not limited to, limits on height of structure, limits on light levels of fixtures, light shields, setbacks, buffer areas, and screening.
- L. Where shoreline setbacks or buffers are allowed to be reduced per this program, the proposed use or development shall not be permitted to substantially obscure shoreline views within shoreline view areas as defined in WCC Chapter 23.60 (Definitions) or from existing residences on adjacent property.
- M. Limbing, clearing, and/or thinning for limited view corridors shall only be allowed pursuant to WCC 16.16.235(B)(5) (Activities Allowed with Notification), except that view corridors are not permitted in the Natural shoreline environment.

23.30.040 Vegetation Management.

- A. Pursuant to WCC 16.16.710, shorelines are designated as Fish & Wildlife Habitat Conservation Areas. Within these areas and their buffers it is important to protect and enhance vegetation to provide ecological and habitat functions as well as human health and safety. Vegetation management practices consist of retaining or improving vegetated areas to protect the integrity, functions, and values of the affected critical area (shoreline) while allowing the shoreline (critical area) buffer to be modified to accommodate allowed uses when consistent with the Act and this program.
- B. Vegetation management within the shoreline (critical area) buffer shall adhere to the applicable regulations of WCC Chapter 16.16 (Critical Areas). In addition:
1. Vegetation clearing within shoreline jurisdiction shall be limited to the minimum necessary to accommodate approved shoreline development.
 2. Shoreline development shall conform to natural contours and minimize disturbance to soils and native vegetation, as feasible. This shall include incorporation of trails or stairs from parking areas on steep slopes, and other design elements, to lessen the need to alter natural contours and minimize soil and native vegetation disturbance. Foundations shall be tiered with earth retention incorporated into the structural design.
 3. All shoreline developments shall develop and implement a vegetation management plan, prepared by a qualified professional and consistent with the requirements in WCC [16.16.260](#)(G) and (H); provided, that the Director may establish prescriptive standards for vegetation conservation and management as an alternative to requiring a specific plan for a development. Vegetation management plans shall describe actions that will be implemented to ensure that buffer areas provide ecological functions equivalent to a dense native vegetation community to the extent possible given the area that is feasibly available. Required vegetation shall be maintained over the life of the use and/or development by means of a conservation easement or similar legal instrument recorded with the Whatcom County auditor.

23.30.050 Cultural Resources.**A. Project Approval Requirements.**

1. Upon receipt of an application for a permit, exemption, or other approval for a proposed project, the County shall determine whether the project lies within 500 feet of a site known to contain a cultural resource based on the Washington State Department of Archaeology & Historic Preservation's (DAHP) Inventory of Cultural Resources.
2. If the project meets this criterion, a cultural resources survey and report meeting the requirements of subsection (B) shall be required.
3. Whatcom County shall provide the cultural resource report to DAHP—and if Native American cultural resources are addressed, to the Lummi Nation Tribal Historic Preservation Office, the Nooksack Tribe, and/or other affected Native American Tribes—for a fifteen (15) day review and comment opportunity. Said review period may run concurrently with other required public review periods, such as for SEPA.
4. Based upon consultation with DAHP and the affected Tribe(s), the Director may approve the report or reject or request revision of the conclusions reached and/or management recommendations when it is inaccurate or does not fully address the cultural resource management concerns involved.
5. If the cultural resource report identifies the presence of a cultural resource, any permit issued shall be conditioned on meeting the approved report's management recommendations.
6. Regardless of whether any cultural resources are identified or not, any activities are still subject to the state and federal regulations, including those regarding inadvertent discoveries (RCWs 68.50.645, 27.44.055, and 68.60.055).
7. Final cultural resource reports shall be filed with DAHP prior to the County's issuance of a permit, exemption, or other approval by the applicant or his/her agent. The project's cultural resource professional shall also uploading their reports and site forms to WISAARD, the state's digital repository for architectural and archaeological resources and reports maintained by DAHP.
8. Any costs associated with a cultural resource review shall be borne by the applicant.

B. Cultural Resources Report Standards.

1. Cultural resources reports shall meet the most recent "Washington State Standards for Cultural Resource Reporting" issued by DAHP (<https://dahp.wa.gov/project-review/washington-state-standards-for-cultural-resource-reporting>)
2. Cultural resources reports addressing archaeological resources shall be conducted by a professional archaeologist that meets the Secretary of the Interior Professional Qualification Standards (36 CFR Part 61). Cultural resources reports addressing historic resources shall be conducted by a qualified historic preservation professional.
3. If the cultural resource report identifies the presence of a cultural resource, it must provide management recommendations that, at a minimum, conform to DAHP's most current management standards. Such recommendations will depend on the resource identified, but may include but are not limited to:
 - a. Inadvertent Discovery Plan;
 - b. On-site monitoring by a qualified professional and/or a Tribal representative;

- c. Avoidance, by redesigning the project; or
- d. When impacts cannot be avoided, obtaining a Cultural Resource Permit (see RCWs 27.44 and 27.53; <https://dahp.wa.gov/archaeology/archaeological-permitting>, and <https://apps.leg.wa.gov/WAC/default.aspx?cite=25-48-060>).

23.30.060 Public Access.

- A. All shoreline substantial development, shoreline conditional use permits, or developments of more than four residential lots or dwelling units shall provide public access. When appropriate, provisions for adequate public access shall be incorporated into such proposals, including land division. An applicant shall not be required to provide public access if the decision-maker determines that one or more of the following conditions apply:
 - 1. Providing the access, easement, alternative amenity, or mitigating the impacts of public access is unreasonably disproportionate to the proposed development;
 - 2. The proposed development has already been considered as part of a larger development project that has previously provided public access as part of the development permitting process.
 - 3. The proposed development is for the subdivision of property into four or fewer parcels.
 - 4. The proposed development consists of only agricultural activities.
 - 5. Provision of public access on the site would pose a health or safety risk to the public due to the nature of the proposed use or activity or the location of public access, or would be infeasible due to security requirements associated with the proposed development.
 - 6. Provision of public access at the proposed development site would result in a net loss of shoreline ecological function that cannot be effectively mitigated or avoided, or would pose a risk to threatened and/or endangered species listed under the Endangered Species Act.
 - 7. The proposal consists solely of a new or expanded utility crossing through shoreline jurisdiction, serving development located outside shoreline jurisdiction, provided that no adverse impacts to existing public access result.
- B. Prior to deciding public access is not required pursuant to subsection (B)(1)(a) through (e) of this section, the county must determine that all reasonable alternatives have been exhausted; including, but not limited to:
 - 1. Regulating access by such means as maintaining a gate and/or limiting hours of use;
 - 2. Designing separation of uses and activities (e.g., fences, terracing, use of one-way glazing, hedges, landscaping, etc.); and
 - 3. Providing for access at a site geographically separated from the proposal such as a street end, vista, tideland, or trail system.
- C. Public access shall consist of a dedication of land or a physical improvement in the form of a walkway, trail, bikeway, corridor, viewpoint, park, deck, observation tower, pier, boat launching ramp, dock or pier area, or other area serving as a means to view and/or physically approach public waters, and may include interpretive centers and displays.
- D. Where public access planning as described in WAC 173-26-221(4)(c) demonstrates that a more effective public access system can be achieved through alternate means, such as focusing public access at the most desirable locations, the County may institute master program provisions for public access based on that approach in lieu of uniform site-by-site public access requirements.

- 1 E. Where there is an irreconcilable conflict between water-dependent shoreline uses or physical public
2 access and the maintenance of views from adjacent properties, the water-dependent uses and
3 physical public access shall have priority.
- 4 F. Alternate off-site provision of public access to shorelines may be used upon approval as a means of
5 offsetting identifiable on-site impacts. If public access is demonstrated to be infeasible or
6 inappropriate on site due to significant interference to operations or hazards to life and property,
7 alternative visual access opportunities (such as a viewpoint, observation tower, or other areas
8 serving as a means to view public waters (such as an interpretive center and displays explaining
9 maritime history and industry) may be provided at a location not directly adjacent to the water;
10 provided, that visual access to the water is provided.
- 11 G. Public access provided by shoreline street ends, public utilities, and rights-of-way shall not be
12 diminished (RCW 35.79.035 and 36.87.130).
- 13 H. Shoreline development by public entities shall include public access measures as part of each
14 development project.
- 15 I. Development shall be located, designed, and managed so that impacts on public use of the
16 shoreline are minimized.
- 17 J. Public access shall incorporate the following location and design criteria:
- 18 1. Where open space is provided along the shoreline, and public access can be provided in a
19 manner that will not adversely impact shoreline ecological functions and/or processes, a public
20 pedestrian access walkway parallel to the ordinary high water mark of the property is preferred.
21 The walkway shall be buffered from sensitive ecological features and provide limited and
22 controlled access to sensitive features and the water's edge where appropriate. Fencing may be
23 provided to control damage to plants and other sensitive ecological features and where
24 appropriate. Trails shall be constructed of permeable materials and limited to five feet in width
25 to reduce impacts to ecologically sensitive resources.
- 26 2. Public access shall be located adjacent to other public areas, accesses and connecting trails,
27 connected to the nearest public street; and include provisions for differently-abled persons
28 where feasible.
- 29 3. Where views of the water or shoreline are available and physical access to the water's edge is
30 not present or appropriate, a public viewing area shall be provided.
- 31 4. Design shall minimize intrusions on privacy by avoiding locations adjacent to windows and/or
32 outdoor private open spaces or by screening or other separation techniques.
- 33 5. Design shall provide for the safety of users, including the control of offensive conduct through
34 public visibility of the public access area, or through provisions for oversight. The administrator
35 may authorize a public access to be temporarily closed in order to develop a program to address
36 offensive conduct. If offensive conduct cannot be reasonably controlled, alternative facilities
37 may be approved through a permit revision.
- 38 6. Public amenities appropriate to the use of a public access area such as benches, picnic tables
39 and sufficient public parking to serve the users shall be provided.
- 40 7. Commercial developments that attract a substantial number of persons and developments by
41 government/public entities may be required to provide public restrooms, facilities for disposal
42 of animal waste and other appropriate public facilities.

- 1 8. The minimum width of public access easements shall be 10 feet, unless the administrator
2 determines that undue hardship would result. In such cases, easement widths may be reduced
3 only to the extent necessary to relieve the hardship.
- 4 9. The requirement for public access on a specific site may be fulfilled by:
5 a. Participation in a public access plan incorporated in the program; or
6 b. Provision of facilities specified in a permit approval.
- 7 10. Required public access sites shall be fully developed and available for public use at the time of
8 occupancy of the use or activity or in accordance with other provisions for guaranteeing
9 installation through a monetary performance assurance.
- 10 11. Public access facilities shall be maintained over the life of the use or development. Future
11 actions by successors in interest or other parties shall not diminish the usefulness or value of
12 required public access areas and associated improvements.
- 13 12. Public access provisions shall run with the land and be recorded via a legal instrument such as an
14 easement, or as a dedication on the face of a plat or short plat. Such legal instruments shall be
15 recorded with the county auditor's office prior to the time of building permit approval,
16 occupancy or plat recordation, whichever comes first.
- 17 13. Maintenance of the public access facility shall be the responsibility of the owner unless
18 otherwise accepted by a public or nonprofit agency through a formal agreement recorded with
19 the county auditor's office.
- 20 14. Public access facilities shall be available to the public 24 hours per day unless specific exceptions
21 are granted though the shoreline permit process subject to the provisions of subsection (B)(1) of
22 this section.
- 23 15. The standard state-approved logo or other approved signs that indicate the public's right of
24 access and hours of access shall be installed and maintained by the owner. Such signs shall be
25 posted in conspicuous locations at public access sites.
- 26 16. Incentives for public access improvements such as density or bulk and dimensional bonuses shall
27 be considered through applicable provisions of zoning and subdivision regulations.

Chapter 23.40 Shoreline Use and Modification Regulations

23.40.010 Shoreline Use and Modification.

- A. All uses and modifications in shoreline areas shall be subject to the policies and regulations of this program.
- B. Table 1. Shoreline Use by Environment Designation generally sets forth the permissible uses within the respective shoreline environment designations in the county. It should be read in close conjunction with the definitions in Chapter 23.60 (Definitions) and the other provisions in this program. The contents of Table 1 provisions are subject to limitations, conditions, and exceptions listed under of each of the categories of this chapter. Such text modifies the requirements of Table 1, and in the event there is a conflict between Table 1 and the policies or regulations, the policies and regulations shall prevail.
- C. Shoreline use and development shall be classified by the Director and regulated under one or more of the following applicable sections of WCC Chapter 23.40 (Shoreline Use and Modification Regulations). A proposed development may contain different types of uses and/or modifications, and may be classified under and be subject to multiple categories (e.g., a marina may fall under and be subject to Marinas, Moorage, Commercial, and Industrial, depending on what is proposed).
- D. In the Aquatic shoreline environment designation, only water-dependent uses shall be allowed, subject to the use and development regulations of the abutting upland shoreline environment designation.

Table 1. Shoreline Use by Environment Designation

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Agriculture										
Agriculture – General	P	X	P	P	P*	P	P	X*	X	P
Liquid Manure Storage Facilities and Spreading	X	X	X	X	P	P	P	X	X	X
Animal Feeding Operations and Confined Animal Feeding Operations (AFOs/CAFOs)	X	X	X	X	P	P	P	X	X	X
Aquaculture										
Aquaculture – General	P	P*	P	P*	P	P	P	X	see upland	P
Commercial Salmon Net Pen Facilities	X	X	X	X	X	X	X	X	X	X
Commercial Geoduck Aquaculture	C	C	C	C	C	C	C	C	C	C
Marinas and Launch Ramps										
Marinas, including accessory structures	P	P	C	P	P	X	C	X	see upland	X
Launch ramps – Marina	P	P	C	P	P	X	C	X	see upland	X
Launch ramps – Public	P	P	P	P	P	P	P	X/P*	see upland	P
Launch ramps – Residential	X	X	X	X	X	X	X	X	X	X
Covered Over-Water Structures	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	P*	P
Commercial										
Water-Dependent Commercial	P	P*	C*	P	P	P*	C*	X	see upland	P

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Water-Related and Water-Enjoyment Commercial	P	P*	C*	P	P	P*	C*	X	X	P
Non-Water-Oriented Commercial	C	C	C	C	C	C*	C	X	X	C
Dredging and Dredge Material Disposal										
Dredging	C	C	C	C	C	C	C	X/P*	C*	X/C*
Maintenance Dredging	P	P	P	P	P	P	P	P	P*	P*
Dredge Material Disposal	P	P	P	P	P	P	P	P	X	P
Essential Public Facilities										
	C	C	C	C	C	C	C	X	C	C
Fill and Excavation										
	P/*C	P/*C	P/*C	P/*C	P/*C	P/*C	P/*C	X	C	X/C*
Flood Hazard Reduction and Instream Structures										
Flood Hazard Reduction and Instream Structures – General	P	P	P	P	P	P	P	X	see upland	P
Channelization or Dams for Hazard Reduction	P	P	X	P	C	C	X	X	see upland	P
Forest Practices										
Outside of shorelines of statewide significance	P	P	P	P	P	P	P	C	see upland	P
Within shorelines of statewide significance	C	C	C	C	C	C	C	C	C	C
Industrial and Port										

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Water-Dependent Industrial and Port Development	P	X	X	X	P*	P/C*	X	X	see upland	P
Water-Related and Water-Enjoyment Industrial and Port development	P	X	X	X	P*	P / C*	X	X	X	P
Existing legal fossil-fuel refinery operations or existing legal fossil fuel transshipment facilities	P	X	X	X	P	C	X	X	C	P
Expansion of existing legal fossil-fuel refinery operations or expansion of existing legal fossil fuel transshipment facilities	P	X	X	X	P	C	X	X	C	C
New or expansion of existing legal renewable fuel refinery operations or renewable fuel transshipment facilities	P	X	X	X	P	C	X	X	C	C
Non-Water-Oriented Industrial and Port Development	C	X	X	X	C	C	X	X	X	X
Terminals for Passenger-Only Vessels	P	P	X	X	P	P	X	X	see upland	C
In-Water Log Storage	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	C	X
Institutional										
	C	C	C	C	C	C	C	X	X	X
Land Division										

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Boundary Line Adjustments and Lot Consolidation	P	P	P	P	P	P	P	X	X	P
Short Plats	P	P	P	P	P	P	P	X	X	P
Subdivisions	P	P	P	P	P	P	P	X	X	P
Mining										
Mining – General	X	X	X	X	C	C	C	X	X*	C
Surface oil or gas drilling	X	X	X	X	X	X	X	X	X	X
Moorage Structures										
Private Individual Moorage (other than mooring buoys) – Freshwater	P	C	P	P	P	P	P	X	see upland	X
Private Individual Moorage (other than mooring buoys) – Marine	P	C	C	P	P	P	C	X	see upland	X
Private Shared Moorage	P	C	P	P	P	P	P	X	see upland	X
Public Moorage (other than mooring buoys)	C	C	C	C	C	C	C	C	see upland	X
Commercial Moorage (other than mooring buoys)	C	C	C	C	C	C	C	X	see upland	X
Industrial Moorage (other than mooring buoys)	C	X	X	X	C	C	X	X	see upland	Existing: P* New: X

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Covered Moorage Accessory to Permitted Moorage	P	P	X	P	X	X	X	X	see upland	C
Float Plane Moorage Accessory to Permitted Moorage	C	C	C	C	C	C	C	X	see upland	C
Mooring Buoys	P	P	P	P	P	P	P	X	see upland	P
Recreational										
Water-Oriented Recreation	P	P	P	P	P	P	P	P	P/C	P
Non-Water-Oriented Recreation	P	P	C	P	C	C	C	C	X	X
Residential										
Single-Family	P	P	P	P	P	P	P	X/C*	X	P
Duplex	P	P	P	P	P	P	P	X	X	X
Multi-Family	P	P	C	P	P	X	C	X	X	X
Over-Water Residences	X	X	X	X	X	X	X	X	X	X
Restoration and Enhancement										
	P	P	P	P	P	P	P	P	P	P
Shoreline Stabilization*										
Groins	X	X	X	X	X	X	X	X	X	X
Breakwaters and Jetties	C	C	C*	C	C	C	C*	X	C*	C
Bulkheads	P	P	C	P	P	P	C	X	X*	C*
Drift Sills	P	P	C	P	P	P	C	X	See upland	C
Gabions	X/C*	X/C*	X/C*	X/C*	X/C*	X/C*	X/C*	X	X	X/C*

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Revetments	X/C*	X/C*	X/C*	X/C*	X/C*	X/C*	X/C*	X	X*	X/C*
Bioengineering Approaches & other Soft-Shore Measures	P	P	P	P	P	P	P	P*	P*	P
Signs										
	P	P	P	P	P	P	P	X*	P*	P
Transportation										
Transportation Facilities serving a specific approved use*	P	P	P	P	P	P	P	X*	P/C*	P
Transportation Facilities not serving a specific approved use*	C	C	X	C	C	C	X	X	C	X
Utilities										
Accessory Utilities	P	P	P	P	P	P	P	P	P	P
Local Utilities	P	P	P/C*	P	P	P	P/C*	X	P/C/X*	P
Regional utilities	C	C	C	C	C	C	C	X	C/X*	C
Desalinization Facilities	C	C	C	C	C	C	C	X	C	C
Dams, Diversion, and Tailrace Structures for Hydroelectric Power Generation	C	X	C	C	C	C	C	X	see upland	X

P = Permitted, subject to policies and regulations of this program.

C = Shoreline conditional use, subject to policies and regulations of this program.

X = Prohibited.

N/A = Not applicable.

* = Refer to the regulations under this use and modification category for certain caveats.

23.40.020 Shoreline Bulk Provisions – Buffers, Setbacks, Height, Open Space and Impervious Surface Coverage.

- A. Table 2. Bulk Regulations for Shoreline Development, establishes the minimum required dimensional requirements for development, uses, and activities. Dimensional standards relating to critical areas are governed by the provisions of WCC Chapter 16.16. Dimensional standards specified in this program shall not exceed the geographic limit of the Act's jurisdiction. Additional standards may be established in WCC Chapter 23.40 (Shoreline Use and Modification Regulations).
- B. Where the bulk provisions of other County regulations (e.g., Title 20, Zoning) differ, the stricter shall apply.
- C. All measurements except height and area shall be measured outward on the horizontal plane and in the direction that results in the greatest dimension from property lines, or from other features specified.
- D. **Setbacks.**
1. Setbacks shall be pursuant to Table 2; except as allowed by subsection (D)(2).
 2. Sideyard setbacks shall be measured from all property lines that intersect the shore side of a lot or tract; provided, that for development not requiring a wider shoreline (critical area) buffer, five feet of the total required sideyard setbacks may be provided on one side and the balance on the other side.
- E. **Height.** Table 2 establishes the maximum allowed building height for all primary and accessory structures within the shoreline jurisdiction. Height is measured according to the definition in WCC 23.60.080(8); provided, that:
1. Pursuant to RCW 90.58.320, and except as allowed by subsections (2 - 4) of this section, no permit may be issued for any building or structure more than 35 feet above average grade level that will obstruct the view of a substantial number of residences on or adjoining such shorelines except where the program does not prohibit such development and only when overriding considerations of the public interest will be served. The applicant/proponent shall be responsible for providing sufficient information to determine whether this standard is met.
 2. In the Urban Resort designation, commercial and multifamily residential development more than 100 feet from the ordinary high water mark may exceed the standard height limit up to a maximum height of 75 feet when approved through a shoreline conditional use permit; provided, that specific location design and other conditions may be imposed to meet the policies and regulations of this program;
 3. In the Urban Resort shoreline environment designation, lodging developments over 35 feet in height may be allowed. However, due to the potential for adverse impacts upon adjacent uses and the community from such development, special consideration must be given to the following factors during review of such proposals:
 - a. Urban services, including sanitary sewers, public water supply, fire protection, storm drainage, and police protection, must be provided at adequate levels to protect the public health, safety, and welfare.
 - b. Circulation, parking areas, and outdoor storage or loading areas should be adequate in size and designed so that the public safety and local aesthetic values are not diminished. Such

- 1 areas should be screened from open space areas by landscaping, fences or similar
- 2 structures, or grade separation.
- 3 c. Recreational needs of building clientele must be provided for through on-site recreation
- 4 facilities and access to shorelines. The variety and number of on-site recreation facilities
- 5 should increase proportionately as density increases.
- 6 4. In the Cherry Point Management Area, cranes, gantries, mobile conveyors, light standards, and
- 7 similar equipment necessary for the functions of water-dependent uses or the servicing of
- 8 vessels may extend above the applicable maximum height limit provided in Table 1, provided
- 9 that such structures shall be designed to minimize view obstruction.
- 10 5. Residential accessory structures that are not waterward of the primary structure may be built to
- 11 the maximum height for the environment designation.
- 12 6. Residential structures that share a common wall with the primary structure shall be considered
- 13 an extension of the primary structure (i.e., an attached garage) and may be built to the
- 14 maximum height for the designation.
- 15 7. In the Rural, Resource, or Conservancy shoreline environments, accessory structures that are
- 16 150 feet or greater from the OHWM of the Nooksack or Sumas Rivers may be built to the
- 17 maximum height for the designation.
- 18 F. **Open Space.** Open space shall be provided for certain types of development, use, or activities. The
- 19 amount of open space, as a percentage of lot coverage, shall be as provided in **Table 2**, below.
- 20 G. **Uses Allowed in Buffers and Setbacks.** The following development activities are allowed in buffers
- 21 and setbacks; provided, that they are constructed and maintained in a manner that minimizes
- 22 adverse impacts on shoreline functions and processes; and provided further, that they comply with
- 23 all the applicable regulations in WCC Chapter 16.16, including mitigation:
- 24 1. Those portions of approved private water-dependent development or public water-oriented
- 25 development that require a location waterward of the ordinary high water mark of streams,
- 26 rivers, lakes, ponds, marine shorelines, associated wetlands, and/or within their associated
- 27 buffers.
- 28 2. Accessory and underground utilities.
- 29 3. Necessary power poles and transmission towers are not subject to height limits but shall not be
- 30 higher than necessary to achieve the intended purpose.
- 31 4. Modifications to existing development that are necessary to comply with environmental
- 32 requirements of any state or federal agency, when otherwise consistent with this program;
- 33 provided, that the decision maker determines that the facility cannot meet the dimensional
- 34 standard and accomplish the purpose for which it is intended and the facility is located,
- 35 designed, and constructed to meet specified dimensional standards to the maximum extent
- 36 feasible, and the modification is in conformance with the provisions of Chapter WCC 23.50
- 37 (Nonconforming Uses, Structures, and Lots).
- 38 5. Roads, railways, and other essential public facilities that must cross shorelines and are necessary
- 39 to access approved water-dependent development.
- 40 6. Stairs and walkways no greater than four feet in width and no higher than 18 inches above
- 41 grade, except for railings; provided, that where ADA requirements apply, such facilities may be
- 42 increased to five feet in width and the height requirement may be waived to provide for site-

- specific ADA compliance. Stairways shall conform to the existing topography to the extent feasible and minimize impervious surfaces.
7. Shared moorages when located on or adjacent to a property line shared in common by the project proponents and where appropriate easements or other legal instruments have been executed providing for ingress and egress to the facility.
 8. Retaining walls or similar slope stabilization structures, when associated with an approved shoreline use or development consistent with the provisions of this program and demonstrated to be necessary for the approved use or development through a geotechnical analysis.
 9. Where permitted, fences, walls other than [those allowed by 23.70.020\(G\)\(8\) above](#), hedges and other similar structures shall be limited to four feet in height within shoreline setbacks and six feet in height outside of shoreline setbacks; provided, that the Director may exempt security fencing from this requirement as required by federal or state regulations.
 10. Signs.
 - a. On publicly owned park properties, interpretive, wayfinding, and park identification signs.
 - b. Signage required by state or federal security requirements.
 11. Passive recreation facilities that are part of a non-motorized trail system or environmental education program, including walkways, wildlife viewing structures, or public education trails; provided, that all the criteria in WCC 23.40.160(A)(6) (Recreation) are met.
 12. Accessory Structures. When located in the shoreline jurisdiction, residential recreational accessory structures—such as a boat equipment storage shed, an small uncovered boat storage rack, a fire pit, and a pathway leading to the shoreline—may be permitted in an HCA buffer; provided,
 - a. Such structures are located as far from the shoreline as feasible and on previously-impacted buffer areas;
 - b. The maximum area, inclusive of existing lawfully-established accessory structures, shall be limited to 10% of the buffer's area or 500 square feet, whichever is less;
 - c. No more than 20% of the linear length of shoreline is occupied by a building or structure;
 - d. Individual structures shall be limited to a total footprint area of 100-square feet and 10-feet in height; and
 - e. The shoreline is 75% or at ratios outlined in WCC 16.16.760, whichever is greater, planted (or replanted) with native vegetation to a minimum depth of 15 feet landward from the ordinary high water mark.
 - f. This provision shall not apply to residential developments authorized using the constrained lot provisions of WCC 23.40.150(B).

1 **Table 2. Bulk Regulations for Shoreline Development**

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Agriculture										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	20'	N/A	20'	20'	20'	20'	20'	N/A	N/A	20'
Maximum Height ⁽⁵⁾	35'	N/A	35'	35'	35'	35"	35'	N/A	N/A	35'
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Aquaculture										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	10'	10'	10'	10'	10'	10'	15'	N/A	N/A	20'
Maximum Height ^(4,5) (a/b)	25' / 35'	25' / 35'	20' / 30'	25' / 35'	20' / 30'	20' / 30'	15' / 25'	N/A	10'	20' / 30'
Open Space %	30%	40%	50%	30%	50%	50%	60%	N/A	N/A	30%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Commercial										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3,6)	5'	5'	10'	10'	10'	10'	15'	N/A	N/A	15'
Maximum Height ^(4,5) (a/b)	25' / 35'	25' / 35'	20' / 30'	25' / 35'	20' / 30'	20' / 30'	15' / 25'	N/A	15'	35'
Open Space % (c/d)	30% / 15%	40% / 20%	60% / 30%	30% / 15%	50% / 25%	50% / 25%	60% / 30%	N/A	N/A	30% / 15%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Marinas and Launch Ramps										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	10'	10'	10'	10'	10'	10'	15'	N/A	N/A	20'
Maximum Height ^(4,5) (a/b)	25' / 35'	25' / 35'	25' / 35'	25' / 35'	20' / 25'	20' / 25'	15' / 25'	N/A	N/A	25' / 35'
Open Space % (c/d)	15%	30%	50%	15%	30%	30%	50%	N/A	N/A	15%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Mining										

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	N/A	N/A	N/A	N/A	50'	50'	100'	N/A	N/A	50'
Open Space %	N/A	N/A	N/A	N/A	50%	50%	50%	N/A	N/A	50%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Industrial and Port Development										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	30'	10'	30'	30'	40'	40'	60'	N/A	N/A	40'
Maximum Height ⁽⁵⁾ (a/b)	35' / 35'	15' / 25'	20' / 30'	35' / 35'	25' / 35'	25' / 35'	25' / 35'	N/A	20'	25' / 35'
Open Space %	30%	40%	60%	30%	50%	50%	60%	N/A	N/A	30%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Land Division										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	Based on shoreline use									
Maximum Height ⁽⁵⁾ (a/b)	Based on shoreline use									
Open Space %	30%	40%	50%	30%	50%	50%	60%	N/A	N/A	30%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Recreation										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	10'	10'	15'	10'	15'	15'	20'	20'	N/A	20'
Maximum Height ^(4,5) (a/b)	25' / 35'	25' / 35'	20' / 35'	25' / 35'	20' / 35'	20' / 35'	15' / 25'	10' / 15'	15'	20' / 35'
Open Space % (c/d)	30% / 25%	40% / 40%	50% / 60%	30% / 25%	50% / 60%	50% / 60%	60% / 75%	95%	N/A	30% / 25%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Residential – Single-Family and Duplex										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Maximum Density ⁽⁸⁾	6:1 ac	22:1 ac	6:1 ac	6:1 ac	1:1 ac	1:20 ac	1:1 ac	N/A	N/A	1:1 ac

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Side Setback ^(2,3)	5'	5'	10'	5'	10'	10'	15'	15'	N/A	20'
Maximum Height ^(4,5) (a/b)	30' / 30'	30' / 30'	30' / 35'	30' / 30'	30' / 35'	30' / 35'	30' / 35'	30' / 35'	N/A	30' / 35'
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
Residential – Multifamily (3 – 6 units)										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Maximum Density ⁽⁸⁾	6:1 ac.	22:1 ac.	6:1 ac.	6:1 ac.	1:1 ac.	1:20 ac.	1:1 ac.	N/A	N/A	N/A
Side Setback ^(2,3,6) (e/f)	5'	5'	15'	5'	15'	15'	20'	N/A	N/A	N/A
Maximum Height ^(4,5) (a/b)	30' / 40'	30' / 40'	30' / 35'	30' / 40'	30' / 35'	30' / 35'	30' / 35'	N/A	N/A	N/A
Open Space %	30%	40%	60%	30%	50%	50%	60%	N/A	N/A	N/A
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		N/A
Residential – Multifamily (7+ units)										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Maximum Density ⁽⁸⁾	6:1 ac	22:1 ac	6:1 ac	6:1 ac	1:1 ac	1:20 ac	1:1 ac	N/A	N/A	N/A
Side Setback ^(2,3,6) (e/f)	5'	5'	15'	5'	15'	15'	20'	N/A	N/A	N/A
Maximum Height ^(4,5) (a/b)	30' / 40'	30' / 40'	30' / 35'	30' / 40'	30' / 35'	30' / 35'	30' / 35'	N/A	N/A	N/A
Open Space	30%	40%	50%	30%	50%	50%	60%	N/A	N/A	N/A
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		N/A
Residential – Decks and Accessory Structures										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	5'	5'	10'	5'	10'	10'	15'	15'	N/A	
Height Limit ⁽⁴⁾	15'	15'	15'	15'	15'	15'	15'	15'	N/A	
Transportation Facilities										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Signs										
Shoreline Buffer ^(1,7)	Per Shoreline Buffer Standards in WCC 23.30.040									

Shoreline Uses	Shoreline Environment Designation									
	Urban	Urban Resort	Urban Conservancy	Shoreline Residential	Rural	Resource	Conservancy	Natural	Aquatic	Cherry Point Mgmt Area
Side Setback ^(1,2,3)	5'	5'	10'	5'	10'	10'	15'	N/A	N/A	10'
Maximum Height ^(4,5) (a/b)	10' / 15'	10' / 15'	6' / 10'	10' / 15'	6' / 10'	6' / 10'	6' / 10'	N/A	10'	6' / 10'
Utilities										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(1,2,3)	5'	5'	10'	5'	10'	10'	15'	N/A	N/A	10'
Maximum Height ^(4,5) (a/b)	20' / 35'	20' / 35'	20' / 20'	20' / 35'	20' / 20'	20' / 20'	20' / 20'	N/A	N/A	20' / 20'
Open Space %	30%	40%	60%	30%	50%	50%	60%	N/A	N/A	50%
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		
All Other Development										
Shoreline Buffer ⁽¹⁾	Per Shoreline Buffer Standards in WCC 23.30.040									
Side Setback ^(2,3)	10'	10'	10'	10'	15'	15'	20'	N/A	N/A	
Maximum Height ^(4,5) (a/b)	25' / 35'	25' / 35'	25' / 35'	20' / 30'	20' / 30'	20' / 30'	20' / 30'	N/A	N/A	
Open Space %	30%	40%	60%	30%	50%	50%	60%	N/A	N/A	
Impervious Surface Coverage	Per the underlying zone, WCC Title 20 .					10% ⁽⁹⁾	10% ⁽⁹⁾	Per the underlying zone, WCC Title 20 .		

1 **Footnotes:**

2 (1) = Water dependent development shall have a buffer of zero feet. Unless specifically exempted from setback
3 requirements in WCC 23.40.020, minimum required setbacks for permanent freestanding signs are 50 feet from
4 the OWHM where not subject to critical areas or buffers. Other non-water dependent uses that may be allowed
5 within the shoreline (critical area) buffer are identified in WCC 23.40.020(G).

6 (2) = Roof overhangs or other architectural features shall not project further than 18 inches into the side setbacks.

7 (3) = A side setback of 5 feet applies to residential decks and accessory structures.

8 (4) = Maximum height for accessory structures is 15 feet, except as provided in WCC 23.40.020(E).

9 (5) = Maximum height is as shown, except as provided in WCC 23.40.020(E).

10 (6) = Add five feet of setback for each five feet of height over 15 feet.

11 (7) = See WCC 23.40.200 (Signs) for additional allowances and restrictions.

12 (8) = Maximum allowable development density shall be calculated pursuant to the applicable underlying zone
13 district, per WCC Title 20; provided, that maximum allowable density in dwelling units/acre shall not exceed the
14 density ratios identified above. Density shall be calculated based on the total area of the parent parcel including
15 those areas located outside of shoreline jurisdiction. Submerged lands and/or tidelands within the boundaries of
16 any waterfront parcel that are located waterward of the ordinary high water mark shall not be used in density
17 calculations.

(g) = Where the maximum total impervious surface percentage does not allow 2,500 square feet of total impervious surface area, 2,500 square feet shall be allowed.

(a/b) = “a” applies to structures within 100 feet of OHWM or wetland edge; “b” applies to structures more than 100 feet from OHWM or wetland edge.

(c/d) = “c” applies to development that includes overnight lodging; “d” applies to development that does not include overnight lodging.

(e/f) = “e” applies to structures not more than 35 feet high; “f” applies to structures more than 35 feet high.

N/A = Not applicable.

23.40.030 General Shoreline Use and Modification Regulations

- A. Proposed uses and developments shall limit the number and extent of shoreline modifications.
- B. Shoreline uses and developments that are water-dependent shall be given priority. Permit conditions may limit the range of uses or sites developed for such uses.
- C. Interim non-water-dependent uses authorized as a shoreline conditional use may be allowed to respond to short-term market conditions; provided, that permit conditions are placed on such uses to provide for a specific timetable or review process to ensure water-dependent use of the development in the long term.
- D. Shoreline uses and developments shall be located, designed, and managed so that other appropriate uses are neither subjected to substantial or unnecessary adverse impacts, nor deprived of reasonable, lawful use of navigable waters, other publicly owned shorelines, or private property.
- E. Navigable waters shall be kept free of obstructions for the general benefit of the region, state, and nation. No use or development shall be allowed to effectively exclude other appropriate uses from navigable waters.
- F. Shoreline uses and developments shall be located in a manner so that shoreline stabilization is not likely to become necessary in the future.
- G. Accessory uses and structures that do not require a shoreline location shall be sited away from the land/water interface and not placed waterward of the principal use unless otherwise allowed by this Program.
- H. Nothing in the regulations may be construed as to impinge on tribal treaty rights exercised within usual and accustomed areas.
- I. No shoreline use or development may commence without the proponent having obtained all applicable federal, state, and local permits and approvals, including but not limited to a Hydraulic Permit Application (HPA) from the State Department of Fish and Wildlife.
- J. Use of motor vehicles including unlicensed off-road vehicles is permitted only on roads or trails specifically designated for such use. Motor vehicle use, except for vessels and float planes, is prohibited waterward of the ordinary high water mark, on tidelands, public or private beaches, wetlands and/or their associated buffers; except as necessary for public health and safety or permitted maintenance activities associated with approved developments or as otherwise permitted.
- K. Buildings, fencing, walls, hedges, and similar features shall be designed, located, and constructed in a manner that does not preclude or significantly interfere with wildlife movement to or from important habitat areas consistent with the applicable provisions of this program; provided, that the

Director may exempt security fencing associated with residential, industrial, and/or commercial developments from this requirement on a case-by-case basis.

23.40.040 Agriculture.

A. General.

1. Agricultural activities within shorelines are governed by the critical areas regulations in WCC Chapter 16.16, including the conservation program on agricultural lands (CPAL) provided for in therein.
2. Accessory uses and buildings shall observe critical area buffer requirements (see WCC Chapter 16.16); except that utility development associated with an approved agriculture activity or development may encroach on critical area buffers where it can be demonstrated that the proposed utility development is essential to the agriculture activity or development and that such development complies with the general provisions of WCC Chapter 16.16; such utilities shall be placed underground where feasible.
3. Intentional discharge of any manure storage facility into ground or surface water is prohibited.
4. Feedlots are prohibited in critical areas and their buffers (see WCC Chapter 16.16).
5. Conversion of agricultural uses to other uses shall comply with the provisions of WCC Chapter 16.16 and this program for the proposed use.

B. Regulations for Specific Shoreline Environment Designations.

1. In the Natural shoreline environment, only low-intensity agricultural activities are permitted; provided, that the use does not expand or alter agricultural practices in a manner inconsistent with the purpose of this designation.

23.40.050 Aquaculture.

A. General.

1. Aquaculture that involves little or no substrate modification shall be given preference over those that involve substantial modification. The applicant/proponent shall demonstrate that the degree of proposed substrate modification is the minimum necessary for feasible aquaculture operations at the site.
2. The installation of submerged structures, intertidal structures, and floating structures shall be allowed only when the applicant/proponent demonstrates that no alternative method of operation is feasible.
3. Aquaculture proposals that involve substantial substrate modification or sedimentation through dredging, trenching, digging, mechanical clam harvesting, or other similar mechanisms shall not be permitted in areas where the proposal would adversely impact critical saltwater habitat, or other fish and wildlife habitat conservation areas.
4. Aquaculture activities that would have a significant adverse impact on natural, dynamic shoreline processes or that would result in a net loss of shoreline ecological functions shall be prohibited.
5. Unless otherwise provided in the shoreline permit issued by the County, repeated introduction of an approved organism in the same location shall require approval by the County only at the time the initial aquaculture use permit is issued. Introduction, for purposes of this section, shall mean the placing of any aquatic organism in any area within the waters of Whatcom County

1 regardless of whether it is a native or resident organism within the county and regardless of
2 whether it is being transferred from within or without the waters of Whatcom County.

- 3 6. The rights of treaty tribes to aquatic resources within their usual and accustomed areas shall be
4 addressed through direct coordination between the applicant/proponent and the affected
5 tribe(s) through the permit review process.

6 B. Site Design and Operation.

- 7 1. Aquaculture shall be designed to minimize use of artificial substances and shall use chemical
8 compounds that are least persistent and have the least impact on plants and animals.
- 9 2. Aquaculture structures and equipment shall be of sound construction and shall be so
10 maintained. Abandoned or unsafe structures and/or equipment shall be removed or repaired
11 promptly by the owner, including when a business ceases operations. Where any structure
12 might constitute a potential hazard to the public in the future, the County shall require the
13 posting of a bond commensurate with the cost of removal or repair. The County may abate an
14 abandoned or unsafe structure, following notice to the owner, if the owner fails to respond in
15 30 days and may impose a lien on the related shoreline property or other assets in an amount
16 equal to the cost of the abatement. Bonding requirements shall not duplicate requirements of
17 other agencies.
- 18 3. All floating and submerged aquaculture structures and facilities in navigable waters shall be
19 marked in accordance with U.S. Coast Guard requirements.
- 20 4. Predator control shall not involve the killing or harassment of birds or mammals. Approved
21 controls include, but are not limited to, double netting for seals, overhead netting for birds, and
22 three-foot-high fencing or netting for otters. The use of other nonlethal, non-abusive predator
23 control measures shall be contingent upon receipt of written approval from the National Marine
24 Fisheries Service and/or the U.S. Fish and Wildlife Service, as required.
- 25 5. Aquaculture wastes shall be disposed of in a manner that will ensure strict compliance with all
26 applicable governmental waste disposal standards, including but not limited to the Federal
27 Clean Water Act, Section 401, and the Washington State Water Pollution Control Act
28 (Chapter 90.48 RCW). No garbage, waste, or debris shall be allowed to accumulate at the site of
29 any aquaculture operation.
- 30 6. No processing of any aquaculture product, except for the sorting or culling of the cultured
31 organisms and the washing or removal of surface materials or organisms after harvest, shall
32 occur in or over the water unless specifically approved by permit. All other processing and
33 processing facilities shall be located on land and shall be subject to the regulations of
34 WCC 23.40.120 (Industrial and Port Development), in addition to the regulations in this section.
- 35 7. For aquaculture projects using over-water structures, storage of necessary tools and apparatus
36 waterward of the ordinary high water mark shall be limited to containers of not more than three
37 feet in height, as measured from the surface of the raft or dock; provided, that in locations
38 where the visual impact of the proposed aquaculture structures will be minimal, the County may
39 authorize storage containers of greater height. In such cases, the burden of proof shall be on the
40 applicant/proponent. Materials that are not necessary for the immediate and regular operation
41 of the facility shall not be stored waterward of the ordinary high water mark.

- 1 8. The County shall reserve the right to require aquaculture operations to carry liability insurance
- 2 in an amount commensurate with the risk of injury or damage to any person or property as a
- 3 result of the project. Insurance requirements shall not duplicate requirements of other agencies.
- 4 9. Where aquaculture activities are authorized to use County facilities, such as boat launches or
- 5 docks, the County shall reserve the right to require the applicant/proponent to pay a portion of
- 6 the cost of maintenance and any required improvements commensurate with the use of such
- 7 facilities.

8 C. Additional Standards for Net Pens.

- 9 1. Fish net pens and rafts shall meet the following criteria in addition to the other applicable
- 10 regulations of this section:
- 11 a. Fish net pens shall meet, at a minimum, state-approved administrative guidelines for the
- 12 management of net pen cultures. In the event there is a conflict in requirements, the more
- 13 restrictive requirement shall prevail.
- 14 b. Fish net pens shall not occupy more than two surface acres of water area, excluding
- 15 booming and anchoring requirements. Anchors that minimize disturbance to substrate, such
- 16 as helical anchors, shall be employed. Such operations shall not use chemicals or antibiotics.
- 17 c. Aquaculture proposals that include net pens or rafts shall not be located closer than one
- 18 nautical mile to any other aquaculture facility that includes net pens or rafts; provided, that
- 19 a lesser distance may be authorized if the applicant/proponent can demonstrate that the
- 20 proposal will be consistent with the environmental and aesthetic policies of the Whatcom
- 21 County Comprehensive Plan Chapter 11 (Shorelines). If a lesser distance is requested, the
- 22 burden of proof shall be on the applicant/proponent to demonstrate that the cumulative
- 23 impacts of existing and proposed operations would not be contrary to the policies of the
- 24 Comprehensive Plan and regulations of this program.
- 25 d. Net cleaning activities shall be conducted on a frequent enough basis so as not to violate
- 26 state water quality standards. When feasible, the cleaning of nets and other apparatus shall
- 27 be accomplished by air drying, spray washing, or hand washing.
- 28 e. In the event of a significant fish kill at the site of a net pen facility, the fin fish aquaculture
- 29 operator shall submit a timely report to the Whatcom County Health Department,
- 30 Environmental Health division, and the Whatcom County Planning and Development
- 31 Services Department stating the cause of death and shall detail remedial action(s) to be
- 32 implemented to prevent reoccurrence.
- 33 2. Limited nonprofit penned cultivation of wild salmon stocks during a limited portion of their
- 34 lifecycle to enhance restoration of native stocks when such activities involve minimal
- 35 supplemental feeding and no use of chemicals or antibiotics shall not be considered commercial
- 36 salmon net pen facilities and may be permitted.

37 D. Additional Standards for Commercial Geoduck Aquaculture.

- 38 1. Commercial geoduck aquaculture shall only be allowed where sediments, topography, land, and
- 39 water access support geoduck aquaculture operations without significant clearing or grading.
- 40 2. Shoreline conditional use permits are required for new commercial geoduck aquaculture and
- 41 existing aquaculture being converted to commercial geoduck aquaculture. However, shoreline
- 42 conditional use permits must take into account that commercial geoduck operators have a right

- 1 to harvest geoduck once planted and all subsequent cycles of planting and harvest shall not
2 require a new shoreline conditional use permit.
- 3 3. A substantial development permit is not required for the planting, growing, and harvesting of
4 farm-raised geoduck clams unless a specific project or practice causes substantial interference
5 with normal public use of the surface waters.
- 6 4. A single shoreline conditional use permit application may be submitted for multiple sites within
7 an inlet, bay, or other defined feature, provided the sites are all under control of the same
8 applicant and under the County's shoreline permitting jurisdiction.
- 9 E. Additional Standards for Experimental Aquaculture.
 - 10 1. If uncertainty exists regarding potential impacts of a proposed aquaculture activity, and for all
11 experimental aquaculture activities, baseline and periodic operational monitoring by a County-
12 approved consultant (unless otherwise provided for) may be required, at the
13 applicant's/proponent's expense, and shall continue until adequate information is available to
14 determine the success of the project and/or the magnitude of any probable significant adverse
15 environmental impacts. Permits for such activities shall include specific performance measures
16 and provisions for adjustment or termination of the project at any time if monitoring indicates
17 significant adverse environmental impacts that cannot be adequately mitigated.
 - 18 2. Aquaculture developments, not including net pens, approved on an experimental basis shall not
19 exceed five acres in area (except land-based projects and anchorage for floating systems) and
20 three years in duration; provided, that the County may issue a new permit to continue an
21 experimental project as many times as is deemed appropriate.
 - 22 3. Aquatic species that are not previously cultivated in Washington State shall not be introduced
23 into Whatcom County salt- or freshwaters without prior written approval of the Director of the
24 Washington State Department of Fish and Wildlife and the Director of the Washington
25 Department of Health. In saltwaters, the County shall not issue permits for projects that include
26 the introduction of such organisms until it has also received written comment from the Marine
27 Resources Committee, the Lummi Nation, and the Nooksack Tribe; provided, that such comment
28 is received in a timely manner. This regulation does not apply to Pacific, Olympia, Kumomoto,
29 Belon, or Virginica oysters; Manila, Butter, or Littleneck clams; or geoduck clams.
- 30 F. Supplemental Application Requirements – General Aquaculture.
 - 31 1. In addition to the minimum application requirements specified in WCC Title 22 (Land Use and
32 Development), applications for aquaculture use or development shall include all information
33 necessary to conduct a thorough evaluation of the proposed aquaculture activity, including but
34 not limited to the following:
 - 35 a. A site plan map including:
 - 36 i. The perimeter of the proposed aquaculture operations area.
 - 37 ii. Existing bathymetry depths based on mean lower low water (MLLW datum).
 - 38 iii. Adjacent upland use, vegetation, presence of structures, docks, bulkheads and other
39 modifications. If there are shore stabilization structures, provide the beach elevation at
40 the toe of the structure and the top of the structure (MLLW datum).
 - 41 iv. Areas where specific substrate modification will take place or structures will be
42 constructed or installed.

- 1 v. Access provisions for barges or track equipment.
- 2 vi. Location of storage or processing structures or facilities.
- 3 b. A baseline description of existing conditions, including best available information on:
- 4 i. Water quality.
- 5 ii. Tidal variations.
- 6 iii. Prevailing storm wind conditions.
- 7 iv. Current flows.
- 8 v. Flushing rates.
- 9 vi. Littoral drift.
- 10 vii. Areas of differing substrate composition.
- 11 viii. Areas of aquatic, intertidal, and upland vegetation complexes. A vegetation habitat
- 12 survey must be conducted. WDFW must be contacted prior to the survey to ensure it is
- 13 conducted according to their most current eelgrass/macroalgae survey guidelines.
- 14 ix. Existing shoreline or water uses and structures.
- 15 x. Aquatic and benthic organisms. Information must include an assessment of aquatic
- 16 species, including forage fish, and spawning and other lifecycle use of, or adjacent to,
- 17 the site.
- 18 Further baseline studies including surveys and sampling may be required depending upon
- 19 the adequacy of available information, existing conditions, and the nature of the proposal.
- 20 c. A detailed description of the project proposal including:
- 21 i. Species to be reared.
- 22 ii. Substrate modification or vegetation removal.
- 23 iii. Planting, harvest and processing location, method and timing, including work proposal
- 24 and construction techniques proposed (list all hand tools, machinery used (such as track
- 25 hoes, trucks or barges), type of work, frequency, and duration.
- 26 d. Anticipated use of any feed, pesticides, herbicides, antibiotics, vaccines, growth stimulants,
- 27 antifouling agents, or other chemicals, and an assessment of predicted impacts. Approvals
- 28 for the use of such materials shall be obtained from all appropriate state and federal
- 29 agencies, including but not limited to the U.S. Food and Drug Administration, and the
- 30 Washington State Departments of Ecology, Fish and Wildlife, and Agriculture, as required,
- 31 and submitted to the County. An annual report of antibiotic use shall be submitted to the
- 32 Whatcom County Department of Health, Environmental Health division. The report shall
- 33 indicate the type and amount of antibiotics used during the previous calendar year. Actual
- 34 usage data for all chemicals and antibiotics shall be maintained for review by County
- 35 inspectors at all times.
- 36 e. Number of employees/workers necessary for the project, including average and peak
- 37 employment.
- 38 f. Methods of waste disposal and predator control.
- 39 g. Methods to address pollutant loading, including biological oxygen demand (BOD).
- 40 h. Assessment of potential impacts on shoreline ecological functions and processes addressing
- 41 the baseline conditions identified, including but not limited to indirect and cumulative
- 42 effects.

- i. A visual impact analysis for floating culture facilities or other structures, if required by the County. See the Department of Ecology’s “Aquaculture Siting Study” 1986 for general approach. Depending on the size and complexity of the proposal, such analysis may be prepared by the applicant/proponent, without professional assistance; provided, that it includes an adequate assessment of impacts.
 - j. Information demonstrating that the site has natural potential for the type(s) of aquaculture proposed, due to necessary substrate or other conditions, as well as water quality suitable for the type(s) of aquaculture proposed.
 - k. Information demonstrating that the proposed aquaculture activities will not result in a net loss of shoreline ecological functions or processes or adversely affect habitat conservation areas (see WCC Chapter 16.16 (Critical Areas)).
 - l. Information demonstrating that the proposed aquaculture activities will not substantially and materially conflict with areas devoted to established uses of the aquatic environment. Such uses include but are not limited to navigation, moorage, sport or commercial fishing, log rafting, underwater utilities, and scientific research. Existing public opportunities for gathering wild stock aquatic resources on public lands shall be addressed in any application for aquaculture on public tidelands or bedlands. Compensation for loss of public access to public aquatic resources may be required.
 - m. Other pertinent information deemed necessary by the Director.
2. Applications for aquaculture activities must demonstrate that the proposed activity will be compatible with surrounding existing and planned uses.
 - a. Aquaculture activities shall comply with all applicable noise, air, and water quality standards. All projects shall be designed, operated and maintained to minimize odor and noise.
 - b. Aquaculture activities shall minimize adverse impacts from noise, light, and/or glare on nearby residents, other sensitive uses, or critical habitat.
 - c. Aquaculture facilities shall not significantly impact the aesthetic qualities of the shoreline. Aquaculture structures and equipment, except navigation aids, shall be designed, operated and maintained to blend into their surroundings through the use of appropriate colors and materials.
- G. Supplemental Application Requirements – Commercial Geoduck Aquaculture.
 1. In addition to the general application requirements of WCC Title 22 (Land Use and Development), subsection F, above, and chapter 173-27 WAC, applications for new geoduck aquaculture use or development shall include all information necessary to conduct a thorough evaluation of the proposed activity, including but not limited to the following:
 - a. A narrative description and timeline for all anticipated geoduck planting and harvesting activities if not already contained in the federal or state permit application or comparable information mentioned above;
 - b. A baseline ecological survey of the proposed site to allow consideration of the ecological effects if not already contained in the federal or state permit application or comparable information mentioned above; and

- c. Management practices that address impacts from mooring, parking, noise, lights, litter, and other activities associated with geoduck planting and harvesting operations.

H. Regulations for Specific Shoreline Environment Designations.

1. In the Urban Resort, Shoreline Residential, and Rural shoreline environments, proposals containing net pen facilities shall be located no closer than 1,500 feet from the OHWM of this environment unless a specific lesser distance is determined to be appropriate based upon a visual impact analysis. Other types of floating culture facilities may be located within 1,500 feet of the OHWM but in such cases a visual analysis shall be mandatory.
2. In the Natural shoreline environment, aquaculture activities that do not require structures, facilities, or mechanized harvest practices and that will not result in the alteration of natural systems or features are permitted.

23.40.060 Marinas and Launch Ramps.

A. Marinas and Launch Ramps – General.

1. This section applies to marinas and public boat launches, though the moorage structures of such facilities shall also comply with WCC 23.40.150 (Moorage Structures). For moorage structures serving four or fewer users, only WCC 23.40.150 (Moorage Structures) applies.
2. Accessory uses shall be limited to those that are water-dependent, related to boating, and necessary for facility operation, or which provide physical or visual shoreline access to substantial numbers of the general public. Accessory uses shall be consistent in scale and intensity with the marina and/or launch ramp and surrounding uses.
3. All developments shall provide boater education addressing boater impacts on water quality and other shoreline resources, boater safety, and requirements for boater use of sewage pump-outs.

B. Marinas – Location Standards.

1. When marina sites are considered, sufficient evidence must be presented to show there is a regional demand and existing marinas are inadequate and cannot be expanded to meet regional demand.
2. Marinas shall be sited to prevent any restrictions in the use of commercial and recreational shellfish beds or commercial aquaculture operations. The specific distance shall be determined in conjunction with the Washington State Department of Health, the Washington State Department of Ecology, and other agencies with expertise. Criteria for determining the specific distance may include:
 - a. The size and depth of the waterbody;
 - b. Tidal flushing action in the project area;
 - c. Size of the marina and projected intensity of use;
 - d. Whether fuel will be handled or stored;
 - e. Location of a sewer hook-up; and
 - f. Expected or planned changes in adjacent land uses that could result in additional water quality impacts or sanitary treatment requirements.

3. Marinas shall be allowed only on stable shoreline areas where water depth is adequate to eliminate or minimize the need for channel dredging (for construction or maintenance), soil disposal, filling, beach enhancement, and other harbor and channel maintenance activities.
4. Marinas shall be located only in areas where there is adequate water mixing and flushing and shall be designed so as not to reduce or negatively influence flushing characteristics.
5. Fixed breakwaters are discouraged.
6. Marinas shall be clearly separated from beaches commonly used for swimming and shall provide signage and protection measures to ensure the safety of swimmers.
7. Marinas shall not be located at or along:
 - a. Significant littoral drift cells, including resource material areas, such as feeder bluffs and accretion beaches, barrier beaches, points, sand spits and hooks; or
 - b. Wetlands, marshes, bogs, swamps and lagoons; or
 - c. Mud flats and salt marshes; or
 - d. Fish and shellfish spawning and rearing areas.
8. Solid structures shall not be permitted to extend without openings from the shore to zero tide level (mean lower low water, or MLLW), but shall stop short to allow sufficient shallow fringe water for fish passage.

C. Marinas – Site Design.

1. Proposals for marinas shall include public launch facilities unless the applicant can demonstrate that providing such facilities is not feasible.
2. Marinas shall be designed, constructed, and maintained to:
 - a. Provide thorough flushing of all enclosed water areas and shall not restrict the movement of aquatic life requiring shallow water;
 - b. Minimize interference with geo-hydraulic processes and disruption of existing shore forms;
 - c. Be aesthetically compatible with existing shoreline features and uses;
 - d. Avoid adverse proximity impacts such as noise, light, and glare;
 - e. Include vegetative screening for parking and upland storage areas and facilities consistent with landscaping standards prescribed in WCC 20.80.300, et seq. (Landscaping); and,
 - f. Include public restrooms, accessory parking, or other recreational uses according to the scale of the facility.
3. Short-term loading/unloading areas and hand-launch storage areas may be located at ramps or near berthing areas and should be constructed of pervious material.
4. Public access, both visual and physical such as viewpoints or walkways, shall be an integral part of all marina design and development commensurate with the particular proposal and must meet the standards of WCC 23.30.060 (Public Access).
5. Innovative construction techniques and construction methods of foreshore marinas may be allowed when demonstrated to the satisfaction of the Director that the design will prevent degradation of fish migration, critical saltwater habitat, and/or shellfish resources.

D. Operations and Management.

1. The discharge of sewage and/or toxic material from boats and/or shore installations is prohibited. The responsibility for the adequate and approved collection and disposal of marina-originated sewage, solid waste, and petroleum waste is that of the marina operator. An

- 1 emergency spill kit and use instructions shall be provided for tenants in an easy-to-access area
2 and be accessible twenty-four (24) hours a day.
- 3 2. Commercial fish or shellfish processing and the discharge or discarding of unused bait, scrapfish,
4 or viscera shall be prohibited.
- 5 3. Swimming shall be prohibited within marina facilities unless the swimming area is adequately
6 separated, protected, and posted.
- 7 4. If dredging at marina entrances changes the littoral drift processes and adversely affects
8 adjacent shores, the marina operator shall be required to periodically replenish these shores
9 with the appropriate quantity and quality of aggregate as determined by a geohydraulic study,
10 paid for by the operator or owner and completed to the satisfaction of the Director.
- 11 5. Temporary vacant moorage spaces shall be made available for “transient moorage” (less than
12 two-week stay) when at least one of the following applies:
 - 13 a. The marina is owned, operated, or franchised by a governmental agency for use by the
14 public;
 - 15 b. The marina provides more than three thousand (3,000) lineal feet of moorage; or
 - 16 c. The marina is part of a mixed-use development which includes restaurants or other water-
17 enjoyment uses.
- 18 6. Marina operators shall execute a lease, contract, or deed that establishes permission to use a
19 slip for a stated period of time and that establishes conditions for use of the slip, including the
20 requirement that all boats meet applicable sanitation regulations.
- 21 7. Marinas shall meet the following before occupancy:
 - 22 a. Marinas that dispense fuel shall have adequate facilities and post procedures for fuel
23 handling and storage to prevent/minimize accidental spillage.
 - 24 b. Marinas shall have facilities, equipment such as emergency spill kits, and post procedures
25 for containment, recovery, and mitigation of spilled petroleum, sewage, and toxic products.
 - 26 c. Marina operators shall post signs where they are readily visible to all marina users
27 describing regulations:
 - 28 i. Pertaining to handling and disposal of waste, wastewater, toxic materials, and recycling;
 - 29 ii. Prohibiting the discharge of marine toilets (i.e., no untreated sewage discharge);
 - 30 iii. Prohibiting the disposal of fish and shellfish cleaning wastes; and
 - 31 iv. Describing best management practices (BMPs) for boat maintenance and repairs on site.
 - 32 d. Garbage or litter receptacles shall be provided and maintained by the marina operator at
33 several locations convenient to users in sufficient numbers to properly store all solid waste
34 generated on site.
 - 35 e. Marina docks shall be equipped with adequate lifesaving equipment, such as:
 - 36 i. Life rings, hooks, ropes and ladders, or equivalent, on the end of fingers; and/or
 - 37 ii. One ladder (per side) either every one hundred (100) linear feet of the dock, or every six
38 (6) slips whichever is greater. This regulation does not apply to a float which is less than
39 one hundred (100) feet from a shoreline; or
 - 40 iii. At least one ladder to serve a float with six (6) or more slips and is one hundred (100)
41 linear feet in length or less.

1 E. Additional Standards for Boat Launches.

2 1. Boat launches are prohibited in:

- 3 a. Significant littoral drift cells, including resource material areas such as feeder bluffs and
4 accretion beaches, points, spits and hooks;
5 b. Wetlands, marshes, bogs, swamps, and lagoons;
6 c. Mud flats and salt marshes; and
7 d. Fish spawning and rearing areas and commercial or recreational shellfish areas.

8 2. Launch ramps shall be:

- 9 a. Located on stable shorelines where water depths are adequate to eliminate or minimize the
10 need for:
11 i. Offshore or foreshore channel construction dredging; or
12 ii. Maintenance dredging; or
13 iii. Spoil disposal; or
14 iv. Filling; or
15 v. Beach enhancement; or
16 vi. Other harbor and channel maintenance activities.
17 b. Located in areas where there is adequate water mixing and flushing.
18 c. Designed so as not to negatively influence flushing characteristics.

19 3. Innovative or hinged boat launches may be permitted on marine accretion shoreforms, provided
20 that continual grading is not required. When grading is permitted it must not adversely affect
21 ecological functions and ecosystem-wide processes. Accessory facilities shall be located out of
22 critical areas.

23 4. Boat launches may be allowed on stable banks where current deflectors or other stabilization
24 structures will not be necessary.

25 5. Boat launches shall not be permitted where the upland within twenty-five (25) feet of the
26 OHWM has a slope that exceeds twenty-five percent (25%) grade and/or where substantial
27 cutting, grading, filing, or defense works is necessary.

28 6. Boat launches, minor accessory buildings, and haul-out facilities shall be designed to be in
29 character and scale with the surrounding shoreline.

30 7. Boat launches shall be built from flexible, hinge-segmented pads that can adapt to changes in
31 beach profiles, unless a solid structure is demonstrated to be more appropriate for the intended
32 level of use.

33 8. Boat launches shall be placed and kept near flush with the foreshore slope to minimize the
34 interruption of geo-hydraulic processes and impacts to critical saltwater habitats.

35 9. Marine rails for boat launching shall be located the minimum distance necessary above existing
36 grade to minimize impact on littoral drift and navigation along the shoreline.

37 10. Boat launch facilities shall be clearly separated from beaches commonly used for swimming and
38 shall provide signage and protection measures to ensure the safety of swimmers.

39 F. Additional Standards for Live-Aboard Vessels.

40 1. Live-aboard vessels are only allowed in marinas and only as follows:

- 41 a. Vessels must be for residential use only;

- b. Slips occupied by live-aboard vessels shall not exceed 10 percent of the total slips in the marina;
 - c. Vessels shall be owner-occupied; and
 - d. Vessels must be operational for cruising.
 2. Liveaboard vessels must comply with all marine regulations, policies, and procedures of the U.S. Coast Guard, and any other federal and state government agencies that pertain to health, safety and/or environmental protection. Proof of seaworthiness of the vessel and the adequacy of the mooring arrangement must be provided and laws governing all the citizens of Whatcom County must be obeyed.
- G. Additional Standards for Boat Storage.
 1. Marinas shall provide dry upland boat storage with a launch mechanism to protect shoreline ecological functions and processes, efficiently use shoreline space, and minimize consumption of public water surface area unless:
 - a. No suitable upland locations exist for such facilities; or
 - b. It can be demonstrated that wet moorage would result in fewer impacts to ecological functions and processes; or
 - c. It can be demonstrated that wet moorage would enhance public use of the shoreline.
 2. Dry moorage and other storage areas shall be located away from the shoreline and be landscaped pursuant to WCC 20.80.300, et seq. (Landscaping) with native vegetation to provide a visual and noise buffer for adjoining dissimilar uses or scenic areas.
- H. Additional Standards for Parking and Vehicle Access.
 1. Parking facilities shall meet County zoning design and location standards; provided, that at a minimum, one vehicle space shall be maintained for every four moorage spaces and for every 400 square feet of interior floor space devoted to accessory retail sales or service use. Bicycle parking shall be provided commensurate with the anticipated demand.
 2. Launch ramps shall provide trailer spaces, at least 10 feet by 40 feet, commensurate with projected demand.
 3. Parking shall:
 - a. Be sited away from the land/water interface unless no feasible alternative location exists outside of the shoreline;
 - b. Be planted or landscaped pursuant to WCC 20.80.300, et seq. (Landscaping) with native vegetation, to provide a visual and noise buffer for adjoining dissimilar uses or scenic areas; and
 - c. Be designed to incorporate low impact development practices, such as pervious surfaces, and bioswales, pursuant to WCC 20.80.630, et seq. (Stormwater and drainage).
- I. Supplemental Application Requirements. In addition to the general application requirements of WCC Title 22 (Land Use and Development), applications for marinas or launch ramps shall include all information necessary to conduct a thorough evaluation of the proposed activity, including but not limited to the following:
 1. Provide a level of service needs analysis that documents the market demand for such facilities, including:
 - a. The total amount of moorage proposed;

- b. The proposed supply, as compared to the existing supply within the service range of the proposed facility, including vacancies or waiting lists at existing facilities;
 - c. The expected service population and boat ownership characteristics of the population;
 - d. Existing approved facilities or pending applications within the service area of the proposed new facility.
 2. Document that a preferred method of providing moorage facilities is not feasible. Review of proposals involving public aquatic lands may be required to include an analysis of other alternative sites not controlled by the applicant/proponent.
 3. Provide a critical area assessment report pursuant to WCC 16.16 (Critical Areas), including:
 4. A slope bathymetry map.
 5. Evaluation of effects on littoral drift.
 6. Provide an assessment of existing water-dependent uses in the vicinity including, but not limited to, navigation, fishing, shellfish harvest, pleasure boating, swimming, beach walking, picnicking, and shoreline viewing, and shall document potential impacts and mitigating measures. Impacts on these resources shall be considered in review of proposals and specific conditions to avoid or minimize impacts may be imposed.
 7. Provide a visual assessment of views from surrounding residential properties, public viewpoints, and the view of the shore from the water surface, if required.
 - J. Regulations for Specific Shoreline Environment Designations.
 1. In the Natural shoreline environment, marinas or launch ramps are prohibited; except that primitive ramps to facilitate hand launching of small craft are permitted if materials and design are compatible with the site.
 2. In the Aquatic shoreline environment, covered over-water structures may be permitted only where vessel construction or repair work is to be the primary activity and covered work areas are demonstrated to be the minimum necessary over water.
- 23.40.070 Commercial.**
- A. General. Prior to approval of an application, the Director shall review a proposal for design, layout, and operation of the use and determine whether the proposed use is water-dependent, water-related, water-enjoyment, or a non-water-oriented commercial use.
 1. Water-dependent commercial uses shall be given first preference over non-water dependent commercial uses.
 2. Water-related commercial uses shall not be approved if they displace existing water-dependent uses.
 3. Water-enjoyment commercial uses shall not be approved if they displace existing water-dependent or water-related uses or if they occupy space designated for water-dependent or water-related use identified in a substantial development permit or other approval.
 4. All non-water-oriented commercial uses are prohibited in the shoreline unless the use provides significant public benefit with respect to the objectives of the Act and the proposed use:
 - a. Is part of a mixed use project that includes a water-oriented use; or
 - b. Is on a site where navigability is severely limited; or,

- c. Does not occupy space designated for water-dependent or water-related use identified in a project permit approval; or,
 - d. In areas designated for commercial use and the site is physically separated from the shoreline by another property or public right of way.
 5. Water-oriented commercial uses shall provide public access in accordance with the provisions of WCC 23.30.060 (Public Access).
 6. Non-water oriented commercial uses shall provide public access and/or restoration as follows:
 - a. Public access shall be in the form of unrestricted open space.
 - b. If no water-oriented commercial uses are located on or adjacent to the water as part of a mixed use development, 80% of the shoreline and associated buffers shall be preserved or restored to provide shoreline ecological functions that approximate the functions provided by the site in natural conditions.
 - c. The requirements of this section may be modified when:
 - i. The site is designated as a public access area by a shoreline public access plan, in which case public access consistent with that plan element shall be provided; or
 - ii. Specific findings are made demonstrating that the size of the parcel and the presence of adjacent uses preclude restoration of shoreline ecological functions. Where on-site restoration is infeasible, equivalent off-site restoration shall be provided.
 - d. Where restoration is proposed, buffers shall be designed as appropriate to protect shoreline resources based on a site-specific assessment.
 7. If water-oriented commercial uses are located on or adjacent to the water, the remaining undeveloped water frontage that is not devoted to water-dependent use shall be preserved in a substantially undeveloped condition until such time that an appropriate water-dependent use has been identified for the area. If the site has been previously altered by past development, the balance of the site may be reserved for future water-related use.
- B. Site Design and Operation.
 1. Commercial recreation-oriented uses, including commercial resorts and campgrounds, shall provide adequate access to water areas for their patrons or shall provide adequate on-site outdoor recreation facilities so that such resorts or campgrounds will neither be dependent on nor place undue burdens upon public access and recreational facilities.
 2. Commercial development shall install or establish access roads of sufficient capacity and with appropriate improvements to provide vehicular and pedestrian access to the site. Utilities shall be adequate to serve the demands of the proposed uses.
 3. Over-Water Structures.
 - a. Only those portions of water-dependent commercial uses that require over-water facilities such as boat fuel stations shall be permitted to locate waterward of the OHWM, provided they are located on floats, piling, or other open-work structures.
 - b. Non-water-dependent commercial uses shall not be allowed over water except in limited instances where they are appurtenant to existing structures and necessary in support of water-dependent uses.
 4. Marine rails shall be located the minimum distance necessary above existing grade to minimize impact on littoral drift and navigation along the shoreline.

C. Regulations for Specific Shoreline Environment Designations.

1. In the Conservancy and Urban Conservancy shoreline environments, only low intensity commercial use and development—either water-oriented or non-water-oriented, and limited to resort, campground, and similar facilities—may be permitted as a shoreline conditional use. Non-water-oriented uses are subject to the criteria for such uses of this section.
2. In the Urban Resort shoreline environment, water-oriented resort-oriented commercial use and developments are permitted. Non-water-oriented commercial uses and developments may be permitted as a shoreline conditional use subject to the criteria for such uses in this section. Commercial uses in this shoreline environment are permitted either by themselves or as part of a structure or development also containing residential uses.
3. In the Resource shoreline environment, water-oriented commercial use and development related to natural resource products predominantly produced on site is permitted. Non-water-oriented commercial related to natural resource products predominantly produced on site may be permitted as a shoreline conditional use subject to the criteria for such uses in this section.

23.40.080 Dredging and Dredge Material Disposal.

A. General.

1. Dredging shall only be permitted for the following activities:
 - a. Development of approved water-dependent uses of economic importance to the region and/or essential public facilities of economic importance to the region only when there are no feasible alternatives.
 - b. Maintenance dredging for the purpose of restoring a lawfully established development or the previously permitted or authorized hydraulic capacity of streams.
 - c. Maintenance of irrigation reservoirs, drains, canals, or ditches for agricultural purposes.
 - d. Establishing, expanding, relocating, or reconfiguring navigation channels where necessary to assure safe and efficient accommodation of existing navigational uses. Maintenance dredging of established navigation channels and basins shall be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.
 - e. Removal of gravel for flood management purposes consistent with an adopted flood hazard reduction plan and only after a biological and geomorphological study demonstrates that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of shoreline ecological functions and processes, and is part of a comprehensive flood management solution.
 - f. Restoration or enhancement of shoreline ecological functions and processes benefiting water quality and/or fish and wildlife habitat.
 - g. Minor in-water trenching to allow the installation of necessary underground pipes or cables if no alternative, including boring, is feasible, and:
 - i. Impacts to fish and wildlife habitat are avoided to the maximum extent possible.
 - ii. The utility installation shall not increase or decrease the natural rate, extent, or opportunity of channel migration.
 - iii. Appropriate best management practices are employed to prevent water quality impacts or other environmental degradation.

- 1 h. Dredging for the purpose of obtaining fill material is prohibited, except that:
 - 2 i. Limited bar scalping of gravel in streams is permitted subject to policies of the
 - 3 Whatcom County Comprehensive Plan and regulations for mining under
 - 4 WCC 23.40.140 (Mining), and WCC Title 20 (Zoning).
 - 5 ii. Dredging to obtain fill for restoration projects is permitted for approved
 - 6 MTCA/CERCLA projects and may be approved as a shoreline conditional use for other
 - 7 restoration projects.
- 8 2. The physical alignment and ecological functions and processes of streams, lakes, or marine
- 9 shorelines shall be maintained, except to improve hydraulic function, water quality, fish or
- 10 wildlife habitat, or fish passage.
- 11 3. To protect public safety and compatibility with surrounding uses, dredge or disposal operations
- 12 may be conditioned to limit periods and hours of operation and type of machinery, and may
- 13 require provision of landscaped buffers and/or fencing to address noise and visual impacts.
- 14 4. Regular maintenance of an approved barge landing site shall not be considered dredging.
- 15 B. Additional Standards for Dredge Material Disposal.
- 16 1. Any dredge material disposal shall be used as part of a program to restore or enhance shoreline
- 17 ecological functions and processes, unless found to be infeasible.
- 18 2. Dredge material disposal on uplands within shoreline jurisdiction is permitted only under the
- 19 following conditions:
 - 20 a. Shoreline ecological functions and processes will be preserved, including protection of
 - 21 surface and ground water.
 - 22 b. Erosion, sedimentation, floodwaters, or runoff will not increase adverse impacts to
 - 23 shoreline ecological functions and processes or property.
 - 24 c. Sites will be adequately screened from view of local residents or passersby on public rights-
 - 25 of-way.
- 26 3. Disposal of dredge material on shorelands or wetlands within a river's channel migration zone
- 27 shall be discouraged. In the limited instances where it is allowed for restoration or enhancement
- 28 of shoreline ecological functions and processes, such disposal shall require a shoreline
- 29 conditional use permit.
- 30 4. Dredge material disposal is prohibited below the ordinary high water mark; except that:
 - 31 a. Dredge material may be used in approved projects for the restoration or enhancement of
 - 32 shoreline ecological functions and processes, such as beach nourishment.
 - 33 b. Dredge material disposal at an open water disposal site approved through the auspices of
 - 34 the Dredged Material Management Program (RCW 79.105.500) is allowed and shall not
 - 35 require a shoreline permit.
- 36 C. Supplemental Application Requirements.
- 37 1. In addition to the minimum application requirements specified in WCC Title 22 (Land Use and
- 38 Development), applications for dredging and material disposal use or development shall include
- 39 all information necessary to conduct a thorough evaluation of the proposed activity, including
- 40 but not limited to the following::
 - 41 a. A description of the purpose of the proposed dredging and an analysis of compliance with
 - 42 the policies and regulations of this program and WCC Title 20 (Zoning).

- 51

- b. Dredging for a mutually designated reach of river with a County and Ecology approved sediment management plan is permitted subject to the use and development regulations of the abutting upland shoreline environment designation.
- c. Maintenance dredging pursuant to WAC 173-27-140 is permitted, provided the original constructed bottom contours have been established and documented in a prior shoreline permit or authorization.

23.40.090 Fill and Excavation.

A. General.

1. Fill and excavation shall be avoided to the extent feasible, and shall be allowed only along with approved shoreline use and development activities that are consistent with this program. Where necessary, fill in shoreline jurisdiction shall be located, designed, and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration.
2. Excavation waterward of the OHWM or within wetlands shall be considered dredging or mining for purposes of this program.
3. Fill materials shall only be clean sand, gravel, soil, rock, or similar material. Use of polluted dredge spoils or other solid or dangerous wastes is prohibited.
4. Fill waterward of the ordinary high water mark shall only be permitted through a shoreline conditional use permit in limited instances for the following purposes, with due consideration given to specific site conditions, and only along with approved shoreline use and development activities:
 - a. Water-dependent uses where other upland alternatives or structural solutions, including pile or pier supports, are infeasible.
 - b. Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline where alternatives to fill are infeasible.
 - c. Ecological restoration, mitigation, or enhancement such as beach nourishment, habitat creation, or bank restoration when consistent with an approved restoration plan.
 - d. Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan.
 - e. Public access.
5. Fill shall not be used to create land to serve residential development.
6. Fill or excavation shall not be located where shore stabilization will be necessary to protect materials placed or removed. Disturbed areas shall be immediately stabilized and revegetated, as applicable.
7. Fill, beach nourishment, and excavation shall be designed to blend physically and visually with existing topography whenever possible, so as not to interfere with long-term appropriate use including lawful access and enjoyment of scenery.
8. Fill shall be designed to avoid water quality impacts in accordance with local, state and federal regulations. A temporary erosion and sediment control (TESC) plan shall be required for all proposed fill and excavation activities.

23.40.100 Flood Hazard Reduction and Instream Structures.**A. General.**

1. **Applicability.** This section applies to actions taken to reduce flood damage or hazard and to uses, development, and shoreline modifications that may increase flood hazards. Flood hazard reduction measures may consist of nonstructural measures, such as setbacks, land use controls, wetland restoration, dike removal, use relocation, biotechnical measures, and stormwater management programs, and of structural measures, such as dikes, levees, revetments, floodwalls, channel realignment, and elevation of structures consistent with the National Flood Insurance Program. Additional relevant critical area provisions are in WAC 173-26-221(2).
2. Development in floodplains should not significantly or cumulatively increase flood hazard or be inconsistent with a comprehensive flood hazard management plan adopted pursuant to chapter [86.12](#) RCW, provided the plan has been adopted after 1994 and approved by the Department of Ecology.
3. New development or new uses in shoreline jurisdiction should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway.
4. The following uses and activities may be appropriate and/or necessary within the channel migration zone or floodway:
 - a. Actions that protect or restore the ecosystem-wide processes or ecological functions.
 - b. Forest practices in compliance with the Washington State Forest Practices Act and its implementing rules.
 - c. Existing and ongoing agricultural practices, provided that no new restrictions to channel movement occur.
 - d. Mining when conducted in a manner consistent with the environment designation and with the provisions of Chapter 23.40.140 (Mining).
 - e. Bridges, utility lines, flood Hazard Reduction works, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate cost. Where such structures are allowed, mitigation shall address impacted functions and processes in the affected section of watershed or drift cell.
 - f. Repair and maintenance of an existing legal use, provided that such actions do not cause significant ecological impacts or increase flood hazards to other uses.
 - g. Development with a primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.
 - h. Modifications or additions to an existing nonagricultural legal use, provided that channel migration is not further limited and that the new development includes appropriate protection of ecological functions.
 - i. Measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measure does not interfere with fluvial hydrological and geomorphological processes normally acting in natural conditions, and that the measure includes appropriate mitigation of impacts to ecological functions associated with the river or stream.

5. Structural flood hazard reduction works shall be permitted only when it is demonstrated by engineering and scientific evaluations that:
 - a. They are necessary to protect health/safety and/or existing development;
 - b. Nonstructural flood hazard reduction measures are infeasible; and
 - c. Measures are consistent with an adopted comprehensive flood hazard management plan that evaluates cumulative impacts to the watershed system.
 6. Place new structural flood hazard reduction measures landward of the associated wetlands and designated vegetation conservation areas, except for actions that increase ecological functions, such as wetland restoration, or as noted below. Provided that such flood hazard reduction projects be authorized if it is determined that no other alternative to reduce flood hazard to existing development is feasible. The need for, and analysis of feasible alternatives to, structural improvements shall be documented through an analysis performed by a qualified professional.
 7. Flood hazard reduction works are prohibited on estuarine shores, on point and channel bars, and in salmon and trout spawning areas, except for the purpose of fish or wildlife habitat enhancement or restoration.
 8. Revetments shall only be permitted for public projects, and shall not be placed waterward of the OHWM.
 9. Weirs and current deflectors are permitted only when necessary to protect public bridges, roads, and levees.
 10. Channelization projects that damage fish and wildlife resources, degrade recreation and aesthetic resources, or result in high flood stages and velocities shall not be permitted when feasible alternatives are available.
 11. Flood hazard reduction works and instream structures shall be constructed and maintained in a manner that does not degrade the quality of affected waters. The County may require reasonable conditions such as setbacks, buffers, or storage basins to achieve this objective.
 12. Flood hazard reduction works shall provide access to public shorelines whenever possible, unless it is demonstrated that public access would cause unavoidable public health and safety hazards, security problems, unmitigatable ecological impacts, unavoidable conflicts with proposed uses, or unreasonable cost. At a minimum, flood hazard reduction works should not decrease public access or use potential of shorelines.
- B. Site Design and Operation.
1. The County shall require professionally engineered design of any proposed flood hazard reduction works or instream structure.
 2. The design of all dams and the suitability of the proposed site for dam construction shall be certified by a professional engineer licensed in the state of Washington. The professional design shall include a maintenance schedule.
 3. For all dams that are not regulated by either the Federal Energy Regulatory Commission licensing procedures or the State Department of Ecology reservoir permit requirements, a maintenance agreement and construction bond for 150% of the cost of the structure shall be filed with the director of the Public Works Department prior to construction. The maintenance agreement shall specify who is responsible for maintenance, shall incorporate the maintenance schedule specified by the design engineer, shall require annual inspections by a civil engineer

1 licensed in the state of Washington and shall stipulate abandonment procedures which shall
2 include, where appropriate, provisions for site restoration.

- 3 4. Natural instream features such as snags, uprooted trees, or stumps should be left in place unless
4 it can be demonstrated that they are actually causing bank erosion or higher flood stages.
- 5 5. Flood hazard reduction works and instream structures shall allow for normal groundwater
6 movement and surface runoff.
- 7 6. Flood hazard reduction works and instream structures shall preserve valuable recreation
8 resources and aesthetic values such as point and channel bars, islands, and braided banks.
- 9 7. Structural flood hazard reduction works shall be placed landward of associated wetlands, and
10 designated habitat conservation areas, except for works that improve ecological functions, such
11 as wetland restoration.
- 12 8. Where flood hazard reduction works are necessary, they shall be set back at convex (inside)
13 bends to allow streams to maintain point bars and associated aquatic habitat through normal
14 accretion. Levees that have already cut off point bars should be relocated where feasible to
15 lower flood stages and current velocities.
- 16 9. Where levees are necessary to protect floodway fringe areas, they shall be located and designed
17 to protect shoreline ecological functions and processes. Such works should be located near the
18 tangent to outside meander bends so that the stream can maintain normal meander
19 progression and use most of its natural flood water storage capacity.
- 20 10. No motor vehicles, appliances, other similar structures or parts thereof; nor structure
21 demolition debris; nor any other solid waste shall be used for flood hazard reduction works.
- 22 11. Cut-and-fill slopes and back-filled areas shall be stabilized with brush matting and buffer strips
23 and revegetated with native grasses, shrubs, or trees to prevent loss of shoreline ecological
24 functions and processes.

25 **23.40.110 Forest Practices.**

26 A. General.

- 27 1. All forest practices undertaken on shorelines shall comply with the applicable policies and
28 provisions of the Forest Practices Act, Chapter 76.09 RCW as amended, and any regulations
29 adopted pursuant thereto (WAC Title 222), as administered by the Department of Natural
30 Resources.
- 31 2. Unless otherwise stated, the vegetation management regulations of this program do not apply
32 to commercial forest practices as defined by this program when such activities are covered
33 under the Washington State Forest Practices Act (Chapter 76.09 RCW), except where such
34 activities are associated with a conversion to other uses or other forest practice activities over
35 which local governments have authority. For the purposes of this program, preparatory work
36 associated with the conversion of land to non-forestry uses and/or developments shall not be
37 considered a forest practice and shall be reviewed in accordance with the provisions for the
38 proposed non-forestry use, the general provisions of this program, and WCC
39 Chapter 16.16 (Critical Areas), and shall be limited to the minimum necessary to accommodate
40 an approved use.

3. A forest practice that only involves timber cutting is not a development under the Act and does not require a shoreline substantial development permit or a shoreline exemption. A forest practice that includes activities other than timber cutting may be a development under the act and may require a substantial development permit, as required by WAC 222-50-020.
4. Any conversion of land to a use not compatible with forestry must:
 - a. Comply with the applicable policies and regulations of this program;
 - b. Limit the conversion to the minimum necessary, while complying with the purpose of the shoreline environment designation, general policies and regulations, and specific shoreline use and modification policies and regulations on the subject property;
 - c. Ensure no net loss of shoreline ecological functions or significant adverse impacts to other shoreline uses, resources, and values provided for in RCW 90.58.020, such as navigation, recreation, and public access.
5. Per RCW 90.58.150, with respect to timber situated within shoreline jurisdiction along shorelines of statewide significance, only selective commercial timber cutting may be permitted so that no more than 30 percent of the merchantable timber may be harvested in any 10-year period; provided that:
 - a. Other timber harvesting methods may be permitted in those limited instances where topography, soil conditions, or silviculture practices necessary for regeneration render selective logging ecologically detrimental; and
 - b. Timber removal that is to the minimum necessary for the conversion of land for other uses may be permitted.

23.40.120 Industrial and Port Development.

A. General.

1. Prior to approval of an application, the Director shall review a proposal for design, layout, and operation of the proposed use and shall determine whether the use is water-dependent, water-related, water-enjoyment or non-water-oriented industrial and port use.
2. All harbor areas, established pursuant to Article XV of the Washington State Constitution, that have reasonable commercial navigational accessibility and necessary support facilities such as transportation shall be reserved for water-dependent and water-related uses that are associated with commercial navigation unless a specific finding is made in the permit review process that adequate shoreline is reserved for navigation use elsewhere in the affected harbor area.
3. Industrial and port uses are allowed subject to specific criteria below:
 - a. Water-dependent industrial and port uses shall be given first preference over non-waterdependent industrial and port uses.
 - b. Water-related industrial and port uses shall be given second preference over non-water dependent industrial and port uses.
 - c. Water-related industrial and port uses may not be approved if they displace existing water-dependent uses.
 - d. Water-enjoyment industrial and port uses may be not be approved if they displace existing water-dependent or water-related uses or if they occupy space designated for water-

- 1 dependent or water-related use identified in a substantial development permit or other
2 approval.
- 3 e. All non-water-oriented industrial and port uses are prohibited in the shoreline, except for
4 those identified above; provided that the use provides significant public benefit with respect
5 to the objectives of the Act and the following:
- 6 i. The proposal is part of a mixed use project that includes a water-oriented use; or
7 ii. The proposal is on a site where navigability is severely limited; or
8 iii. The proposal does not occupy space designated for water-dependent or water-related
9 use identified in a project permit approval.
- 10 f. Water-oriented industrial and port uses shall provide public access in accordance with the
11 provisions of WCC 23.30.060 (Public Access).
- 12 g. Non-water-oriented industrial and port uses shall provide public access and/or restoration
13 as follows:
- 14 i. Public access shall be in the form of unrestricted open space.
15 ii. If no water-oriented uses are located on or adjacent to the water as part of a mixed use
16 development, 80% of the shoreline and associated buffers shall be restored to provide
17 shoreline ecological functions that approximate the functions provided by the site in
18 natural conditions.
19 iii. The requirements i of this section may be modified when:
20 (A) The site is designated as a public access area by a shoreline public access plan, in
21 which case public access consistent with that plan element shall be provided; or
22 (B) Specific findings are made demonstrating that the size of the parcel and the
23 presence of adjacent uses preclude restoration of shoreline ecological functions.
24 Where on-site restoration is infeasible, equivalent off-site restoration shall be
25 provided.
- 26 iv. Buffers shall be designed as appropriate to protect shoreline resources based on a site-
27 specific assessment.
- 28 v. If water-oriented uses are located on or adjacent to the water, the remaining
29 undeveloped water frontage that is not devoted to water-dependent use shall be
30 preserved if in a substantially unaltered condition. If the site has been previously altered
31 by past development, the balance of the site may be reserved for future water-related
32 use.
- 33 vi. The requirements of this section shall not apply to those industrial or port uses located
34 on a site physically separated from the shoreline where access to the land/water
35 interface is precluded; provided, that such conditions were lawfully established prior to
36 the effective date of this program.
- 37 h. Interim use of facilities approved and/or permitted for water-dependent use for non-water-
38 dependent uses may be approved by a shoreline conditional use permit under the following
39 conditions:
- 40 i. A specific occupancy plan has been approved that allows interim uses for a specific
41 period while the market for water-dependent uses is being developed, and the
42 proposed interim use is consistent with the occupancy plan.

- ii. The period of interim lease or commitment of the space shall not exceed five years. At the end of five years, a new application for interim use shall be submitted.
 - iii. A good faith effort to obtain water-dependent uses has been made and suitable tenants were not found. The period of the search for water-dependent uses, the notice of availability, listing or advertising employed, and any inquiries received shall be documented.
 - iv. No permanent improvements will be made to the space that requires more than five years of occupancy to repay the investment. No permanent improvements will be made that will reduce the suitability of the space for water-dependent use.
 4. Required setback areas shall not be used for storage of industrial equipment or materials, or waste disposal, but may be used for outdoor recreation. Portions of such setbacks may be used for motor vehicle parking if design of such facilities is consistent with this program and critical area regulations in WCC Chapter 16.16.
 5. Disposal or storage of solid or other industrial wastes is not permitted on shorelines; except that liquid waste treatment facilities may be permitted as a shoreline conditional use if it is demonstrated that a shoreline location is required or where it is demonstrated that an alternative site outside of the shoreline is not feasible; and further excepted, that land application of waters used in the processing of fruits and vegetables within the shoreline is permitted as a shoreline conditional use.
 6. Marine rails shall be located the minimum distance necessary above existing grade to minimize impact on littoral drift and navigation along the shoreline.
- B. Additional Standards for Log Rafts and Storage.
 1. Storage of logs is prohibited in waterbodies, except where an upland location is not feasible; provided, that no log storage may be allowed in marine or estuarine waters or tidelands.
 2. Log rafting shall be allowed in cases where overland transportation of logs would produce unacceptable transportation impacts, or for transportation of logs from islands or from other locations in Puget Sound. Areas for assembly and disassembly of log rafts shall meet all standards below for log storage.
 3. Offshore log storage shall only be allowed on a temporary basis, and should be located where natural tidal or current flushing and water circulation are adequate to disperse polluting wastes.
 4. Log rafting or storage operations are required to implement the following, whenever applicable:
 - a. Logs shall not be dumped, stored, or rafted where grounding will occur.
 - b. Easy let-down devices shall be provided for placing logs in water.
 - c. Bark and wood debris controls and disposal shall be implemented at log dumps, raft building areas, and mill-side handling zones. Accumulations of bark and other debris on the land and docks around dump sites shall be fully contained and kept out of the water.
 - d. Where water depths will permit the floating of bundled logs, they shall be secured in bundles on land before being placed in the water. Bundles shall not be broken again except on land or at mill sites.
 5. Impervious pavement is required for log yards where the wet season water table is less than four feet below surface level in order to reduce waste buildup and impacts on ground and surface water.

6. Stormwater management facilities shall be provided to protect the quality of affected waters.
 7. Log storage facilities shall be located upland and properly sited to avoid fish and wildlife habitat conservation areas.
 8. Log storage facilities must be sited to avoid and minimize the need for dredging in order to accommodate barging activities at the site.
 9. Log storage facilities shall be located in existing developed areas to the greatest extent feasible. If a log storage facility is proposed along an undeveloped shoreline, an alternatives analysis shall be required.
 10. A berm must be located around the outer edge of the upland sort surface using rocks or other suitable materials to prevent loss of wood debris into the water.
 11. Log booming shall only be allowed offshore in sub-tidal waters in order to maintain unimpeded nearshore migration corridors for juvenile salmonids and to minimize shading impacts from log rafts. Log booming activities include the placement in or removal of logs and log bundles from the water, and the assembly and disassembly of rafts for water-borne transportation.
 12. A debris management plan describing the removal and disposal of wood waste must be developed and submitted to the County. Debris monitoring reports shall be provided, when stipulated.
 13. Existing in-water log storage and log booming facilities in critical habitats used by threatened or endangered species classified under ESA shall be reevaluated if use is discontinued for two years or more, or if substantial repair or reconstruction is required. The evaluation shall include an alternatives analysis in order to determine if logs can be stored upland and out of the water, or if the site should be used for other purposes that would have lesser impacts on ESA-listed species. The alternatives analysis shall include evaluation of the potential for moving all, or portions of, log storage and booming to uplands.
- C. Regulations for Specific Shoreline Environment Designations.
1. In the Rural shoreline environment, permitted water-oriented port development and industrial facilities are limited to those used for processing, manufacturing, and storage of finished or semi-finished goods.
 2. In the Resource shoreline environment, water-oriented facilities for the processing, manufacturing, and storage of natural resource products are permitted. Other water-oriented industrial or port use and development may be permitted as a shoreline conditional use. Non-water-oriented oriented facilities for the processing, manufacturing, and storage of natural resource products may be permitted as a shoreline conditional use subject to the criteria for such uses in this section.
 3. In the Aquatic shoreline environment, water-dependent industrial or port use and development are permitted, subject to the use and development regulations of the abutting upland shoreline environment designation.
 4. In the Cherry Point Management Area, WCC 23.40.125 shall also apply. Where this section differs from WCC 23.40.125, the regulation(s) of that section shall govern.

23.40.125 Cherry Point Management Area.

- A. All uses and modifications within the Cherry Point Management Area shall be subject to the regulations found in this section (as well as those of Title 20, Zoning), and WCC 23.40.120 (Industrial and Port Development). Where this section differs from WCC 23.40.120, the regulation(s) of this section shall govern.
- B. Allowed Uses.
1. Water-dependent industrial and port uses are allowed within the Cherry Point management area only upon finding that:
 - a. Policies for optimum implementation of the statewide interest have been achieved through protection of shoreline ecological functions and processes;
 - b. The long-term statewide benefits of the development have been considered with the potential adverse impacts on ecological functions; and
 - c. Proposed mitigation measures to achieve no net loss of ecological functions and processes are incorporated in the proposal.
 2. Fuel Uses – Shoreline Permits and Requirements:
 - a. Existing legal fossil or renewable fuel refinery operations or existing legal fossil or renewable fuel transshipment facilities [as of XXX effective date] are considered permitted shoreline substantial developments.
 - b. Expansions of existing legal fossil-fuel refineries or expansions of existing legal fossil-fuel transshipment facilities shall require a shoreline conditional use permit.
 - c. New or expansion of existing legal renewable fuel refinery or renewable fuel transshipment facility shall require a shoreline conditional use permit.
 3. Water-related and water-enjoyment uses are allowed only as part of public access and public recreation development, subject to the criteria in subsection (B)(1) of this section.
 4. Accessory uses, which do not require a shoreline location in order to carry out their support functions, shall be sited away from the land/water interface and landward of the principal use. Accessory uses shall observe critical area buffers in WCC Chapter 16.16. Accessory uses include, but are not limited to, parking, warehousing, open air storage, waste storage and treatment, stormwater control facilities, utility and land transport.
 5. Road, railway and utility facilities serving approved waterfront facilities related to water-dependent uses that are located and designed to minimize shoreline alteration are permitted.
 6. Waste water disposal/treatment facilities for storage or disposal of industrial or domestic waste water are prohibited, except that elements such as conveyances and outfalls shall be allowed if alternate inland sites have been demonstrated to be infeasible. Waste water conveyance systems for ships at berth shall be permitted.
 7. Liquid manure storage facilities and spreading and animal feeding operations and confined animal feeding operations shall be prohibited.
- C. Public Access.
1. Public access shall be provided in accordance with WCC 23.30.070 (Public Access) unless it is demonstrated that public access poses significant interference with facility operations or hazards to life or property.

2. If public access meeting the criteria above is demonstrated to be infeasible or inappropriate, alternative access may be provided in accordance with WCC 23.30.070 at a location not directly adjacent to the water such as a viewpoint, observation tower, or other areas serving as a means to view public waters. Such facilities may include interpretive centers and displays that explain maritime history and industry; provided, that visual access to the water is also provided.
 3. As an alternative to on-site public access facilities, public access may be provided in accordance with a public access plan adopted as an element of the Whatcom County Parks and Recreation Open Space Plan.
- D. **Critical Areas.** In addition to meeting the provisions of WCC 23.30.010 (Ecological Protection), development and alteration shall not be located or expanded within critical areas designated pursuant to WCC Chapter 16.16 except where the site is approved for water-dependent use, and the following are met:
1. Mitigation to achieve no net loss of ecological functions and processes shall be conducted in accordance with WCC 23.30.010 (Ecological Protection).
 2. Development and alteration shall not be allowed in wetlands in the backshore area. Upland development shall demonstrate that changes in local hydrology will not decrease the viability of the wetland environment nor degrade the existing water quality within the wetland.
 3. The minimum required setback from the OHWM for all industrial and port facilities, including development components, which do not require a water's edge or water surface location shall be 150 feet; provided, that bluffs and banks greater than 10 feet in height and sloping greater than 30 percent and wetland shorelines shall have such setbacks measured from the crest of the bank or the edge of the wetland in addition to the OHWM.
 4. Development and alteration other than recreation development for public and quasi-public shoreline access is prohibited on the accretion shoreforms identified on the map in Appendix C of this title; provided, that lawfully established uses or developments may be maintained subject to the provisions of WCC Chapter 23.50 (Nonconforming Uses, Structures, and Lots).
- E. **Location and Design.**
1. Piers.
 - a. Due to the environmental sensitivity of the area, Whatcom County shall limit the number of piers to those in operation as of January 1, 1998.
 - b. Piers shall be designed to accommodate only the necessary and intrinsic activities associated with the movement of material and cargo from land to water and water to land. The length of piers shall not extend beyond that which is necessary to accommodate the draft of the vessels intending to use the facility.
 - c. Piers shall be designed to minimize interference in the intertidal zone and adverse impacts to fish and wildlife habitats.
 - d. Piers shall be designed to minimize impacts on steep shoreline bluffs.
 - e. All pilings in contact with water shall be constructed of materials such as concrete, steel, or other materials that will not adversely affect water quality or aquatic plants or animals. Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave splash, rain, or runoff. Wood treated with creosote, copper chromium arsenic or

- 1 pentachlorophenol is prohibited; provided, that replacement of existing wood pilings with
2 chemically treated wood is allowed for maintenance purposes where use of a different
3 material such as steel or concrete would result in unreasonable or unsafe structural
4 complications; further provided, that where such replacement exceeds 20 percent of the
5 existing pilings over a 10-year period, such pilings shall conform to the standard
6 construction provisions of this section.
- 7 f. All piers on piling structures shall have a minimum vertical clearance of one foot above
8 extreme high water.
- 9 g. Bulk storage of gasoline, oil and other petroleum products for any use or purpose is not
10 allowed on piers, except for temporary storage under emergency situations, including oil
11 spill cleanup. Bulk storage means non-portable storage in fixed tanks. Secondary
12 containment shall be provided for portable containers.
- 13 h. All piers shall be located and designed to avoid impediments to navigation and to avoid
14 depriving other properties of reasonable access to navigable waters. All piers shall be
15 marked with navigational aids and approved for compliance with U.S. Coast Guard
16 regulations.
- 17 2. Dredging.
- 18 a. Dredging to accommodate water access to, or construction of, new development is
19 prohibited. New development shall be located and designed to avoid the need for dredging.
20 Dredging for existing development shall be the minimum necessary and shall minimize
21 interference in the intertidal zone and impacts to fish and wildlife habitats.
- 22 b. 23.90.120Dredging is prohibited in the accretion shoreform and backshore wetland areas.
- 23 3. Fill is prohibited, except for the minimum necessary to access piers or other structures that
24 provide access to the water. Pier design should accommodate the connection between the pier
25 and uplands by employing a pile-supported structure to the point of intersection with stable
26 upland soils. Any fill or excavation waterward of the OHWM requires a shoreline conditional use
27 permit.
- 28 4. Excavation/Stabilization.
- 29 a. Excavation/stabilization of bluffs is prohibited, except for the minimum necessary to access
30 piers or other structures that provide access to the water; provided, that active feeder bluffs
31 shall not be altered if alteration will adversely affect the existing littoral drift process.
32 Development shall avoid, rather than modify, feeder bluffs.
- 33 b. Excavation/stabilization is prohibited on accretion shoreforms and in wetlands in the
34 backshore area.
- 35 5. Shoreline stabilization shall be regulated in accordance with WCC 23.40.190 and be consistent
36 with the conservancy and aquatic shoreline environment regulations of that section.
- 37 F. Adjacent Use.
- 38 1. Port or industrial development adjacent to properties which are zoned for nonindustrial
39 purposes shall provide setbacks of adequate width, to attenuate proximity impacts such as
40 noise, light and glare; and may address scale and aesthetic impacts. Fencing or landscape areas
41 may be required to provide a visual screen.

2. Exterior lighting shall be designed and operated to avoid illuminating nearby properties zoned for non-port or non-industrial purposes so as to not unreasonably infringe on the use and enjoyment of such property, and to prevent hazards for public traffic. Methods of controlling illumination of nearby properties include, but are not limited to, limits on height of structure, limits on light levels of fixtures, light shields and screening.
3. The minimum setback from side property lines which intersect the OHWM for industrial and port development shall be 60 feet; provided, that:
 - i. The side yard setback shall not apply to utility or security structures such as poles, meters, fences, guard houses, power vaults or transformers; and
 - ii. The side yard setbacks for parcels adjoining the NW and SE boundaries of the Cherry Point management area shall be administered in accordance with WCC 20.68.550 (Buffer Area).
4. Required setbacks shall not be used for storage of industrial equipment or materials, or for waste disposal, but may be used for public access or outdoor recreation.

G. Oil and Hazardous Materials.

1. Release of oil or hazardous materials on shorelines is prohibited.
2. A management plan shall be developed for permitted or conditionally permitted development for the safe handling of cargo, fuels, bilge water, and toxic or hazardous materials to prevent them from entering aquatic waters, surface or ground water. Specific provisions shall address prompt and effective clean-up of spills that may occur. Management plans shall be coordinated with state or federal spill response plans. Where a spill management/response plan has been approved by the state, said plan may be used to satisfy the requirements of this section.
3. Necessary spill containment facilities associated with existing development may be permitted within shoreline jurisdiction where there are no feasible alternatives.

23.40.130 Land Division

A. General.

1. Land divisions, including boundary line adjustments, shall not be allowed in a configuration that will require significant vegetation removal or shoreline modification or result in a net loss of shoreline ecological functions and processes at the time of development of the subdivision and/or use of each new parcel.
2. All land divisions shall provide for vegetation conservation to mitigate cumulative impacts of intensification of use within or adjacent to the shoreline that shall include compliance with vegetation conservation requirements of WCC 23.30.040, together with replanting and control of invasive species within setbacks and open space to assure establishment and continuation of a vegetation community characteristic of a native climax community.
3. Land division may not be approved in cases when it can be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within a channel migration zone or floodway during the life of the development or use.
4. Land division shall assure that the lots created will not require shoreline stabilization in order for reasonable development to occur. Land division that would require shoreline stabilization is prohibited.
5. Land divisions of four or fewer lots adjacent to the shoreline shall provide common access to the shoreline for all lots, consistent with WCC 23.30.070 (Public Access) and this section.

6. All land divisions shall record a prohibition on private docks on the face of the plat. An area for shared moorage may be approved if it meets all requirements for shared moorage in WCC 23.40.150. (Moorage), including demonstration that marinas and launch ramps are not sufficient to meet the moorage needs of the subdivision.
7. Subdividing tidelands for sale or lease in connection with individual building lots is prohibited.
8. Substandard shoreline lots unsuitable for development of a primary permitted use under the WCC Title 20 (Zoning) and this program shall not be subdivided.
9. Land divisions of more than four lots and shall incorporate public access to shorelines of the state as provided for in WCC 23.30.070 unless the site is designated in a shoreline public access plan for a greater component of public access or public access is demonstrated to be infeasible or inappropriate. The amount and configuration of public access shall depend on the proposed use(s) and the following criteria:
 - a. Subdivisions that have views of water areas shall provide a public pedestrian viewing area.
 - b. Subdivisions adjacent to waters of the state shall provide access to a point abutting the water that will provide visual access, and shall provide physical access to public waterways, public marine waters, and public tidelands that are physically accessible at low tide or low water.
 - c. Subdivisions subject to requirements for dedication of land to provide open space or mitigate recreation demands of the development shall dedicate such land on or adjacent to public waterways or marine shorelines, as applicable, unless the ecological sensitivity of such land precludes public access. Portions of the area dedicated may be fenced or otherwise restricted to limit public access to ecologically sensitive areas.
10. Clustering and other low-impact development techniques may be required where appropriate to minimize physical and visual impacts on shorelines.

23.40.140 Mining.**A. General.**

1. The removal of gravel for flood management purposes shall be regulated in accordance with the regulations of WCC 23.40.100 (Flood Hazard Reduction and Instream Structures) as well as this section.
2. Mining and associated activities shall be designed and conducted to result in no net loss of shoreline ecological functions and processes in accordance with WCC 23.30.010 (Ecological Protection). Application of this standard shall include avoidance and mitigation of adverse impacts during the course of mining and reclamation. The determination of whether there will be no net loss of ecological function shall be based on an evaluation of the reclamation plan required for the site and shall consider impacts on ecological functions during operation. Preference shall be given to mining proposals that result in the creation, restoration, or enhancement of habitat for priority species.
3. Permit requirements for mining should be coordinated with the requirements of RCW Chapters 78.44 (Surface Mining) and 77.55 (Construction Projects in State Waters).

- 1 4. The proposed subsequent use of mined property shall be consistent with the provisions of the
- 2 environment designation in which the property is located. Reclamation of disturbed shoreline
- 3 areas shall provide appropriate ecological functions consistent with the setting.
- 4 5. Pursuant to RCW 90.48.615, motorized or gravity siphon aquatic mining or discharge of effluent
- 5 from such activity to any waters of the state that has been designated under the endangered
- 6 species act as critical habitat, or would impact critical habitat for salmon, steelhead, or bull trout
- 7 is prohibited. This section does not apply to:
- 8 a. Aquatic mining using nonmotorized methods, such as gold panning, if the nonmotorized
- 9 method does not involve use of a gravity siphon suction dredge;
- 10 b. Mining operations where no part of the operation or discharge of effluent from the
- 11 operation is to waters of the state;
- 12 c. Surface mining operations regulated by the State Department of Natural Resources under
- 13 Title 78 RCW;
- 14 d. Metals mining and milling operations as defined in chapter 78.56 RCW; or
- 15 e. Activities related to an industrial facility, dredging related to navigability, or activities subject
- 16 to a clean water act section 404 individual permit.

17 B. Additional Standards for Rivers and Streams.

- 18 1. Mining waterward of the ordinary high-water mark of a river shall not be permitted unless:
- 19 a. Removal of specified quantities of sand and gravel or other materials at specific locations
- 20 will not adversely affect the natural processes of gravel transportation for the river system
- 21 as a whole; and
- 22 b. The mining and any associated permitted activities will not have significant adverse impacts
- 23 to habitat for priority species nor cause a net loss of ecological functions of the shoreline.
- 24 c. The determinations required by this section shall be made consistent with RCW
- 25 90.58.100(1) and WAC 173-26-201(2)(a). Such evaluation of impacts should be appropriately
- 26 integrated with relevant environmental review requirements of SEPA (chapter 43.21C RCW)
- 27 and the SEPA rules (chapter 197-11 WAC).
- 28 d. In considering renewal, extension, or reauthorization of gravel bar and other in-channel
- 29 mining operations in locations where they have previously been conducted, the County shall
- 30 require compliance with this section to the extent that no such review has previously been
- 31 conducted. Where there has been prior review, the County shall review previous
- 32 determinations comparable to the requirements of this section to assure compliance with
- 33 this section under current site conditions.
- 34 e. The provisions of this section do not apply to dredging of authorized navigation channels
- 35 when conducted in accordance with WCC 23.40.080 (Dredging and Dredge Material
- 36 Disposal).
- 37 2. Mining within any channel migration zone (CMZ) shall require a shoreline conditional use.
- 38 3. Scalping of accretional point bars may be permitted as a shoreline conditional use for flood
- 39 hazard reduction purposes or commercial purposes under the following conditions:
- 40 a. Removal of specified quantities of sand and gravel or other materials at specific locations
- 41 will not adversely affect the natural processes of gravel transportation for the river system
- 42 as a whole. Specific studies accompanying the application shall demonstrate that no adverse

- 1 flood, erosion, or other environmental impacts occur either upstream or downstream of
2 extraction sites. Mining extraction amounts, rates, timing, and locations shall be based on a
3 scientifically determined sediment budget adjusted periodically according to data provided
4 by a regular monitoring plan.
- 5 b. Aggregate washing and ponding of waste water are prohibited in floodways.
- 6 c. Storage within the FEMA floodway is prohibited in the shoreline during the flood season
7 (November 1st through March 1st); provided, that temporary stockpiling is permitted during
8 working hours if all such materials are removed from the floodway at the end of each day's
9 operation.
- 10 d. All applicable permits and approvals, including, but not limited to, hydraulic project approval
11 (HPA) from the Department of Fish and Wildlife and a Whatcom County flood permit, shall
12 be obtained and all applicable provisions attached thereto shall be adhered to.
- 13 C. Regulations for Specific Shoreline Environment Designations
- 14 1. In the Aquatic shoreline environment mining is prohibited, except that accretional bar scalping
15 in streams may be permitted as a shoreline conditional use; provided, that upon approval by the
16 County and Ecology of a sediment management plan component for a mutually designated
17 reach of river, including incorporating the findings of a programmatic environmental impact
18 statement, the shoreline conditional use requirement will no longer be in effect unless mutually
19 agreed to in said management plan.
- 20 **23.40.150 Moorage Structures.**
- 21 A. General.
- 22 1. This section applies to all moorage structures. Marinas and boat launches are regulated
23 pursuant to WCC 23.40.060 (Marinas and Launch Ramps).
- 24 2. No pier or dock shall be used for a residence.
- 25 3. Public access facilities shall be regulated pursuant to WCC 23.30.060 (Public Access).
- 26 4. Commercial moorage shall be permitted only for water-dependent uses, and only if the
27 applicant/proponent demonstrates that existing facilities in the vicinity, including marinas and
28 shared moorage, are not adequate or feasible for the proposed water-dependent use.
- 29 5. Commercial covered moorage may be permitted only where vessel construction or repair work
30 is to be the primary activity and covered work areas are demonstrated to be the minimum
31 necessary over water, including demonstration that adequate upland sites are not feasible.
- 32 6. Moorage structures shall not be permitted within the following shoreline habitats because of
33 their scarcity, biological productivity, and sensitivity:
- 34 a. Feeder bluffs and accretion shoreforms;
- 35 b. Marshes and other wetlands;
- 36 c. Kelp and eelgrass beds; and,
- 37 d. Areas of high energy or shallow sloping bottoms (<2% gradient) in the marine environment.
- 38 7. Moorage structures shall not be permitted within the following shoreline habitats because of
39 their scarcity, biological productivity, and sensitivity unless no alternative location is feasible,
40 the project would result in a net enhancement of shoreline ecological functions, and the
41 proposal is otherwise consistent with this program:
- 42 a. Estuaries;

- 1 b. Tidal pools on rock shores;
- 2 c. Spawning and holding areas for forage fish (such as herring, surf smelt and sandlance);
- 3 d. Subsistence, commercial and recreational shellfish beds; and
- 4 e. Other critical saltwater or freshwater habitats.
- 5 8. Other than for day use, all vessels mooring on waters of the state must obtain a lease or
- 6 permission from the State Department of Natural Resources, except as allowed by applicable
- 7 state regulations.
- 8 9. No moorage shall impact the rights of navigation or public access, unless mitigated.
- 9 10. When there is not a moorage structure, marine rails are permissible, but shall be supported with
- 10 as few piles as practicable.
- 11 B. Dimensional Standards.
- 12 1. Freshwater – Moorage structures in freshwater environments may be permitted, subject to the
- 13 following:

	Design and Dimensional Standards
Maximum Area: surface coverage, including all attached float decking, platform lifts, covered moorage, ramps, ells, and fingers	<ul style="list-style-type: none"> • 480 sq. ft. for an individual use dock or pier • 700 sq. ft. for a shared moorage facility used by 2 residential property owners • 1,000 sq. ft. for a shared moorage facility used by 3 or more residential property owners • Public and commercial moorage structures shall be limited to the minimum area needed to accommodate the intended use. • These area limitations shall include platform lifts • Where a pier or dock cannot reasonably be constructed under the area limitation above to obtain a moorage depth of 5.5 feet measured below ordinary high water mark, an additional 4 sq. ft. of area may be added for each additional foot of pier or dock length needed to reach 5.5 feet of water depth at the waterward end of the pier or dock; provided, that all other area dimensions, such as maximum width and length, have been minimized.
Maximum Width	<ul style="list-style-type: none"> • For moorage structures accessory to a residential use: <ul style="list-style-type: none"> ○ 4 feet for pier or dock walkway or ramp ○ 6 feet for ells ○ 2 feet for fingers ○ 6 feet for float decking • Public and marina moorage structures shall be a maximum of 6 feet for all elements unless a need for a larger size is demonstrated
Height	<ul style="list-style-type: none"> • Minimum of 1.5 feet above ordinary high water to bottom of pier stringers, except the floating section of a dock and float decking attached to a pier
Maximum Length <ul style="list-style-type: none"> ○ Marine Rails ○ Floats ○ Overall Dock Length 	<ul style="list-style-type: none"> • 20 feet waterward from the ordinary high water mark • 20 feet per user (e.g. single user – 20 feet, 2-users – 40 feet, etc.) • Minimum necessary to obtain a moorage depth of 5.5 feet measured below ordinary high watermark at the waterward end of the dock, though in no instance shall a dock be longer than adjacent docks or 100 feet, whichever is the lesser.
Decking for piers, docks, walkways, platform lifts, ells, and fingers	<ul style="list-style-type: none"> • Floats 6 feet wide or less must have at least 30% of the deck surface covered in functional grating • Floats greater than 6 feet wide must have at least 50% of the deck surface covered in functional grating • All other dock components must have 100% of the deck surface covered in functional grating • The open area of functional grating must be at least 60%

	<ul style="list-style-type: none"> Replacement of more than 33% or 250 sq. ft., whichever is greater, of decking or replacement of decking substructure requires installation of functional grating in the replaced portion only
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2. Marine – Moorage structures in marine environments may be permitted, subject to the following; provided that port, industrial, and commercial piers and floats shall be the minimum area, length, and width necessary for the intended use:

	Design and Dimensional Standards
Maximum Area: surface coverage, including all components	<ul style="list-style-type: none"> 480 sq. ft. for an individual use dock or pier 700 sq. ft. for a shared moorage facility used by 2 residential property owners 1,000 sq. ft. for a shared moorage facility used by 3 or more residential property owners Where a pier or dock cannot reasonably be constructed under the area limitation above to obtain a moorage depth of -9.5 feet mean low low water as measured at the waterward end of the dock, an additional 4 sq. ft. of area may be added for each additional foot of pier or dock length needed to reach -9.5 feet mean low low water as measured at the waterward end of the pier or dock; provided, that all other area dimensions, such as maximum width and length, have been minimized
Maximum Width	<ul style="list-style-type: none"> For moorage structures accessory to a residential use: <ul style="list-style-type: none"> 4 feet pier or dock walkway or ramp 6 feet for ells 2 feet for fingers 8 feet for float decking Public and marina moorage structures shall be a maximum of 6 feet for all elements unless a need for a larger size is demonstrated Public and marina moorage structures shall be a maximum of 6 feet for all elements unless a need for a larger size is demonstrated
Height	<ul style="list-style-type: none"> Maximize height over the bed to improve light transmission The bottom of the pier must be at least six feet above the bed at the landward end
Maximum Length	<ul style="list-style-type: none"> Marine Rails – 20 feet Floats – 30 feet per user (e.g., single-user – 30 feet, 2-users – 60 feet, etc.) Overall Dock Length – Minimum necessary to obtain a moorage depth of -9.5 feet mean low low water as measured at the waterward end of the dock.
Decking	<ul style="list-style-type: none"> Floats must have at least 50% of the deck surface covered in functional grating. Piers, stairs, ramps, and platform lifts must have 100% of the deck surface covered in functional grating Grating openings should be oriented lengthwise in the east/west direction to the maximum extent practicable. Grating must not be covered (on the surface or underneath) with any items (e.g., kayaks, planters, sheds, lawn chairs, etc.) except utility boxes. Grating must be either multi-directional grating with a minimum of 40% open space or square grating with a minimum of 60% open space. Provide documentation to show amount of % open area. Replacement of more than 10% or 48 sq. ft. of decking or replacement of decking substructure requires installation of functional grating in the replaced portion only

C. Construction Standards for Moorage Structures.

- Piers and docks shall be the minimum size necessary to meet the needs of the proposed water-dependent use.
- Moorage structures shall be constructed of materials that will not adversely affect water quality or aquatic plants and animals over the long term. Materials used for submerged portions of a

- 1 pier or dock, decking and other components that may come in contact with water shall be
2 approved by applicable state agencies for use in water to avoid discharge of pollutants from
3 wave splash, rain or runoff. Wood treated with creosote, pentachlorophenol or other similarly
4 toxic materials is prohibited. Piers and docks in lakes providing a public water supply shall be
5 constructed of untreated materials, such as untreated wood, approved plastic composites,
6 concrete or steel.
- 7 3. Piers and docks shall use pile supports unless engineering studies demonstrate that pile
8 supports are insufficient to ensure public safety. Riprapped or bulkheaded fills may be approved
9 for public projects only and only as a shoreline conditional use and only when demonstrated
10 that no feasible alternative is available. Mitigation shall be provided to ensure no net loss of
11 shoreline ecological functions and processes.
- 12 4. Approaches to piers and docks shall use piers or other structures to span the entire upper
13 foreshore to the point of intersection with stable upland soils and shall be design to avoid
14 interference with littoral drift or wave refraction. Limited fill or excavation may be allowed
15 landward of the OHWM to match the upland with the elevation of the pier or dock.
- 16 5. Pile diameter shall be the minimum necessary and pile spacing shall be the maximum feasible to
17 minimize shading and avoid a “wall” effect that would block or baffle wave patterns, currents,
18 littoral drift, or movement of aquatic life forms, or result in structure damage from driftwood
19 impact or entrapment. Piles supporting a new pier must be spaced no closer than 20 feet apart.
- 20 6. Offshore and foreshore pile structures shall allow for continuity of hydraulic energy patterns,
21 unless specifically designed to reduce wave impact on shores.
- 22 7. Flotation for the float shall be fully enclosed and contained in a shell (e.g., polystyrene tubs not
23 shrink wrapped or sprayed coatings) that prevents breakup or loss of the flotation material into
24 the water and is not readily subject to damage by ultraviolet radiation and/or abrasion caused
25 by rubbing against piling and/or waterborne debris.
- 26 8. Flotation components shall be installed under the solid portions of the float, not under the
27 grating.
- 28 9. If the project includes the replacement of existing piling, they should be either partially cut with
29 a new piling secured directly on top, fully extracted, or cut 2 feet below the mudline. If treated
30 piling are fully extracted or cut, the holes or piles must be capped with clean, appropriate
31 material.
- 32 10. A maximum of two moorage pilings may be installed to accommodate the moorage of boats
33 exceeding the length of the floats.
- 34 11. Overhead wiring or plumbing is not permitted on moorage structures.
- 35 12. Moorage facilities shall be marked with reflectors, or otherwise identified to prevent
36 unnecessarily hazardous conditions for water surface users during the day or night. Exterior
37 finish shall be generally non-reflective.
- 38 13. Moorage facilities shall be constructed and maintained so that no part of a facility creates
39 hazardous conditions nor damages other shore property or natural features during predictable
40 flood conditions. Floats shall be securely anchored.
- 41 14. Water supply, sewage disposal and disposal of nonhazardous materials associated with activities
42 on docks and piers shall conform to applicable health standards.

15. No private or shared moorage may be constructed to within 200 feet of OHWM on the opposite shore of any lake or semi-enclosed body of water such as a bay, cove, or natural channel. This restriction shall not apply within marinas, dredged canal systems or approved marina-home developments.
16. Storage of fuel, oils, and other toxic materials is prohibited on docks and piers except portable containers when provided with secondary containment.
17. The width of landings, stairways, or steps must not exceed 4 feet for single-use and 6 feet for joint-use.
18. Additional standards for marine moorage structures:
- a. Floats may be held in place with lines anchored with a helical screw or “duckbill” embedded anchor, piles with stoppers and/or float support/stub piles. (1) For a single-user float, a maximum of 4 piles (not including stub piles) or embedded anchors may be installed. (2) For a joint-use float, a maximum of 8 piles (not including stub piles) or embedded anchors may be installed. (3) If embedded anchors need to be utilized, the anchor lines shall not rest on the substrate at any time; each must contain a mid-line float. (4) Only if the substrate prohibits use of piles or embedded anchors may a Corps-approved alternative be used. (5) If a concrete anchor or other Corps-approved alternative is needed to hold the float, calculations showing that it will hold without dragging or breaking during storm events are required. This analysis should include the size of the float and the dry weight and dimensions of the anchor.
 - b. If the float is positioned perpendicular to the ramp, a small access float may be installed to accommodate tidal movement of the ramp. The access float cannot be larger than 6 feet wide and 10 feet long.
 - c. No floats may be installed in the Upper Shore Zone (area landward of +5 MLLW).
 - d. Float Stops:
 - i. To suspend the float above the substrate at all tides, float stops should be installed on piles anchoring floats. This method is preferred over (d)(ii) and (d)(iii) because float stops are less impacting to the marine environment.
 - ii. If float stops attached to piles are not feasible (provide explanation) then up to four 10-inch diameter stub piles may be installed.
 - iii. Float “feet” attached to the float are an option if the substrate consists of coarse material as described in the column to the right
19. Additional standards for marine mooring buoys:
- a. Mooring buoys shall be placed at a distance specified by the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, and the U.S. Coast Guard to balance the goals of avoiding nearshore habitat and minimizing obstruction to navigation. Anchors and other design features shall meet Washington Department of Fish and Wildlife standards.
 - b. The location (latitude/longitude) of the anchor for the buoy must be identified on the project drawings.
 - c. Anchor lines must not rest or drag on the substrate, and a midline float must be installed to prevent this.

- d. Anchors should be helical screw or another type of embedded anchor. Only if the substrate prohibits use of embedded anchors may alternative anchors (i.e., concrete block) be used. If an embedded anchor cannot be used and a concrete anchor is needed, calculations showing that the anchor will hold without dragging or breaking during storm events is required. This analysis should include the size of the vessel and the dry weight and dimensions of the anchor.
 - e. No other moorage structures may be anchored within a 117-foot radius (with the proposed buoy in the center of the 117-foot radius circle, which would result in a concentration of no more than one per acre) of the proposed buoy.
 - f. New mooring buoys may not be installed in any waterbody the Washington State Department of Health has designated as “threatened” or “closed” to shellfish harvesting due to the number of boats moored there.
- D. Additional Standards for Individual Moorage.
1. An individual use dock may consist of one pier, one float or platform lift, one boat lift, and one covered moorage.
 2. When allowed under the provisions of this program, only one private dock shall be permitted as an accessory use to a primary use.
 3. Private recreational moorage for individual lots is permitted in subdivisions approved on or before January 28, 1993, only where shared moorage has not already been developed.
 4. Prior to development of a new dock for a single residential lot, the applicant/proponent shall demonstrate that:
 - a. Existing facilities in the vicinity, including marinas and shared moorage, are not adequate or feasible for use;
 - b. Alternative moorage, such as mooring buoys or a dock or marine rail system sized to accommodate a tender to provide access in conjunction with a mooring buoy, are not adequate or feasible; and
 - c. The applicant/proponent has contacted abutting property owners and none have indicated a willingness to share an existing dock or develop a shared moorage in conjunction with the applicant/proponent.
 5. Private moorage for float planes may be permitted as a shoreline conditional use where construction will not adversely affect shoreline functions or processes, including wildlife use. Ecological restoration may be required to compensate for the greater intensity of activity associated with the use.
 6. Private docks shall not encroach into the required sideyard setbacks for residential development (both onshore and offshore).
 7. Covered moorage accessory to a single-family pier or dock shall have no walls other than an open structural framework to support a roof and shall not cover more than 200 square feet nor exceed 15 feet in height above OHWM. Roof materials shall be translucent, or at least 50 percent clear skylights.
- E. Additional Standards for Shared Moorage.
1. When allowed under the provisions of this program, a shared moorage dock may be permitted for multiple users. Such docks may consist of one pier and multiple floats or platform lifts, boat

- 1 lifts, and covered moorages, not to exceed the number of authorized users nor the total
2 maximum area allowed per WCC 23.40.140(B).
- 3 2. Shared moorage shall be required in accordance with the following to prevent the proliferation
4 of moorage facilities:
- 5 a. Shared moorage shall be provided for all residential developments of more than two
6 dwelling units.
- 7 b. Subdivisions shall contain a restriction on the face of the plat prohibiting individual docks.
- 8 c. Shared moorage facilities shall be available to property owners in the subdivision for
9 community access and may be required to provide public access depending on the scale of
10 the facility. A site for shared moorage should be owned in undivided interest by property
11 owners within the subdivision.
- 12 d. If shared moorage is provided, the applicant/proponent shall file at the time of plat
13 recordation a legally enforceable joint use agreement or other legal instrument that, at
14 minimum, addresses the following:
- 15 i. Apportionment of construction and maintenance expenses;
- 16 ii. Easements and liability agreements; and
- 17 iii. Use restrictions.
- 18 e. On marine shorelines a dock or pier may be approved only if it is not feasible to provide
19 mooring buoys with an adequate landing area or a dock or marine rail system sized to
20 accommodate tenders.
- 21 f. Where a new multifamily residential, camping club, or subdivision development proposes to
22 provide shared moorage, the number of slips shall be limited to the amount of moorage
23 needed to serve dwelling units/rental spaces with water frontage; provided, that a limited
24 number of upland dwelling units/rental spaces within shoreline jurisdiction may also be
25 accommodated at a ratio of 0.25 slips per such dwelling units/rental spaces. Applications for
26 shared moorage shall demonstrate that mooring buoys are not feasible prior to approval of
27 dock moorage. Shared moorage currently serving or proposed to serve upland dwelling
28 units/rental spaces shall be reviewed as a marina. This provision does not apply to existing
29 developments.
- 30 3. Shared moorage may be located adjacent to or upon a side property line of the affected
31 properties upon filing of an easement agreement or other legal instrument by the affected
32 property owners.

33 **23.40.160 Recreation.**

34 A. General.

- 35 1. Water-related and water-enjoyment uses shall not displace water-dependent uses.
- 36 2. Activities provided by recreational facilities must bear a substantial relationship to the shoreline,
37 or provide physical or visual access to the shoreline. Facilities for water-dependent recreation
38 such as fishing, clam digging, swimming, boating, and wading, and water-related recreation such
39 as picnicking, hiking, and walking should be located near the shoreline, while non-water-related
40 recreation facilities shall be located inland.

- 1 3. Recreation areas or facilities shall provide physical or visual public access consistent with the
- 2 criteria of WCC 23.30.060 (Public Access).
- 3 4. Recreational facilities with large grass areas, such as golf courses and playing fields, and facilities
- 4 with extensive impervious surfaces shall incorporate means to prevent erosion, control the
- 5 amount of runoff, and prevent harmful concentrations of chemicals and sediment from entering
- 6 waterbodies in accordance with the regulations of WCC 23.30.030 (Water Quality and Quantity).
- 7 5. Recreational use of motor vehicles including unlicensed off-road vehicles is permitted only on
- 8 roads or trails specifically designated for such use. Such use is prohibited on tidelands,
- 9 backshore beaches, streams, or wetlands; except as necessary for public health and safety or
- 10 maintenance.
- 11 6. Trails shall meet the requirements of WCC Chapter 16.16 (Critical Areas).
- 12 B. Regulations for Specific Shoreline Environment Designations.
- 13 1. In the Urban Conservancy shoreline environment, low intensity water-oriented recreational use
- 14 and development is permitted subject to the following criteria:
- 15 a. Structures will not result in more than 10 percent building coverage or 4,000 square feet,
- 16 whichever is greater, and total impervious surface will not exceed 20 percent, or 10,000
- 17 square feet, whichever is greater.
- 18 b. Alteration of topography shall be limited to the minimum necessary to accommodate
- 19 allowed development, and generally less than 30 inches.
- 20 c. Use of areas or facilities will not result in use patterns that lead to degradation of shoreline
- 21 ecological functions.
- 22 2. In the Resource shoreline environment, low intensity water-oriented recreational use and
- 23 development is permitted; provided, that no designated agricultural or forest resource lands of
- 24 long-term significance are displaced.
- 25 3. In the Conservancy shoreline environment, low intensity water-oriented recreational use and
- 26 development is permitted subject to the following criteria:
- 27 a. Structures on sites of one acre or less will not result in more than 10 percent building
- 28 coverage or 2,000 square feet, whichever is greater, and total impervious surface will not
- 29 exceed 20 percent or 5,000 square feet, whichever is greater.
- 30 b. Structures on sites greater than one acre will not result in more than five percent building
- 31 coverage or 2,000 square feet, whichever is greater, and total impervious surface will not
- 32 exceed 10 percent or 10,000 square feet, whichever is greater.
- 33 c. Alteration of topography shall be limited to the minimum necessary to accommodate
- 34 allowed development, and generally less than 30 inches.
- 35 d. Use of areas or facilities will not result in use patterns that lead to degradation of shoreline
- 36 ecological functions.
- 37 4. In the Natural shoreline environment, low intensity water-oriented recreational use and
- 38 development consisting of primitive trails or primitive campsites is permitted subject to the
- 39 following criteria:
- 40 a. Essential minor structures such as trails, stairs, small picnic areas, primitive roads,
- 41 viewpoints, restrooms, interpretive facilities, or development that will not adversely affect
- 42 shoreline ecological functions and processes are permitted.

- b. Any necessary landscaping shall use native or similar self-maintaining vegetation.
- c. Recreational development requiring extensive structures or substantial alterations to topography or native vegetation is prohibited.
5. In the Aquatic shoreline environment, water-oriented recreational use and development is permitted, subject to the use and development regulations of the abutting upland shoreline environment designation; provided, that underwater parks may be permitted as a shoreline conditional use.

23.40.170 Residential.

This section applies to residential development, uses, and activities. The creation of lots through land division is regulated pursuant to WCC 23.40.130 (Land Division).

A. General.

1. Over-water residences, including floating homes, are prohibited.
2. Residential development may not be approved in cases when it can be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within a channel migration zone or floodway during the life of the development or use.
3. Residential development shall assure through a geotechnical analysis that the development will not require shoreline stabilization for the life of structure (100 years). Prior to approval, geotechnical analysis of the site and shoreline characteristics shall demonstrate that shoreline stabilization is unlikely to be necessary; setbacks from steep slopes, bluffs, landslide hazard areas, seismic hazard areas, riparian and marine shoreline erosion areas shall be sufficient to protect structures during the life of the structure (100 years); and impacts to adjacent, downslope or down-current properties are not likely to occur. The greater setback resulting from this regulation or WCC 23.40.020 (Shoreline Bulk Provisions) shall apply.
4. Residential structures, accessory uses, and related facilities shall be designed and located so as to minimize view obstructions to and from shorelines and waterbodies.
5. Utilities shall be located within roadway and driveway corridors and rights-of-way wherever feasible.

B. Standards for Single-Family Residential Use on Constrained Lots.

1. Legally existing lots with a depth (the distance from the ordinary high water mark to the inside edge of the frontage setback) that would not allow for compliance with the reduced standard buffer may be allowed without a shoreline variance when the following criteria are met:
2. The lot is vacant or existing structures are removed; provided an existing primary single family residential structure may be enlarged, consistent to WCC 23.50.020, to the maximum building area allowed in (3) below.
3. The maximum impact area shall not exceed 2,500 square feet. The maximum impact area means the proposed residence, normal appurtenances (except drainfields), and any proposed residential accessory structures. Additionally, up to another 500 square feet of low-impact development (LID) landscaping, including any lawn, turf, ornamental vegetation, or gardens may be allowed, provided that it is set back as far as feasible from the shoreline.
4. In no case shall the proposed residence be located waterward of the common-line setback as determined in applicable sections of WCC 23.40.020(D)(2) (Common-Line Setback).

5. The lot is not subject to landslide hazard areas or riverine and coastal erosion hazard areas or associated buffers (see WCC 16.16.310);
 6. The nonconforming lot was created prior to the effective date of this program (August 8, 2008);
 7. Appropriate measures are taken to mitigate all adverse impacts, including but not limited to locating the [building area and landscaping allowance](#) in the least environmentally damaging location relative to the shoreline and any critical areas and their buffers.
 8. All reductions to side yard and/or frontage setbacks are pursued. [Such reductions may be approved administratively without a zoning variance](#) when doing so will not create a hazardous condition or a condition that is inconsistent with this program and WCC Title 20.
 9. There is no opportunity to consolidate lots under common ownership that will alleviate the nonconformity;
 10. The shoreline jurisdiction shoreline area outside of the approved development is retained if fully functional, and/or enhanced with native trees, shrubs and groundcovers through development of a mitigation plan, including monitoring and maintenance contingencies per WCC 16.16.260(G);
 11. Development may not take place waterward of the ordinary high water mark; and
 12. Accessory utilities may be allowed within critical areas or their buffers, subject to specific criteria in Chapter 16.16 WCC.
- C. Additional Standards for Multifamily Residential Development.
1. Open space areas and setbacks shall be required along shorelines and between buildings. These areas should be large enough so that views are not extensively blocked, and building residents have privacy and ample space for outdoor recreation and circulation. The amount of open space shall increase proportionately as density and/or height increase. In general, a view corridor must be maintained across 30 percent of the average parcel width with additional width provided for the percentage increase above 35 feet to a maximum of 50 percent of the lot width. The increased area within a view corridor due to increased height must be devoted to landscaping or other open space.
 2. Circulation, parking areas, and outdoor storage or loading areas shall be adequate in size and designed so that the public safety and local aesthetic values are not diminished. Such areas shall be screened where appropriate from open space areas by landscaping, fences or other similar structures, or grade separation.
 3. Multifamily development shall incorporate public access to waters of the state as provided for in WCC 23.30.070 (Public Access) unless the site is designated in a shoreline public access plan for a greater component of public access or public access is demonstrated to be infeasible or inappropriate. The amount and configuration of public access shall depend on the proposed use(s) and the following criteria:
 - a. Multifamily development that have views of water areas shall provide a public pedestrian viewing area.
 - b. Multifamily development adjacent to waters of the state shall provide access to a point abutting the water that will provide visual access, and shall provide physical access to public waterways, public marine waters, and public tidelands that are physically accessible at low tide or low water.

- c. Multifamily development subject to requirements for dedication of land to provide open space or mitigate recreation demands of the development shall dedicate such land on or adjacent to public waterways or marine shorelines, as applicable, unless the ecological sensitivity of such land precludes public access. Portions of the area dedicated may be fenced or otherwise restricted to limit public access to ecologically sensitive areas.
4. Recreational needs of building residents shall be provided through on-site recreation facilities and access to shorelines. The variety and number of on-site recreation facilities should increase proportionately as density increases.
- D. Additional Standards for Accessory Uses and Development.
 1. Shoreline permits shall be required for accessory development that does not meet the intent and definition of an appurtenance as defined in WCC 23.110.010(16).
 2. Non-water dependent accessory uses are prohibited in required shoreline setbacks; except, as provided in WCC Chapter 16.16 (Critical Areas).
 3. Non-water dependent development uses shall be prohibited over the water.
 4. For docks and piers, see WCC 23.40.150 (Moorage Structures).
- E. Regulations for Specific Shoreline Environment Designations.
 1. In the Natural shoreline environment, residential development is prohibited, except that one single-family residence per legal lot may be permitted as a shoreline conditional use where there is no feasible location outside of the shoreline.

23.40.180 Restoration and Enhancement.

- A. General.
 1. Restoration of ecological functions and processes shall be allowed on all shorelines and shall be located, designed, and implemented in accordance with applicable policies and regulations of this program.
 2. Restoration shall be carried out in accordance with an approved shoreline restoration plan.
 3. The County may grant relief from shoreline master program development standards and use regulations resulting from shoreline restoration projects within urban growth areas consistent with criteria and procedures in WAC 173-27-215.

23.40.190 Shoreline Stabilization.

- A. General.
 1. All development shall be located and designed to avoid the need for future shoreline stabilization to the extent feasible.
 2. Shoreline stabilization measures shall comply with the principals and standards of WAC 173-26-231(3)(a) (Shoreline Stabilization).
 3. Shoreline stabilization structures shall not result in a net loss of shoreline ecological functions. If shoreline stabilization is necessary pursuant to a geotechnical analysis, the method, either hard or soft, may be required to provide mitigation.
 4. When authorized consistent with these provisions, shoreline stabilization measures shall be designed in accordance with WDFW's Integrated Streambank Protection Guidelines or WDFW's Marine Shoreline Design Guidelines, whichever is relevant to the particular environment.
 5. Alternatives for shoreline stabilization shall be based on the following order of preference:

- 1 a. No action;
- 2 b. Nonstructural shoreline stabilization, including building setbacks, relocation of structures to
- 3 be protected, and groundwater management;
- 4 c. Other soft shoreline stabilization treatment;
- 5 d. Hybrid shoreline stabilization;
- 6 e. Hard shoreline stabilization.
- 7 6. Soft shoreline stabilization treatment shall be used unless demonstrated through a geotechnical
- 8 analysis not to be sufficient to protect primary structures, dwellings, or businesses.
- 9 7. Hard shoreline stabilization measures shall not be allowed except when necessity is
- 10 demonstrated in the following manner:
- 11 a. To protect legally existing primary structures:
- 12 i. New or enlarged structural shoreline stabilization measures for the existing primary
- 13 structure, including residences and their primary appurtenant structures or uses, shall
- 14 not be allowed unless there is conclusive evidence, documented by a geotechnical
- 15 analysis, that the lawfully established, primary structure will be damaged within three
- 16 years from shoreline erosion caused by tidal actions, currents, or waves. Where a
- 17 geotechnical analysis confirms a need to prevent potential damage to a primary
- 18 structure, but the need is not as immediate as three years, the analysis may still be used
- 19 to justify more immediate authorization for shoreline stabilization using soft treatment.
- 20 ii. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific
- 21 or geotechnical analysis, is not demonstration of need.
- 22 b. In support of water-dependent development when all of the following apply:
- 23 i. The erosion is not being caused by upland conditions, such as the loss of vegetation and
- 24 drainage;
- 25 ii. Nonstructural shoreline stabilization, planting vegetation, or installing on-site drainage
- 26 improvements are not feasible or not sufficient;
- 27 iii. The need to protect primary structures from damage due to erosion is demonstrated
- 28 through a geotechnical report;
- 29 c. In support of non-water-dependent development, including single-family residences, when
- 30 all of the following apply:
- 31 i. The erosion is not being caused by upland conditions, such as the loss of vegetation and
- 32 drainage;
- 33 ii. Nonstructural measures, such as placing the development further from the shoreline,
- 34 planting vegetation, or installing on-site drainage improvements are not feasible or not
- 35 sufficient;
- 36 iii. The need to protect the primary structures from damage due to erosion is
- 37 demonstrated through a geotechnical report. The damage must be caused by natural
- 38 processes, such as tidal action, currents and waves;
- 39 d. To protect projects for the restoration of ecological functions or hazardous substance
- 40 remediation projects pursuant to Chapter 70.105D RCW when nonstructural measures,
- 41 planting vegetation, or installing on-site drainage improvements are not feasible or
- 42 sufficient.

- 1 8. When hard shoreline stabilization measures are demonstrated to be necessary, they must:
 - 2 a. Limit the size of stabilization measures to the minimum necessary; and
 - 3 b. Assure no net loss of shoreline ecological functions; and
- 4 9. Publicly financed or subsidized shoreline erosion control measures shall provide appropriate
- 5 public access to the shoreline except where such access is determined to be infeasible because
- 6 of incompatible uses, safety, security, or harm to ecological functions.
- 7 10. Bioengineering approaches or other soft treatment shoreline stabilization that provide
- 8 restoration of shoreline ecological functions may be permitted waterward of the OHWM.
- 9 11. Shoreline stabilization on streams should be located and designed to fit the physical character
- 10 and hydraulic energy potential of a specific shoreline reach, which may differ substantially from
- 11 adjacent reaches. Hard shoreline stabilization methods are prohibited in jurisdictional shoreline
- 12 streams on estuarine shores, in wetlands, and in salmon spawning areas, except for the purpose
- 13 of fish or wildlife habitat enhancement or restoration.
- 14 12. Revetments are prohibited, except for use in water-dependent and public infrastructure
- 15 projects, which may be permitted as conditional use.
- 16 13. Gabions are prohibited along marine shorelines, but may be permitted as a conditional use
- 17 along freshwater shorelines.
- 18 14. Shoreline stabilization measures shall not be for the purpose of creating dry land, leveling or
- 19 extending property, creating or preserving residential lawns, yards, or landscaping, and shall not
- 20 be allowed except when otherwise allowed in this program.
- 21 15. Minimize disturbance pertaining to beach access by avoiding trails that [may be subject to loss or](#)
- 22 [damage by erosion.](#)
- 23 16. Placement of shoreline stabilization methods shall follow the natural contour of the existing
- 24 shoreline, be parallel to and at or above the OHWM.
- 25 17. When determined to be necessary pursuant to this section shoreline stabilization on marine
- 26 feeder bluffs or on marine or lake accretion shoreforms shall require a conditional use permit.
 - 27 a. Shoreline stabilization on marine feeder bluffs may require additional mitigation measures,
 - 28 including those necessary to offset the loss of sediment supply.
 - 29 b. Shoreline stabilization on accretion shoreforms shall be set back a minimum of 20 feet
 - 30 landward from the OHWM.
- 31 18. Shoreline stabilization must be designed by a professional engineer licensed in the state of
- 32 Washington with demonstrated experience in hydraulic activities of shorelines. Alternatively,
- 33 soft treatment shoreline stabilization may be designed by a habitat biologist or a professional
- 34 with demonstrated expertise in designing soft treatment shoreline stabilization.
- 35 19. Depending on the degree of hard or soft elements to the project, the County, WDFW, and/or
- 36 U.S. Army Corps of Engineers may require varying degrees of mitigation or other permit
- 37 conditions.
- 38 20. Shoreline stabilization, as applied in this section, is generally distinguished from shoreline
- 39 restoration activities. However, specific shoreline stabilization elements of restoration activities
- 40 shall be guided by this section.
- 41 21. Use of shoreline armoring to protect a lot where no primary structure presently exists shall be
- 42 prohibited.

22. Shoreline stabilization structures shall not be constructed with waste materials such as demolition debris, derelict vessels, tires, concrete or any other materials which might have adverse toxic or visual impacts on shoreline areas.
- B. Additional Standards for Replacement or Repair of Existing Shoreline Stabilization.
 1. Damaged structural stabilization may be repaired up to 50% of the linear length within a 5-year period. Repair area that exceeds 50% shall be considered a replacement. Stabilization repair applications shall consider cumulative approvals of each successive application within a five-year period.
 2. Any replacement of, additions to, or increases in the dimensions of existing shoreline stabilization measures shall be considered as a new structure.
 3. An existing stabilization structure may be replaced with a similar structure if there is a demonstrated need, through a geotechnical report, to protect principal uses or structures from erosion caused by currents, tidal action or waves.
 4. If the OHWM has been re-established, the replacement structure must be located at or near the new OHWM.
 5. Alternative or soft treatment stabilization shall be considered prior to in-kind replacement through an alternatives analysis.
 6. The replacement structure shall:
 - a. Be designed, located, sized and constructed to assure no net loss of ecological functions.
 - b. Perform the same stabilization function of the existing structure and not require additions to or increases in size.
 - c. Not encroach waterward of the OHWM or existing structure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure.
 7. When possible or as an element of mitigation sequencing, failing, harmful, unnecessary, or ineffective structures should be removed, and shoreline ecological functions and processes should be restored using nonstructural or soft and/or long-term stabilization measures.
- C. Supplemental Application Requirements.
 1. Geotechnical reports required pursuant to this section shall address the need for shoreline stabilization and shall include the following:
 - a. A scaled site plan showing:
 - i. The location of existing and proposed shore stabilization, structures, fill, and vegetation, with dimensions indicating distances to the OHWM; and
 - ii. Existing site topography, preferably with two-foot contours.
 - b. A description of the processes affecting the site, and surrounding areas that influence or could be influenced by the site, including areas in which stream processes, lake or marine geomorphic processes affect the site, including, but not limited to:
 - i. Soil erosion, deposition, or accretion;
 - ii. Evidence of past or potential channel migration;
 - iii. Evidence of past or potential erosion due to tidal action and/or waves;
 - iv. Littoral drift; and

- 1 v. An estimate of shoreline erosion rates.
- 2 c. A description and analysis of the urgency and risk associated with the specific site
- 3 characteristics, an alternative analysis addressing the order of preference as specified in
- 4 subsection (A)(4), and demonstrated need as specified in subsection (A)(7).
- 5 d. A discussion and analysis demonstrating conformance with the standards enumerated in
- 6 WCC Chapter 16.16 (Critical Areas).
- 7 D. Regulations for Specific Shoreline Environment Designations.
- 8 1. In the Urban Conservancy and Conservancy shoreline environments, breakwaters and jetties
- 9 may be permitted as a shoreline conditional use if accessory to a water-dependent use and
- 10 littoral sediment transport is not significantly disrupted.
- 11 2. In the Natural shoreline area environment, shoreline stabilization is prohibited; except that
- 12 using bioengineering approaches may be permitted when necessary to restore an eroding
- 13 accretion shoreform or to retard erosion elsewhere.
- 14 3. In the Aquatic shoreline environment:
- 15 a. Bioengineering approaches are permitted on tidelands and shorelands when necessary to
- 16 restore an eroding accretion shoreform or to retard erosion elsewhere.
- 17 b. Drift sills, breakwaters, and jetties may be permitted as a shoreline conditional use if such
- 18 development is permitted in the abutting upland shoreline environment designation.
- 19 c. Bulkheads or revetments are prohibited except for an approved water-dependent
- 20 development.
- 21 **23.40.200 Signs.**
- 22 A. General.
- 23 1. These provisions do not apply to private informational signs posted on private property by the
- 24 owner for reasonable purposes such as address, No Trespass, and temporary signs such as For
- 25 Sale, Rent and campaign signs; provided, that no such sign exceeds four square feet in area.
- 26 2. In addition to the regulations in this section, signs are subject to WCC 20.80.400, et seq. (Signs)
- 27 3. All signs proposed for a development requiring a substantial development permit shall be
- 28 designated on application and approval documents.
- 29 4. Sign illumination shall be indirect, incorporating exterior lighting shining on the sign, or shadow
- 30 illumination behind nontransparent materials. Internally illuminated signs are prohibited.
- 31 5. Distracting Devices. Any signs or other devices which flash, blink, flutter, rotate, oscillate, or
- 32 otherwise purposely fluctuate in lighting or position, in order to attract attention through their
- 33 distractive character, are prohibited on shorelines; provided, that searchlights, pennants,
- 34 banners and other devices of seasonal, holiday, or special event character may be used for up to
- 35 90 days in one year.
- 36 6. Freestanding signs other than those private informational signs described in subsection (A)(1) of
- 37 this section are prohibited between a public right-of-way and the water where the waterbody is
- 38 visible from the public right-of-way.
- 39 7. To protect views from the water or publicly accessible beaches or lands adjacent to the water,
- 40 freestanding signs other than those private informational signs described in subsection (A)(1) of
- 41 this section are prohibited between buildings and OHWM, and waterward of a line drawn from

the nearest point of the building parallel to the shoreline; provided, that where a public road or path separates said building from the OHWM, up to one freestanding sign not to exceed 12 square feet is permitted between the road or path and said building.

8. Signs may not be located in critical areas or buffers as established by WCC Chapter 16.16 except as otherwise provided for therein.

9. Unless specifically exempted from setback requirements in WCC 23.40.020, the minimum required setback for permanent freestanding signs is 50 feet from the ordinary high water mark..

10. Freestanding signs shall be entirely self-supporting and structurally sound without permanent use of guy wires or cables.

11. Signs shall comply with the standards in this section at any time a change in use or modification of structures requiring a substantial development permit is approved. Abandoned or derelict signs should either be properly restored or completely removed within a reasonable period of time by the sign owner or property owner as necessary.

B. Regulations for Specific Shoreline Environment Designations.

1. In the Natural shoreline environment, sign development is prohibited, except for trail marking, hazard warnings, or interpretive scientific or educational purposes and personal signs provided for in this section. Such permitted signs shall be limited in size and number to those required to affect their purpose.

2. In the Aquatic shoreline environment, only wall signs and low-profile freestanding signs less than 30 inches in height for water-dependent uses are permitted, except as provided for in this section, and no premise may have more than two signs.

23.40.210 Transportation.

These regulations apply to both public and private transportation projects.

A. General.

1. RCW 36.87.130 prohibits the County from vacating any county road that abuts a body of saltwater or freshwater except for port, recreational, educational, or industrial purposes. Therefore, development, abandonment, or alteration of undeveloped county road ends within SMP jurisdiction is prohibited unless approved in accordance with this program.

2. Transportation development shall be carried out in a manner that maintains or improves state water quality standards for affected waters.

3. Maintenance activity including vegetation control and erosion control shall be carried out consistent with this program. Necessary minor resurfacing of existing roadways and replacement of culverts that improve shoreline ecological functions may be exempt from substantial development permit requirements as provided by WCC Title 22 (Land Use and Development).

4. Transportation facilities must meet the following criteria:

- a. The proposed facilities cannot be feasibly located outside of shoreline jurisdiction due to the uses served or the need to connect specific end points. An analysis of alternatives may be required. Transportation facilities should be located inland from the land/water interface, preferably out of the shoreline.

- b. The proposed facilities are primarily oriented to pedestrian use and provide an opportunity for a substantial number of people to enjoy shoreline areas.
- c. The location, design, and use achieve no net loss of shoreline ecological functions and incorporate appropriate mitigation in accordance with WCC 23.30.010 (Ecological Protection).
- d. The proposed facilities avoid public recreation areas and significant natural or cultural resources, or no alternative is feasible outside of the shoreline and all feasible measures to minimize adverse impacts have been incorporated into the proposal.

B. Site Design and Operation.

1. Transportation facilities on shorelines shall be designed to generally follow natural topography, to minimize cuts and/or fills, to avoid cutting off meander bends or point bars, and to avoid adverse impacts to shoreline ecological functions and processes. Wherever such roads or railway embankments cross depressions remaining from remnant channels and oxbow bends, crossings of ample cross-section shall be provided to span the remnant feature.
2. Raised arterial roads or railways shall be built outside the floodway except for necessary crossings. If built in the floodway fringe, such routes should be aligned generally parallel to outside stream bends so they will also act as setback dikes. Any parking areas required along such roads shall be sited at the base of the embankment and at the downstream corner of large accretion beaches, thus requiring no or minimal flood hazard reduction works or shoreline stabilization. Local access roads in floodplains shall be built at valley floor grade level so that floodwaters are not abnormally obstructed nor diverted. Transportation facilities shall be designed so that no significant loss of floodway capacity or measurable increase in predictable flood levels will result. If transportation facilities are intended to secondarily provide flood hazard reduction, they shall comply with policies of the Comprehensive Plan and regulations for flood hazard reduction works under WCC 23.40.100 (Flood Hazard Reduction and Instream Structures).
3. If a road is demonstrated to be necessary along an accretion shoreform, the waterward road shoulder shall be set back far enough from the primary berm so that the berm may absorb the high energy of storm tide breakers, as well as prevent road bed erosion and allow optimum recreational use of these scarce shore features.
4. Spans on rivers shall avoid placing structures within the channel migration zone or other dynamic, shifting channel elements such as bends.
5. Earth cut slopes and other exposed soils shall be placed, compacted, and planted or otherwise stabilized and protected from surface runoff with native vegetation. Transportation facilities sited close to water, wetlands, or other sensitive features shall incorporate the maximum feasible buffer of native vegetation in accordance with critical area regulations in WCC Chapter 16.16.
6. Bridges or bottomless culverts or other similar structures shall be used in accordance with WDFW guidance to protect shoreline ecological functions and processes. Bridge approaches in floodways shall be constructed on open piling, support piers, or other similar measures to preserve hydraulic processes.

7. Bridge supports and abutments shall be designed and spaced so they do not act as walls baffling or blocking flood waters, or interrupting stream channel processes or littoral drift.
8. Transportation facilities shall be constructed of materials that will not adversely affect water quality or aquatic plants and animals over the long term. Elements within or over water shall be constructed of materials approved by applicable state agencies for use in water for both submerged portions and other components to avoid discharge of pollutants from splash, rain or runoff. Wood treated with creosote, pentachlorophenol or other similarly toxic materials are prohibited. Preferred materials are concrete and steel.
9. Vehicle and pedestrian circulation systems shall be designed to minimize clearing, grading and alteration of topography and natural features. Roadway and driveway alignment shall follow the natural contours of the site and minimize width to the maximum extent feasible. Elevated walkways should be used to cross wetlands.
10. Nonemergency construction and repair work shall be scheduled for that time of year when seasonal conditions (weather, streamflow) permit optimum feasible protection of shoreline ecological functions and processes.

C. Additional Standards for Parking Facilities.

1. Parking facilities are not a water-dependent use and shall only be permitted in the shoreline to support an authorized use where it can be demonstrated that there are no feasible alternative locations away from the shoreline. Parking facilities shall be buffered from the water's edge and less intense adjacent land uses by vegetation screening, undeveloped space, or structures developed for the authorized primary use.
2. Parking areas shall be developed using low impact development techniques whenever possible including, but not limited to, the use of permeable surfacing materials.
3. Impervious surfacing for parking lot/space areas shall be minimized through the use of alternative surfaces where feasible, consistent with the most current Low Impact Development Technical Guidance Manual for Puget Sound, or as amended.

D. Supplemental Application Requirements.

1. In addition to the application requirements specified in WCC Title 22 (Land Use and Development), all applications for transportation facilities shall be accompanied by adequate documentation that the proposal meets the policies and regulations of this program, including subsection (A)(4) of this section.

E. Regulations for Specific Shoreline Environment Designations.

1. In the Urban Conservancy and Conservancy shoreline environments, transportation facilities are permitted only for access to approved development.
2. In the Natural shoreline environment, transportation facilities are prohibited, except to access approved recreational development.
3. In the Aquatic shoreline environment, access to water-dependent or water-related uses, such as ferry terminals, is permitted. Bridge crossings for non-water-dependent or non-water-related uses may be permitted as a shoreline conditional use.

23.40.220 Utilities.

This section applies to regional and local utilities, both public and private, but not to accessory utilities (see definitions in WCC Chapter 23.60); however, there are regulations regarding septic systems located in WCC 23.30.020 (Water Quality and Quantity).

A. General.

1. Utilities that are not water-dependent shall be located away from shoreline jurisdiction unless alternative locations, including alternative technology, are demonstrated to be infeasible and it is demonstrated that the facilities do not result in a net loss of shoreline ecological functions and processes or significant adverse impacts to other shoreline resources and values such as parks and recreation facilities, public access, and cultural or aesthetic resources.
2. Storage and handling facilities for water-borne firefighting or rescue equipment may be permitted on shoreline jurisdiction at locations which are suitable considering the purpose of the proposal and the policies of the Comprehensive Plan.
3. Utilities shall be located within roadway and driveway corridors and rights-of-way wherever feasible.
4. Utilities must meet the following criteria:
 - a. The proposed facilities cannot be feasibly located outside of shoreline jurisdiction due to the uses served or the need to cross shorelands to connect specific end points. An analysis of alternatives may be required. Utilities should be located inland from the land/water interface, preferably out of shoreline jurisdiction.
 - b. The location, design, and use of the proposed facility achieves no net loss of shoreline ecological functions and incorporates appropriate mitigation in accordance with WCC 23.30.010 (Ecological Protection).
 - c. The proposed facilities will avoid public recreation areas and significant natural or cultural resources, and that all feasible measures to minimize adverse impacts to such resources have been incorporated into the proposal.
 - d. The proposal includes adequate provisions for preventing spills or leaks, as well as procedures for mitigating damages from spills or other malfunctions and shall demonstrate that periodic maintenance will not disrupt shoreline ecological functions.
 - e. If the proposal is for oil, gas, and natural gas utilities and pipelines or electrical energy and communications utilities, it includes an analysis of alternative routes avoiding aquatic lands, including an analysis of alternative technology.

B. Additional Standards for Specific Utilities.

1. Desalinization facilities shall be located consistent with critical area regulations and buffers, except for water-dependent components such as water intakes.
2. Solid Waste Facilities.
 - a. Facilities for processing, storage and disposal of solid waste are not normally water-dependent. Components that are not water-dependent shall not be permitted in shoreline jurisdiction.
 - b. Disposal of solid waste on shorelines or in waterbodies has potential for severe adverse effects upon ecological processes and functions, property values, public health, natural resources, and local aesthetic values and shall not be permitted.

- c. Temporary storage of solid waste in suitable receptacles is permitted as an accessory use to a primary permitted use, or for litter control.
 3. Oil, Gas and Natural Gas Transmission.
 - a. Regional oil, gas, and natural gas utility pipelines shall not be located in shoreline jurisdiction unless alternatives are demonstrated to be infeasible.
 - b. Local natural gas utilities shall not be located in shoreline environments unless serving approved shoreline uses. Crossings of shorelines shall not be approved unless alternatives are demonstrated to be infeasible.
 4. Electrical Energy and Communication Systems.
 - a. Underground placement of lines shall be required on shorelines for new or replacement lines that are parallel to the shoreline and do not cross water or other critical areas; provided, that maintenance of existing aerial lines above 35kv may be permitted above ground where alternatives are demonstrated to be impractical and/or infeasible. New or replacement lines that cross water or other critical areas may be required to be placed underground depending on impacts on ecological functions and processes and visual impacts; provided, that maintenance of existing aerial lines above 35 kv may be permitted above ground where alternatives are demonstrated to be impractical and/or infeasible. Poles or supports treated with creosote or other wood preservatives that may be mobile in water shall not be used along shorelines or associated wetlands. Where road rights-of-way or easements are within 150 feet and also are parallel to the shoreline for more than 500 feet, no new overhead wiring shall be installed between the road and OHWM.
 - b. Utilities for development within the shoreline shall be installed underground.
 5. Hydropower Development. In addition to the general requirements, above, hydropower facilities shall be located, designed, and operated to:
 - a. Minimize impacts to fish and wildlife resources including spawning, nesting, rearing habitat, migratory routes, and critical areas. Mitigation measures to achieve no net loss of shoreline ecological functions and processes shall be implemented in accordance with WCC 23.30.010 (Ecological Protection).
 - b. Minimize impacts to geohydraulic processes; waterfalls; erosion and accretion shoreforms; agricultural land; scenic vistas; recreation sites; and sites having significant historical, cultural, scientific, or educational value.
 - c. Accommodate public access to, and multiple use of, the shoreline.
 - d. Comply with the instream structure regulations of 23.40.100 (Flood Hazard Reduction and Instream Structures).
- C. Supplemental Application Requirements.
 1. In addition to the minimum application requirements specified in WCC Title 22 (Land Use and Development), all applications for utilities shall be accompanied by adequate documentation that the proposal meets the policies and regulations of this program.
- D. Regulations for Specific Shoreline Environment Designations.
 1. In the Urban Conservancy and Conservancy shoreline environments, local utility development is permitted; provided, that sewage outfalls and treatment plants, over-water communication or

- 1 powerlines, fuel pipelines, and other types of hazardous material pipelines may be permitted as
2 a shoreline conditional use, provided there is no feasible location outside the shoreline.
- 3 2. In the Natural shoreline environment, utility development is prohibited. Maintenance of existing
4 utilities is permitted and shall take extraordinary measures in protecting the natural features
5 therein.
- 6 3. In the Aquatic shoreline environment:
 - 7 a. Submarine electrical or communications cables, over-water public utility lines consisting of
8 local distribution facilities if adequately flood-proofed, water intakes, and desalinization
9 facility intakes are permitted.
 - 10 b. Submarine water and sewer lines, fuel pipelines, sewer, and desalinization outfalls may be
11 permitted as shoreline conditional uses.
 - 12 c. Crossings of waterbodies by over-water transmission or distribution lines and on-site
13 electrical communication wiring may be permitted within 100 feet of the OHWM and
14 wetlands and over bodies of water as a shoreline conditional use. All other utility
15 development is prohibited.

Chapter 23.50 Nonconforming Uses, Structures, and Lots

23.50.010 Nonconforming Uses.

- A. The lawfully established use of any building, structure, land, or premises existing or authorized under a permit or approval issued prior to the effective date of initial adoption of this program (August 27, 1976) or any applicable amendment thereafter, but which does not conform to present use regulations due to subsequent changes to the master program, shall be considered legally nonconforming and may be continued, subject to the provisions of this section; provided, that agricultural activities shall conform to WCC Chapter 16.16, Article 8 (Conservation Program on Agricultural Lands).
- B. The expansion, alteration, and/or intensification of a nonconforming use is prohibited.
- C. An existing use designated as a shoreline conditional use under present use regulations that lawfully existed prior to the effective date of the initial adoption of this program (August 27, 1976) or any applicable amendment thereafter and that has not obtained a shoreline conditional use permit shall be considered a legal use and may be continued subject to the provisions of this section without obtaining a shoreline conditional use permit.
- D. Other than agricultural uses complying with WCC 16.16.800, if a use is discontinued for a period of 12 consecutive months or more, then any subsequent use, if allowed, shall be consistent with the provisions of this program and the Act.
- E. The change of a nonconforming use to another type of nonconforming use is prohibited.

23.50.020 Nonconforming Structures.

- A. A lawfully established structure existing or authorized under a permit or approval issued prior to the effective date of initial adoption of this program (August 27, 1976) or any applicable amendment thereafter, but is no longer fully consistent with present regulations due to subsequent changes to the master program, shall be considered legally nonconforming and may be continued, subject to the provisions of this section; provided that:
 1. Shoreline stabilization structures shall conform to WCC 23.40.190 (Shoreline Stabilization).
 2. When maintenance and repair of a nonconforming structure has lapsed such that the structure or activity area is not in a usable condition, the structure or activity shall be considered to be abandoned or derelict and may no longer be continued.
 3. For structures where the ordinary high water mark establishes landward of the structure, this structure shall be considered to be abandoned or derelict and may no longer be continued.
 4. Non-overwater nonconforming structures may be maintained, repaired, renovated, or remodeled to the extent that nonconformance with the standards and regulations of this program is not increased, provided that a nonconforming structure that is moved any distance must be brought into conformance with this program and the Act, except as provided in subsection (C) and (D) of this section;
 5. Overwater nonconforming structures may be maintained or repaired to the extent that nonconformance with the standards and regulations of this program is not increased; provided that when replacement is the common method of repair, the replaced components shall meet the construction and materials standards of WCC 23.40.150 (Moorage Structures).

- 1 B. Nonconforming structures (including accessory structures) that are damaged or destroyed by fire,
2 explosion, flood, or other casualty may be restored or replaced in kind; provided, that:
 - 3 1. Intentional demolition or removal is not a casualty.
 - 4 2. Damaged or destroyed nonconforming structures containing conforming uses that are located
5 within a geologically hazardous area or frequently flooded area shall be reconstructed
6 consistent with the requirements of WCC Chapter 16.16, Article 3 (Geologically Hazardous
7 Areas) and Article 4 (Frequently Flooded Areas); provided, that the permit process is
8 commenced within 18 months of the date of such damage; and the reconstruction does not
9 expand, enlarge, or otherwise increase the nonconformity, except as provided for in this
10 section.
 - 11 3. Damaged or destroyed nonconforming structures containing nonconforming uses can be
12 replaced in kind if:
 - 13 a. There is no feasible alternative that allows for compliance with the provisions of this
14 program;
 - 15 b. The structure is reconstructed consistent with the requirements of WCC Chapter 16.16,
16 Article 3 (Geologically Hazardous Areas) and Article 4 (Frequently Flooded Areas);
 - 17 c. The permit process is commenced within 12 months of the date of such damage; and,
 - 18 d. The reconstruction does not expand, enlarge, or otherwise increase the nonconformity.
- 19 C. Nonconforming structures that do not meet the criteria of subsection (A)(2) but are intentionally
20 demolished or removed with a valid demolition permit may be replaced with the same bulk
21 dimensions provided that:
 - 22 1. The permit process is commenced within 12 months of the date of such demolition or removal;
23 and
 - 24 2. Such structures that are located within a geologically hazardous area or frequently flooded area
25 shall be reconstructed consistent with the requirements of WCC Chapter 16.16, Article 3
26 (Geologically Hazardous Areas) and Article 4 (Frequently Flooded Areas).
- 27 D. Replacement of any nonconforming structures or buildings or portions thereof within the aquatic
28 shoreline environment shall comply with program requirements for construction design and
29 materials; provided, that replacement of existing wood pilings with chemically treated wood is
30 allowed for maintenance purposes where use of a different material such as steel or concrete would
31 result in unreasonable or unsafe structural complications; further provided, that where such
32 replacement exceeds 20% of the existing pilings over a 10-year period, such pilings shall conform to
33 the standard provisions of this section.
- 34 E. Other than for single-family residences and their appurtenances, nonconforming structures shall not
35 be altered, enlarged, or expanded without a variance unless such alteration, enlargement or
36 expansion would bring the structure into conformance with this program and the Act; provided, that
37 nonconforming structures with conforming uses may be enlarged or expanded as a shoreline
38 conditional use pursuant to WCC Title 22 (Land Use and Development) when the following criteria
39 are met:
 - 40 1. The enlargement or expansion is within the existing building footprint;
 - 41 2. The enlargement or expansion is in conformance with the bulk dimensional standards; and
 - 42 3. Public access is provided and/or the shoreline environment is enhanced.

- 1 F. Single-family residences nonconforming to the shoreline (critical area) buffer.
- 2 1. Enlargement or expansion of a primary single-family structure may be approved when either of
- 3 the following are met:
- 4 a. When the vertical expansion or enlargement is within the existing building footprint and is
- 5 in conformance with the bulk dimensional standards; or
- 6 b. When the enlargement or expansion meets all of the following.
- 7 i. The enlargement or expansion will not extend waterward of the building footprint of
- 8 the existing primary structure or the enlargement or expansion is consistent with the
- 9 constrained lot provisions in WCC 23.40.170 (Standards for Single-Family Residential
- 10 Use on Constrained Lots).
- 11 ii. The enlargement or expansion is not within a critical area or critical area buffer in a
- 12 manner inconsistent with this program.
- 13 iii. The enlargement or expansion is in conformance with the bulk dimensional standards.
- 14 2. The enlargement or expansion of single-family residences or normal appurtenances greater than
- 15 the constrained lot provisions of WCC 23.40.170(B) may be approved once during the life of the
- 16 structure (100 years); provided, that the following conditions are met:
- 17 a. The existing structure must be located landward of the ordinary high water mark.
- 18 b. Building footprint enlargement or expansion:
- 19 i. Shall not increase the total building footprint by more than 500 square feet.
- 20 ii. Shall be landward or lateral of the existing footprint.
- 21 iii. Shall occur on a previously impacted impervious surface.
- 22 iv. Shall not occur waterward of the common line setback as follows:
- 23 A. Where there are legally established single-family residential primary structures
- 24 within 50 feet on both sides of the proposed residence, the setback shall be
- 25 determined as the greater of either:
- 26 1. A common line drawn between the nearest corners of the foundation closest to
- 27 the sideyard property line of the proposed residence to each adjacent
- 28 residence, or
- 29 2. A common line calculated by the average of both adjacent residences' existing
- 30 setbacks.
- 31 B. Where there is a legally established single-family residential primary structure
- 32 within 50 feet on only one side of the proposed residence, the common line setback
- 33 shall be determined as the greater of either:
- 34 1. A common line drawn between nearest corner of the foundation closest to
- 35 the sideyard property line of the proposed residence to the adjacent
- 36 residence and the nearest point of the standard buffer on the adjacent vacant
- 37 lot, or
- 38 2. A common line calculated by the average of the adjacent residence's setback
- 39 and the standard buffer for the adjacent vacant lot.
- 40 v. Shall be accompanied by enhancement of an area equivalent to the enlargement or
- 41 expansion if the total building footprint increases by more than 250 square feet. If
- 42 enhanced through planting, the Director shall require a vegetation management plan
- 43 consistent with WCC 23.30.040 (Vegetation Management).

1 c. The property has not previously received a shoreline exemption under the provisions for a
2 nonconforming or constrained lot.

3 G. Redevelopment of nonconforming rights-of-way and associated transportation structures, such as
4 railroad trestles, may be permitted for purposes of facilitating the development of public trails
5 and/or public shoreline access; provided, that such redevelopment shall be otherwise consistent
6 with the provisions of this program, including but not limited to the provisions for public access and
7 no net loss of shoreline ecological functions and processes, except as provided for in this section.

8 **23.50.030 Nonconforming Lots.**

9 A lawfully established lot existing or authorized under a permit or approval issued prior to the effective
10 date of initial adoption of this program (August 27, 1976) or any applicable amendment thereafter, but
11 which does not conform to present lot standards, shall be considered a legally nonconforming lot and
12 may be developed subject to the provisions of this program.

Chapter 23.60 Definitions

23.60.005 General.

The terms used throughout this program shall be defined and interpreted as indicated below. When consistent with the context, words used in the present tense shall include the future; the singular shall include the plural, and the plural the singular. Any words not defined herein shall be defined pursuant to WWC Chapter 16.16 (Critical Areas) or Titles 20 (Zoning) or 22 (Land Use and Development), or their common meanings when not defined in code.

23.60.010 “A” definitions.

1. “Accessory structure” means a structure that is incidental and subordinate to a primary use and located on the same lot as the primary use, such as barns, garages, storage sheds, and similar structures. Structures that share a common wall with a primary residential structure shall be considered an extension of the primary structure, rather than an accessory structure.
2. “Accretion shoreform” means a shoreline with a relatively stable berm and backshore that has been built up by long-term deposition of sand and gravel transported by wind and/or water from a feeder bluff or other material source. Examples include, but are not limited to, barrier beaches, points, spits, tombolos, pocket beaches, and point and channel bars on streams.
3. “Act” means the Shoreline Management Act of 1971 (Chapter 90.58 RCW) as amended.
4. “Adverse impact” means an impact that can be measured or is tangible and has a reasonable likelihood of causing moderate or greater harm to ecological functions or processes or other elements of the shoreline environment.
5. “Agricultural activities” means agricultural uses and practices including, but not limited to: producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities; and maintaining agricultural lands under production or cultivation. The construction of new structures or activities that bring a new, non-ongoing agricultural area into agricultural use are not considered agricultural activities.
6. “Agricultural equipment” and “agricultural facilities” include, but are not limited to:
 - a. The following used in agricultural operations: equipment; machinery; constructed shelters, buildings, and ponds; fences; water diversion, withdrawal, conveyance, and use equipment and facilities including, but not limited to, pumps, pipes, tapes, canals, ditches, and drains;
 - b. Corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;
 - c. Farm residences and associated equipment, lands, and facilities; and
 - d. Roadside stands and on-farm markets for marketing fruit or vegetables.

- 1 7. “Agricultural land” means areas on which agricultural activities are conducted as of the date of
2 adoption of this program pursuant to the State Shoreline Guidelines as evidenced by aerial
3 photography or other documentation. After the effective date of this program, land converted to
4 agricultural use is subject to compliance with the requirements herein.
- 5 8. “Agricultural products” includes, but is not limited to, horticultural, viticultural, floricultural,
6 vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage
7 for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and
8 harvested within 20 years of planting; and livestock including both the animals themselves and
9 animal products including, but not limited to, meat, poultry and poultry products, and dairy
10 products.
- 11 9. “Alteration” means any human-induced change in an existing condition of a shoreline, critical area
12 and/or its buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging,
13 clearing (vegetation), draining, construction, compaction, excavation, or any other activity that
14 changes the character of the area.
- 15 10. “Appurtenance” means development that is necessarily connected to the use and enjoyment of a
16 single-family residence and is located landward of the OHWM and/or the perimeter of a wetland.
17 For the purposes of single-family residential exemptions, normal appurtenances include a garage,
18 deck, driveway, utilities, fences, installation of a septic tank and drainfield, and grading that does
19 not exceed 250 cubic yards (except to construct a conventional drainfield) and that does not involve
20 placement of fill in any wetland or waterward of the ordinary high water mark.
- 21 11. “Aquaculture” means the culture or farming of fish, shellfish, or other aquatic plants or animals.
22 Aquaculture does not include the harvest of wild geoduck associated with the state managed
23 wildstock geoduck fishery.
- 24 12. “Aquatic shoreline environment” means an area designated pursuant to WCC
25 Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).
- 26 13. “Archaeologist” means a person who has designed and executed an archaeological study as
27 evidenced by a thesis or dissertation and has been awarded an advanced degree such as an M.A.,
28 M.S. or Ph.D. from an accredited institution of higher education in archaeology, anthropology, or
29 history or other germane discipline with a specialization in archaeology; has a minimum of one year
30 of field experience with at least 24 weeks of field work under the supervision of a professional
31 archaeologist, including no less than 12 weeks of survey or reconnaissance work, and at least eight
32 weeks of supervised laboratory experience. Twenty weeks of field work in a supervisory capacity
33 must be documentable with a report produced by the individual on the field work.
- 34 14. “Associated wetlands” means wetlands that are in proximity to tidal waters, lakes, rivers, or streams
35 that are subject to the Shoreline Management Act and either influence or are influenced by such
36 waters. Factors used to determine proximity and influence include, but are not limited to: location
37 contiguous to a shoreline waterbody, formation by tidally influenced geohydraulic processes,
38 presence of a surface connection including through a culvert or tide gate, location in part or whole
39 within the floodplain of a shoreline, periodic inundation, and/or hydraulic continuity.
- 40 15. “Average grade level” means the average of the natural or existing topography of the portion of the
41 lot, parcel, or tract of real property that will be directly under a proposed building or structure. In
42 the case of structures to be built over water, average grade level shall be the elevation of the

ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure. .

23.60.020 “B” definitions.

1. “Backshore” means the accretion or erosion zone, located landward of the line of ordinary high water, which is normally wetted only by storm tides. A backshore may take the form of a more or less narrow storm berm (ridge of wave-heaped sand and/or gravel) under a bluff, or it may constitute a broader complex of berms, marshes, meadows, or dunes landward of the line of ordinary high water. It is part of the littoral drift process along its waterward boundary..
2. “Barrier beach” means a linear ridge of sand or gravel extending above high tide, built by wave action and sediment deposition seaward of the original coastline; includes a variety of depositional coastal landforms..
3. “Beach nourishment” means a restoration or shoreline stabilization activity in which selected beach material is deposited at one or several locations in the updrift portion of a drift sector. The material is then naturally transported by waves or currents downdrift to stabilize or restore accretion shoreforms and other berms, which may be eroding due to artificial obstructions in the shore process corridor.
4. “Bed and Breakfast” means a privately owned dwelling that is the primary residence(s) of the owner in which, for compensation, one to five rooms are used as sleeping units to house or lodge individuals or families for periods of less than 30 days as transient visitors with or without limited food service. The use of the dwelling unit for the bed and breakfast shall be clearly incidental and subordinate to its use for residential purposes and the purpose of the applicable zoning district. At least one owner shall be present overnight when a guest room is rented.
5. “Bedlands” means those submerged lands below the line of extreme low tide in marine waters and below the line of navigability or navigable lakes and rivers. Where the line of navigability has not been established, bedlands would be those submerged lands below the OHWM in lakes and rivers.
6. “Bedrock” means a general term for rock, typically hard, consolidated geologic material that underlies soil or other unconsolidated, superficial material or is exposed at the surface.
7. “Berm” or “protective berm” means one or several accreted linear mounds of sand and gravel generally paralleling the shore at or landward of OHWM; berms are normally stable because of material size or vegetation, and are naturally formed by littoral drift.
8. “Best management practices” means conservation practices or systems of practices and management measures that:
 - a. Control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxins, and sediment;
 - b. Minimize adverse impacts to surface water and ground water flow, circulation patterns, and to the chemical, physical, and biological characteristics of waters, wetlands, and other fish and wildlife habitats;
 - c. Control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material.
9. “Boathouse.” See “Moorage Structure.”
10. “Boat lift” or “lift.” See Moorage Structure.”

11. “Bog” means a type of wetland dominated by mosses that form peat. Bogs are very acidic, nutrient poor systems, fed by precipitation rather than surface inflow, with specially adapted plant communities.
12. “Breakwater” means an offshore structure that is generally built parallel to shore that may or may not be connected to land, and may be floating or stationary. Their primary purpose is to protect harbors, moorages and navigation activity from wave and wind action by creating stillwater areas along shore. A secondary purpose is to protect shorelines from wave-caused erosion.
13. “Buffer (buffer zone)” means the area adjacent to a shoreline and/or critical area that separates and protects the area from adverse impacts associated with adjacent land uses.
14. “Building” means any structure used or intended for supporting or sheltering any use or occupancy as defined in the International Building Code.
15. “Building area” means the entire area that will be disturbed to construct the home, normal appurtenances (except on-site sewage systems), and landscaping.
16. “Building footprint” means, for the purposes of this program, the ground area contained by the exterior walls of a building.
17. “Bulkhead” means a wall-like structure that is placed parallel to shore primarily for retaining uplands and fills prone to sliding or sheet erosion, and to protect uplands and fills from erosion by wave action.

23.60.030 “C” definitions.

1. “Canopy.” See “Moorage Structure.”
2. “Channelization” means the straightening, relocation, deepening or lining of stream channels, including construction of continuous revetments or levees for the purpose of preventing gradual, natural meander progression.
3. “Clearing” means the removal or destruction of vegetation or plant cover by manual, chemical, or mechanical means and that may result in exposed soils. Clearing includes, but is not limited to, actions such as cutting, felling, thinning, flooding, killing, poisoning, girdling, uprooting, or burning.
4. “Coastal high hazard area” means the area subject to high velocity waters, including, but not limited to, storm surge or tsunamis. The area is designated on the Flood Insurance Rate Map as Zone V1-V30, VE or V.
5. “Commercial development” means those developments whose primary use is for retail, service or other commercial business activities. Included in this definition are developments such as hotels, motels, shops, restaurants, banks, professional offices, grocery stores, laundromats, recreational vehicle parks, commercial rental campgrounds and cabins, whether public or private, and indoor or intensive outdoor commercial recreation facilities. Not included are private camping clubs, marinas, signs, utilities, bed and breakfasts, vacation rentals, and other development.
6. “Conservancy shoreline environment” means an area so designated in WCC Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).
7. “County” means Whatcom County, Washington.
8. “Covered moorage” means a roofed floating or fixed offshore structure without walls, other than a minimal structural framework needed to support the roof, for moorage of water craft or float planes.

9. “Critical areas” means the following areas as designated in WCC Chapter 16.16:
 - a. Critical aquifer recharge areas.
 - b. Wetlands.
 - c. Geologically hazardous areas.
 - d. Frequently flooded areas.
 - e. Fish and wildlife habitat conservation areas.
10. “Critical habitat” means habitat areas with which endangered, threatened, sensitive or monitored plant, fish, or wildlife species have a primary association (e.g., feeding, breeding, rearing of young, migrating). Such areas are identified in WCC Chapter 16.16 with reference to lists, categories, and definitions promulgated by the Washington Department of Fish and Wildlife as identified in WAC 232-12-011 or 232-12-014; in the Priority Habitat and Species (PHS) program of the Department of Fish and Wildlife; or by rules and regulations adopted by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or other agency with jurisdiction for such designations.
11. “Critical saltwater habitat” includes all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as Pacific herring, surf smelt and Pacific sandlance; subsistence, commercial and recreational shellfish beds; mudflats, intertidal habitats with vascular plants; and areas with which priority species have a primary association.
16. “Cultural resource” refers to any archaeological, historic, cemetery, or other cultural sites or artifacts; as well as those traditional food, medicine, fibers, and objects that sustain the religious, ceremonial, and social activities of affected Native American tribes that may be regulated under state or federal laws administered by the Washington State Department of Archaeologic and Historic Preservation (DAHP).
12. “Cultural resource site” means a geographic locality in Washington, including, but not limited to, submerged and submersible lands and the bed of the sea within the state’s jurisdiction, that contains cultural resources. “Current deflector” means an angled “stub-dike,” groin, or sheet-pile structure which projects into a stream channel to divert flood currents from specific areas, or to control downstream current alignment.

23.60.040 “D” definitions.

1. “Dam” means a barrier across a stream or river to confine or regulate flow or raise water levels for purposes such as flood or irrigation water storage, erosion control, power generation, or collection of sediment or debris.
2. “Date of filing” refers to the beginning of the state Shorelines Hearings Board’s 21 day appeal period. Consistent with RCW 90.58.140(6), “date of filing” is defined as follows:
 - a. For projects that only require a substantial development permit: the date that Ecology receives the County’s decision.
 - b. For a shoreline conditional use permit or variance: the date the Ecology’s decision on the shoreline conditional use permit or variance is transmitted to the applicant and the County.
 - c. For substantial development permits simultaneously mailed with a shoreline conditional use permit or variance: the date that Ecology’s decision on the shoreline conditional use permit or variance is transmitted to the applicant and the County.
3. “Department” means the Whatcom County Department of Planning and Development Services.

4. “Department of Ecology” or “Ecology” means the Washington State Department of Ecology.
5. “Development” means any land use activity, action, or manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, site work, and installation of utilities; land division, binding site plans, and planned unit developments; dredging, drilling, dumping, filling, grading, clearing, or removal of any sand, gravel, or minerals; shoreline stabilization works, driving of piling, placing of obstructions; or any project of a permanent or temporary nature that interferes with the normal public use of the surface of the waters overlying lands subject to the act at any stage of water level. “Development” does not include dismantling or removing structures if there is no other associated development or redevelopment.
6. “Dike” means an artificial embankment placed at a stream mouth or delta area to hold back sea water for purposes of creating and/or protecting arable land from flooding.
7. “Dock.” See “Moorage Structure.”
8. “Director” means the Whatcom County Planning and Development Services director, or his/her designee. The Director is the Shoreline Administrator and is authorized to carry out the administrative duties enumerated in his program.
9. “Ditch” or “drainage ditch” means an artificially created watercourse constructed to convey surface or ground water. Ditches are graded (manmade) channels installed to collect and convey runoff from fields and roadways. Ditches may include irrigation ditches, waste ways, drains, outfalls, operational spillways, channels, stormwater runoff facilities or other wholly artificial watercourses, except those that directly result from the modification to a natural watercourse. Ditched channels that support fish are considered to be streams.
10. “Dredge spoil” means the material removed by dredging.
11. “Dredging” means the removal, displacement, and disposal of unconsolidated earth material such as silt, sand, gravel, or other submerged material from waterward of the OHWM of waterbodies or from wetlands. With the exception of regular maintenance of an approved barge landing site, maintenance dredging and other support activities are included in this definition.
12. “Drift sector” or “drift cell” means a particular reach of marine shore in which littoral drift may occur without significant interruption, and which contains any and all natural sources of such drift, and also any accretion shoreform(s) accreted by such drift. Each normal drift sector contains these shore process elements: feeder bluff or estuary, driftway, littoral drift, and accretion shoreform.
13. “Drift sill” means a low elevation groin, typically constructed of rock, installed along with beach nourishment filled up to height of sill, that is sometimes used to hold or slow littoral transport of placed sediment without blocking longshore drift.
14. “Driftway” means that portion of the marine shore process corridor, primarily the upper foreshore, through which sand and gravel are transported by littoral drift. The driftway is the essential component between the feeder bluff(s) and accretion shoreform(s) of an integral drift sector. Driftways are also characterized by intermittent, narrow berm beaches.

23.60.050 “E” definitions.

1. “Ecological functions” or “shoreline functions” means the work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline’s natural ecosystem. See WAC 173-26-

- 201(2)(c). Functions include, but are not limited to, habitat diversity and food chain support for fish and wildlife, ground water recharge and discharge, high primary productivity, low flow stream water contribution, sediment stabilization and erosion control, storm and flood water attenuation and flood peak desynchronization, and water quality enhancement through biofiltration and retention of sediments, nutrients, and toxicants. These beneficial roles are not listed in order of priority.
2. “Ecology” or “Department of Ecology” means the Washington State Department of Ecology.
 3. “Ecosystem processes” or “ecosystem-wide processes” means the suite of naturally occurring physical and geologic processes of erosion, transport, and deposition; and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.
 4. “Ells.” See “Moorage Structure.”
 5. “Emergency activities” means an unanticipated and imminent threat to public health, safety, or the environment that requires immediate action within a time too short to allow full compliance with the Shoreline Management Program. Emergency construction is construed narrowly as that which is necessary to protect property from the elements; it does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the Director to be the appropriate means to address the emergency situation, upon abatement of the emergency the structure(s) shall be either permitted, or if not permissible, removed pursuant to the Shoreline Management Program and RCW 90.58.030(3)(e)(iii), WAC 173-27-040(2)(d), or their successors. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not considered an emergency.
 6. “Enhancement” means actions performed within an existing degraded shoreline, critical area and/or buffer to intentionally increase or augment one or more functions or values of the existing area. Enhancement actions include, but are not limited to, increasing plant diversity and cover, increasing wildlife habitat and structural complexity (snags, woody debris), installing environmentally compatible erosion controls, or removing nonindigenous plant or animal species.
 7. “Erosion” means the wearing away of land by the action of natural forces, such as wind, rain, water and other natural agents that mobilize, transport, and deposit soil particles; on a beach, the carrying away of beach material by wave actions, tidal currents, or littoral currents. “Erosion hazard areas” means lands or areas underlain by soils identified by the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) as having “severe” or “very severe” erosion hazards and areas subject to impacts from lateral erosion related to moving water such as river channel migration and shoreline retreat.
 8. “Essential public facility” means those facilities that are typically difficult to site, such as airports, state education facilities, and state or regional transportation facilities as defined in RCW 47.06.140, state and local correctional facilities, solid waste handling facilities, and inpatient facilities including substance abuse facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.09.020 (RCW 36.70A.200, Siting of essential public facilities).
 9. “Excavation” means the disturbance, displacement and/or disposal of unconsolidated earth material such as silt, sand, gravel, soil, rock or other material from all areas landward of OHWM.

10. “Exempt development” means a use or development activity that is not a substantial development and that is specifically listed as exempt from the substantial development permit requirement in WAC 173-27-040 and WCC Title 22 (Land Use and Development).
11. “Extreme high water level” means the highest tide level reached in a 19-year tidal cycle, or on lakes, the highest water level reached in the past 10 years.
12. “Extreme low tide” means the lowest line on the land reached by a receding tide.

23.60.060 “F” definitions.

1. “Fair market value” of a development means the open market bid price for conducting the work, using the equipment and facilities, and purchase of the goods, services and materials necessary to accomplish the development. This would normally equate to the cost of hiring a contractor to undertake the development from start to finish, including the cost of labor, materials, equipment and facility usage, transportation and contractor overhead and profit. The fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials.
2. “Farm pond” means an open water depression created from a non-wetland site in connection with agricultural activities.
3. “Feasible” means an action, such as a development project, mitigation, or preservation requirement, that meets all of the following conditions:
 - a. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;
 - b. The action provides a reasonable likelihood of achieving its intended purpose; and
 - c. The action does not physically preclude achieving the project’s primary intended legal use. In cases where this program requires certain actions, unless they are infeasible, the burden of proving infeasibility is on the applicant/proponent. In determining an action’s infeasibility, the County may weigh the action’s relative costs and public benefits, considered in the short- and long-term time frames.
4. “Feasible alternative” means an action, such as development, mitigation, or restoration, that meets all of the following conditions: (a) the action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results; (b) the action provides a reasonable likelihood of achieving its intended purpose; and (c) the action does not physically preclude achieving the project’s primary intended legal use. Feasibility shall take into account both short- and long-term monetary and nonmonetary costs and benefits.
5. “Feasible location” means a location that accommodates a development in a manner that achieves its intended purpose consistent with the constraints of the applicable land use regulations and characteristics of the property, including but not limited to lot size, configuration, presence/absence of critical areas and compatibility with adjacent land use/development. Feasibility shall take into account both short- and long-term monetary and nonmonetary costs and benefits.

6. “Feeder bluff” or “erosional bluff” means any bluff (or cliff) experiencing periodic erosion from waves, sliding or slumping, and/or whose eroded sand or gravel material is naturally transported (littoral drift) via a driftway to an accretion shoreform; these natural sources of beach material are limited and vital for the long-term stability of driftways and accretion shoreforms.
7. “Feeder bluff exceptional” means relatively rapidly eroding bluff segments identified by the presence of landslide scarps, bluff toe erosion, and a general absence of vegetative cover and/or portions of bluff face fully exposed. Other indicators included the presence of colluvium (slide debris), boulder or cobble lag deposits, and fallen trees across the beachface. Feeder bluff exceptional segments lack a backshore, old or rotten logs, and coniferous bluff vegetation.
8. “Feedlot” means a concentrated, confined animal or poultry operation for production of meat, milk or eggs; or stabling in yards, barns, pens or houses wherein animals or poultry are fed at the place of confinement; and crop or forage growth or production is not sustained within the place of confinement.
9. “Fill” means the transport or placement by any manual or mechanical means of fill material from, to, or on an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land, including temporary stockpiling of fill material.
10. “Fill material” means any solid or semi-solid material, including rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure that, when placed, changes the grade or elevation of the receiving site.
11. “Fish and wildlife habitat conservation areas” means those areas as defined in WCC Chapter 16.16 (Critical Areas).
12. “Fish habitat” means a complex of physical, chemical, and biological conditions that provide the life-supporting and reproductive needs of a species or life stage of fish. Although the habitat requirements of a species depend on its age and activity, the basic components of fish habitat in rivers, streams, ponds, lakes, estuaries, marine waters, and nearshore areas include, but are not limited to, the following:
 - a. Clean water and appropriate temperatures for spawning, rearing, and holding.
 - b. Adequate water depth and velocity for migrating, spawning, rearing, and holding, including off-channel habitat.
 - c. Abundance of bank and instream structures to provide hiding and resting areas and stabilize stream banks and beds.
 - d. Appropriate substrates for spawning and embryonic development. For stream- and lake-dwelling fishes, substrates range from sands and gravel to rooted vegetation or submerged rocks and logs. Generally, substrates must be relatively stable and free of silts or fine sand.
 - e. Presence of riparian vegetation as defined in this program. Riparian vegetation creates a transition zone, which provides shade, and food sources of aquatic and terrestrial insects for fish.
 - f. Unimpeded passage (i.e., due to suitable gradient and lack of barriers) for upstream and downstream migrating juveniles and adults.
13. “Fisheries” means all species of fish and shellfish commonly or regularly originating or harvested commercially or for sport in Puget Sound and its tributary freshwater bodies, together with the

- 1 aquatic plants and animals and habitat needed for continued propagation and growth of such
2 species.
- 3 14. “Fisheries enhancement” means actions taken to rehabilitate, maintain or create fisheries habitat,
4 including but not limited to hatcheries, spawning channels, lake rehabilitation, and planting of
5 fisheries stocks. Fisheries enhancement differs from aquaculture in that the increase in fisheries
6 stocks eventually becomes available for public harvest.
- 7 15. “Float” means an anchored (not directly to the shore) floating platform that is free to rise and fall
8 with water levels and is used for water-dependent recreational activities such as boat mooring,
9 swimming, or diving. Floats may stand alone with no over-water connection to shore or may be
10 located at the end of a pier or ramp..
- 11 16. “Flood” or “flooding” means a general and temporary condition of partial or complete inundation of
12 normally dry land areas from the overflow of inland waters and/or the unusual and rapid
13 accumulation of runoff of surface waters from any source.
- 14 17. “Flood control works” means all development on rivers and streams designed to retard bank
15 erosion, to reduce flooding of adjacent lands, to control or divert stream flow, or to create a
16 reservoir, including but not limited to revetments, dikes, levees, channelization, dams, vegetative
17 stabilization, weirs, flood and tidal gates. Excluded are water pump apparatus.
- 18 18. “Flood management” means a long-term program to reduce flood damages to life and property and
19 to minimize public expenses due to floods through a comprehensive system of planning,
20 development regulations, building standards, structural works, and monitoring and warning
21 systems.
- 22 19. “Flood-proofing” means structural provisions, changes, adjustments or a combination thereof, to
23 buildings, structures, and works in areas subject to flooding in order to reduce or eliminate damages
24 from flooding to such development and its contents, as well as related water supplies and utility
25 facilities.
- 26 20. “Floodway fringe” means that fringe of land in the floodplain outside the floodway, which is subject
27 to inundation by the base flood. Flooding in the fringe is limited to flood surge storage of water
28 currents moving at a negligible velocity of less than one-half mile per hour.
- 29 21. “Food chain” means the hierarchy of feeding relationships between species in a biotic community.
30 The food chain represents the transfer of material and energy from one species to another within an
31 ecosystem.
- 32 22. “Foreshore” means the intertidal area between mean higher high water and mean low water.
- 33 23. “Fossil fuels” include coal, petroleum, crude oil, natural gas, oil shales, bitumens, tar sands, propane,
34 butane, and heavy oils. All contain carbon and were formed as a result of geologic processes acting
35 on the remains of organic matter. Renewable fuels are not fossil fuels.
- 36 24. “Fossil Fuel Transshipment Facility” is a facility engaging primarily in the process of off-loading fossil
37 fuels from one transportation method (such as a ship, truck, or railcar) and loading it onto another
38 transportation method for the purposes of transporting the fossil fuel into and out of Whatcom
39 County. This definition shall include bulk storage or transfer facilities for the shipment of crude oil
40 without refining or consuming within the Cherry Point Industrial District and shall exclude Small
41 Fossil or Renewable Fuel Storage and Distribution Facilities.

25. “Fossil Fuel Refinery” means a facility that converts crude oil and other liquids into petroleum products including but not limited to gasoline, distillates such as diesel fuel and heating oil, jet fuel, petrochemical feedstocks, waxes, lubricating oils, and asphalt. Activities that support refineries include but are not limited to: bulk storage, manufacturing, or processing of fossil fuels or by products. This definition excludes Small Fossil or Renewable Fuel Storage and Distribution Facilities.
26. “Frequently flooded areas” means lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance and attenuation functions, as determined by the County in accordance with WAC 365-190-080(3). Classifications of frequently flooded areas include, at a minimum, the “special flood hazard area” designations of the Federal Emergency Management Agency and the National Flood Insurance Program, as designated in WCC Chapter 16.16 (Critical Areas).

23.60.070 “G” definitions.

1. “Gabions” means works composed of masses of rock, rubble, or masonry tightly enclosed usually by wire mesh so as to form massive blocks. They are used to form walls on beaches to retard wave erosion or as foundations for breakwaters or jetties.
2. “Gangway.” See “Moorage Structure.”
3. “Geologically hazardous areas” means areas designated in WCC Chapter 16.16 that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, pose unacceptable risks to public health and safety and may not be suited to commercial, residential, or industrial development.
4. “Geotechnical assessment” is an umbrella term used for the evaluation completed by a qualified professional to meet the requirements of WCC 16.16.255 (Critical areas assessment reports) and WCC 16.16, Article 3 (Geologically Hazardous Areas).
5. “Gradient” means a degree of inclination, or a rate of ascent or descent, of an inclined part of the earth’s surface with respect to the horizontal; the steepness of a slope. It is expressed as a ratio (vertical to horizontal), a fraction (such as meters/kilometers or feet/miles), a percentage (of horizontal distance), or an angle (in degrees).
6. “Grading” means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.
7. “Groins” means wall-like structures extending on an angle waterward from the shore into the intertidal zone. Their purpose is to build or preserve an accretion shoreform or berm on their updrift side by trapping littoral drift. Groins are relatively narrow in width but vary greatly in length. Groins are sometimes built in series as a system, and may be permeable or impermeable, high or low, and fixed or adjustable.
8. “Ground water” means all water that exists beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water within the boundaries of the state, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves (Chapter 90.44 RCW).
9. “Growth Management Act” means Chapters 36.70A and 36.70B RCW, as amended.

23.60.080 “H” definitions.

1. “Habitat conservation areas.” See “Fish and wildlife habitat conservation areas.”

2. “Harbor area” means the navigable waters between inner and outer harbor lines as established by the State Harbor Lines Commission waterward of and within one mile of an incorporated city. Harbor areas have been established offshore of Bellingham and Blaine.
3. “Hazard tree” See WCC Chapter 16.16 (Critical Areas).
4. “Hazardous area” means any shoreline environment which is hazardous for intensive human use or structural development due to inherent and/or predictable physical conditions, such as, but not limited to, geologically hazardous areas, frequently flooded areas, and coastal high hazard areas.
5. “Hazardous materials” means any substance containing such elements or compounds which, when discharged in any quantity in shorelines, present an imminent and/or substantial danger to public health or welfare, including, but not limited to: fish, shellfish, wildlife, water quality, and other shoreline features and property.
6. “Hazardous substance” means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090 or 173-303-100.
7. “Hearings board” means the State Shorelines Hearings Board referenced in RCW 90.58.170.
8. “Height (building)” means the distance measured from the average grade level to the highest point of a structure. Television antennas, chimneys, and similar structures or appurtenances shall not be used in calculating height except where they obstruct the view of residences adjoining such shorelines. Temporary construction equipment is excluded in this calculation (WAC 173-27-030(9) or its successor). For all moorage structures, height shall be measured from the ordinary high water mark.
9. “High intensity land use” means land use that includes the following uses or activities: commercial, urban, industrial, institutional, retail sales, residential (more than one unit/acre), high intensity agriculture (dairies, nurseries, greenhouses, raising and harvesting crops requiring annual tilling, raising and maintaining animals), high intensity recreation (golf courses, ball fields), and hobby farms.
10. “Historic preservation professional” means those individuals who hold a graduate degree in architectural history, art history, historic preservation, or closely related field, with coursework in American architectural history, or a bachelor’s degree in architectural history, art history, historic preservation or closely related field plus one of the following:
 - a. At least two years of full-time experience in research, writing, or teaching in American architectural history or restoration architecture with an academic institution, historical organization or agency, museum, or other professional institution; or
 - b. Substantial contribution through research and publication to the body of scholarly knowledge in the field of American architectural history.
11. “Historic site” means those sites that are eligible or listed on the Washington Heritage Register, National Register of Historic Places, or any locally developed historic registry formally adopted by the Whatcom County Council.
12. “Hydraulic project approval (HPA)” means a permit issued by the State Department of Fish and Wildlife for modifications to waters of the state in accordance with Chapter 77.55 RCW.
13. “Hydric soil” means a soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be

determined following the methods described in the NRCS “Field Indicators of Hydric Soils” Version 7, and/or the Corps of Engineers Wetlands Delineation Manual, as amended.

14. “Hydrophytic vegetation” means macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

15. “Hyporheic zone” means the saturated zone located beneath and adjacent to streams that contain some proportion of surface water from the surface channel mixed with shallow ground water. The hyporheic zone serves as a filter for nutrients, as a site for macroinvertebrate production important in fish nutrition, and provides other functions related to maintaining water quality.

23.60.090 “I” definitions.

1. “In-kind compensation” means to replace critical areas with substitute areas whose characteristics and functions mirror those destroyed or degraded by a regulated activity.

2. “Instream structure” means a structure placed by humans within a stream or river waterward of the ordinary high-water mark that either causes or has the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. Instream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose.

3. “Industrial development” means facilities for processing, manufacturing, and storage of finished or semi-finished goods, including but not limited to metal or mineral product refining, power generating facilities, including hydropower, ship building and major repair, storage and repair of large trucks and other large vehicles or heavy equipment, related storage of fuels, commercial storage and repair of fishing gear, warehousing, construction contractors’ offices and material/equipment storage yards, wholesale trade or storage, and log storage on land or water, together with necessary accessory uses such as parking, loading, and waste storage and treatment. Excluded from this definition are mining, including on-site processing of raw materials, and off-site utility, solid waste, road or railway development, and methane digesters that are accessory to an agricultural use. This definition excludes fossil or renewable fuel refineries or transshipment facilities.

4. “Infiltration” means the downward entry of water into the immediate surface of soil.

5. “Institutional development” means those public and/or private facilities including, but not limited to, police and fire stations, libraries, activity centers, schools, educational and religious training centers, water-oriented research facilities, and similar noncommercial uses, excluding essential public facilities.

6. “Intertidal zone” means the substratum from extreme low water of spring tides to the upper limit of spray or influence from ocean-derived salts. It includes areas that are sometimes submerged and sometimes exposed to air, mud and sand flats, rocky shores, salt marshes, and some terrestrial areas where salt influences are present.

7. “Invasive species” means a species that is (a) nonnative (or alien) to Whatcom County and (b) whose introduction causes or is likely to cause economic or environmental harm, or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions.

23.60.100 “J” definitions.

1. “Jetties” means structures that are generally perpendicular to shore extending through or past the intertidal zone. They are built singly or in pairs at harbor entrances or river mouths mainly to prevent shoaling or accretion from littoral drift in entrance channels, which may or may not be dredged. Jetties also serve to protect channels from storm waves or cross currents, and stabilize inlets through barrier beaches. On the West Coast and in this region, most jetties are of riprap mound construction.

23.60.110 “K” definitions.

Reserved.

23.60.120 “L” definitions.

1. “Lake.” See WCC Chapter 16.16 (Critical Areas).
2. “Landslide” means a general term covering a wide variety of mass movement landforms and processes involving the downslope transport, under gravitational influence of soil and rock material *en masse*; included are debris flows, debris avalanches, earthflows, mudflows, slumps, mudslides, rock slides, and rock falls.
3. “Landslide hazard areas” means areas that due to a combination of site conditions, like slope inclination and relative soil permeability, are susceptible to mass wasting, as designated in WCC Chapter 16.16 (Critical Areas).
4. “Launch Rail.” See “Moorage Structure.”
5. “Launch Ramp” or “Boat Ramp.” See “Moorage Structure.”
6. “Levee” means a natural or artificial embankment on the bank of a stream for the purpose of keeping floodwaters from inundating adjacent land. Some levees have revetments on their sides.
7. “Liberal construction” means an interpretation that applies in writing in light of the situation presented that tends to effectuate the spirit and purpose of the writing.
8. “Littoral drift” means the natural movement of sediment, particularly sand and gravel, along shorelines by wave action in response to prevailing winds or by stream currents (see also “drift sector,” “driftway”).
9. “Live-aboard” means any noncommercial habitation of a vessel when any one of the following applies:
 - a. Any person or succession of different persons resides on the vessel in a specific location, and/or in the same area on more than a total of 30 days in any 40-day period or on more than a total of 90 days in any 365-day period. “In the same area” means within a radius of one mile of any location where the same vessel previously moored or anchored on state-owned aquatic lands. A vessel that is occupied and is moored or anchored in the same area, but not for the number of days described in this subsection, is considered used as a recreational or transient vessel;
 - b. The city or county jurisdiction, through local ordinance or policy, defines the use as a residential use or identifies the occupant of the vessel as a resident of the vessel or of the facility where it is moored;
 - c. The operator of the facility where the vessel is moored, through the moorage agreement, billing statement, or facility rules, defines the use as a residential use or identifies the occupant of the vessel as a resident of the vessel or of the facility; or

- d. The occupant or occupants identify the vessel or the facility where it is moored as their residence for voting, mail, tax, or similar purposes.
10. "Log booming" means assembling and disassembling rafts of logs for water-borne transportation.
11. "Log storage" means the holding of logs in the water for more than 60 days.

23.60.130 "M" definitions.

1. "Maintenance or repair" means those usual activities required to prevent a decline, lapse or cessation from a lawfully established condition or to restore the character, scope, size, and design of a serviceable area, structure, or land use to a state comparable to its previously authorized and undamaged condition. This does not include any activities that change the character, scope, or size of the original structure, facility, utility or improved area beyond the original design.
2. "Marina" means a facility that provides wet moorage or dry storage for pleasure or commercial craft where goods, moorage or services related to boating may be sold commercially or provided for a fee, e.g., yacht club, etc. Launching facilities and covered moorage may also be provided. Marinas may be open to the general public or restricted on the basis of property ownership or membership. Manufacturing of watercraft is considered industrial. Shared moorage of 5 or more residential units is considered a marina.
3. "Marsh" means a low flat wetland area on which the vegetation consists mainly of herbaceous plants such as cattails, bulrushes, tules, sedges, skunk cabbage or other hydrophytic plants. Shallow water usually stands on a marsh at least during part of the year.
4. "Mass wasting" means downslope movement of soil and rock material by gravity. This includes soil creep, erosion, and various types of landslides, not including bed load associated with natural stream sediment transport dynamics.
5. "May" means the action is allowable, provided it conforms to the provisions of this program.
6. "Mean annual flow" means the average flow of a river, or stream (measured in cubic feet per second) from measurements taken throughout the year. If available, flow data for the previous 10 years should be used in determining mean annual flow.
7. "Mean higher high water" or "MHHW" means the mean elevation of all higher tides, generally occurring twice each day in Whatcom County at any given location on the marine shoreline.
8. "Mean lower low water" or "MLLW" means the mean elevation of all lower tides, generally occurring twice each day in Whatcom County at any given location on the marine shoreline.
9. "Mining" means the removal of naturally occurring metallic and nonmetallic minerals or other materials from the earth for commercial and other uses.
10. "Mitigation" means individual actions that may include a combination of the following measures, listed in order of preference:
 - a. Avoiding an impact altogether by not taking a certain action or parts of actions;
 - b. Minimizing impacts by limiting the degree or magnitude of an action and its implementation;
 - c. Rectifying impacts by repairing, rehabilitating, or restoring the affected environment;
 - d. Reducing or eliminating an impact over time by preservation and maintenance operations during the life of the action;
 - e. Compensating for an impact by replacing or providing substitute resources or environments;and

- 1 f. Monitoring the mitigation and taking remedial action when necessary.
- 2 11. "Mitigation plan" means a detailed plan indicating actions necessary to mitigate adverse impacts to
- 3 critical areas.
- 4 12. "Mixed use" means a combination of uses within the same building or site as a part of an integrated
- 5 development project with functional interrelationships and coherent physical design.
- 6 13. "Monitoring" means evaluating the impacts of development proposals over time on the biological,
- 7 hydrological, pedological, and geological elements of ecosystem functions and processes and/or
- 8 assessing the performance of required mitigation measures through the collection and analysis of
- 9 data by various methods for the purpose of understanding and documenting changes in natural
- 10 ecosystems and features compared to baseline or pre-project conditions and/or reference sites.
- 11 14. "Moorage Buoy." See "Moorage Structure."
- 12 15. "Boat Lift" or lift. See "Moorage Structure."
- 13 16. "Mooring Pile" or piling. See "Moorage Structure."
- 14 17. "Moorage Structure" means any in- or overwater structures, used for mooring, launching, or storing
- 15 vessels and may contain any one or combination of the following:
- 16 a. Piers and docks adjoin the shoreline, extend over the water, and serve as a landing or
- 17 moorage place for commercial, industrial and pleasure watercraft.
- 18 i. Piers are built on fixed platforms and sit above the water.
- 19 ii. Docks float on the water and are anchored to the land, substrate, or the pier with pilings
- 20 or anchors.
- 21 b. Gangways are walkways that connect the pier to the dock. Gangways are often used in areas
- 22 where the water level changes due to tides or seasonal variations.
- 23 c. Ells are extensions of piers, often in a U-shape or L shape, that provide additional watercraft
- 24 moorage.
- 25 d. Recreational floats are platforms that float on the water's surface. They are anchored offshore
- 26 and are used for swimming and fishing. Some floats have components such as slides and
- 27 trampolines.
- 28 e. Boathouses basically serve as garages for boats. They have walls and a roof, and are situated
- 29 on the water or just above the water's edge.
- 30 f. Mooring buoys typically include an anchoring system with an anchor and anchor line, a float
- 31 marking its location, and a fitting for a vessel's mooring chain or hawser. Washington laws
- 32 establish two categories for mooring buoys -- commercial and recreational [RCW 79.105.430].
- 33 Commercial buoys are typically used for temporary moorage of a vessel that is awaiting transit
- 34 or loading or offloading. Recreational buoys are used as semi-permanent moorage for
- 35 recreational vessels.
- 36 g. Mooring piles or pilings are fixed poles or groups of poles set in the substrate and extending
- 37 above the water line.
- 38 h. Lifts or boat lifts raise watercraft out of the water for launching or storing. They may be
- 39 attached to the substrate, a pier or dock, bulkhead or float or be located upland.
- 40 i. Canopies are covers that protect watercraft from the sun and rain.
- 41 j. Boat or launch ramps are solid or relatively solid surfaces that bridge land and water and are
- 42 used for moving watercraft into and out of the water.

- 1 k. Railways are rails attached to the substrate used for launching and retrieving watercraft,
2 usually with a cradle and winch system.
- 3 l. Others such as Jet Ski floats and boat dry docks provide storage of watercraft out of the water.
4 Some floats serve as helicopter pads, while others are used for docking seaplanes.
- 5 m. “Finger” means a narrow extension to a fixed-pile pier, usually extending perpendicular to the
6 pier walkway along with an ell to form an enclosed area for boat moorage.
- 7 18. “Must” means a mandate; the action is required.

8 **23.60.140 “N” definitions.**

- 9 1. “Natural shoreline environment” means an area designated pursuant to WCC
10 Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).
- 11 2. “Navigable waters” means a waterbody that in its ordinary condition, or by being united with other
12 waterbodies, forms a continued route or area over which commerce or recreational activities are or
13 may be carried on in the customary modes in which such commerce or recreation is conducted on
14 water.
- 15 3. “Nearshore” or “nearshore zone” means the area of marine and estuarine shoreline, generally
16 extending from the top of the shoreline bank or bluff to the depth offshore where light penetrating
17 the water falls below a level supporting plant growth, and upstream in estuaries to the head of the
18 tidal influence. It includes bluffs, beaches, mudflats, kelp and eelgrass beds, salt marshes, gravel
19 spits, and estuaries..
- 20 4. “No net loss” means the maintenance of the aggregate total of the county’s shoreline ecological
21 and/or critical area functions and values at its current level of environmental resource productivity.
22 As a development and/or mitigation standard, no net loss requires that the impacts of a particular
23 shoreline development and/or use, whether permitted or exempt, be identified and prevented or
24 mitigated, such that it has no resulting adverse impacts on shoreline ecological functions or values.
25 Each project shall be evaluated based on its ability to meet the no net loss standard commensurate
26 with its scale and character.
- 27 5. “Nonconforming lot” means a lot that met dimensional requirements of the applicable master
28 program at the time of its establishment but now contains less than the required width, depth or
29 area due to subsequent changes to the master program.
- 30 6. “Nonconforming structure” means an existing structure that was lawfully constructed at the time it
31 was built but is no longer fully consistent with present regulations such as setbacks, buffers or yards;
32 area; bulk; height or density standards due to subsequent changes to the master program.
- 33 7. “Nonconforming use” means an existing shoreline use that was lawfully established prior to the
34 effective date of initial adoption of this program (August 27, 1976) or any applicable amendment
35 thereafter, but which does not conform to present use regulations due to subsequent changes to
36 the master program.
- 37 8. “Non-water-oriented use” means uses that are not water-dependent, water-related or water-
38 enjoyment. Non-water-oriented uses have little or no relationship to the shoreline and are not
39 considered priority uses under the Shoreline Management Act except single-family residences. Any
40 use that does not meet the definition of water-dependent, water-related or water-enjoyment is
41 classified as non-water-oriented.

23.60.150 “O” definitions.

1. “Oil” means petroleum or any petroleum product in liquid, semi-liquid, or gaseous form including, but not limited to, crude oil, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredging spoil. See Fossil Fuels.
2. “Ongoing agriculture” means those activities conducted on lands defined in RCW 84.34.020(2), and those activities involved in the production of crops and livestock, including, but not limited to, operation and maintenance of existing farm and stock ponds or drainage ditches, irrigation systems, changes between agricultural activities, and maintenance or repair of existing serviceable structures and facilities. Activities that bring an area into agricultural use are not part of an ongoing activity. An operation ceases to be ongoing when the area on which it was conducted has been converted to a nonagricultural use, or has lain idle for more than five consecutive years unless that idle land is registered in a federal or state soils conservation program. Forest practices are not included in this definition.
3. “Open space” means any parcel or area of land or water not covered by structures, hard surfacing, parking areas and other impervious surfaces except for pedestrian or bicycle pathways, or where otherwise provided by this title or other County ordinance and set aside or dedicated for active or passive recreation, visual enjoyment, or critical area development buffers as established in WCC Chapter 16.16. Submerged lands and/or tidelands within the boundaries of any waterfront parcel that are located waterward of the ordinary high water mark shall not be used in open space calculations. Required open space percentages, as applicable, are not to be used for purposes of calculating total impervious surface.
4. “Ordinary high water mark (OHWM)” means the mark or line on all lakes, rivers, streams, and tidal water that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition existed on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with approved development; provided, that in any area where the OHWM cannot be found, the OHWM adjoining saltwater shall be the line of mean higher high tide and the OHWM adjoining fresh water shall be the line of mean high water. For braided streams, the OHWM is found on the banks forming the outer limits of the depression within which the braiding occurs.

23.60.160 “P” definitions.

1. “Party of record” means all persons, agencies or organizations who have submitted written comments in response to a notice of application; made oral comments in a formal public hearing conducted on an application; or notified local government of their desire to receive a copy of the final decision on a permit and who have provided an address for delivery of such notice by mail.
2. “Permit or approval” means any form or permission required under this program prior to undertaking activity on shorelines of the state, including substantial development permits, variance permits, shoreline conditional use permits, permit revisions, and shoreline exemptions from the substantial development permit process.
3. “Person” means any individual, trustee, executor, other fiduciary, corporation, firm, partnership, association, organization, or other entity, either public or private, acting as a unit.

- 1 4. "Pier." See "Moorage Structure."
- 2 5. "Pocket beach" means an isolated beach existing usually without benefit of littoral drift from
3 sources elsewhere. Pocket beaches are produced by erosion of immediately adjacent bluffs or banks
4 and are relatively scarce and therefore valuable shoreforms in Whatcom County; they are most
5 common between rock headlands and may or may not have a backshore.
- 6 6. "Point" means a low profile shore promontory that may be either the wave-cut shelf remaining from
7 an ancient bluff or the final accretional phase of a hooked spit that closed the leeward side gap.
8 Points are accretion shoreforms characterized by converging berms accreted by storm waves that
9 enclose a lagoon, marsh, or meadow, depending on the point's development stage.
- 10 7. "Point bar" means an accretion shoreform created by deposition of sand and gravel on the inside,
11 convex side of a meander bend. Most material is transported downstream as sediment and bedload
12 at times of high current velocity, or flood stage, from eroding banks or other bars upstream.
- 13 8. "Pond" means an open body of water, generally equal to or greater than 6.6 feet deep, that persists
14 throughout the year and occurs in a depression of land or expanded part of a stream and has less
15 than 30 percent aerial coverage by trees, shrubs, or persistent emergent vegetation. Ponds are
16 generally smaller than lakes. Farm ponds are excluded from this definition. Beaver ponds that are
17 two years old or less are excluded from this definition. For the purpose of this program, any pond
18 whose surface water extends into the OHWM of any shoreline of the state shall be considered part
19 of that shoreline of the state.
- 20 9. "Port development" means public or private facilities for transfer of cargo or passengers from
21 water-borne craft to land and vice versa, including, but not limited to: piers, wharves, sea islands,
22 commercial float plane moorages, offshore loading or unloading buoys, ferry terminals, and
23 required dredged waterways, moorage basins, and equipment for transferring cargo or passengers
24 between land and water modes. Excluded from this definition and addressed elsewhere are airports,
25 marinas, boat ramps or docks used primarily for recreation, cargo storage and parking areas not
26 essential for port operations, boat building or repair. The latter group is considered industrial or
27 accessory to other uses. This definition excludes fossil or renewable fuel transshipment facilities.
- 28 10. "Potable" means water that is suitable for drinking by the public (Chapter 246-290 WAC).
- 29 11. "Preservation" means actions taken to ensure the permanent protection of existing, ecologically
30 important areas that the County has deemed worthy of long-term protection.
- 31 12. "Primary association" means the use of a habitat area by a listed or priority species for
32 breeding/spawning, rearing young, resting, roosting, feeding, foraging, and/or migrating on a
33 frequent and/or regular basis during the appropriate season(s), as well as habitats that are used less
34 frequently/regularly but which provide for essential life cycle functions such as breeding, nesting, or
35 spawning.
- 36 13. "Priority habitat" means a habitat type with unique or significant value to one or more species. An
37 area classified and mapped as priority habitat must have one or more of the following attributes:
38 comparatively high fish or wildlife density; comparatively high fish or wildlife species diversity; fish
39 spawning habitat; important wildlife habitat; important fish or wildlife seasonal range; important
40 fish or wildlife movement corridor; rearing and foraging habitat; important marine mammal
41 haulout; refuge; limited availability; high vulnerability to habitat alteration; unique or dependent
42 species; or shellfish bed. A priority habitat may be described by a unique vegetation type or by a

dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife (WAC 173-26-020(24)).

14. "Priority species" means wildlife species of concern due to their population status and their sensitivity to habitat alteration, as defined by the Washington Department of Fish and Wildlife.

15. "Private dock" means a dock and/or float for pleasure craft moorage or water recreation for exclusive use by one waterfront lot owner.

16. "Private sign" means a sign used on a private residence to indicate only the owner's name or address, that the premises are for rent or sale, or for other reasonable purposes related to residential use including permitted home occupations.

17. "Project" means any proposed or existing activity regulated by Whatcom County.

18. "Public access" means the public's right to get to and use the state's public waters, both saltwater and freshwater, the water/land interface and associated shoreline environment. It includes physical access that is either lateral (areas paralleling the shore) or perpendicular (an easement or public corridor to the shore), and/or visual access facilitated by means such as scenic roads and overlooks, viewing towers and other public sites or facilities.

19. "Public interest" means the interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected including, but not limited to, an effect on public property or on health, safety, or general welfare resulting from adverse effects of a use or development.

23.60.170 "Q" definitions.

1. "Qualified professional" or "qualified consultant." See WCC 16.16 (Critical Areas).

23.60.180 "R" definitions.

1. "Recharge" means the process involved in the absorption and addition of water from the unsaturated zone to ground water.

2. "Recreation" means an experience or activity in which an individual engages for personal enjoyment and satisfaction. Most shore-based recreation includes outdoor recreation such as: fishing, hunting, clamming, beach combing, and rock climbing; various forms of boating, swimming, hiking, bicycling, horseback riding, camping, picnicking, watching or recording activities such as photography, painting, bird watching or viewing of water or shorelines, nature study and related activities.

3. "Recreational development" means the modification of the natural or existing environment to accommodate recreation. This includes clearing land, earth modifications, structures and other facilities such as parks, camps, camping clubs, launch ramps, golf courses, viewpoints, trails, public access facilities, public parks and athletic fields, hunting blinds, wildlife enhancement (wildlife ponds are considered excavation), and other low intensity use outdoor recreation areas. Recreational homes/condominiums and related subdivisions of land are considered residential; resorts, motels, hotels, recreational vehicle parks, intensive commercial outdoor or indoor recreation, and other commercial enterprises are considered commercial.

- 1 4. "Recreational Float." See "Moorage Structure."
- 2 5. "Reestablishment" means measures taken to intentionally restore an altered or damaged natural
3 feature or process including:
 - 4 a. Active steps taken to restore damaged wetlands, streams, protected habitat, and/or their
5 buffers to the functioning condition that existed prior to an unauthorized alteration;
 - 6 b. Actions performed to reestablish structural and functional characteristics of a critical area that
7 have been lost by alteration, past management activities, or other events; and
 - 8 c. Restoration can include restoration of wetland functions and values on a site where wetlands
9 previous existed, but are no longer present due to lack of water or hydric soils.
- 10 5. "Rehabilitation" means a type of restoration action intended to repair natural or historic functions
11 and processes. Activities could involve breaching a dike to reconnect wetlands to a floodplain or
12 other activities that restore the natural water regime.
- 13 6. "Renewable biomass" includes but is not limited to the following:
 - 14 a. Planted crops and crop residue harvested from agricultural land.
 - 15 b. Planted trees and tree residue from a tree plantation.
 - 16 c. Animal waste material and animal byproducts.
 - 17 d. Slash and pre-commercial thinnings.
 - 18 e. Organic matter that is available on a renewable or recurring basis.
 - 19 f. Algae.
 - 20 g. Separated yard waste or food waste, including recycled cooking and trap grease.
 - 21 h. Items a through g including any incidental, de minimis contaminants that are impractical to
22 remove and are related to customary feedstock production and transport.
- 23 7. "Renewable Fuel" means liquid fuels produced from renewable biomass and limited in terms of
24 blending with fossil fuels. Common renewable fuels include ethanol and biodiesel:
 - 25 a. "E85 motor fuel" means an alternative fuel that is a blend of ethanol and hydrocarbon of which
26 the ethanol portion is nominally seventy-five to eighty-five percent denatured fuel ethanol by
27 volume that complies with the most recent version of American society of testing and materials
28 specification D 5798.
 - 29 b. "Renewable diesel" means a diesel fuel substitute produced from nonpetroleum renewable
30 sources, including vegetable oils and animal fats, that meets the registration requirements for
31 fuels and fuel additives established by the federal environmental protection agency in 40 Code
32 of Federal Regulations (C.F.R.) Part 79 and meets the requirements of American society of
33 testing and materials specification D 975.
 - 34 c. Renewable fuels shall include those designed to result in a lifecycle greenhouse gas emission
35 reduction of at least 50% or more under the Federal Clean Air Act. Renewable fuels shall not
36 include products produced from palm oil or other feedstocks that cannot be proven to reduce
37 greenhouse gas emissions using accepted methods of the Washington State Department of
38 Ecology or US EPA.
- 39 8. "Renewable Fuel Refinery" means a facility that processes or produces renewable fuels. This
40 definition excludes Small Fossil or Renewable Fuel Storage and Distribution Facilities.

- 1 9. “Renovate” means to restore to an earlier condition as by repairing or remodeling. Renovation shall
2 include any interior changes to a building and those exterior changes that do not substantially
3 change the character of an existing structure.
- 4 10. “Residential development” means development and use of land primarily for human residence,
5 including, but not limited to: single-family and multifamily dwellings, condominiums, mobile
6 homes and mobile home parks, boarding homes, family daycare homes, adult family homes,
7 retirement and convalescent homes, bed and breakfasts, and vacation rental units, together with
8 accessory uses common to normal residential use. Camping sites or clubs, recreational vehicle
9 parks, motels, and hotels, are not included in this definition.
- 10 11. “Resource shoreline environment” means an area designated pursuant to WCC
11 Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).
- 12 12. “Responsible Party” or “Party Responsible.” The “responsible party” shall be assumed, in singular
13 or plural, to be any individual, business, organization, or entity, property owner, or person having
14 control of a property who has created or allowed to exist a violation of any applicable regulations,
15 whether or not the violation is known to that person at the time the violation occurred or is
16 occurring. A responsible party includes any person who aids, assists, or perpetuates a violation.
- 17 13. “Restore,” “restoration” or “ecological restoration” means the reestablishment or upgrading of
18 impaired ecological shoreline processes or functions. This may be accomplished through measures
19 including, but not limited to, revegetation, removal of intrusive shoreline structures, and removal
20 or treatment of toxic materials. Restoration does not imply a requirement for returning the
21 shoreline environment to aboriginal or pre-European settlement conditions.
- 22 14. “Revetment” means a sloping structure built to protect a scarp, embankment, or shore against
23 erosion by waves or currents. Usually built of riprap, with heavy armor layer, one or more filter
24 layers of smaller rock or filter cloth, and “toe” protection. A revetment slopes shoreward and has a
25 rough or jagged face. Its sloping face absorbs wave energy and differentiates it from a bulkhead,
26 which is a near vertical structure..
- 27 15. “Riprap” means dense, hard, angular rock free from cracks or other defects conducive to
28 weathering used for revetments or other flood control works.
- 29 16. “Riparian zone” means the area adjacent to a waterbody (stream, lake or marine water) that
30 contains vegetation that influences the aquatic ecosystem, nearshore area and/or fish and wildlife
31 habitat by providing shade, fine or large woody material, nutrients, organic debris, sediment
32 filtration, and terrestrial insects (prey production). Riparian areas include those portions of
33 terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic
34 ecosystems (i.e., zone of influence). Riparian zones provide important wildlife habitat. They provide
35 sites for foraging, breeding and nesting; cover to escape predators or weather; and corridors that
36 connect different parts of a watershed for dispersal and migration.
- 37 17. “Riparian vegetation” means vegetation that tolerates and/or requires moist conditions and
38 periodic free-flowing water, thus creating a transitional zone between aquatic and terrestrial
39 habitats which provides cover, shade and food sources for aquatic and terrestrial insects for fish
40 species. Riparian vegetation and their root systems stabilizes stream banks, attenuates high water
41 flows, provides wildlife habitat and travel corridors, and provides a source of limbs and other
42 woody debris to terrestrial and aquatic ecosystems, which, in turn, stabilize stream beds.

18. “River delta” means those lands formed as an aggradational feature by stratified clay, silt, sand and gravel deposited at the mouths of streams where they enter a quieter body of water. The upstream extent of a river delta is that limit where it no longer forms distributary channels.
19. “Rock shore” means those shorelines whose bluffs and banks are typically composed of natural rock formations.
20. “Roof sign” means a sign erected upon, against, or directly above a roof, or on top of or above the parapet of a building; signs on mansard roofs shall be considered wall signs.
21. “Rural shoreline environment” means an area designated pursuant to WCC Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).

23.60.190 “S” definitions.

1. “Seismic hazard areas” means areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.
2. “Shall” means a mandate; the action must be done.
3. “Shared moorage” means moorage for pleasure craft and/or landing for water sports for use in common by shoreline residents of a certain subdivision or community within shoreline jurisdiction or for use by patrons of a public park or quasi-public recreation area, including rental of non-powered craft. If a shared moorage provides commercial services or is of a large scale (5 or more slips), it shall be considered a marina. Shared moorage proposed to serve upland property owners shall also be considered a marina. If a proposal includes covered moorage, commercial sale of goods or services, or a means of launching other than a ramp, swinging boom, or davit style hoist, it shall be considered a marina.
4. “Shellfish” means invertebrates of the phyla Arthropoda (class Crustacea), Mollusca (class Pelecypoda) and Echinodermata.
5. “Shellfish habitat conservation areas” means all public and private tidelands suitable for shellfish, as identified by the Washington Department of Health classification of commercial growing areas, and those recreational harvest areas as identified by the Washington Department of Ecology are designated as shellfish habitat conservation areas pursuant to WAC 365-190-080. Any area that is or has been designated as a shellfish protection district created under Chapter 90.72 RCW is also a shellfish habitat conservation area.
6. “Shellfish protection district” means the Drayton Harbor shellfish protection district (DHSPD) (Ordinance 95-036) and the Portage Bay shellfish protection district (PBSPD) (Ordinance 98-069), or other area formed by the County based on RCW Title 90, in response to State Department of Health (DOH) closures or downgrades of a commercial shellfish growing area due to a degradation of water quality as a result of pollution. These areas include the watershed draining to the shellfish beds as part of the shellfish habitat conservation area.
7. “Shorelands” or “shoreland areas” means those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter 90.58RCW.

- 1 8. “Shorelines” means all of the water areas of the state as defined in RCW 90.58.030, including
2 reservoirs and their associated shorelands, together with the lands underlying them except:
 - 3 a. Shorelines of statewide significance;
 - 4 b. Shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic
5 feet per second or less and the wetlands associated with such upstream segments; and
 - 6 c. Shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.
- 7 9. “Shoreline Administrator” means the Director of the Department of Planning and Development
8 Services, or his/her designee, who is authorized to carry out the administrative duties enumerated
9 in this program.
- 10 10. “Shoreline Conditional Use” for the purposes of this program means a use, development or
11 substantial development listed in the regulations as being permitted only as a shoreline conditional
12 use, or not classified in this program. Shoreline conditional uses are subject to review and approval
13 pursuant to the criteria in WCC Title 22 (Land Use and Development) regardless of whether or not
14 the proposal requires a substantial development permit.
- 15 11. “Shoreline jurisdiction” means all “shorelines of the state” and “shorelands.”
- 16 12. “Shoreline permit” means a shoreline substantial development permit, a shoreline conditional use,
17 or a shoreline variance, or any combination thereof issued by Whatcom County pursuant to
18 Chapter 90.58 RCW.
- 19 13. “Shoreline residential environment” means an area designated pursuant to WCC
20 Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).
- 21 14. “Shoreline stabilization” means structural or nonstructural modifications to the existing shoreline
22 intended to reduce or prevent erosion of uplands or beaches. They are generally located parallel to
23 the shoreline at or near the OHWM. Other construction classified as shore defense works include
24 groins, jetties and breakwaters, which are intended to influence wave action, currents and/or the
25 natural transport of sediments along the shoreline.
- 26 15. “Shoreline stabilization, bioengineered” means biostructural and biotechnical alternatives to
27 hardened structures (bulkheads, walls) for protecting slopes or other erosive features including soft-
28 treatment techniques. Bioengineered stabilization uses vegetation reinforced soil slopes (VRSS),
29 which uses vegetation arranged embedded in the ground to prevent shallow mass-movements and
30 surficial erosion.
- 31 16. “Shoreline stabilization, nonstructural” means a soft treatment which does not use driftwood, logs,
32 geotextile fabric, or other organic or nonorganic structural materials. Examples include:
 - 33 a. Addressing upland drainage issues;
 - 34 b. Planting stabilization vegetation without fill, grading, or use of nonbiodegradable geotextile fabric,
35 gabions or other stabilizing structures to provide temporary erosion control.
- 36 17. “Shoreline stabilization, replacement” means the construction of a new structure to perform a
37 shoreline stabilization function of an existing legally established shoreline stabilization structure
38 which can no longer adequately serve its purpose. Where ordinary high water has established
39 behind the structure replacement is considered a new shoreline stabilization.
- 40 18. “Shoreline stabilization, soft-treatment” means shore erosion control and restoration practices
41 using only plantings or organic materials to restore, protect or enhance the natural shoreline
42 environment. This technique mimics natural conditions for ecological functions and ecosystem-wide

processes. When used, organic/biodegradable structural components are to be placed to avoid significant disruption of sediment recruitment, transportation, and accretion. Examples include:

- a. Bioengineered shoreline stabilization;
- b. Beach nourishment/replenishment;
- c. Vegetated soil stabilization retention methods;
- d. Driftwood;
- e. Coir fiber logs or other natural materials;
- f. Nonstructural shoreline stabilization;
- g. Beach berm.

19. "Shoreline stabilization, hard structure" means shore erosion control practices using hardened structures that armor and stabilize the shoreline landward of the structure from further erosion.

20. "Shoreline stabilization, hybrid structure" means an approach to erosion control that combines soft-treatment shoreline treatment placed waterward of more conventional structural shoreline stabilization elements. The soft treatment preserves natural beach contours and mimics habitat structure in order to preserve ecological functions. The hard structure provides long-term stability to the upland site, but is located sufficiently landward of the OHWM as not to impair ecological processes.

21. Shoreline Stabilization, New. Placement of shoreline stabilization where no such structure previously existed, including additions to or increases in size of existing shoreline stabilization measures, are considered new structures.

22. "Shoreline stabilization, structural" means shoreline stabilization which includes a footing, foundation, or anchors. Materials are typically hardened structures which armor the shoreline. See also "shoreline stabilization, hard structure" and "shoreline stabilization, hybrid structure."

23. "Shoreline view area" means any area looking waterward within the jurisdiction of this program between the OHWM and a public road, park, pathway, or other public area that is undeveloped or developed with accessory uses only; and that does not obstruct the view of the shoreline or would not obstruct the view if natural vegetation, fences, walls, antennas or similar obstructions were removed.

24. "Shorelines of statewide significance" means the following shorelines in Whatcom County:

- a. Those areas of Puget Sound and adjacent saltwaters between the ordinary high water mark and the line of extreme low tide as follows: Birch Bay from Point Whitehorn to Birch Point; and
- b. Those areas of Puget Sound and adjacent saltwaters north to the Canadian line and lying waterward from the line of extreme low tide; and
- c. Those lakes, whether natural, artificial, or a combination thereof, with a surface acreage of 1,000 acres or more measured at the ordinary high water mark including Lakes Whatcom, Baker and Ross; and
- d. Those natural rivers or segments thereof as follows: any west of the crest of the Cascade range downstream of a point where the mean annual flow is measured at 1,000 cubic feet per second or more; including the Nooksack River's mainstream, the North Fork upstream to its confluence with Glacier Creek in Section 6, Township 39 North, Range 7 East, W.M.; and the South Fork upstream to its confluence with Hutchinson Creek in Section 9, Township 37 North, Range 5 East, W.M.
- e. Shoreline jurisdiction associated with subsections (a), (c), and (d) of this section.

- 1 25. “Shorelines of the state” means the total of all “shorelines” and “shorelines of statewide
2 significance” within the state.
- 3 26. “Should” means that the particular action is required unless there is a demonstrated, compelling
4 reason, based on policy of the Act and this chapter, against taking the action.
- 5 27. “Sign” means any placard, billboard, display, message, design, letters, symbol, light, figure,
6 illustration, set of pennants, or other device intended to identify, inform, advertise, or attract
7 attention to any private or public premises, and placed mainly outdoors so as to be seen from any
8 public or quasi-public place. Double-faced signs are counted as two signs. Excluded from this
9 definition are official traffic, directional or warning devices, other official public notices, signs
10 required by law, or flag of a government or other noncommercial institution.
- 11 28. “Significant vegetation removal” means the removal or alteration of trees, shrubs, and/or ground
12 cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant
13 impacts to ecological functions provided by such vegetation. The removal of invasive or noxious
14 weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping,
15 where it does not affect ecological functions, does not constitute significant vegetation removal.
- 16 29. “Single-family development” means the development of a single-family residence permanently
17 installed and served with utilities on a lot of record.
- 18 30. “Site” means any parcel or combination of contiguous parcels, or right-of-way or combination of
19 contiguous rights-of-way under the applicant’s/proponent’s ownership or control that is the subject
20 of a development proposal or change in use.
- 21 31. “Slope” means:
22 a. Gradient.
23 b. The inclined surface of any part of the earth’s surface delineated by establishing its toe and top
24 and measured by averaging the inclination over at least 10 feet of vertical relief.
- 25 32. “Small Fossil or Renewable Fuel Storage and Distribution Facilities” means:
26 a. Equipment and buildings used for purposes of direct sale or distribution to consumers of fossil
27 fuels or renewable fuels, or
28 b. Accessory equipment that supplies fossil fuels or renewable fuels to an onsite allowed
29 commercial or industrial operation, and that does not meet the definitions of fossil fuel or
30 renewable refinery or transshipment facilities
- 31 33. “Soil” means all unconsolidated materials above bedrock described in the Soil Conservation Service
32 Classification System or by the Unified Soils Classification System.
- 33 34. “Solid waste” means all putrescible and non-putrescible solid and semi-solid waste including
34 garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned
35 vehicles and parts thereof, and any other discarded commodities.
- 36 35. “Spit” means an accretion shoreform that is narrow in relation to length and extends parallel to or
37 curves outward from shore; spits are also characterized by a substantial wave-built sand and gravel
38 berm on the windward side, and a more gently sloping silt or marsh shore on the lagoon or leeward
39 side; curved spits are called hooks.
- 40 36. “Standing” is the status required for a person, agency, or other entity to bring an action before an
41 appeal body. A person has standing per RCW 36.70C.060 if they are:
42 a. The applicant and the owner of property to which the land use decision is directed; or

- b. Another person, county department, and/or public agency aggrieved or adversely affected by the land use decision, or who would be aggrieved or adversely affected by a reversal or modification of the land use decision. A person is aggrieved or adversely affected within the meaning of this section only when all of the following conditions are present:
- i. The land use decision has prejudiced or is likely to prejudice that person;
 - ii. That person's asserted interests are among those that the local jurisdiction was required to consider when it made the land use decision;
 - iii. A judgment in favor of that person would substantially eliminate or redress the prejudice to that person caused or likely to be caused by the land use decision; and
 - iv. The petitioner has exhausted his or her administrative remedies to the extent required by law.

37. "Statement of exemption" means a written statement by the Director that a particular development proposal is exempt from the substantial development permit requirement and is generally consistent with this program including the policy of the Act (RCW 90.58.020), pursuant to WCC Title 22 (Land Use and Development).

38. "Streams" means those areas where surface waters produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the annual passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds, and defined channel swales. The channel or bed need not contain water year-round. This definition includes drainage ditches or other artificial water courses where natural streams existed prior to human alteration, and/or the waterway is used by anadromous or resident salmonid or other fish populations or flows directly into shellfish habitat conservation areas.

39. "Strict construction" means an interpretation that considers only the literal words of a writing.

40. "Structure" means a permanent or temporary building or edifice of any kind, or any piece of work artificially built up or composed of parts joined together in some definite matter whether installed on, above, or below the surface of the ground or water, except for vessels.

41. "Substantial development" means any development that materially interferes with the normal public use of the water or shorelines of the state; except the classes of development, listed in WAC 173-27-040.

42. "Substantially degrade" means to cause significant ecological impact.

43. "Sustained yield" means the continuing yield of a biological resource, such as timber from a forest, by controlled and periodic harvesting.

44. "Swamp" means a wetland that is often inundated and composed of woody vegetation.

23.60.200 "T" definitions.

1. "Tideland" means the land on the shore of marine waterbodies between OHWM and the line of extreme low tide which is submerged daily by tides.

2. "Timber" means forest trees, standing or down, of a commercial species, including Christmas trees.

3. "Toe" means the lowest part of a slope or cliff; the downslope end of an alluvial fan, landslide, etc.

4. "Tombolo" means an accretion shoreform that began as a spit and accreted into a causeway-like connection to an island or offshore rock; tombolos normally develop from offshore bars (submarine

berms) that build up in a low energy “wave-shadow” zone between the offshore, wave barrier element and an active driftway.

5. “Top” means the top of a slope; or in this program it may be used as the highest point of contact above a landslide hazard area.

6. “Transportation” means roads and railways, related bridges and culverts, fills, embankments, causeways, parking areas, truck terminals and rail switchyards, sidings, spurs, and air fields. Not included are recreational trails, highway rest areas, ship terminals, seaplane moorages, nor logging roads; they are included respectively under “recreation,” “pier,” “dock,” “residential,” and “forest practices.”

23.60.210 “U” definitions.

1. “Unavoidable” means adverse impacts that remain after all appropriate avoidance and minimization measures have been implemented.

2. “Upland” means dry lands landward of OHWM.

3. “Urban conservancy shoreline environment” means an area designated pursuant to WCC Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).

4. “Urban resort shoreline environment” means an area designated pursuant to WCC Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).

5. “Urban shoreline environment” means an area designated pursuant to WCC Chapter 23.20 (Shoreline Jurisdiction and Environment Designations).

6. “Utilities” means all lines and facilities used to distribute, collect, transmit, or control electrical power, natural gas, petroleum products, information (telecommunications), water, and sewage.

a. “Accessory utilities” means on-site utility features such as a water, sewer, septic, electrical, or gas lines serving a primary use. Accessory utilities shall be considered part of the primary use.

b. “Local utilities” means utilities that serve adjacent properties and include, but are not limited to, powerlines, water, sewer, and stormwater facilities, fiber optic cable, pump stations and hydrants, switching boxes, and other structures normally found in a street right-of-way.

c. “Regional utilities” means utilities that serve more than one community or major attractions; examples include, but are not limited to, two hundred thirty (230) kv power transmission lines, natural gas transmission lines, and regional water storage tanks and reservoirs, regional water transmission lines or regional sewer collectors and interceptors. Regional utilities may also include facilities serving an entire community, such as subregional switching stations (one hundred fifteen (115) kv and smaller), and municipal sewer, water, and storm water facilities. Regional utilities include regional transmission pipelines for the bulk conveyance of natural gas, or pipelines termed a distribution pipeline but having characteristics that fit the definition of a transmission pipeline. Natural gas pipelines which are owned and operated by a gas utility company regulated by the State Utilities and Transportation Commission and which are distribution lines owned by the utility that provide natural gas service directly to county citizens and businesses shall not be considered regional transmission lines.

7. “Utility development” means development including, but not limited to, facilities for distributing, processing, or storage of water, sewage, solid waste, storm drainage, electrical energy including

electronic communications, and their administrative structures, as well as pipelines for petroleum products, and firefighting facilities. Power plants are considered industrial.

23.60.220 “V” definitions.-

1. “Vacation Rental Unit” means a single-family dwelling unit, detached accessory dwelling unit, or accessory apartment that, for compensation, is rented as a single unit used to lodge individuals or families for a period of less than 30 days and where the owner is not present in the rented unit during the rental period. Individual sleeping rooms shall not be rented individually.
2. “Variance” means an adjustment in the application of this program’s bulk and dimensional regulations to a particular site pursuant to WCC Title 22 (Land Use and Development).
3. “Vegetative stabilization” means planting of vegetation to retain soil and retard erosion, reduce wave action, and retain bottom materials. It also means use of temporary structures or netting to enable plants to establish themselves in unstable areas.
4. “Vessel” means a floating structure that is designed primarily for navigation, is normally capable of self-propulsion and use as a means of transportation, and meets all applicable laws and regulations pertaining to navigation and safety equipment on vessels, including, but not limited to, registration as a vessel by an appropriate government agency.

23.60.230 “W” definitions.

1. “Waterbody” means a body of still or flowing water, fresh or marine, bounded by the OHWM.
2. “Water-dependent use” means a use or portion of a use that requires direct contact with the water and cannot exist at a non-water location due to the intrinsic nature of its operations.
3. “Water-enjoyment use” means a recreational use, or other use facilitating public access to the shoreline as the primary character of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general character of the use and that through the location, design and operation assure the public’s ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the water-oriented space within the project must be devoted to the specific aspects of the use that fosters shoreline enjoyment.
4. “Water-oriented use” means any one or a combination of water-dependent, water-related or water-enjoyment uses and serves as an all-encompassing definition, together with single-family residences, for priority uses under the Act.
5. “Water quality” means the characteristics of water, including flow or amount, and related physical, chemical, aesthetic, recreation-related, and biological characteristics.
6. “Water-related use” means a use or portion of a use that is not intrinsically dependent on a waterfront location but depends upon a waterfront location for economic viability. These uses have a functional relationship to the water, or the use provides a necessary support service for a water-dependent use and physical separation is not feasible.
7. “Watershed” means a geographic region within which water drains into a particular river, stream or body of water. There are approximately 122 watersheds (e.g., Bertrand, Ten Mile, Dakota, Canyon Creek, Lake Whatcom, Lake Samish) identified in WRIA 1 and WRIA 3. These are nested within approximately 14 sub-basins (e.g., North Fork Nooksack, Drayton Harbor, Sumas River, Friday

- Creek), which are nested within four basins (e.g., Nooksack River, Fraser River, Samish River, Coastal).
8. “Watershed restoration plan” means a plan developed or sponsored by the Department of Fish and Wildlife, the Department of Ecology, the Department of Transportation, a federally recognized Indian tribe acting within and pursuant to its authority, a city, a county or a conservation district that provides a general program and implementation measures or actions for the preservation, restoration, recreation, or enhancement of the natural resource character and ecology of a stream, stream segment, drainage area or watershed for which agency and public review have been conducted pursuant to Chapter 43.21C RCW, the State Environmental Policy Act.
9. “Watershed restoration project” means a public or private project authorized by the sponsor of a watershed restoration plan that implements the plan or part of the plan and consists of one or more of the following activities:
- a. A project that involves less than 10 miles of stream reach, in which less than 25 cubic yards of sand, gravel, or soil is removed, imported, disturbed or discharged, and in which no existing vegetation is removed except as minimally necessary to facilitate additional plantings;
 - b. A project for the restoration of an eroded or unstable stream bank that employs the principles of bioengineering, including limited use of rock as a stabilization only at the toe of the bank, and with primary emphasis on using native vegetation to control erosive forces of flowing water; or
 - c. A project primarily designated to improve fish and wildlife habitat, remove or reduce impediments to migration of fish, or enhance the fishery resource available for use by all of the citizens of the state; provided, that any structures, other than a bridge or culvert or instream habitat enhancement structure associated with the project, is less than 200 square feet in floor area and is located above the ordinary high water mark.
10. “Weir” means a structure in a stream or river for measuring or regulating stream flow.
11. “Wet season” means the period generally between November 1st and March 30th of most years when soils are wet and prone to instability. The specific beginning and end of the wet season can vary from year to year depending on weather conditions.
12. “Wetlands” means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created for non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.
13. “Wetland edge” means the boundary of a wetland as delineated based on the definitions contained in WCC Chapter 16.16 (Critical Areas).
14. “Wood waste” means solid waste consisting of wood pieces or particles generated as a byproduct or waste from the manufacturing of wood products, handling and storage of raw materials and trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hog fuel, and

- 1 log sort yard waste, but does not include wood pieces or particles containing chemical preservatives
2 such as creosote, pentachlorophenol, or copper-chrome-arsenate.

3 **23.60.240 “X” definitions.**

4 Reserved.

5 **23.60.250 “Y” definitions.**

6 Reserved.

7 **23.60.260 “Z” definitions.**

8 Reserved.

Adopted by County Council 9/24/2024

Effective 1/1/2025

Exhibit E: Proposed Amendments to WCC Title 22

Shoreline Management
Program Periodic Update
2020

Whatcom County Planning and Development
Services

Chapter 22.05 Project Permits

Note: Some changes in this version will be superseded by the 5290 amendments effective on the same date.

22.05.010 Purpose and Applicability.

- (1) The purpose of this chapter is to combine and consolidate the application, review, and approval processes for project permits and appeals as defined in WCC 20.97 (Definitions). It is further intended for this chapter to comply with the provisions of Chapter 36.70B RCW. These procedures provide for a consolidated land use permit process and integrate the environmental review process with the procedures for review of land use decisions.
- (2) This chapter applies to the processing of project permit applications for development and appeals related to the provisions of WCC Title 15, Buildings and Construction; WCC Title 16, Environment; WCC Title 17, Flood Damage Prevention; WCC Title 20, Zoning; WCC Title 21, Land Division Regulations; and WCC Title 23, Shoreline Management Program. The provisions of this chapter shall apply to all project permit applications as defined in RCW 36.70B.020, and other administrative decisions, as listed in WCC 22.05.020 Table 1.
- (3) The meaning of words used in this chapter shall be as defined in WCC Chapters 20.97 (Definitions) or 23.60 (Definitions), as appropriate to the permit being applied for.

22.05.020 Project Permit Processing Table.

- (1) Table 1. Project Permit Processing Table indicates the required general steps for processing all project permit applications or administrative actions. Check marks indicate a step is required; reference letters refer to the notes in subsection (2) of this section. The requirements for each step listed in the top row of the table are provided in WCC [22.05.040](#) through [22.05.160](#), as indicated. Specific requirements for each project permit can be found through the references given in the table.

1 **Table 1. Project Permit Processing Table**

Permit Application Processing Table	WCC Reference for Specific Requirements	Pre-Application Required (see 22.05.040)	Determination of Completeness Required (see 22.05.050)	Notice of Application Required (see 22.05.070)	Site Posting Required (see 22.05.080)	Notice of Open Record Hearing Required (see 22.05.090)	Open Record Hearing Held By: (see 22.05.090)	County Decision Maker (see 2.11.210 , 22.05.120)	Appeal Body (see 2.11.210 , 2.05.160)
Type I Applications (Administrative Decision with No Public Notice or Hearing)									
Boundary Line Adjustment	21.03		✓					Director	Hearing Examiner
Building Permit	15.04	✓ (d)	✓					Director	Hearing Examiner (g)
Natural Resource Assessment	Title 16		✓					Director	Hearing Examiner
Commercial Site Plan Review			✓					Director	Hearing Examiner
Exempt Land Division	21.03		✓					Director	Hearing Examiner
Floodplain Development Permit	Title 17							Director	Hearing Examiner
Land Disturbance Permit	15.04 and 20.80		✓					Director	Hearing Examiner
Lot of Record/Lot Consolidation	20.83 and 20.97.220		✓					Director	Hearing Examiner
Nonconforming Use	20.83		✓					Director	Hearing Examiner
Removal of Forest Practices Development Moratorium	20.80.738 (3)							Director	Hearing Examiner
Shoreline Exemption	22.05 & 07		✓					Director	Hearing Examiner

Permit Application Processing Table	WCC Reference for Specific Requirements	Pre-Application Required (see 22.05.040)	Determination of Completeness Required (see 22.05.050)	Notice of Application Required (see 22.05.070)	Site Posting Required (see 22.05.080)	Notice of Open Record Hearing Required (see 22.05.090)	Open Record Hearing Held By: (see 22.05.090)	County Decision Maker (see 2.11.210 , 22.05.120)	Appeal Body (see 2.11.210 , 2.05.160)
Zoning Interpretation	22.20							Director	Hearing Examiner
Type II Applications (Administrative Decision with Public Notice; No Public Hearing)									
Administrative Use	20.84.235	✓	✓	✓	✓			Director	Hearing Examiner
Lot Consolidation Relief	20.83.070		✓	✓	✓			Director	Hearing Examiner
Shoreline Substantial Development Permit (a)	22.05 & .07	✓	✓	✓	✓			Director (b)	Shorelines Hearings Board (f)
Shoreline Conditional Use for single-family development, uses, and activities (a)	22.05 & .07		✓	✓	✓			Director (b)	Hearing Examiner
Minor Variance (outside of shoreline jurisdiction)	22.05.024	✓	✓	✓	✓			Director	Hearing Examiner
Short Subdivision	21.04	✓	✓	✓	✓			Director	Hearing Examiner
Type III Applications (Hearing Examiner Decision with Public Notice and Public Hearing)									
Conditional Use	20.84.200	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner	Superior Court
Floodplain Development Variance	Title 17		✓	✓	✓	✓	Hearing Examiner	Hearing Examiner	Superior Court

Permit Application Processing Table	WCC Reference for Specific Requirements	Pre-Application Required (see 22.05.040)	Determination of Completeness Required (see 22.05.050)	Notice of Application Required (see 22.05.070)	Site Posting Required (see 22.05.080)	Notice of Open Record Hearing Required (see 22.05.090)	Open Record Hearing Held By: (see 22.05.090)	County Decision Maker (see 2.11.210 , 22.05.120)	Appeal Body (see 2.11.210 , 2.05.160)
Long Subdivision	21.05	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner (e)	Superior Court
Binding Site Plan	21.07	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner (e)	Superior Court
Reasonable Use (c)	16.16	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner	Superior Court
Removal of Development Moratorium	20.80.738(2)		✓	✓	✓	✓	Hearing Examiner	Hearing Examiner	Superior Court
Major Variance (outside of shoreline jurisdiction)	22.05.024 or 16.16.273	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner	Superior Court
Shoreline Conditional Use	22.05 & 07	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner (b)	Shorelines Hearings Board (f)
Shoreline Substantial Development Permit	22.05 & 07	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner (b)	Shorelines Hearings Board (f)
Shoreline Variance	22.05 & 07	✓	✓	✓	✓	✓	Hearing Examiner	Hearing Examiner (b)	Shorelines Hearings Board (f)
Type IV Applications (County Council Decision with Public Notice and Public Hearing)									
Development Agreement	2.11.205	✓	✓	✓	✓	✓	Hearing Examiner	County Council	Superior Court
Major Project Permit	20.88	✓	✓	✓	✓	✓	Hearing Examiner	County Council	Superior Court
Planned Unit Development	20.85	✓	✓	✓	✓	✓	Hearing Examiner	County Council	Superior Court

- (2) **Project Permit Processing Table Notes.** As indicated in Table 1, project permits are subject to the following additional requirements:
- (a) Whether a public hearing is required is determined pursuant to 22.07.030(A) (Shoreline Substantial Development Permits). If a public hearing is required the shoreline permit shall be processed as a Type III application.
 - (b) Pursuant to WCC 22.07.060, final administrative determinations or decisions as appropriate shall be filed with, or approved by, the Washington State Department of Ecology.
 - (c) All reasonable use exception applications in geological hazardous areas and setbacks and all non-single-family residential uses in critical areas or critical area buffers.
 - (d) Building permit pre-application conference, subject to WCC [15.04.020](#)(A)(3)(a).
 - (e) The Hearing Examiner may choose to consult with the development standards technical advisory committee concerning technical matters relating to land division applications.
 - (f) Except that appeals of WCC Title [15](#) fire and building code requirements shall be made to the board of appeals per current building code, as adopted in WCC [15.04.010](#).

22.05.024 Variances (Non-Shoreline).

- (1) Variances from the standards of Title 20 (Zoning) or Chapter 16.16 (Critical Areas Ordinance) may be authorized in specific cases that will not be contrary to the public interest, and where, due to special conditions, literal enforcement of the provisions of those codes would result in unnecessary hardship. Generally, variances shall only be considered for dimensional standards, unless otherwise specified in those codes. Under no circumstances shall a variance be granted that allows a use not permissible or otherwise prohibited in the zoning district in which the subject property is located.
- (2) There are two types of (non-shoreline) variances: Minor and Major Variances.
 - (a) Minor variances include those that are unlikely to have impacts on surrounding properties or people. These shall be limited to variances for:
 - i. A reduction of up to 10% of a front yard setback
 - ii. A reduction in parking stall dimensions down to 9 feet by 18 feet.
 - iii. A 25% to 50% reduction of critical area buffers pursuant to 16.16.273 (Variances).
 - (b) Major variances include all other variances.
- (3) The appropriate decision maker, as specified in 22.05.020 (Project permit processing table) shall have the authority to grant variances when the conditions set forth in subsection (4) have been found to exist. In such cases, a variance may be granted so that the spirit of the County's land use codes shall be observed, public safety and welfare secured, and substantial justice done.
- (4) Before any variance may be granted, it shall be shown that the following circumstances are found to apply:
 - (a) That any variance granted shall not constitute a grant of special privilege, not be based upon reasons of hardship caused by previous actions of the property owner, nor be granted for pecuniary reasons alone;
 - (b) Because of special circumstances applicable to the subject property, including size, shape, topography, location, or surrounding, the strict application of Title 20 (Zoning) or Chapter 16.16 (Critical Areas Ordinance) is found to cause a hardship and deprive the subject property of a use or improvement otherwise allowed in its zoning district. Aesthetic considerations or design

- 1 preferences without reference to restrictions based upon the physical characteristics of the
2 property do not constitute sufficient hardship under this section;
- 3 (c) The granting of the variance will not be materially detrimental to the public welfare, or injurious
4 to the property or improvements in the vicinity and zone in which the subject property is
5 situated.

6 **22.05.026 Conditional Use Permits.**

- 7 (1) **Application.** Conditional use permit applications shall be processed per the provisions of this
8 chapter.
- 9 (2) Conditional use permits shall be nontransferable unless said transfer is approved by the Hearing
10 Examiner.
- 11 (3) **Approval Criteria.** Before approving an application, the Director or Hearing Examiner shall ensure
12 that any specific standards of the zoning district defining the use are fulfilled, and shall find
13 adequate evidence showing that the proposed use at the proposed location:
- 14 (a) Will be harmonious and in accordance with the general and specific objectives of Whatcom
15 County's Comprehensive Plan, zoning regulations, and any other applicable regulations.
- 16 (b) Will be designed, constructed, operated, and maintained so as to be harmonious and
17 appropriate in appearance with the existing or intended character of the general vicinity, and
18 that such use will not change the essential character of the same area.
- 19 (c) If located in a rural area (as designated in the Comprehensive Plan), will be consistent with rural
20 land use policies as designated in the rural lands element of the Comprehensive Plan.
- 21 (d) Will not be hazardous or disturbing to existing or future neighboring uses.
- 22 (e) Will be serviced adequately by necessary public facilities such as highways, streets, police and
23 fire protection, drainage structures, refuse disposal, water, sewers, and schools; or that the
24 persons or agencies responsible for the establishment of the proposed use shall be able to
25 provide adequately any such services.
- 26 (f) Will not create excessive additional requirements at public cost for public facilities and services,
27 and will not be detrimental to the economic welfare of the community.
- 28 (g) Will not involve uses, activities, processes, materials, equipment, and conditions of operation
29 that will be detrimental to any persons, property, or the general welfare by reasons of excessive
30 production of traffic, noise, smoke, fumes, glare or odors.
- 31 (h) Will have vehicular approaches to the property which shall be so designed as not to create an
32 interference with traffic on surrounding public streets.
- 33 (i) Will not result in the destruction, loss or damage of any natural, scenic, or historic feature of
34 major importance.
- 35 (4) Approval Criteria for expansion of Fossil Fuel Refineries pursuant to WCC 20.68.153 and expansion
36 of Fossil Fuel Transshipment Facilities pursuant to WCC 20.68.154. Before approving an application,
37 the hearing examiner shall ensure that any specific standards of the zoning district defining the use
38 are fulfilled, and shall find adequate evidence showing that:
- 39 (a) The conditional use permit approval criteria listed under WCC 22.05.026(3) are met;
- 40 (b) Within shorelines, if applicable, County approval shall be contingent upon approval of a
41 shoreline permit;

- (c) The applicant has documented to the County decision maker (as applicable):
- (i) All of the anticipated types and volumes of substances to be processed, stored, or transferred in bulk with the proposed expansion,
 - (ii) Changes in the Maximum Transshipment Capacity or the Maximum Atmospheric Crude Distillation Capacity occurring as a result of the proposed expansion, as applicable; and
 - (iii) The mode of shipment vessels to be loaded or unloaded with the proposed equipment and/or as a result of the proposed expansion.
 - (iv) The permit shall be limited exclusively to those types and volumes of materials or products as documented and approved.
- (d) Insurance requirements meet the provisions of WCC 22.05.125.
- (e) Mitigation of transportation impacts consistent with Chapter 20.78 WCC, Transportation Concurrency Management, and Chapter 16.24 WCC, Commute Trip Reduction.
- (f) Mitigation of impacts to other services including fire and emergency response capabilities, water supply and fire flow, to address risks created by expansions.
- (g) Plans for stormwater and wastewater releases have been approved.
- (h) Prior to commencement of any site preparation or construction activities, all necessary state leases shall be acquired for any piers or aquatic lands improvements, and it shall be demonstrated to the zoning administrator that the project applicant has met any federal or state permit consultation requirements, including tribal treaty rights or the provisions of the Magnuson Amendment through state and federal permitting decisions.
- (i) The County decision maker may approve a conditional use permit with a condition to obtain relevant leases and complete any necessary federal and state permitting requirements, and may restrict the conditional use permittee from undertaking site preparation or construction activities until it has fulfilled that condition.
- (j) The permittee must inform the county permitting authorities of a change in the aforementioned disclosures so that the department can document current capacity levels to ensure that the cumulative thresholds under WCC 20.68.153 or WCC 20.68.154 (as applicable) have not been exceeded.
- (k) The County decision maker shall include, in any approval of an application for an expansion, as per 20.68.153 or 20.68.154, a condition that the permitted equipment shall only be used in the manner described by the project proponent in the application and approved in the permit. The application shall describe the intended use, including the type of fuel to be stored and, if located at a Fossil Fuel Refinery or Renewable Fuel Refinery, whether the equipment will or will not be used for transshipment.
- (5) **Revisions.** The Hearing Examiner may administratively approve revisions to conditional use permits; provided, that the proposed changes are within the scope and intent of the original permit. “Within the scope and intent of the original permit” shall mean the following:
- (a) Lot coverage and height may be increased a maximum of 10 percent from the provisions of the original permit; provided, that:
 - (i) revisions involving new structures not shown on the original site plan shall require a new permit;

- (ii) any revisions shall not exceed height, lot coverage, setback, or any other requirements of the regulations for the area in which the project is located; and,
- (iii) any revisions shall be reviewed for consistency with the Comprehensive Plan;
- (b) Landscaping may be added to a project without necessitating an application for a new permit; provided, that the landscaping is consistent with conditions (if any) attached to the original permit and is consistent with the regulations for the area in which the project is located;
- (c) The use authorized pursuant to the original permit is not changed;
- (d) No additional over-water construction will be involved for shoreline conditional use permits;
- (e) No substantial increase in adverse environmental impact will be caused by the project revision.

22.05.028 Administrative Approval Uses.

- (1) Administrative approval applications shall be processed per the provisions of this Chapter.
- (2) The Director of Planning and Development Services is authorized to approve, approve with conditions, or deny all administrative approval use applications.
- (3) **Approval Criteria.** Decisions for all administrative approval use permits shall be based upon compliance with:
 - (a) The criteria established for the proposed use in the appropriate zone district;
 - (b) The Comprehensive Plan policies governing the associated land use designation;
 - (c) In rural areas, consideration will be given to the cumulative impacts of permitted uses in relation to the governing Comprehensive Plan policies and zoning district; and
 - (d) The criteria of WCC 22.05.026 (Conditional Use Permits), subsection (3) (Approval Criteria).
 - (e) Additionally, decisions for administrative approval use permits for adult businesses shall be based on the criteria in subsection (4) of this section.
- (4) **Additional Approval Criteria for Adult Businesses.** Prior to granting administrative approval for an adult business, the Director shall find that the proposed use at the proposed location satisfies or will satisfy all the following criteria:
 - (a) The adult business will be consistent with WCC 20.66.131 (Light Impact Industrial District, Administrative Approval Uses).
 - (b) The adult business shall be closed from 2:00 a.m. to 10:00 a.m. if it contains:
 - (i) An adult eating or drinking establishment; or
 - (ii) An adult theater; or
 - (iii) Another adult commercial establishment; or
 - (iv) One or more viewing booths.
 - (c) If the adult business includes one or more viewing booths, the interior of the adult business will incorporate all of the following measures:
 - (a) Each viewing booth shall have at least a three-foot wide opening where a customer enters and exits the booth that is without doors, physical barriers, or visual barriers; and
 - (b) Each viewing booth shall have at least one 100-watt light bulb that is properly working and turned on when business is open. The light bulb shall not be covered or otherwise shielded except with a commercially available lighting fixture. A minimum of one 12-inch by 12-inch durable metal sign shall be located at the entrance to each viewing booth area stating that lights shall remain on; and

- (c) Aisles or hallways adjacent to viewing booths shall be a minimum of five feet wide; and
- (d) There shall be no holes or openings in common walls between viewing booths.
- (d) Additionally, for adult businesses containing one or more viewing booths, a condition of approval shall allow an unannounced inspection by Whatcom County every six months during business hours to ensure that measures in subsections (4)(c)(i) through (iv) of this section are being implemented on an ongoing basis.

(5) **Revisions.** The Director may approve revisions to administrative approval use permits; provided, that the proposed changes are within the scope and intent of the original permit. “Within the scope and intent of the original permit” shall mean the following:

- (a) Lot coverage and height may be increased a maximum of 10 percent from the provisions of the original permit; provided, that:
- (i) revisions involving new structures not shown on the original site plan shall require a new permit; and
 - (ii) any revisions shall not exceed height, lot coverage, setback, or any other requirements of the regulations for the area in which the project is located; and
 - (iii) any revisions shall be reviewed for consistency with the Comprehensive Plan;
- (b) Landscaping may be added to a project without necessitating an application for a new permit; provided, that the landscaping is consistent with conditions (if any) attached to the original permit and is consistent with the regulations for the area in which the project is located;
- (c) The use authorized pursuant to the original permit is not changed;
- (d) No additional over-water construction will be involved for shoreline conditional use permits;
- (e) No substantial increase in adverse environmental impact will be caused by the project revision.

22.05.030 Consolidated Permit Review.

The County shall integrate and consolidate the review and decision on two or more project permits that relate to the proposed project action unless the applicant requests otherwise. Consolidated Type I, II, III and IV permits shall be reviewed under the process required for the permit with the highest process type number per WCC [22.05.020](#). Level IV is considered the highest and Level I is considered the lowest process type.

22.05.040 Pre-Application Conference.

The purpose of a pre-application conference is to assist applicants in preparing development applications for submittal to the County by identifying applicable regulations and procedures. It is not intended to provide a staff recommendation on future permit decisions. Pre-application review does not constitute acceptance of an application by the County nor does it vest an application, unless otherwise indicated in Whatcom County Code.

- (1) A pre-application conference is required as indicated in WCC [22.05.020](#), unless the Director or designee grants a written waiver. For other permits, the applicant may request a pre-application conference.
- (2) The County shall charge the applicant a fee for a pre-application conference per the unified fee schedule. If the County makes a determination of completeness on a project permit submitted within one year of the notice of site-specific submittal requirements per subsection (6) of this section, the pre-application fee shall be applied to the application cost.

- (3) It is the responsibility of the applicant to initiate a pre-application conference through a written application. The application shall, at a minimum, include all items identified on the pre-application form and the department's administrative manual. The applicant may provide additional information to facilitate more detailed review.
- (4) A pre-application conference shall be scheduled as soon as possible and held no later than 30 calendar days from the date of the applicant's request, unless agreed upon by the applicant and the County.
- (5) The County shall invite the appropriate city to the pre-application meeting if the project is located within that city's urban growth area or which contemplates the use of any city utilities. Notice shall also be given to appropriate public agencies and public utilities, if within 500 feet of the area submitted in the application.
- (6) The County should provide the applicant with notice of site-specific submittal requirements for application no later than 14 calendar days from the date of the conference.
- (7) A new pre-application conference shall be required if an associated project permit application is not filed with the County within one year of the notice of site-specific submittal requirements per subsection (6) of this section or the application is substantially altered, unless waived per WCC [22.05.040](#)(1).

22.05.050 Application and Determination of Completeness.

- (1) Project permit applications shall be submitted using current forms provided by the review authority. The submittal shall include: all applicable fees per Chapter [22.25](#) WCC, all materials required by the department's administrative manual (unless waived pursuant to subsection (2)), and all items identified in the pre-application notice of site-specific submittal requirements. If a permit is denied, no reapplication for the same or essentially similar development may be made until one year from the date of denial.
- (2) The Director may vary or waive the requirements provided in the department's administrative manual on a case-by-case basis, though may also require additional specific information depending on the nature of the proposal and the presence of sensitive ecological features or issues related to compliance with other county requirements.
- (3) Upon submittal by the applicant, the County will accept the application and note the date of receipt. Receipt of an application does not constitute approval of the project proposal.
- (4) Within 14 calendar days of receiving the application, the County shall provide to the applicant a written determination which states either that the application is complete or the application is incomplete. To the extent known by the County, other agencies of local, state, or federal government that may have jurisdiction shall be identified on the determination.
- (5) A project permit application is complete when it meets the submittal requirements of the department's administrative manual, includes items identified through the pre-application conference process and contains sufficient information to process the application even if additional information will be required. A determination of completeness shall not preclude the County from requiring additional information or studies at any time prior to permit approval. A project permit application shall be deemed complete under this section if the County does not issue a written

determination to the applicant that the application is incomplete by the end of the fourteenth calendar day from the date of receipt.

(6) If the application is determined to be incomplete, the following shall take place:

(a) The County will notify the applicant that the application is incomplete and indicate what is necessary to make the application complete.

(b) The applicant shall have 90 calendar days from the date that the notification was issued to submit the necessary information to the County. If the applicant does not submit the necessary information to the County in writing within the 90-day period, the application shall be rejected. The Director or designee may extend this period for an additional 90 calendar days upon written request by the applicant.

(c) Upon receipt of the necessary information, the County shall have 14 calendar days to make a determination and notify the applicant whether the application is complete or what additional information is necessary.

(7) A determination of an incomplete application is an appealable final administrative determination, subject to WCC [22.05.160](#)(1).

22.05.060 Vesting.

(1) **Complete Applications.** For a project permit application the department has determined to be complete per WCC [22.05.050](#)(4), the application shall be considered under the zoning or other land use control ordinances in effect on the date the application was submitted to the department.

(2) **Incomplete Applications.** For a project permit application the department has determined to be incomplete per WCC [22.05.050](#)(5), the application shall be considered under the zoning or other land use control ordinances in effect on the date the department determines the application to be complete based on the necessary information required by the department.

(3) **Applications Subject to Pre-Application Conference.** Notwithstanding the provisions of subsections (1) and (2) of this section, for a project permit application that is (a) subject to a pre-application conference per WCC [22.05.020](#) and [22.05.040](#), (b) submitted no more than 28 calendar days from the date the department issued its notice of site-specific submittal requirements, and (c) determined complete by the department, the application shall be considered under the zoning or other land use control ordinances in effect on the date the pre-application conference request was submitted to the department.

(4) **Continuation of Vesting.** Building or land disturbance permit applications that are required to complete a valid (i.e., not expired) project permit approval for project permits identified in the following list (subsections (4)(a) through (m) of this section) shall vest to the zoning and land use control ordinances in effect at the time the project permit application identified below was determined complete:

(a) Administrative use;

(b) Commercial site plan review;

(c) Conditional use;

(d) Critical areas variance;

(e) Major project permit;

(f) Natural resource review;

- (g) Planned unit development;
- (h) Reasonable use exceptions;
- (i) Shoreline conditional use permit;
- (j) Shoreline exemption;
- (k) Shoreline substantial;
- (l) Shoreline variance;
- (m) Zoning variance.

(5) Building Permit Applications within Recorded Long and Short Subdivisions and Binding Site Plans.

Building permit applications, including associated land disturbance permits, shall be governed by conditions of approval, statutes, and ordinances in effect at the time of final approval pursuant to RCW [58.17.170](#). Vesting duration for those building permit applications shall be governed by the time limits established for long subdivisions in RCW [58.17.170](#), unless the County finds that a change in conditions creates a serious threat to the public health or safety.

(6) Building and Fire Code Requirements. Building and fire code provisions adopted per WCC Title [15](#) vest at the time a building permit application is determined complete.

(7) Duration. Vesting status established through subsections (1) through (5) of this section runs with the application and expires upon denial of the application by the County, withdrawal of the application by the applicant, rejection of the application per WCC [22.05.050](#)(5), expiration of the application per WCC [22.05.130](#)(1)(a)(i), or expiration of the approved permit per WCC [22.05.140](#).

22.05.070 Notice of Application.

- (1) For Type II, III, and IV applications per WCC [22.05.020](#), the County shall issue a notice of application within 14 calendar days of a determination of completeness. The date of notice shall be the date of mailing.
- (2) If the County has made a State Environmental Policy Act (SEPA) threshold determination of significance concurrently with the notice of application, the County shall combine the determination of significance and scoping notice with the notice of application.
- (3) Notice shall include:
 - (a) The date of application, the date of determination of completeness for the application, and the date of the notice of application;
 - (b) A description of the proposed project action and a list of the project permits included in the application, and, if applicable, a list of any studies requested by the County;
 - (c) The identification of other permits not included in the application to the extent known by the County;
 - (d) The identification of environmental reviews conducted, including notice of existing environmental documents that evaluate the proposed project (including but not limited to reports, delineations, assessments and/or mitigation plans associated with critical area reviews) and, if not otherwise stated on the document providing notice of application, the location where the application and any studies can be reviewed;
 - (e) Any other information determined appropriate by the County;
 - (f) A statement indicating those development regulations that will be used for project mitigation or a determination of consistency if they have been identified at the time of notice;

- (g) A statement of the minimum public comment period which shall be 14 calendar days for all project permits except for shoreline substantial development, shoreline conditional use, shoreline variance and major project permits for mitigation banks which shall have a minimum comment period of no more than 30 calendar days;
- (h) A statement of the right of any person to comment on the application and receive notice of and participate in any hearings, request a copy of the decision once made and to appeal a decision when allowed by law. The department may accept public comments at any time prior to the close of the open record public hearing, or if there is no public hearing, prior to the decision on the project permit. In addition, the statement shall indicate that any person wishing to receive personal notice of any decisions or hearings must notify the department.
- (4) The department shall issue a notice of application in the following manner:
- (a) The notice shall be published once in the official County newspaper and on the Whatcom County website. The applicant shall bear the responsibility of paying for such notice.
- (b) Additional notice shall be given using the following method:
- i. For sites within urban growth areas: Application notice shall be sent to all property owners within 300 feet of the external boundaries of the subject property as shown by the records of the County assessor;
- ii. For sites outside urban growth areas: Application notice shall be sent to all property owners within 1,000 feet of the external boundaries of the subject property as shown by the records of the County assessor.
- (5) The County shall send notices of application to neighboring cities and other agencies or tribes that will potentially be affected, either directly or indirectly, by the proposed development. Notice shall also be given to public utilities, if within 500 feet of the area submitted in the application.
- (6) All public comments received on the notice of application must be received by the department of planning and development services by 4:30 p.m. on or before the last day of the comment period.
- (7) Except for a determination of significance, the County shall not issue its SEPA threshold determination or issue a decision or recommendation on a permit application until the end of the public comment period on the notice of application. If an optional Determination of Nonsignificance (DNS) process is used, the notice of application and DNS comment period shall be combined.
- (8) Public notice given for project permit applications, SEPA documents, project hearings, and appeals hearings as required by this chapter and other provisions of the County code may be combined when practical, where such combined notice will expedite the permit review process, and where provisions applicable to each individual notice are met through the combined notice.

22.05.080 Posting of Application.

Where posting of public notice is required per WCC [22.05.020](#), the department shall post public notices of the proposal on all road frontages of the subject property and adjacent shorelines on or before the notice of application date and shall be visible to adjacent property owners and to passing motorists. Said notices shall remain in place until three days after the comment period closes.

22.05.090 Open Record Public Hearings.

- (1) Pursuant to WCC [22.05.020](#) (Project Permit Processing Table), Type III and Type IV applications and appeals of Type I and Type II applications require an open record public hearing.

- (2) **Open Record Hearing Notice.** Public hearings shall be noticed as follows:
- a. The Hearing Examiner shall publish a notice of open record hearing once in the official County newspaper and on the Whatcom County website at least 14 calendar days prior to the hearing. The notice shall consist of the date, time, place, and type of the hearing. In addition, personal notice shall be provided to any person who has requested such notice in a timely manner, consistent with WCC [22.05.070](#) (Notice of Application).
 - b. Within two days of the published notice the applicant shall be responsible for posting three copies of the notice in a conspicuous manner on the property upon which the use is proposed. Notices shall be provided by the Hearing Examiner.
 - c. An affidavit verifying distribution of the notice must be submitted to the Hearing Examiner two working days prior to the open record hearing.
 - d. The Hearing Examiner shall send notice of an open record hearing to neighboring cities and other agencies or tribes that will potentially be affected, either directly or indirectly by the proposed development. The Hearing Examiner shall be responsible for such notification.
 - e. The applicant shall pay all costs associated with providing notice.
- (3) **One Open Record Hearing.** A project proposal subject to this chapter shall be provided with no more than one open record hearing and one closed record hearing pursuant to RCW Chapter [36.70B](#). This restriction does not apply to an appeal of a determination of significance as provided in RCW [43.21C.075](#).
- (4) **Combined County and Agency Hearing.** Unless otherwise requested by an applicant, the County shall allow an open record hearing to be combined with a hearing that may be necessary by another local, state, regional, federal or other agency for the same project if the joint hearing can be held within the time periods specified in Chapter [22.05](#) WCC, or if the applicant agrees to waive such time periods in the event additional time is needed in order to combine the hearings. The combined hearing shall be conducted in Whatcom County pursuant to Chapter [36.70B](#) RCW.
- (5) Quasi-judicial actions, including applications listed as Type III and IV applications in WCC [22.05.020](#), are subject to the appearance of fairness doctrine, Chapter [42.36](#) RCW. The Hearing Examiner shall administer the open record hearing and issue decisions or recommendations in accordance with Chapter [42.36](#) RCW.
- 22.05.100 Application Consistency Review and Recommendations.**
- (1) During project permit review, the review authority shall determine if the project proposal is consistent with the County's comprehensive plan, other adopted plans, and existing regulations and development standards.
- (a) For Type I and II applications, the conclusions of a consistency determination made under this section shall be documented in the project permit decision.
 - (b) For Type III and IV applications the department shall prepare a staff report on the proposed development or action. Staff shall file one consolidated report with the Hearing Examiner at least 10 calendar days prior to the scheduled open record hearing. The staff report shall:
 - i. Summarize the comments and recommendations of County departments, affected agencies, special districts and public comments received within the 14-day or 30-day comment period as established in WCC [22.05.070](#)(6).

- 1 ii. Provide an evaluation of the project proposal for consistency as indicated in this section.
- 2 iii. Include recommended findings, conclusions, and actions regarding the proposal.
- 3 (2) **Additional Requirements.** For all project permit applications, if more information is required to
- 4 determine consistency at any time in review of the application, the department may issue a notice
- 5 of additional requirements. The applicant shall have 180 calendar days from the date of issuance of
- 6 said notice to submit all required information.
- 7 (3) **Permit Inactivity.** Any application that remains inactive for a period of 180 days shall expire and a
- 8 new application and repayment of fees shall be required to reactivate the proposal; provided, that
- 9 the Director may grant a 1-year extension for good cause upon written request by the applicant,
- 10 provided the request is submitted before the end of the first 180-day period. A notice of additional
- 11 requirements is not a final administrative determination.
- 12 (4) **Burden of Proof.** Permit applicants/proponents have the burden of proving that the proposed
- 13 development is consistent with all applicable policies and regulations
- 14 (5) **Permit conditions.** In granting, revising, or extending a permit, the decision maker may attach such
- 15 conditions, modifications, or restrictions thereto regarding the location, character, and other
- 16 elements of the proposed development deemed necessary to assure that the development will be
- 17 consistent with the applicable policies and regulations (including the policies and provisions of the
- 18 Shoreline Management Act for shoreline permits). In cases involving unusual circumstances or
- 19 uncertain effects, a condition may be imposed to require monitoring with future review or
- 20 reevaluation to assure conformance. If the monitoring plan is not implemented, the permittee may
- 21 be found to be noncompliant and the permit may be revoked in accordance with WCC 22.05.150
- 22 (Permit Revocation).
- 23 **22.05.110 Final Decisions – Type I, II, and III applications.**
- 24 (1) The Director or designee's final decision on all Type I or II applications shall be in the form of a
- 25 written determination or permit. The determination or permit may be granted subject to conditions,
- 26 modifications, or restrictions that are necessary to comply with all applicable codes.
- 27 (2) The Hearing Examiner's final decision on all Type III applications per WCC [22.05.020](#) or appeals per
- 28 WCC [22.05.160](#)(1) shall either grant or deny the application or appeal.
- 29 (a) The Hearing Examiner may grant Type III applications subject to conditions, modifications or
- 30 restrictions that the Hearing Examiner finds are necessary to make the application compatible
- 31 with its environment, carry out the objectives and goals of the comprehensive plan, statutes,
- 32 ordinances and regulations as well as other official policies and objectives of Whatcom County.
- 33 (b) Requirements:
- 34 (i) Performance bonds or other security, acceptable to the prosecuting attorney, may be
- 35 required to ensure compliance with the conditions, modifications and restrictions.
- 36 (ii) Fossil or Renewable Fuel Refinery or Fossil or Renewable Fuel Transshipment Facilities: The
- 37 applicant shall provide insurance or other financial assurance acceptable to the prosecuting
- 38 attorney consistent with Section 22.05.125.
- 39 (c) The Hearing Examiner shall render a final decision within 14 calendar days following the
- 40 conclusion of all testimony and hearings. Each final decision of the Hearing Examiner shall be in
- 41 writing and shall include findings and conclusions based on the record to support the decision.

(d) No final decision of the Hearing Examiner shall be subject to administrative or quasi-judicial review, except as provided herein.

(e) The applicant, any person with standing, or any County department may appeal any final decision of the Hearing Examiner to superior court, except as otherwise specified in WCC 22.05.020.

22.05.120 Recommendations and Final Decisions to County Council – Type IV Applications.

(1) For Type IV applications per WCC [22.05.020](#) the Hearing Examiner's recommendations to the County Council may be to grant, grant with conditions or deny an application. The Hearing Examiner's recommendation may include conditions, modifications or restrictions as may be necessary to make the application compatible with its environment, carry out the objectives and goals of the comprehensive plan, statutes, ordinances and regulations as well as other official policies and objectives of Whatcom County.

(2) Each recommended decision of the Hearing Examiner for an application identified as a Type IV application per WCC [22.05.020](#) shall be in writing to the clerk of the County Council and shall include findings and conclusions based upon the record to support the decision. Such findings and conclusions shall also set forth the manner in which the decision carries out and conforms to the County's comprehensive plan and complies with the applicable statutes, ordinances or regulations.

(3) The deliberation of the County Council on quasi-judicial actions shall be in accordance with WCC [22.05.090](#)(4) and Chapter [42.36](#) RCW.

(4) For planned unit developments and major project permits the following shall apply:

(a) The recommendation of the Hearing Examiner regarding planned unit developments and major project permits shall be based upon the criteria set forth in WCC [20.85.335](#) and [20.88.130](#), respectively.

(b) The Hearing Examiner shall file the recommendation with the clerk of the County Council within 21 calendar days following the conclusion of the open record hearing.

(c) The County Council shall conduct the following within the specified time frames, except as provided in subsection (4)(c)(iii) of this section:

i. Hold a public meeting, not an open record public hearing, to deliberate on the project application within 28 calendar days after receiving the Hearing Examiner's recommendation.

ii. Issue a final written decision within 21 calendar days of the public meeting.

iii. The County Council may exceed the time limits in subsection (4)(c)(i) or (ii) of this section if the County Council meeting schedule does not accommodate a meeting within the above time frames, or if the County Council makes written findings that a specified amount of additional time is needed to process a specific application or project type, per RCW [36.70B.080](#)(1).

(5) The County Council's final written decision may include conditions when the project is approved and shall state the findings of fact upon which the decision is based.

(a) Performance bonds or other security, acceptable to the prosecuting attorney, may be required to ensure compliance with the conditions, modifications and restrictions.

(b) Fossil or Renewable Fuel Refinery or Fossil or Renewable Fuel Transshipment Facilities: The applicant shall provide insurance or other financial assurance acceptable to the prosecuting attorney consistent with Section 22.05.125.

(6) Any deliberation or decision of the County Council shall be based solely upon consideration of the record established by the Hearing Examiner, the recommendations of the Hearing Examiner and the criteria set forth in applicable County code, the County Comprehensive Plan if applicable, and the Whatcom County Shoreline Management Program, including compliance with SEPA, WAC 197-11 (SEPA Rules) as adopted and modified in the County Code, and the County's adopted SEPA policies.

22.05.125 Proof of Insurance for Hazards Created in the County

For expansion projects requiring approval under a Conditional Use Permit or Major Project Permit at new or existing facilities per WCC 20.68.153 or WCC 20.68.154, financial assurance for the benefit of Whatcom County shall be required. For such expansion projects, a permittee must demonstrate proof of financial assurance (such as trust funds, letters of credit, insurance, self-insurance, financial tests, corporate guarantees, payment bonds, or performance bonds) sufficient to comply with the financial responsibility requirements set forth in State and Federal law, as applicable, prior to permit approval by a Whatcom County Decision Maker. If the financial assurance is in the form of insurance policies, the policies must name Whatcom County as an additional insured and provide Whatcom County with a certificate of insurance to that effect.

The permittee must maintain the approved level of financial assurance coverage for new or expanded uses while operating the permitted facility. At the request of the permittee, the Whatcom County Decision Maker may approve new or altered forms of financial assurance to meet the requirements of this section, provided that the new or altered form is consistent with the scope and intent of the original permit condition.

22.05.126 Supplemental Procedures for Fossil Fuel Refinery and Fossil Fuel Transshipment Facility Permitting

(1) Upon request of the County, Fossil Fuel Refineries or Fossil Fuel Transshipment Facilities shall fill out a supplemental checklist for the purpose of determining whether a project qualifies as a permitted use or requires a conditional use permit as specified in WCC 20.68.153 or WCC 20.68.154. The checklist shall contain supplemental information to include:

- (a) Impact on Maximum Atmospheric Crude Distillation Capacity (MACDC), Maximum Transshipment Capacity, and fossil fuel unit train shipment frequency from the proposed activity;
- (b) Confirmation of the acceptance of potential permit conditions as outlined in 20.68.068 subsection (23);
- (c) Applicant name, property owner information, and parcel information as appropriate; and
- (d) An attestation by the applicant regarding the accuracy of the information contained therein, signed by the applicant and certified by a Notary Public.

(2) Confidential Business Information

- (a) For the purpose of checklists, permit applications and all other materials submitted by Fossil Fuel Refineries or Fossil Fuel Transshipment Facilities for activities in the Cherry Point Heavy Impact Industrial District, the following shall apply:

- (i) The applicant shall clearly identify information the applicant considers to be Confidential Business Information, not subject to disclosure under chapter 42.56 RCW (Public Records Act) and/or WCC 1.32.090. If such information is contained in submittal documents, the applicant shall submit two copies of materials for County use as follows:
1. A copy with Confidential Business Information clearly identified, with a watermark indicating the document contains such information; and
 2. A copy with Confidential Business Information redacted, and a watermark added indicating that the document does not contain such information and is suitable for public disclosure.
- (ii) Confidential Business Information may include:
1. Processing equipment technical specifications on internals, sidestream/pumparounds, design specifications, and process controls;
 2. Process unit design, instrumentation and controls;
 3. Feedstock, product, or process unit pump capacity and configuration; and
 4. Contractual agreements and all terms contained therein.
- (iii) The information listed above is not meant to be all-inclusive. Other information related to the applicant's processing activities, feedstock and product purchase, and/or sale and transportation methods and costs may be Confidential Business Information and, if so, shall be marked as such when submitted.
- (iv) Calculation and permit material submittals may contain, but are not required to contain any of the above information.
- (v) Where no increase to MACDC, Maximum Transshipment Capacity, or unit train frequency is proposed, submittal of Confidential Business Information specifically related to the criteria of WCC 20.68.153 and WCC 20.68.154 shall not be required to be submitted with the permit application materials.
- (3) Where calculations are to be submitted for Maximum Transshipment Capacity of Maximum Atmospheric Crude Distillation Capacity, the applicant shall provide calculations performed and certified by a professional engineer licensed in the state of Washington, clearly indicating the impact on MACDC and Transshipment Capacity. Confidential Business Information shall be clearly identified as required by WCC 22.05.126(2)(a)(i) above.
- (4) If the County receives a public records request for records containing information the applicant has clearly indicated to be Confidential Business Information pursuant to WCC 22.05.126(2)(a)(i), the County will notify the applicant of the request and provide the applicant with at least 30 days to file for an injunction under RCW 42.56.540 to prevent the disclosure of such information. If the applicant does not file for an injunction within the period of time set by the County, the County will disclose the records containing the information that the applicant has designated as Confidential Business Information pursuant to WCC 22.05.126(2)(a)(i).

22.05.130 Permit Review Time Frames.

- (1) The County shall issue a notice of final decision for all permit types, including procedures for administrative appeal and notice that affected property owners may request a change in valuation for property tax purposes, to the applicant, the Whatcom County assessor, and any person who

requested notice or submitted substantive comments on the application within 120 calendar days of the date the department determined the application complete, except as provided below:

(a) The following time periods shall be excluded from the calculation of the number of days elapsed:

- i. Any period during which the applicant has been required by the County to correct plans, perform required studies, or provide additional, required information through a notice of additional requirements, per WCC [22.05.100](#)(3). The period shall be calculated from the date the County issues a notice of additional requirements until the date the County receives all of the requested additional information;
- ii. Any period during which an environmental impact statement is being prepared following a determination of significance pursuant to Chapter [43.21C](#) RCW and WCC Title [16](#);
- iii. The period specified for administrative appeals of project permits as provided in Chapter [2.11](#) WCC;
- iv. The period specified for administrative appeals of development standards as provided in WCC [12.08.035](#)(I);
- v. Any period in which the applicant has not met public notification requirements;
- vi. Any period of time mutually agreed upon in writing by the applicant and the County.

(b) The time limits established by this section shall not apply to a project permit application that:

- i. Requires an amendment to the Whatcom County comprehensive plan or a development regulation in order to obtain approval.
- ii. Requires approval of a new fully contained community as provided in RCW [36.70A.350](#), a master planned resort as provided in RCW [36.70A.360](#), or the siting of an essential public facility as provided in RCW [36.70A.200](#).
- iii. Is substantially revised by the applicant, including all redesigns of proposed land divisions, in which case a new time period shall start from the date at which the revised project application is determined to be complete.

(c) Additionally, for shoreline permits and exemptions, and pursuant to WAC 173-27-125, the following special procedures apply to Washington State Department of Transportation (WSDOT) projects:

- i. Pursuant to RCW 47.01.485, the Legislature established a target of 90 days review time for local governments.
- ii. Pursuant to RCW 90.58.140, WSDOT projects that address significant public safety risks may begin twenty-one days after the date of filing if all components of the project will achieve no net loss of shoreline ecological functions.

(d) The County may extend notice of final decision on the project if the County can document legitimate reasons for such a delay. In such a case the County shall provide written notice to the applicant at least 14 calendar days prior to the deadline for the original notice of final decision. The notice shall include a statement of reasons why the time limits have not been met and a date of issuance of a notice of final decision.

(2) If an applicant believes a project permit application has not been acted upon by the County in a timely manner or otherwise consistent with this chapter, the applicant or authorized representative

may request a meeting with the Director to resolve the issue. Within 14 calendar days after the meeting, the Director shall:

- (a) Approve the permit if it is within the Director's authority to do so, provided the approval would not violate state or County regulations; or
 - (b) Deny the permit if it is within the Director's authority to do so; or
 - (c) Respond in writing with the department's position, or a mutually acceptable resolution of the issue, which may include a partial refund of application fees at the Director's discretion.
- (3) Any final order, permit decision or determination issued by Whatcom County shall include a notice to the applicant of his or her appeal rights per WCC [22.05.160](#) (Appeals).

22.05.140 Expiration of Project Permits.

- (1) This section shall apply to non-shoreline project permits and shoreline statements of exemption. Expiration of shoreline permits shall be subject to the rules of WCC 22.07.080 (Expiration of Shoreline Permits).
- (2) Project permit approval status shall expire two years from the date of approval except where a different duration of approval is authorized by Whatcom County Code, or is established by a court decision or state law, or executed by a development agreement. The decision maker may extend this period up to one year from the date of original expiration upon written request by the applicant.
- (3) Any complete project permit application for which no information has been submitted in response to the department's notice of additional requirements per WCC [22.05.100](#)(3) shall expire at the end of the time limit established in 22.05.100(3).
- (4) For projects that have received a SEPA determination of significance per Chapter [16.08](#) WCC, all underlying project permit applications shall expire when one of the following occurs:
 - (a) The applicant has not in good faith maintained a contract with a person or firm to complete the environmental impact statement (EIS) as specified in the scoping document. The applicant is responsible for informing the County of the status of such contract. If there is no notice given to the County, all underlying project permit applications shall expire upon the end date of the contract; or
 - (b) The mutually agreed time frame to complete the draft EIS or final EIS has lapsed.
- (4) Project permits which received preliminary approval or a final decision prior to February 22, 2009, that did not include an expiration time frame in the conditions of approval shall expire on June 16, 2020.

22.05.150 Permit Revocation.

- (1) Upon notification by the Director that a substantial violation of the terms and conditions of any previously granted zoning conditional use, shoreline substantial development, or shoreline conditional use permit exists, the Hearing Examiner shall issue a summons as per WCC [2.11.220](#) to the permit holder requiring said permit holder to appear and show cause why revocation of the permit should not be ordered. Failure of the permit holder to respond may be deemed good cause for revocation.
- (2) Upon issuance of a summons as set forth in subsection (1) of this section, the Hearing Examiner shall schedule an open record hearing to review the alleged violations. The summons shall include notice

of the hearing and shall be sent to the permit holder and the Director of planning and development services no less than 12 calendar days prior to the date of the hearing. At the hearing the Hearing Examiner shall receive evidence of the alleged violations and the responses of the permit holder, as per the business rules of the Hearing Examiner's office. Testimony shall be limited to that of the division and the permit holder except where additional evidence would be of substantial value in determining if revocation should be ordered. The land use division's evidence may include the testimony of witnesses.

- (3) Upon a showing of violation by a preponderance of the evidence as alleged, the Hearing Examiner may revoke the permit or allow the permit holder a reasonable period of time to cure the violation. If the violation is not cured within the time set by the Hearing Examiner, the permit shall be revoked. Where a time to cure the violation has been set out, no further hearing shall be necessary prior to the revocation. The permit holder shall have the burden of proving that the violation has been cured within the time limit previously set. Such evidence as is necessary to demonstrate that the violation has been cured may be submitted to the Hearing Examiner by either the permit holder or the Director of planning and development services. Any revocation shall be accompanied by written findings of fact and conclusions of law. The permit holder shall be notified of any revocation within 14 calendar days of the revocation.

22.05.160 Appeals.

- (1) Any person with standing may appeal any order, final permit decision, or final administrative determination made by the Director or designee in the administration or enforcement of any chapter to the Hearing Examiner, who has the authority to hear and decide such appeals per WCC [2.11.210](#).
- (a) To be valid, an appeal shall be filed, on a form provided by the department, with the department within 14 calendar days of the issuance of a final permit decision and shall be accompanied by a fee as specified in the Unified Fee Schedule. The written appeal shall include:
- i. The action or decision being appealed and the date it was issued;
 - ii. Facts demonstrating that the person is adversely affected by the decision;
 - iii. A statement identifying each alleged error and the manner in which the decision fails to satisfy the applicable decision criteria;
 - iv. The specific relief requested; and
 - v. Any other information reasonably necessary to make a decision on the appeal.
- (b) The Hearing Examiner shall schedule an open record public hearing on the appeal to be held within 60 calendar days following the department's receipt of the application for appeal unless otherwise agreed upon by the County and the appellant.
- (c) A party who fails to appeal within 14 calendar days is barred from appeal, per Chapter [2.11](#) WCC.
- (d) The business rules of the Hearing Examiner shall govern appeal procedures. The Hearing Examiner shall have the authority granted in the business rules, and that authority is incorporated herein by reference. See also WCC [2.11.220](#).
- (2) For non-shoreline permits, any person with standing or any County department may appeal any final decision of the Hearing Examiner to superior court or other body as specified by WCC [22.05.020](#).

1 The appellant shall file a written notice of appeal within 21 calendar days of the final decision of the
2 Hearing Examiner, as provided in RCW [36.70C.040](#).

- 3 (3) For shoreline permits, after the issuance of the appeal determination, a party with standing may
4 appeal to the Shorelines Hearings Board a decision on a shoreline substantial development permit,
5 shoreline variance, or shoreline conditional use pursuant to RCW 90.58.180 within 21 days of the
6 “date of filing” as defined in Title 23 (Shoreline Management Program) and RCW 90.58.140(6). The
7 appeal to the Shorelines Hearing Board shall be filed in accordance with the provisions of Chapter
8 461-08C WAC. Appeals of a decision of the Department of Ecology shall be filed in accordance with
9 the provisions of Chapter 461-08C WAC.

10 **22.05.170 Annual Report.**

11 Staff shall prepare an annual report on the implementation of this chapter and submit it to the Council.

12 **22.05.180 Interpretation, Conflict and Severability.**

- 13 (1) **Interpret to Protect Public Welfare.** In the event of any discrepancies between the requirements
14 established herein and those contained in any other applicable regulation, code or program, the
15 regulations which are more protective of the public health, safety, environment and welfare shall
16 apply.
- 17 (2) **Severability.** The provisions of this chapter are severable. If a section, sentence, clause, or phrase of
18 this title is adjudged by a court of competent jurisdiction to be invalid, the decision shall not affect
19 the remaining portions of this chapter.

Chapter 22.07 Additional Requirements for Shoreline Permits and Exemptions

22.07.010 General Requirements.

- A. In addition to the requirements of WCC Chapter 22.05 (Project Permits), shoreline permits shall be subject to the provisions of this chapter.
- B. To be authorized, all shoreline activities, uses, and development shall be done in a manner consistent with Title 23 (Shoreline Management Program) and the Shoreline Management Act as required by RCW 90.58.140(1), regardless of whether a shoreline permit, statement of exemption, shoreline variance, or shoreline conditional use permit is required.
- C. All final shoreline substantial development, variance, and conditional use permit decisions or recommendations shall be filed with the Department of Ecology pursuant to WCC 22.07.060.
- D. A development or use that is listed as a shoreline conditional use pursuant to Title 23 (Shoreline Management Program) or is an unlisted use must obtain a shoreline conditional use permit even if the development or use does not require a substantial development permit.
- E. When a development, use, or activity is proposed that does not comply with the bulk, dimensional and/or other standards of the Shoreline Management Program, such development or use shall only be authorized by approval of a shoreline variance even if the development or use does not require a substantial development permit.
- F. All permits issued for development, use, or activity within shoreline jurisdiction shall include written findings prepared by the Director, including compliance with bulk and dimensional standards and policies and regulations the Shoreline Management Program. The Director may attach conditions to the approval to project permits as necessary to assure consistency of the project with the Act and the Program.
- G. Pursuant to WAC 173-27-044, requirements to obtain a substantial development permit, shoreline conditional use permit, shoreline variance, letter of exemption, or other review conducted by a local government to implement the Shoreline Management Program do not apply to:
 1. **Remedial Action.** Any person conducting a remedial action at a facility pursuant to a consent decree, order, or agreed order issued pursuant to chapter [70.105D](#) RCW, or to the Department of Ecology (Ecology) when it conducts a remedial action under chapter [70.105D](#) RCW. Ecology must ensure compliance with the substantive requirements of this chapter through the consent decree, order, or agreed order issued pursuant to chapter [70.105D](#) RCW, or during the Ecology-conducted remedial action, through the procedures developed by Ecology pursuant to RCW [70.105D.090](#);
 2. **Boatyard Facilities.** Any person installing site improvements for stormwater treatment in an existing boatyard facility to meet requirements of a national pollutant discharge elimination system stormwater general permit. Ecology must ensure compliance with the substantive requirements of this chapter through the review of engineering reports, site plans, and other documents related to the installation of boatyard stormwater treatment facilities; or

3. **Washington State Department of Transportation (WSDOT)** facility maintenance and safety improvements. Any Washington State Department of Transportation (WSDOT) projects or activities that meet the conditions of RCW 90.58.356.

H. All applications for shoreline substantial development permits or permit revisions shall be submitted to the Department of Ecology upon a final decision by local government pursuant to WAC 173-27-130. "Final decision by local government" shall mean the order of ruling, whether it be an approval or denial, that is established after all local administrative appeals related to the permit have concluded or the opportunity to initiate such appeals has lapsed.

22.07.020 Exemptions from Shoreline Substantial Development Permits.

A. Application and interpretation.

1. An exemption from the substantial development permit process is not an exemption from compliance with the Act, the Whatcom County Shoreline Management Program, or from any other regulatory requirements. To be authorized, all uses, developments, and activities must be consistent with the policies and regulatory provisions of the Shoreline Management Program and the Act. A statement of exemption shall be obtained for exempt activities consistent with the below provisions.
2. Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemptions from the substantial development permit process.
3. The burden of proof that a development, use, or activity is exempt is on the applicant/proponent of the exempt development action.
4. If any part of a proposed development is not eligible for exemption, then a substantial development permit is required for the entire project.

B. **Exemptions.** Certain developments, uses, or activities are exempt from the substantial development permit requirements of the Act and the Shoreline Management Program. These developments, uses, or activities are those set forth in WAC [173-27-040](#) (or as amended), and do not meet the definition of substantial development under RCW [90.58.030](#)(3)(e). A summary of exempt developments is listed below, the application of which shall be guided by WAC [173-27-040](#) (or as amended).

1. Any development of which the total cost or fair market value, whichever is higher, does not exceed \$7,047, or as amended by the state Office of Financial Management, if such development does not materially interfere with the normal public use of the water or shorelines of the state. For the purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state as defined in RCW 90.58.030(2)(c). The total cost or fair market value of the development shall include the fair market value of any donated, contributed or found labor, equipment or materials.
2. Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. Normal maintenance includes those usual acts to prevent a decline, lapse or cessation from a lawfully established condition. Normal repair means to restore a development to a state comparable to its original condition within a reasonable period after

1 decay or partial destruction except where repair causes substantial adverse effects to the
2 shoreline resource or environment. Replacement of a structure or development may be
3 authorized as repair where such replacement is the common method of repair for the type of
4 structure or development and the replacement structure or development is comparable to the
5 original structure or development including but not limited to its size, shape, configuration,
6 location and external appearance and the replacement does not cause substantial adverse
7 effects to shoreline resources or the environment.

- 8 3. Construction of the normal protective bulkhead common to single-family residences. A normal
9 protective bulkhead includes those structural and nonstructural developments installed at or
10 near, and parallel to, the ordinary high-water mark for the sole purpose of protecting an existing
11 single-family residence and appurtenant structures from loss or damage by erosion. A normal
12 protective bulkhead is not exempt if constructed for the purpose of creating dry land. When a
13 vertical or near vertical wall is being constructed or reconstructed, not more than one cubic yard
14 of fill per one foot of wall may be used for backfill. When an existing bulkhead is being repaired
15 by construction of a vertical wall fronting the existing wall, it shall be constructed no further
16 waterward of the existing bulkhead than is necessary for construction of new footings. When a
17 bulkhead has deteriorated such that an ordinary high-water mark has been established by the
18 presence and action of water landward of the bulkhead then the replacement bulkhead must be
19 located at or near the actual ordinary high-water mark. Beach nourishment and bioengineered
20 erosion control projects may be considered a normal protective bulkhead when any structural
21 elements are consistent with the above requirements and when the project has been approved
22 by the Washington Department of Fish and Wildlife.

- 23 4. Emergency construction necessary to protect property from damage by the elements. An
24 emergency is an unanticipated and imminent threat to public health, safety or the environment
25 that requires immediate action within a time too short to allow full compliance with the
26 Shoreline Management Program. Emergency construction does not include development of new
27 permanent protective structures where none previously existed. Where new protective
28 structures are deemed by the Director to be the appropriate means to address the emergency
29 situation, upon abatement of the emergency situation the new structure shall be removed or
30 any permit that would have been required, absent an emergency, pursuant to Chapter 90.58
31 RCW, Chapter 173-27 WAC, or the Shoreline Management Program, shall be obtained. All
32 emergency construction shall be consistent with the policies of Chapter 90.58 RCW and the
33 Shoreline Management Program. As a general matter, flooding or other seasonal events that
34 can be anticipated and may occur but that are not imminent are not an emergency.

- 35 5. Construction and practices normal or necessary for farming, irrigation, and ranching activities,
36 including agricultural service roads and utilities, construction of a barn or similar agricultural
37 structure, and the construction and maintenance of irrigation structures including, but not
38 limited to, head gates, pumping facilities, and irrigation channels; provided, that this exemption
39 shall not apply to agricultural activities proposed on land not in agricultural use on December
40 17, 2003; and further provided, that a feedlot of any size, all processing plants, other activities of
41 a commercial nature, or alteration of the contour of the shorelands by leveling or filling other
42 than that which results from normal cultivation shall not be considered normal or necessary

1 farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being
2 used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for
3 growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal
4 livestock wintering operations.

5 6. Construction or modification, by or under the authority of the Coast Guard or a designated port
6 management authority, of navigational aids such as channel markers and anchor buoys.

7 7. Construction on shorelands by an owner, lessee, or contract purchaser of a single-family
8 residence for their own use or for the use of their family, which residence does not exceed a
9 height of 35 feet above average grade level and that meets all requirements of the state agency
10 or local government having jurisdiction thereof. Single-family residence means a detached
11 dwelling designed for and occupied by one family including those structures and developments
12 within a contiguous ownership which are a normal appurtenance as defined in Chapter 23.60
13 WCC.

14 8. Construction of a dock, including a shared moorage, designed for pleasure craft only, for the
15 private noncommercial use of the owners, lessee, or contract purchaser of a single-family or
16 multifamily residence. A dock is a landing and moorage facility for watercraft and does not
17 include recreational decks, storage facilities or other appurtenances. The private dock
18 exemption applies if either:

19 a. In salt waters, the fair market value of the dock does not exceed \$2,500; or

20 b. In fresh waters the fair market value of the dock does not exceed:

21 i. \$20,000 for docks that are constructed to replace existing docks, are of equal or lesser
22 square footage than the existing dock being replaced

23 ii. \$10,000 for all other docks constructed in fresh waters,

24 However, if subsequent construction occurs within five years of the completion of the prior
25 construction, and the combined fair market value of the subsequent and prior construction
26 exceeds the amount specified above, the subsequent construction shall be considered a
27 substantial development for the purpose of the Shoreline Management Program. For the
28 purpose of this section, saltwater shall include the tidally influenced marine and estuarine water
29 areas of the state including the Pacific Ocean, Strait of Juan de Fuca, Strait of Georgia, and Puget
30 Sound and all associated bays, inlets, and estuaries.

31 9. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other
32 facilities that now exist or are hereafter created or developed as a part of an irrigation system
33 for the primary purpose of making use of system waters including return flow and artificially
34 stored ground water for the irrigation of lands; provided, that this exemption shall not apply to
35 construction of new irrigation facilities proposed after December 17, 2003.

36 10. The marking of property lines or corners on state-owned lands, when such marking does not
37 significantly interfere with normal public use of the surface of the water.

38 11. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on
39 June 4, 1975, that were created, developed or utilized, primarily as a part of an agricultural
40 drainage or diking system.

41 12. Any project with a certification from the governor pursuant to Chapter 80.50 RCW.

- 1 13. Site exploration and investigation activities that are prerequisite to preparation of a
2 development application for authorization under the Shoreline Management Program, if:
 - 3 a. The activity does not interfere with the normal public use of surface waters;
 - 4 b. The activity will have no significant adverse impact on the environment including but not
5 limited to fish, wildlife, fish or wildlife habitat, water quality and aesthetic values;
 - 6 c. The activity does not involve the installation of any structure and, upon completion of the
7 activity, the vegetation and land configuration of the site are restored to conditions existing
8 before the activity;
 - 9 d. A private entity seeking development authorization under this section first posts a
10 performance bond or provides other evidence of financial responsibility to the Director to
11 ensure that the site is restored to preexisting conditions; and
 - 12 e. The activity is not subject to the permit requirements of RCW 90.58.550.
 - 13 14. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020,
14 through the use of an herbicide or other treatment methods applicable to weed control that is
15 recommended by a final environmental impact statement published by the Department of
16 Agriculture or the Department of Ecology jointly with other state agencies under Chapter 43.21C
17 RCW.
 - 18 15. Watershed restoration projects as defined in Chapter 23.60 WCC and WAC 193-27-040(2)(o).
19 The Director shall review the projects for consistency with the Shoreline Management Program
20 in an expeditious manner and shall issue its decision along with any conditions within 45 days of
21 receiving a complete application form from the applicant/proponent. No fee may be charged for
22 accepting and processing applications for watershed restoration projects as defined in Chapter
23 23.60 WCC (Definitions).
 - 24 16. A public or private project, the primary purpose of which is to improve fish or wildlife habitat or
25 fish passage, including restoring native kelp, eelgrass beds and native oysters, when all of the
26 following apply:
 - 27 a. The project has been approved in writing by the Department of Fish and Wildlife as
28 necessary for the improvement of the habitat or passage and appropriately designed and
29 sited to accomplish the intended purpose;
 - 30 b. The project received hydraulic project approval by the Department of Fish and Wildlife
31 pursuant to Chapter 77.55 RCW; and
 - 32 c. The Director has determined that the project is consistent with the Shoreline Management
33 Program. The Director shall make such determination in a timely manner and provide it by
34 letter to the project proponent.
 - 35 17. The external or internal retrofitting of an existing structure with the exclusive purpose of
36 compliance with the Americans with Disabilities Act of 1990 or to otherwise provide physical
37 access to the structure by individuals with disabilities.
- 38 **C. Statements of Exemption.**
- 39 1. Statements of Exemption are considered Type I applications pursuant to WCC 22.05.020 (Project
40 Permit Processing Table).

2. The Director is hereby authorized to grant or deny requests for statements of exemption from the shoreline substantial development permit process for developments, uses, or activities within shorelines that are specifically listed in subsection (B).
3. Exempt activities shall not be conducted until a statement of exemption has been obtained from the Director; provided, that no statement of exemption is required for emergency development pursuant to WAC 173-27-040(2)(d) and that other project permits (e.g., building permits), at the Director's discretion, may serve as a statement of exemption when they contain a statement of review and compliance with the Shoreline Management Program.
4. Whether or not a written statement of exemption is issued, all permits issued within the area of shorelines shall include a record of review actions prepared by the Director, including compliance with bulk and dimensional standards and policies and regulations of the Shoreline Management Program.
5. A notice of decision for shoreline statements of exemption shall be provided to the applicant/proponent and any party of record. Such notices shall also be filed with the Department of Ecology, pursuant to the requirements of WAC 173-27-050 when the project is subject to one or more of the following federal permitting requirements:
 - a. A U.S. Army Corps of Engineers Section 10 permit under the Rivers and Harbors Act of 1899. (The provisions of Section 10 of the Rivers and Harbors Act generally apply to any project occurring on or over navigable waters. Specific applicability information should be obtained from the Corps of Engineers.); or
 - b. A Section 404 permit under the Federal Water Pollution Control Act of 1972. (The provisions of Section 404 of the Federal Water Pollution Control Act generally apply to any project that may involve discharge of dredge or fill material to any water or wetland area. Specific applicability information should be obtained from the Corps of Engineers.)

22.07.030 Shoreline Substantial Development Permits.

- A. A shoreline substantial development permit shall be required for all proposed uses, development, and activities within the shoreline jurisdiction unless the proposal is specifically exempt pursuant to WCC 22.07.020 (Exemptions).
- B. All shoreline substantial development permits are considered Type II permits (see WCC 22.05.020, Project Permit Processing Table), except those the Director has determined meets the any one of the following criteria, in which case it shall be considered a Type III permit:
 1. The proposal has a cost or market value in excess of \$500,000, except for single-family residences, agriculture, and commercial forestry; or
 2. The proposal is determined to have a significant adverse impact on the environment and an environmental impact statement is required in accordance with the State Environmental Policy Act.
 3. The proposal requires a shoreline variance and/or Type III shoreline conditional use approval pursuant to Title 23 (Shoreline Management Program); or
- C. In order to be approved, the decision maker must find that the proposal is consistent with the Shoreline Management Act and the Shoreline Management Program.

- 1 D. the granting of all shoreline substantial development permits should remain consistent with the
2 policy of RCW 90.58.020 and should not produce significant adverse effects to the shoreline
3 ecological functions and processes or other users.

4 **22.07.040 Shoreline Conditional Use Permits.**

- 5 A. The purpose of a shoreline conditional use permit is to allow greater flexibility in administering the
6 use regulations of the Shoreline Management Program in a manner consistent with the policy of
7 RCW 90.58.020. In authorizing a shoreline conditional use, special conditions may be attached to the
8 permit by the county or the Department of Ecology to control any undesirable effects of the
9 proposed use.
- 10 B. Uses specifically classified or set forth in WCC Title 23 (Shoreline Management Program) as shoreline
11 conditional uses and unlisted uses may be authorized, provided the applicant/proponent can
12 demonstrate all of the following:
- 13 1. That the proposed use will be consistent with the policy of RCW 90.58.020 and the Shoreline
14 Management Program.
 - 15 2. That the proposed use will not interfere with normal public use of public shorelines.
 - 16 3. That the proposed use of the site and design of the project will be compatible with other
17 permitted uses within the area.
 - 18 4. That the proposed use will not cause adverse effects to the shoreline environment in which it is
19 to be located.
 - 20 5. That the public interest suffers no substantial detrimental effect.
- 21 C. All shoreline conditional use permits are considered Type III permits (see WCC 22.05.020, Project
22 Permit Processing Table), except those for single-family residential development, uses, or activities,
23 which shall be processed as a Type II permit.
- 24 D. Other uses not specifically classified or set forth in WCC Title 23 (Shoreline Management Program),
25 including the resumption of a nonconforming use pursuant to WCC 23.50.010 (Nonconforming
26 Uses), may be authorized as shoreline conditional uses, provided the applicant/proponent can
27 demonstrate that the proposal will satisfy the criteria set forth in subsection (B) of this section, and
28 that the use clearly requires a specific site location on the shoreline not provided for under the
29 Shoreline Management Program, and extraordinary circumstances preclude reasonable use of the
30 property in a manner consistent with the use regulations of the Shoreline Management Program.
31 Uses that are prohibited cannot be authorized by a shoreline conditional use permit.
- 32 E. In the granting of all shoreline conditional use permits, consideration shall be given to the
33 cumulative environmental impact of additional requests for like actions in the area. For example, if
34 shoreline conditional use permits were granted for other developments in the area where similar
35 circumstances exist, the sum of the shoreline conditional uses and their impacts should also remain
36 consistent with the policy of RCW 90.58.020 and should not produce a significant adverse effect to
37 the shoreline ecological functions and processes or other users.

38 **22.07.050 Shoreline Variances.**

- 39 A. The purpose of a shoreline variance is to grant relief to specific bulk or dimensional requirements
40 set forth in the Shoreline Management Program and any associated standards appended to this
41 program such as critical areas buffer requirements where there are extraordinary or unique

- 1 circumstances relating to the property such that the strict implementation of this program would
2 impose unnecessary hardships on the applicant/proponent or thwart the policy set forth in RCW
3 90.58.020. Use restrictions may not be varied.
- 4 B. Shoreline variances are considered Type III applications pursuant to WCC 22.05.020 (Project Permit
5 Processing Table).
- 6 C. Shoreline variances will be granted in any circumstance where denial would result in a thwarting of
7 the policy enumerated in RCW 90.58.020. In all instances extraordinary circumstances shall be
8 shown and the public interest shall suffer no substantial detrimental effect.
- 9 D. Shoreline variances for development and/or uses that will be located landward of the ordinary high-
10 water mark (OHWM) and/or landward of any wetland may be authorized provided the applicant can
11 demonstrate all of the following:
- 12 1. That the strict application of the bulk or dimensional criteria set forth in WCC Title 23 (Shoreline
13 Management Program) precludes or significantly interferes with reasonable permitted use of
14 the property;
 - 15 2. That the hardship described in subsection (1) of this section is specifically related to the
16 property, and is the result of unique conditions such as irregular lot shape, size, or natural
17 features and the application of the Shoreline Management Program, and not, for example, from
18 deed restrictions or the applicant's/proponent's own actions;
 - 19 3. That the design of the project is compatible with other authorized uses within the area and with
20 uses planned for the area under the Comprehensive Plan and Shoreline Management Program
21 and will not cause adverse impacts to the shoreline environment;
 - 22 4. That the variance authorized does not constitute a grant of special privilege not enjoyed by the
23 other properties in the area, and will be the minimum necessary to afford relief;
 - 24 5. That the public interest will suffer no substantial detrimental effect;
 - 25 6. That the public rights of navigation and use of the shorelines will not be materially interfered
26 with by the granting of the variance; and
 - 27 7. Mitigation is provided to offset unavoidable adverse impacts caused by the proposed
28 development or use.
- 29 E. Shoreline variances for development and/or uses that will be located waterward of the ordinary
30 high-water mark (OHWM) or within any wetland may be authorized, provided the applicant can
31 demonstrate all of the following:
- 32 1. That the proposal is consistent with the criteria established under subsection (D) of this section;
33 and
 - 34 2. That the public rights of navigation and use of the shorelines will not be adversely affected.
- 35 F. In the granting of shoreline variances, consideration shall be given to the cumulative environmental
36 impact of additional requests for like actions in the area. For example, if shoreline variances were
37 granted to other developments in the area where similar circumstances exist, the total of the
38 variances should also remain consistent with the policy of RCW 90.58.020 and should not produce
39 significant adverse effects to the shoreline ecological functions and processes or other users.

22.07.060 Filing Shoreline Permits with the Department of Ecology

- A. After all local permit administrative appeals or reconsideration periods are complete, the County will deliver the final permit using return receipt requested mail or email to the Department of Ecology regional office and the attorney general.
- B. Proposals that require both shoreline conditional use permits and/or shoreline variances shall be delivered simultaneously with any shoreline permit for the project.
- C. The permit and documentation of final local decision will be delivered together the following information:
 1. A copy of the complete application;
 2. Findings and conclusions that establish the basis for the decision, including but not limited to identification of shoreline environment designation(s), applicable Shoreline Management Program policies and regulations, and the consistency of the project with appropriate review criteria for the type of permit(s);
 3. The final decision of the local government;
 4. A completed permit data sheet (WAC 173-27-990, Appendix A); and
 5. Where applicable, local government shall also file the applicable documents required by SEPA, or in lieu thereof, a statement summarizing the actions and dates of such actions taken under Chapter 43.21C RCW.
 6. When the project has been modified in the course of the local review process, plans or text shall be provided that clearly indicate the final approved plan.
- F. Development pursuant to a shoreline substantial development permit, shoreline variance, or shoreline conditional use permit shall not begin and shall not be authorized until 21 days after the “date of filing,” as defined in Title 23 (Shoreline Management Program) and RCW 90.58.140(6), or until all review proceedings before the Shorelines Hearings Board have terminated.
- G. Upon approval of a permit revision, the decision maker shall file a copy of the revised site plan and a detailed description of the authorized changes to the original permit with the Department of Ecology together with a final ruling and findings supporting the decision based on the requirements of this section. In addition, the decision maker shall notify parties of record of the action.

22.07.070 Revisions to Shoreline Permits.

- A. A revision is required whenever the applicant/proponent proposes substantive changes to the design, terms, or conditions of a project from that approved in the permit and/or statement of exemption. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, the Shoreline Management Program, or the Act.
- B. An application for a revision to a shoreline permit shall be submitted to the Director. The application shall include detailed plans and text describing the proposed changes. The County decision maker that approved the original permit may approve the request upon finding that the proposed changes are within the scope and intent of the original approval, and are consistent with the Shoreline Management Program and the Act.
- C. “Within the scope and intent of the original approval” means all of the following:

1. No additional over-water construction is involved except that a pier, dock, or floating structure may be increased by 500 square feet or 10 percent from the provisions of the original permit, whichever is less;
 2. Ground area coverage and/or height may be increased a maximum of 10 percent over that approved under the original approval
 3. The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of the Shoreline Management Program except as authorized under a variance granted as the original permit or a part thereof;
 4. Additional or revised mitigation and/or landscaping is consistent with any conditions attached to the original approval and with the Shoreline Management Program;
 5. The use authorized pursuant to the original approval is not changed; and
 6. The revision will not cause adverse environmental impacts beyond those originally authorized in the approval.
- D. Revisions to shoreline permits may be authorized after the original authorization has expired pursuant to WCC 22.07.080 (Expiration of Shoreline Permits). Revisions made after the expiration of the original approval shall be limited to changes that meet the definition of a shoreline exemption and are consistent with the Shoreline Management Program.
- E. The provisions of this subsection shall not be used to extend the time requirements or to authorize substantial development beyond the time limits or scope of the original approval; provided the revision approval shall expire within 1 year from the date of approval, tolling of expiration does not apply to revision approvals.
- F. A new permit shall be required if the proposed revision and any previously approved revisions in combination would constitute development beyond the scope and intent of the original approval as set forth in subsection (C) of this section.
- G. The revision approval, including the revised site plans and text consistent with the provisions of WAC 173-27-180 as necessary to clearly indicate the authorized changes, and the final ruling on consistency with this section shall be filed with the Department of Ecology pursuant to WCC 22.07.060 (Filing Shoreline Permits with the Department of Ecology). In addition, the County shall notify parties of record of their action.
- H. If the proposed revision is to a development for which a shoreline conditional use or shoreline variance was issued, the decision maker shall submit the revision to the Department of Ecology for approval with conditions or denial, and shall indicate that the revision is being submitted under the requirements of this subsection.
- I. Under the requirements of WAC 173-27-110(6), the Department shall render and transmit to the decision maker and the applicant/proponent its final decision within 15 days of the date of the Department's receipt of the submittal from the decision maker. The decision maker shall notify parties on record of the Department's final decision.

22.07.080 Expiration of Shoreline Permits.

- A. Expiration of shoreline statements of exemptions shall be in accordance with WCC 22.05.140 (Expiration of Project Permits).

- 1 B. The following time requirements shall apply to all substantial development permits and to any
2 development authorized pursuant to a shoreline variance or shoreline conditional use permit:
- 3 1. Construction shall be commenced or, where no construction is involved, the use or activity shall
4 be commenced, within 2 years of the effective date of a shoreline permit or the permit shall
5 expire; provided, that the Hearing Examiner or Director, as appropriate, may authorize a single
6 extension for a period of not more than 1 year based on a showing of good cause if a request for
7 extension has been filed with Planning and Development Services before the expiration date of
8 the shoreline permit. The Director shall provide notice of the proposed extension to parties of
9 record and the Department of Ecology.
- 10 2. Authorization to conduct development activities shall terminate 5 years after the effective date
11 of a shoreline permit; provided, that the Hearing Examiner or Director, as appropriate, may
12 authorize a single extension for a period of not more than 1 year based on a showing of good
13 cause, if a request for extension has been filed with Planning and Development Services before
14 the expiration date of the shoreline permit. The Director shall provide notice of the proposed
15 extension to parties of record and the Department of Ecology.
- 16 3. The effective date of a shoreline permit shall be the date of filing as provided in RCW
17 90.58.140(6).
- 18 4. **Tolling.** The effective date does not include the time during which a development, use, or
19 activity was not actually pursued due to the need to obtain other government permits and
20 approvals for which the issued shoreline permit authorizes, including the pendency of all
21 reasonably related administrative appeals or legal actions on any such permits or approval. The
22 applicant/proponent shall be responsible for informing the County of such pendency.
- 23 C. Notwithstanding the time limits established in subsection (B) of this section, upon a finding of good
24 cause based on the requirements and circumstances of the proposed project and consistent with
25 the policies and provisions of the Shoreline Management Program and the Act, the Hearing
26 Examiner or Director, as appropriate, may set different time limits for a particular substantial
27 development permit or exemption as part of the action to approve the permit or exemption. The
28 Hearing Examiner may also set different time limits on specific shoreline conditional use permits or
29 shoreline variances with the approval of the Department of Ecology. The different time limits may
30 be longer or shorter than those established in subsection (B) but shall be appropriate to the
31 shoreline development or use under review. “Good cause based on the requirements and
32 circumstances of the proposed project” shall mean that the time limits established for the project
33 are reasonably related to the time actually necessary to perform the development on the ground
34 and complete the project that is being permitted, and/or are necessary for the protection of
35 shoreline resources.
- 36 D. When permit approval includes conditions, such conditions shall be satisfied prior to occupancy or
37 use of a structure or prior to the commencement of a nonstructural activity; provided, that different
38 time limits for compliance may be specified in the conditions of approval as appropriate.
- 39 E. The Hearing Examiner or Director, as appropriate, shall notify the Department of Ecology in writing
40 of any change to the effective date of a permit with an explanation of the basis for approval of the
41 change. Any change to the time limits of a permit other than those authorized shall require a new
42 permit application.

- 1 F. All shoreline permits shall expire as indicated in subsection (B); however, regardless of tolling no
- 2 shoreline permit shall be valid beyond 8 years from the date of filing.

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Shoreline Management Program Update Proposed Amendments to WCC Chapter 16.16 Critical Areas

Adopted by County Council 9/24/2024
Effective 1/1/2025



Planning and Development Services
Whatcom County
8/30/2024

Chapter 16.16

CRITICAL AREAS

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Article 1. Purpose and Intent

16.16.100 Purpose and Intent.

- A. The purpose of this chapter is to help achieve the goals of the Whatcom County comprehensive plan and the State of Washington Growth Management Act (Chapter [36.70A](#) RCW) and its implementing rules by designating and classifying critical areas, and by protecting the functions and values of critical areas and the ecological processes that sustain them, while allowing for appropriate economically beneficial or productive use of land and property. Critical areas regulated under this chapter include geologically hazardous areas, frequently flooded areas, critical aquifer recharge areas, wetlands, and habitat conservation areas. This chapter seeks to maintain harmonious relationships between human activity and the natural environment.
- B. The Growth Management Act requires the designation of critical areas and the adoption of regulations for the protection of such areas by all counties and cities. The Washington Department of Commerce has adopted minimum guidelines in Chapter [365-190](#) WAC detailing the process involved in establishing a program to protect critical areas. “Protection” in this context means preservation of the functions and values of the natural environment, or to safeguard the public from hazards to health and safety. Critical areas that must be protected include the following areas and ecosystems:
 - 1. Wetlands;
 - 2. Areas of critical recharging effect on aquifers used for potable water;
 - 3. Fish and wildlife habitat conservation areas;
 - 4. Frequently flooded areas; and
 - 5. Geologically hazardous areas.
- C. By regulating development and minimizing critical area alterations, this chapter seeks to:
 - 1. Reduce harm due to landslides, earthquakes, erosion, volcanic events, flooding, and other natural hazards.
 - 2. Minimize unnecessary maintenance of public facilities, and costs associated with property damage, emergency rescue relief operations, and environmental degradation.
 - 3. Protect against adverse impacts to water quality and quantity resources.
 - 4. Alert appraisers, assessors, real estate agents, owners, potential buyers or lessees, and other members of the public to natural conditions that pose a hazard or otherwise limit development.
 - 5. Protect wetlands, floodplains, critical aquifer recharge areas, and habitat conservation areas by applying the best available science to ensure no net loss of ecological functions and values.
 - 6. Protect species listed as threatened or endangered and their habitats.
 - 7. Protect unique, fragile, and/or valuable elements of the environment, including ground and surface waters, wetlands, anadromous fish species, shellfish, and other fish and wildlife and their habitats.
 - 8. Provide County officials with information to approve, condition, or deny project proposals.
 - 9. Protect property rights, while allowing for economic development, including agriculture, and allowing for the development and maintenance of adequate and appropriate public services and essential public facilities.

10. Prevent adverse and cumulative environmental impacts to critical areas and mitigate unavoidable impacts.
 11. Coordinate Whatcom County's critical areas protection activities and programs with those of other jurisdictions.
 12. Coordinate environmental reviews and permitting of proposals with other departments and agencies to avoid duplication and delay.
 13. Allow for reasonable use of property in accordance with the provisions of WCC [16.16.270](#).
 14. Establish critical areas protection standards and procedures that are consistent with state and federal regulations pertaining to critical areas.
- D. The goals, policies, and purposes set forth in this chapter serve as a basis for exercise of the County's substantive authority under the State Environmental Policy Act (SEPA) and the County's SEPA rules.
 - E. The County's enactment or enforcement of this chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.
 - F. Nothing in this chapter is intended to preclude or discourage beneficial actions that protect, restore, and/or maintain critical areas or minimize risks associated with critical areas.
 - G. Consistent with Whatcom County's high standard of staff conduct, County staff shall observe all applicable County, state, and federal laws regarding entry onto privately owned property.

Article 2. Administrative Provisions

16.16.200 Authority.

- A. This chapter is adopted under the authority of Chapter [36.70](#) RCW, which empowers a county to enact a critical area ordinance and provide for its administration, enforcement and amendment, and Chapter [36.70A](#) RCW and Article 11 of the Washington State Constitution.
- B. The Director shall administer and enforce the provisions of this chapter and have the responsibility for reviewing development proposals for compliance with this chapter. Additionally, s/he shall also have the:
 - 1. Authority to approve, deny, or condition permits in accordance with the standards set forth herein.
 - 2. Authority to convene an interdisciplinary team to assist in reviewing development proposals or to solicit review from outside experts in accordance with WCC 16.16.220(C) (Interdisciplinary Team).
 - 3. Authority to post a stop work order pursuant to WCC 16.16.285 upon a person undertaking activity within a critical area or buffer in violation of this chapter.
 - 4. Any additional responsibility and/or authority specifically provided for in this chapter.
 - 5. For project permits subject to consolidated review the Director's authority shall transfer to another County decision maker when another decision maker is specified for a separate project permit. In such cases, the Director shall ensure that all procedural requirements of this chapter are met and shall make a recommendation to the designated decision maker as to how the provisions of this chapter apply to the permit action, including project permits.
- C. The Whatcom County Hearing Examiner authority is provided in is hereby vested with responsibility and authority to perform the following duties:
 - 1. Those duties as assigned in WCC Chapter 2.11 (Hearing Examiner).
 - 2. Those duties as assigned in WCC Title 22 (Land Use and Development)
 - 3. To grant or deny variances to the standards of this Chapter pursuant to WCC 16.16.275 (Variances).
 - 4. To grant, condition, or deny reasonable use exception permits for all developments affecting critical areas pursuant to WCC 16.16.270 (Reasonable Use Exceptions).
 - 5. To decide on appeals of administrative decisions issued by the Director.
- D. In granting, revising, or extending a permit, the Director, or Hearing Examiner as applicable, may attach such conditions, modifications, or restrictions thereto regarding the location, character, and other features of the proposed development deemed necessary to assure that the development is consistent with criteria set forth in this chapter. In cases involving unusual circumstances or uncertain effects, a condition may be imposed to allow for future review or reevaluation to assure conformance with this chapter. The Director and/or Hearing Examiner shall render a final decision in accordance with the timelines established in WCC Chapter 22.05, as applicable. All decisions of the Director and Hearing Examiner may be appealed pursuant to WCC 22.05.160.

16.16.205 Authorizations Required.

- A. No action shall be taken by any person that results in any alteration of a critical area or its setback or buffer without prior authorization by submitting an application on a form provided by Whatcom County and obtaining either the required permit or an approval of a notice of activity, as specified herein.
- B. No land use project permit, construction permit, or land division approval required by County ordinance shall be granted until the County decision maker has determined that the applicant has complied with the applicable purposes, requirements, objectives, and goals of this chapter including the mitigation standards set forth in WCC [16.16.260](#).
- C. Project permits shall comply with all provisions of this chapter, WCC Title [22](#) and the department's administrative manual.
- D. The requirements of this chapter shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA) (RCW Chapter [43.21C](#)), as locally adopted (WCC Chapter [16.08](#)). Any conditions required pursuant to this chapter shall be coordinated with the SEPA review and threshold determination.
- E. Areas characterized by a particular critical area may also be subject to other regulations established by this chapter due to the overlap or multiple functions of some critical areas. When one critical area adjoins or overlaps another, the more restrictive standards shall apply.

16.16.210 Applicability and Severability.

This chapter shall be consistently applied to any alteration or development within geographical areas of unincorporated Whatcom County that meets the definition and criteria for critical areas and critical area buffers or setbacks as set forth in this chapter. No development shall be constructed, located, extended, modified, converted or altered, or land subdivided without full compliance with this chapter. Should any section or provision of this chapter be declared invalid, such decision shall not affect the validity of this chapter as a whole.

16.16.215 Relationship to Other Jurisdictions.

- A. Permit applicants are responsible for complying with all federal, state, tribal, and local regulations that may pertain to a proposed development. Compliance with the provisions of this chapter does not necessarily constitute compliance with other regulations and permit requirements.
- B. In cases where other agencies have jurisdiction over critical areas and the Director determines that the permit conditions imposed by such agencies are no less protective and satisfy the requirements of this chapter, those permit conditions may be substituted as the conditions of approval for the requirements of this chapter. Such agencies may include, but are not limited to, the Lummi Nation; the Nooksack Tribe; the United States Army Corps of Engineers; the United States Environmental Protection Agency; the United States Fish and Wildlife Service; the National Marine Fisheries Service or NOAA Fisheries; and the Washington State Departments of Ecology, Natural Resources, and Fish and Wildlife.
- C. The County shall make detailed written findings required by WCC Chapter [22.05](#) and WCC [16.16.250](#) when adopting conditions of another jurisdiction's permit. Such requirements shall be a condition of critical area approval and enforceable by the County. In the event that there is a

conflict between permit requirements and the standards of this chapter, the more restrictive standards shall apply.

- D. The County shall notify the applicant in writing when adopting other agencies' conditions pursuant to this section.

16.16.220 Identification of Critical Areas.

- A. **Critical Area Maps.** The County has identified critical areas and areas where the conditions under which critical areas typically occur and/or have the potential to occur. The approximate location and extent of critical areas within the County's jurisdiction are shown on maps; however, this information is for increasing public awareness of critical areas. These "static" maps maybe too inexact for regulatory purposes. These maps shall be available at the Department of Planning and Development Services and online for public inspection.
1. Property owners, the Director, and/or members of the public may use these maps as a general guide, but the maps do not provide a comprehensive accounting of areas subject to this chapter nor do they provide a definitive critical areas designation. Maps showing known critical areas are only for information or illustrative purposes.
 2. Planning and Development Services has the authority to update critical areas maps and shall do so as new critical areas are identified and as new information becomes available.
 3. The approximate location and extent of frequently flooded areas are shown on the County's critical area maps. These maps are to be used as a guide and do not provide a definitive critical area designation. The County shall update the maps as new hazard areas are identified and as new information becomes available. This article does not imply that land outside mapped frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of Whatcom County, any officer or employee thereof, or the Federal Insurance and Mitigation Administration (FIMA), for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.
- B. **Identification.** When County critical area maps, indicators, or other sources of credible information indicate that a site may be located in, contain, or abut critical areas or their buffers or setbacks, the Director shall require technical studies in accordance with the requirements for that critical area specified herein to determine the extent of critical areas on the property.
- C. **Interdisciplinary Team.** The Director may call upon outside expertise including an interdisciplinary team if s/he determines that additional technical assistance is required to assess a critical areas development proposal or ensure the application of best available science.
1. The Director will coordinate this effort and seek advice from the team.
 2. The interdisciplinary team shall include the applicant and/or their technical representative, local, state, or federal agency or tribal representatives with expertise in the field, and/or independent qualified professionals with expertise relating to the critical area issue.
 3. The functions of the interdisciplinary team are to field check and verify critical area determinations/boundaries and assess species/habitat presence by providing written peer review of the in-formation included with an application, identify areas of concern in the application of best available science, provide professional opinions and recommendations

relevant to the provisions of this chapter, and help focus the preparation of subsequent reports and environmental documentation on the most relevant issues.

4. In lieu of convening an interdisciplinary team, the County may require third-party review by a qualified professional for any development proposal, mitigation plan, mitigation bank proposal, or other project for which additional technical expertise is needed. The cost of the third-party review shall be the permit applicant's responsibility.

16.16.225 General Regulations.

- A. General regulations apply to all critical areas and critical area buffers. Specific critical area articles describe standards applied to authorized alterations.
- B. Alteration of critical areas and/or buffers is prohibited except when any impacts are mitigated pursuant to this Chapter, and:
 1. Alteration is approved pursuant to the reasonable use or variance provisions of WCC [16.16.270](#) and [16.16.273](#), respectively; or
 2. Alteration is necessary to accommodate an essential public facility or public utility where no feasible alternative location will accommodate the facility and the facility is located, designed, and constructed to minimize and, where possible, avoid critical areas disturbance to the maximum extent feasible; or
 3. Alteration is necessary to accommodate an approved water-dependent use and associated development, use, or activity listed in WCC Title [23](#) when permitted in accordance with the Whatcom County Shoreline Management Program (SMP); provided, that such development is operated, located, designed and constructed to minimize and, where possible, avoid critical areas disturbance to the maximum extent feasible; or
 4. Alteration is part of an essential element of an activity allowed by this chapter and all feasible measures to avoid and minimize impacts have been employed. Such feasible measures shall include, but not be limited to, clustering where permitted by zoning and as appropriate to protect critical areas. The purposes of clustering shall be to minimize adverse effects of development on critical area functions and values, minimize land clearing, maintain soil stability, preserve native vegetation, provide for wildlife corridors, maintain hydrology, and mitigate risk to life and property; or
 5. Alteration is associated with an alternative mitigation plan or watershed-based management plan approved pursuant to WCC [16.16.261](#) or [16.16.262](#), respectively; or
 6. Alteration is associated with a conservation farm plan pursuant to Article 8 of this chapter; or
 7. Alteration of Type III or IV wetlands not subject to WCC Title 23 that have a habitat area score of less than 6 when associated with an approved commercial development within an Urban Growth Area; or
 8. Alteration of a shoreline habitat conservation area buffers as allowed by Title 23 (Shoreline Management Program).
- C. Development proposals shall seek to maintain ecological connectivity and habitat corridors whenever possible. Restoration of ecological connectivity and habitat corridors shall be considered a priority restoration and mitigation action.

- D. In order to preserve native plant communities within shoreline jurisdiction and/or critical areas and their buffers, mitigation sequencing shall be applied during site planning for uses and activities so that the design and location of the structure or development minimizes native vegetation removal. Development, uses, or activities that require vegetation clearing shall be designed to avoid the following, in order of preference:
1. Native trees;
 2. Other native vegetation;
 3. Nonnative trees; and
 4. Other nonnative vegetation.

16.16.230 Activities Allowed without Notification.

The following activities do not require authorization from Whatcom County. However, this shall not be construed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction. Activities within the shoreline jurisdiction (WCC 23.20.10) may require a shoreline permit or statement of exemption.

- A. Forest practices regulated by the Washington State Department of Natural Resources.
- B. Maintenance of lawfully established vegetation, landscaping, and gardens within a regulated critical area or its buffer to maintain the general condition and extent of such areas; provided, that native growth protection areas, or other areas protected via conservation easements or similar restrictive covenants are not covered by this exception.
- C. Maintenance activities necessary to implement approved mitigation plans.
- D. Low impact activities, when the activity does not cause adverse impacts, such as hiking, canoeing, viewing, nature study, photography, hunting, fishing, education, or scientific research.
- E. Activities undertaken to comply with a United States Environmental Protection Agency Superfund-related order, or a Washington Department of Ecology order pursuant to the Model Toxics Control Act (such as the Swift Creek Sediment Management Action Plan), or a Department of Homeland Security order that specifically preempts local regulations in the findings of the order.
- F. Maintenance and/or repair of lawfully established single-family residences and appurtenant features; provided, that the activity does not further alter, impact, or encroach upon critical areas or buffers or further affect their functions. The maintenance activity shall not result in increased risk to life or property.
- G. Fish, wildlife, and/or wetland restoration or enhancement activities not required as project mitigation; provided, that the project is approved by the U.S. Fish and Wildlife Service, the Washington State Department of Ecology, Washington State Department of Fish and Wildlife, or other appropriate local, state, federal, or tribal jurisdiction and/or that meet the criteria of RCW [77.55.181](#)(1) and that are reviewed and approved according to the provisions of RCW [77.55.181](#).

16.16.235 Activities Allowed with Notification.

- A. The activities specified in subsection B of this section are authorized within critical areas and buffers; provided, that:

1. The applicant provides a written notification to the Director on a form provided by the Department. Activities within the shoreline jurisdiction (WCC 23.20.010) may require a shoreline permit or statement of exception.
 2. The notification will provide a site plan (in a common scale), photos, and specific information describing the activity and the mitigation to be implemented, if required, to document that the activity will not result in increased risk to public health, safety, and welfare; that adverse impacts to critical areas are minimized; and that disturbed areas are restored as soon as possible following the activity.
 3. Notification shall be submitted at least 10 full business days prior to initiating work.
 4. Upon receipt of the notification, the Director shall issue a decision within 10 days unless additional information is required from the applicant or other review processes necessitate additional time. Additionally, the Director may provide guidance on best management practices for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and use of chemical applications to be used in the execution of the activities listed in subsection B of this section.
 5. Unless otherwise specified, notification shall be valid for one year per activity; provided, that there is no change in the scope of the project including, but not limited to, the location and/or extent of the activity allowed under the notification process.
- B. Activities Allowed with Notification.
1. **Emergency construction or activity** necessary for the immediate preservation of the public health, safety, and welfare as determined by the Director; provided, that:
 - a. An emergency is an unanticipated and imminent threat to public health, safety, or the environment that requires immediate action within a time period too short to allow full compliance with this chapter.
 - b. Emergency construction does not include development of new permanent protective structures where none previously existed. Where the Director determines that new protective structures are the appropriate means to address an emergency situation, the project proponent shall either obtain any permits that would have been required absent an emergency, pursuant to Chapter [90.58](#) RCW, Chapter [173-27](#) WAC, or this chapter, or remove the structure upon abatement of the emergency situation.
 - c. Within the jurisdiction of the Whatcom County Shoreline Management Program (WCC Title [23](#)), all emergency construction shall be consistent with the policies and procedural requirements of WCC Title [23](#) and this chapter.
 - d. The applicant shall make a reasonable attempt to contact the Director prior to activity; provided, that when prior notice is not feasible, notification of the action shall be submitted to the Director as soon as the emergency is addressed and no later than 14 days following such action.
 2. **Maintenance or repair to existing infrastructure improvements**, including dikes and drainage ditches, rights-of-way, trails, roads, fences, and utilities or utility corridors; provided, that the activity does not further alter, impact, or encroach upon critical areas or buffers or further affect their functions. The maintenance or repair activity shall not result in increased risk to life or

property. Maintenance or repair shall be allowed pursuant to the provisions set forth in this chapter; provided, that:

- a. The applicant shall submit to the Director a written description of the maintenance activity with all of the following general information:
 - i. Type, timing, frequency, and sequence of maintenance activity to be conducted;
 - ii. Type of equipment to be used (hand or mechanical);
 - iii. Manner in which the equipment will be used; and
 - iv. Best management practices to be used.
 - b. The applicant's written description shall be valid for up to five years; provided, that there is no significant change in the type or extent of maintenance activity.
3. **Utility Installation.** Construction of electrical, telecommunications, cable, water, sewer, and other utility lines and equipment within existing structures, facilities, infrastructure systems, development areas and uses, utility easements, and public and private rights-of-way, provided:
- a. There is no further intrusion into geologically hazardous areas, frequently flooded areas, wetlands, or fish and wildlife habitat conservation areas or their buffers;
 - b. Soil erosion is controlled;
 - c. Disturbed areas are promptly stabilized; and
 - d. Any adverse impacts to critical areas are mitigated in accordance with this chapter.
4. **Vegetation Management.** No vegetation shall be removed from a wetland, habitat conservation area, coastal or riverine erosion hazard area, or landslide hazard area, or their buffers, unless specifically listed in subsection (a) and meeting the conditions of subsection (b), below:
- a. Exceptions.
 - i. Lawn, pasture, ornamental vegetation, and similar introduced vegetation pursuant to WCC 16.16.230(B), provided all areas of vegetation removal are revegetated.
 - ii. Restoration projects.
 - iii. Maintenance of legally established views so long as the criteria subsection (B)(6) of this section are met.
 - iv. The felling of hazard trees within critical areas and buffers, with an approved tree risk assessment completed by a qualified professional.
 - v. To improve overall slope or bank stability selective vegetation limbing, clearing, and/or thinning may be allowed in landslide hazard areas and/or riverine and coastal erosion hazard areas and/or their buffers pursuant to an approved habitat management plan, which shall be prepared by a qualified professional and reviewed by a licensed geologist or geotechnical engineer.
 - b. Conditions.
 - i. Vegetation removal or pruning will be done in a manner that minimizes disturbance and prevents adverse effects on soil stability, fish or wildlife habitat, water quality, or water quantity. Shrubs shall not be pruned to a height of less than 6 feet.
 - ii. Cut vegetation shall be left within the critical area or buffer where practicable unless removal is warranted due to the presence of an established disease infestation, noxious weeds, environmental or other hazards, or because of access or maintenance needs if the area is a utility or access right-of-way.

- iii. All limb removal, crown thinning, or pruning shall meet the American National Standard Institute (ANSI) tree pruning standards. Pruning shall retain branches that overhang the water. No tree topping shall occur. In no circumstance shall removal of more than one-fourth (1/4) of the original crown be permitted within a three-year period.
- iv. Hazard Tree Mitigation.
 - (A) The landowner shall replace any trees that are removed at a three to one ratio (3:1). When approved by the Director, a landowner may choose to convert a hazard tree proposed for removal to a wildlife snag as an alternative if recommended by a certified arborist.
 - (B) In addition to the requirements of WCC 20.80.300 through 20.80.380 (Landscaping), replacement trees shall meet the following criteria:
 - (1) Replacement trees shall be exclusively species native to the coastal region of the Pacific Northwest.
 - (2) At a minimum, 50% of replacement trees shall be evergreen species. If only one replacement tree is required, it shall be an evergreen species, unless otherwise approved by the Director.
- 5. **View Corridors.** Clearing and/or thinning for limited view corridors shall be allowed where it does not adversely impact ecological and/or aesthetic values, and/or slope stability, provided:
 - a. The proposed view corridor is not located in a landslide, riverine, or coastal erosion hazard areas hazard areas or their buffers.
 - b. Clearing shall only be allowed when the applicant can demonstrate that a limited view corridor cannot be achieved through limb removal, crown thinning, or pruning. With clearing, a combination such strategies may be required to establish a view shall be required.
 - c. A window or view opening is limited to the minimum necessary for view purposes and shall not exceed a cumulative total of 15% of buffer length. Whenever possible, view corridors shall be located in areas dominated with non-native vegetation and invasive species.
 - d. Significant trees shall be preserved, but may be shaped, windowed/thinned or pruned.
 - e. Low-growing native vegetation shall be retained and/or planted in the view corridor to provide habitat, stabilize the area, and achieve dense growth.
 - f. Clearing shall not take place where increased risks or adverse impacts, including cumulative impacts, to critical area functions and values are likely to occur.
 - g. This provision does not apply to open space set aside in a subdivision or other approval to which specific conditions are attached that prohibit clearing of vegetation without a written approval or permit.
 - h. View areas established under this section shall be considered lawfully established and may be maintained as provided for in subsection (B)(4) of this section.
- 6. **Navigation Aids.** The installation of navigation aids and boundary markers in accordance with applicable state and federal laws or the installation of mooring buoys in accordance with the Department of Fish and Wildlife design guidelines and the Whatcom County Shoreline Management Program (WCC Title [23](#)).

7. **Site investigation.** Routine site investigation work in wetlands, landslide hazard areas, and riverine and coastal erosion hazard areas. This includes geotechnical soil borings, groundwater monitoring wells, percolation tests, sediment sampling, and similar or related activities required for land use application submittals or permit compliance. Land survey and shallow soil test pits dug in conjunction with wetland delineation studies do not require notification.
8. **Household Garden Products.** Fertilizers or herbicides to address noxious weed infestation may be used in critical area buffers, but not in critical areas. Either must be applied at times and rates specified on the label in accordance with Washington State Department of Agriculture and other applicable regulations.
9. **Ditch Maintenance.** On agricultural lands maintenance of ditches is allowed; provided, that all of the following are met:
 - a. The maintenance is necessary to support agricultural operations;
 - b. The maintenance activity does not expand the dimensions of the drainage channel beyond the original, lawfully established dimensions;
 - c. The agricultural activities are conducted pursuant to an approved conservation farm plan prepared pursuant to Article 8 of this chapter;
 - d. The farm operator obtains a hydraulic project approval (HPA), if required, from the Washington State Department of Fish and Wildlife (WDFW) prior to the maintenance activity; and
 - e. The farm operator provides a copy of the HPA to the Director as part of the written notification.
10. Alteration or removal of beaver-built structures two years old or less; provided, that:
 - a. There is no adverse impact to wetland or river or stream functions.
 - b. The property owner obtains an HPA from WDFW (if required) prior to the maintenance activity.
 - c. The property owner provides a copy of the HPA to the Director as part of the written notification.

A.

16.16.250 Critical Areas Review Process.

- A. All applicants shall complete a prescreening meeting with the Director prior to submitting an application subject to this chapter. The purpose of this meeting shall be to discuss the requirements for a complete application; the critical area standards and procedures; to review conceptual site plans prepared by the applicant; to discuss appropriate investigative techniques and methods; and to determine reporting requirements.
- B. Review and approval of a proposed development within a critical area or its buffer may be initiated through the application for any project permit in Whatcom County on department-approved forms and containing the materials listed in the department's Administrative Manual.
- C. The Director shall be responsible, in a timely manner, to make one of the following determinations regarding critical areas review:
 1. **Determination of Impacts.** The Director shall use best available science, including but not limited to the County's critical areas maps, his/her field investigation results, his/her own

knowledge of the site, information from appropriate resource agencies, or documentation from a scientific or other credible source to determine if the project will more probably than not adversely impact a critical area or its buffer. Identified adverse impacts shall be fully mitigated in accordance with WCC [16.16.260](#).

2. **Determination of Compliance.** If the applicant demonstrates to the satisfaction of the Director that the project meets the provisions of this chapter and is not likely to adversely affect the functions and values of critical areas or buffers or provides mitigation to reduce the adverse impact to meet no net loss of the function and values of critical areas or buffers, the Director shall make the determination that the proposal complies with this chapter.
 3. **Decision to Approve, Condition, or Deny.** The Director shall review all pertinent information pertaining to the proposed development and shall approve, approve with conditions, or deny the permit based on their review, and shall provide a detailed written decision. This determination shall be included in the project review record for the project permit in accordance with WCC Chapter [22.05](#).
- D. The Director may waive the requirement for critical areas review under this chapter when s/he determines that all of the following conditions are met:
1. The proposed development activity is located on a parcel that received approval of a previous critical areas review within the prior five years, site conditions have not changed, and the applicable regulations have not substantively changed;
 2. All critical areas within 300 feet of the new proposed development, use, or activity have been identified and delineated and the effects of the proposed development activity have been thoroughly considered in accordance with the most current regulations and best available science;
 3. The activity is in compliance with all permit conditions including mitigating measures, as applicable, that were imposed as part of the prior review and there are no outstanding violations of conditions that were imposed as part of the previous review;
 4. The development activity involves a use that is equally or less intensive than the development activity that was subject to the prior permit. Land use intensity shall be based on factors including development density, critical areas impacts, impervious surface, noise, glare, dust, hours of operation, and traffic.

16.16.255 Critical Areas Assessment Reports.

- A. When the Director determines a need for a critical area assessment pursuant to WCC [16.16.250](#), s/he shall have the authority to require a critical areas assessment report, to be prepared by a qualified professional and be consistent with best available science. The analysis shall be commensurate with the value or sensitivity of a particular critical area and relative to the scale and potential impacts of the proposed activity. A critical area assessment shall have all of the following elements, unless determined by the Director not to be needed:
1. The requirements found in subsections (C) and (I) of this section;
 2. Geological hazard assessment;
 3. Critical aquifer recharge assessment;
 4. Frequently flooded area assessment;

5. Wetland assessment;
 6. Fish and wildlife habitat conservation area assessment;
 7. A mitigation plan addressing all mitigation requirements of this title.
 8. Habitat Management Plan, when required by this chapter or Title 23.
- B. Elements of a critical area assessment are encouraged to be submitted together for timely review. However, at the request of the applicant the Director may allow the various components to be submitted independently at different phases of a project if s/he determines piecemeal review is reasonable and will benefit the review process.
- C. The critical areas assessment report shall:
1. Demonstrate that the submitted proposal is consistent with the purposes and specific standards of this chapter;
 2. Describe all relevant aspects of the development proposal and critical areas adversely affected by the proposal including any geological hazards and risks associated with the proposal, and assess impacts on the critical area from activities and uses proposed; and
 3. Identify impacts of the proposed use/development on habitat corridors, ecological connectivity, and habitat for salmon and forage fish as identified in WCC 16.16.710.
 4. Where impacts are unavoidable, demonstrate through an alternative's analysis that no other feasible alternative exists. Such an analysis shall explore alternatives that might pose fewer impacts or better protect ecological functions, and address such issues as project design, location on the property, and type and location of mitigation, as applicable to the proposed development.
 5. Identify and evaluate the cumulative impacts of individual development proposals to assure that no net loss standards are achieved. Such impacts shall include those to wildlife, habitat, and migration corridors; water quality and quantity; and other watershed processes that relate to critical area condition, process, and/or service.
 6. Identify proposed mitigation and protective measures as required by this chapter.
- D. The Director shall review the critical areas assessment report for completeness and accuracy and shall consider the recommendations and conclusions of the critical areas assessment report to assist in making administrative decisions concerning approval, conditional approval, or denial of the subject project and to resolve issues concerning critical areas jurisdiction and appropriate mitigation and protective measures.
- E. The Director shall reject or request revision of the field and literature findings and conclusions reached in a critical areas assessment report when s/he can demonstrate that the assessment is inaccurate, incomplete, or does not fully address the critical areas impacts involved.
- F. Critical areas assessment reports shall generally be valid for a period of five years from the date the assessment is approved by the Director. Future land use applications may re-require preparation of new or supplemental critical area assessment reports unless it can be demonstrated to the satisfaction of the Director that the previously prepared report is adequate for current analysis. The Director may also require the preparation of a new critical area assessment report or a supplemental report when new information is found demonstrating that the initial assessment is in error. If the Director requires more information in the report, s/he shall make the request in writing to the applicant stating what additional information is needed and why.

- G. To avoid duplication, the reporting requirements of this chapter shall be coordinated if more than one critical area assessment report is required for a site or development proposal. Similarly, where other agencies' assessments or reports are required pursuant to other state or federal laws, the applicant is encouraged to submit one report that satisfies all such agencies' requirements.
- H. In addition to a hard copy, applicants shall provide reports and maps to the County in an electronic format that allows site data to be incorporated into the County critical areas database; however, the County may waive the electronic format requirement for single-family building permits. Applicants shall follow Whatcom County electronic submittal guidelines. This requirement shall not be construed as a requirement to use specific computer software, though it must be in a format usable by the County.
- I. The intent of these provisions is to require a reasonable level of technical study and alternatives analysis pursuant to WCC [16.16.250](#) sufficient to assess potential project impacts and to protect critical areas. At a minimum, a critical areas assessment report shall include the following information:
 - 1. A site plan showing the proposed development footprint and clearing limits, all relevant critical areas and buffers within and abutting the site, a written description of the project, an examination of project on-site design alternatives, and an explanation of why the proposed activity requires a location on, or access across, a critical area and why alternatives are not feasible;
 - 2. A written description of the critical areas and buffers on or in the vicinity of the site, including their size, type, classification or rating, condition, disturbance history, and functions and values. Projects in frequently flooded areas must comply with the reporting requirements of WCC Title [17](#). Projects on or adjacent to geologically hazardous areas shall identify the type of hazard and assess the associated risks posed by the development or that the development may be subject to;
 - 3. An analysis of potential adverse critical area impacts associated with the proposed activity including, but not limited to, effects related to clearing, grading, noise, light/glare, drilling, damming, draining, creating impervious surface, managing stormwater, releasing hazardous materials, and other alterations, and including an explanation of critical area processes and functions that may be affected;
 - 4. An analysis of how critical area impacts or risks will be avoided and/or minimized, and/or an analysis of the proposed measures to prevent or minimize hazards. When impacts cannot be avoided, the report shall include a plan describing mitigation that will be provided to replace critical area functions and values altered as a result of the proposal. The mitigation plan shall be consistent with the provisions of WCC [16.16.260](#) and provide written documentation showing what the applicant considered for each step in the mitigation sequencing and the other applicable articles of this chapter;
 - 5. The dates, names, signatures, and qualifications of the persons preparing the report and documentation of analysis methods including any fieldwork performed on the site; and
 - 6. Additional reasonable information requested by the Director for the assessment of critical areas impacts or otherwise required by the subsequent articles of this chapter.

16.16.260 General Mitigation Requirements.

- A. Development that adversely impacts or alters a critical area or buffer shall include mitigation sufficient to minimize risks associated with geologic hazards and/or replace or improve critical areas functions and values. Any proposed development that cannot adequately mitigate critical area impacts as determined by the Director shall be denied.
- B. In determining the extent and type of mitigation required, the Director may consider all of the following:
 - 1. The ecological processes that affect and influence critical area structure and function within the watershed or sub-basin;
 - 2. The individual and cumulative effects of the action upon the functions of the critical area and associated watershed;
 - 3. Observed or predicted trends regarding the gains or losses of specific habitats or species in the watershed, in light of natural and human processes;
 - 4. The likely success of the proposed mitigation measures;
 - 5. Effects of the mitigation actions on neighboring properties; and
 - 6. Opportunities to implement restoration actions formally identified by an adopted shoreline restoration plan, watershed planning document prepared and adopted pursuant to Chapter 90.82 RCW, a salmonid recovery plan or project that has been identified on the watershed management board habitat project list or by the Washington State Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement.
- C. Though in general on-site mitigation is preferred, the County shall not risk mitigation success or bypass opportunities for improving ecological processes in a watershed by precluding other mitigation options when it is more effective and sustainable. In order to provide the greatest ecological benefit, a combination of mitigation options may be used to achieve no net loss of ecological functions. In some cases, it may be necessary to mitigate at multiple sites or on-site and out-of-kind. In determining the extent and type of mitigation required for impacts to critical areas, the Director may consider all of the following when applicable:
 - 1. On-site and in-kind. Unless otherwise approved by the Director, all critical areas impacts shall be compensated by creation or restoration of replacement areas that are in-kind, on-site, and of similar critical area category.
 - 2. Off-site and in-kind. The Director may consider and approve off-site mitigation when the applicant demonstrates that greater biological and/or hydrological functions and values will be achieved. The mitigation may include restoration, creation, or enhancement of critical areas and/or their buffers. The process to determine the ratios of on-site mitigation shall apply to off-site ratios as well.
 - 3. On-site and out-of-kind. The Director may consider and approve out-of-kind mitigation when the applicant demonstrates an ecological uplift of biological and/or hydrological functions and values will be achieved. The mitigation may include restoration, creation, or enhancement of other types of critical areas and/or their buffers. The process to determine the ratios of out-of-kind mitigation shall be based on a habitat management plan with a functional replacement assessment.
 - 4. Alternative Mitigation Plans pursuant to 16.16.261 (Alternative Mitigation Plans)

5. Use of Mitigation Bank Credits, pursuant to 16.16.263 (Mitigation Banking)
- D. Where feasible, mitigation projects shall be completed prior to activities that will disturb critical areas or their buffers. In all other cases, mitigation shall be completed concurrently with development and prior to use or occupancy of the activity or development.
- E. Construction of mitigation projects shall be timed to reduce impacts; provided, that the Director may adjust the timing requirements to allow grading, planting, and other activities to occur during the appropriate season(s).
- F. **Mitigation Sequence.**
 1. When an alteration or impact to a critical area or buffer is proposed, the applicant shall conduct an alternatives/mitigation sequencing analysis and demonstrate that all reasonable efforts have been taken to mitigate adverse impacts in the following prioritized order:
 - a. Avoiding the adverse impact altogether by not taking a certain action or parts of an action, or moving the action.
 - b. Minimizing adverse impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology and engineering, or by taking affirmative steps to avoid or reduce adverse impacts.
 - c. Rectifying the adverse impact by repairing, rehabilitating, or restoring the affected environment.
 - d. Reducing or eliminating the adverse impact over time by preservation and maintenance operations during the life of the action.
 - e. Compensating for the adverse impact by replacing, enhancing, or providing similar substitute resources or environments and monitoring the adverse impact and the mitigation project and taking appropriate corrective measures.
 2. Mitigation shall be provided for all unavoidable adverse alterations of a critical area or buffer. Mitigation for individual projects may include a sequenced combination of the above measures as needed to achieve the most effective protection, compensation for buffer functions and values, or mitigation for critical area functions and values.
- G. **Mitigation Plan.**
 1. A mitigation plan shall be developed in accordance with an approved critical areas assessment report and be consistent with best available science. Where appropriate, the mitigation plan should be compatible with watershed and recovery planning goals for Whatcom County. The intent of these provisions is to require a level of technical study and analysis sufficient to protect critical areas and/or protect developments and occupants from critical areas involving hazards. The analysis shall be commensurate with the value or sensitivity of a particular critical area and relative to the scale and potential impacts of the proposed activity.
 2. The mitigation plan shall provide for construction, maintenance, monitoring, and contingencies as required by conditions of approval and consistent with the requirements of this chapter.
 3. The mitigation plan shall demonstrate that all reasonable efforts have been taken to provide sufficient mitigation such that the activity does not have significant adverse impacts and results in no net loss of shoreline and critical area ecological functions.
 4. The mitigation plan shall be prepared by a qualified professional; provided, that the Director may waive the requirement to hire a qualified professional to prepare a mitigation plan when

the required mitigation involves standard planting or enhancement practices. The waiver shall not be granted for mitigation practices involving wetland creation, rehabilitation, and/or restoration.

5. The mitigation plan shall contain the following information:
 - i. A description and scaled drawings of the activities proposed to reduce risks associated with geologic hazards and/or flooding, and/or to mitigate for impacts to critical area functions and values. This shall include all clearing, grading/ excavation, drainage alterations, planting, invasive weed management, installation of habitat structures, construction sequencing, best management practices, site protection, irrigation, and other site treatments associated with the development activities.
 - ii. Specific information on construction or the proposed mitigation activity including timing, sequence, equipment needs, best management practices, and responsible parties.
 - iii. A description of the functions and values that the proposed mitigation area(s) shall provide, and/or a description of the level of hazard mitigation provided.
 - iv. The goals, objectives, and performance standards that the proposed mitigation action(s) shall achieve or demonstrate consistency with.
 - v. A description of how the mitigation area(s) will be evaluated and monitored to determine if the performance standards are being met.
 - vi. A program and schedule for construction and post-construction performance monitoring of the mitigation project.
 - vii. An evaluation of potential adverse impacts on adjacent property owners resulting from the proposed mitigation and measures to address such impacts. Mitigation projects shall not result in adverse impacts to adjacent property owners.
 - viii. Identification of potential courses of action or contingencies, and any corrective measures to be taken if monitoring or evaluation indicates that project performance standards are not being met.
 - ix. Plan sheets with scale identified, showing the edge of the critical area and buffer area. The affected critical area and buffer shall be clearly staked, flagged, and/or fenced prior to and during any site clearing and construction to ensure protection for the critical area and buffer during construction.
 - x. A description of other permits and approvals being sought, including the need for permits from state and/or federal agencies.
 - xi. Additional information as required by the subsequent articles of this chapter.

H. Mitigation Monitoring and Maintenance.

1. All mitigation areas shall be maintained and managed to prevent degradation and ensure protection of critical area functions and values subject to field verification by the Director.
2. The Director shall have the authority to require that mitigation projects be monitored annually for at least five years to establish that performance standards have been met. Required monitoring reports shall be submitted to the County annually during the monitoring period to document milestones, successes, problems, and contingency actions of the compensatory mitigation.

- i. At year three, if the mitigation is meeting year 5 performance standards, the Director may reduce the monitoring timeframe to three years for minor mitigation projects involving critical area or buffer revegetation or vegetation enhancement, but not for projects involving wetland creation, wetland restoration, stream restoration or other activities that require manipulation of soils or water.
 - ii. The Director shall have the authority to extend the monitoring period, require corrective measures, and/or require additional monitoring reports beyond the initial monitoring period for any project that does not meet the performance standards identified in the mitigation plan, or does not provide adequate replacement for the functions and values of the impacted critical area.
3. Permanent protection shall be achieved through deed restriction or other protective covenant in accordance with WCC [16.16.265](#).

I. Mitigation Assurance.

1. The applicant and his/her representatives shall demonstrate sufficient scientific expertise and capability to implement the mitigation, monitor the site, and make corrections if the project fails to meet projected goals. The Director may require the following to ensure that the mitigation is fully functional:
 - i. The applicant shall post a mitigation surety in the amount of 125% of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater. The surety shall be based on an itemized cost estimate of the mitigation activity including clearing and grading, plant materials, plant installation, irrigation, weed management, monitoring, and other costs.
 - ii. The surety shall be in the form of an assignment of funds or other means approved by the Director.
 - iii. Surety authorized by this section shall remain in effect until the Director determines, in writing, that the standards bonded for have been met. Surety shall generally be held by the County for a period of five years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary. Surety for construction may be reduced after initial completion in an amount not to exceed the cost of monitoring plus not less than 25% of the construction cost.
 - iv. Depletion, failure, or collection of surety funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, or monitoring.
 - v. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, or monitoring.
 - vi. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default subject to the provisions of WCC [16.16.285](#), and the County may demand payment of any financial guarantees or require other action authorized by the County code or any other law.

- vii. Any funds recovered pursuant to this section shall be used to complete the required mitigation or equivalent.
- J. **Permanent Protection.** All mitigation areas shall be protected and managed to prevent degradation and ensure protection of critical area functions and values in perpetuity. Permanent protection shall be achieved through deed restriction or other protective covenant in accordance with WCC [16.16.265](#). If additional development is proposed that impacts a mitigation area and those impacts are accounted for under a new, approved mitigation plan, such protection may be removed so long as the final plan meets the requirements of this chapter for all cumulative impacts.

16.16.261 Alternative Mitigation Plans.

- A. The County shall consider and may approve alternative mitigation plans for major developments (as defined in Article 9 of this chapter), planned unit developments (pursuant to WCC Chapter [20.85](#)), and/or development agreements (pursuant to RCW [36.70B.170](#) through [36.70B.210](#)).
- B. If approved, said plan shall be used to satisfy the requirements of this chapter and provide relief and/or deviation as appropriate from the specific standards and requirements thereof; provided, that the standards of impact avoidance and minimization shall remain as guiding principles in the application of these provisions and when it is demonstrated that all of the following circumstances exist:
 - 1. The proponent(s) demonstrate the organizational and fiscal capability to carry out the purpose and intent of the plan;
 - 2. The proponent(s) demonstrate that long-term management, maintenance, and monitoring will be adequately funded and effectively implemented;
 - 3. There is a clear likelihood for success of the proposed plan based on supporting scientific information or demonstrated experience in implementing similar plans;
 - 4. In terms of functional value, the proposed mitigation plan results in equal or greater protection and conservation of critical areas functions, services, and values than would be achieved using parcel-by-parcel regulations and/or traditional mitigation approaches;
 - 5. The plan is consistent with the general purpose and intent of this chapter, the Shoreline Management Program (WCC Title [23](#)), and the comprehensive plan;
 - 6. The plan shall contain relevant management strategies considered effective and within the scope of this chapter and shall document when, where, and how such strategies substitute for compliance with the specific standards herein; and
 - 7. The plan shall contain clear and measurable standards for achieving compliance with the purposes of this chapter, a description of how such standards will be monitored and measured over the life of the plan, and a fully funded contingency plan if any element of the plan does not meet standards for compliance.
- C. Alternative mitigation plans shall be reviewed concurrently with the underlying land use permit(s) and decisions to approve or deny such plans shall be made in accordance with the underlying permit process. The plan shall be reviewed by the Director to ensure compliance with the general purpose and intent of this chapter and to ensure accuracy of the data and effectiveness of proposed management strategies. In making this determination the Director

shall consult with the State Departments of Fish and Wildlife, Ecology, Natural Resources, and/or other local, state, federal, and/or tribal agencies or experts. If the Director finds the plan to be complete, accurate, and consistent with the purposes and intent of this chapter, the designated decision maker shall solicit comment pursuant to the public notice provisions of WCC Chapter [22.05](#) prior to final approval/denial of permission of the plan to substitute for the requirements and standards of this chapter.

16.16.262 Watershed-Based Management Plans.

- A. The County may consider watershed-based management plans sponsored by watershed improvement districts, other special purpose districts, or other government agencies.
- B. If approved, said plan shall be used to satisfy the requirements of this chapter and provide relief and/or deviation as appropriate from the specific standards and requirements thereof; provided, that the standards of impact avoidance and minimization shall remain as guiding principles in the application of these provisions and when it is demonstrated that all of the following circumstances exist:
 - 1. The proponent(s) demonstrate the organizational and fiscal capability to carry out the purpose and intent of the plan;
 - 2. The proponent(s) demonstrate that long-term management, maintenance, and monitoring of the watershed will be adequately funded and effectively implemented;
 - 3. There is a clear likelihood for success of the proposed plan based on supporting scientific information or demonstrated experience in implementing similar plans;
 - 4. In terms of functional value, the proposed mitigation plan results in equal or greater restoration, protection, and conservation of the impacted critical areas than would be achieved using parcel-by-parcel regulations and/or traditional mitigation approaches;
 - 5. The plan is consistent with the general purpose and intent of this chapter, the comprehensive plan, and an approved watershed plan prepared pursuant to Chapter [90.82](#) RCW (the State Watershed Management Act) or the plan is prepared under other local or state authority that is consistent with the goals and policies of an applicable and approved watershed plan prepared pursuant to Chapter [90.82](#) RCW;
 - 6. The plan shall contain relevant management strategies considered effective and within the scope of this chapter and shall document when, where, and how such strategies substitute for compliance with the specific standards herein; and
 - 7. The plan shall contain clear and measurable standards for achieving compliance with the purposes of this chapter, a description of how such standards will be monitored and measured over the life of the plan, and a fully funded contingency plan if any element of the plan does not meet standards for compliance.
- C. Watershed-based management plans shall be approved by the County Council by ordinance and appended to this chapter. The process for approval shall be as follows:
 - 1. The plan shall be reviewed by the Director to ensure compliance with the purposes of this chapter, the Whatcom County Shoreline Management Program (WCC Title [23](#)), and with the comprehensive plan, and to ensure accuracy of the data and effectiveness of proposed management strategies. In making this determination the Director shall consult with the State

Departments of Fish and Wildlife, Ecology, Natural Resources, and/or other local, state, federal, and/or tribal agencies or experts.

2. If the Director finds the plan to be complete, accurate, and consistent with the purposes and intent of this chapter, the designated decision maker shall solicit comments pursuant to the public notice provisions of WCC Chapter [22.05](#) prior to final approval/denial of permission of the plan to substitute for the requirements and standards of this chapter.
3. The designated decision maker shall not approve watershed-based management plans that conflict with Chapter [90.82](#) RCW.

16.16.263 Mitigation Banks.

- A. **Mitigation Bank Credits.** The County may approve the use of mitigation bank credits as a form of compensatory mitigation for wetland and habitat conservation area impacts when the provisions of this chapter require mitigation and when it is clearly demonstrated that the use of a bank will provide equivalent or greater replacement of critical area functions and values when compared to on-site mitigation; provided, that all of the following criteria are met:
1. Banks shall only be used when they provide significant ecological benefits including long-term conservation of critical areas, important species, habitats and/or habitat linkages, and when they are consistent with the County comprehensive plan and create a viable alternative to the piecemeal mitigation for individual project impacts to achieve ecosystem-based conservation goals.
 2. The bank shall be established in accordance with the Washington State Draft Mitigation Banking Rule, Chapter [173-700](#) WAC or as revised, and Chapter [90.84](#) RCW and the federal mitigation banking guidelines as outlined in the Federal Register, Volume 60, No. 228, November 28, 1995. These guidelines establish the procedural and technical criteria that banks must meet to obtain state and federal certification.
 3. Preference shall be given to mitigation banks that implement restoration actions that have been identified formally by an adopted shoreline restoration plan, watershed planning document prepared and adopted pursuant to Chapter [90.82](#) RCW, a salmonid recovery plan or project that has been identified on the watershed management board habitat project list or by the Washington State Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement.
- B. **Establishing a Mitigation Bank.** Establishing a mitigation bank shall require a major project permit in accordance with WCC Chapter [20.88](#) and shall be subject to a formal review process including public review as follows:
1. The bank sponsor shall submit a bank prospectus for County review. The prospectus shall identify the conceptual plan for the mitigation bank, including:
 - i. The ecological goals and objectives of the bank;
 - ii. The rationale for site selection, including a site map and legal description of the prospective bank site;
 - iii. A narrative demonstrating compliance with the Whatcom County comprehensive plan, associated development standards and this chapter, shoreline restoration plan, watershed

- planning documents prepared and adopted pursuant to Chapter [90.82](#) RCW, and/or the salmonid recovery plan;
- iv. A description of the existing site conditions and expected changes in site conditions as a result of the banking activity, including changes on neighboring lands;
 - v. A conceptual site design;
 - vi. A description of the proposed protective mechanism such as a conservation easement; and
 - vii. Demonstration of adequate financial resources to plan, implement, maintain, and administer the project.
2. The Director shall review the bank prospectus either by participating in the state's Mitigation Bank Review Team (MBRT) process and/or by hiring independent, third-party expertise to assist in the review.
 3. If the Director determines that the bank prospectus is complete, technically accurate, and consistent with the purpose and intent of this chapter, s/he shall forward the prospectus to the County Council for initial review. If the proposed bank involves conversion of agricultural land to nonagricultural uses, the County Council shall seek a recommendation from the agricultural advisory committee as to whether the conversion should be allowed. The committee's recommendation shall be nonbinding. The County Council may require mitigation for the loss of agricultural lands.
 4. If the County Council determines, based on the initial review, that the prospectus is valid, it shall issue a notice to proceed to the bank sponsor. Following receipt of the notice to proceed, the bank sponsor may submit application for a major project permit in accordance with WCC Chapter [20.88](#). The notice to proceed shall not be construed as final approval of the bank proposal, but shall indicate approval to proceed with the development of the mitigation bank instrument, which details all of the legal requirements for the bank.
 5. Upon receipt of a draft mitigation banking instrument from the bank sponsor and major project permit application, the Director shall review the banking instrument and major project permit in consultation with the MBRT and/or other third-party experts. Following review of the mitigation banking instrument and major project permit, the Director shall make a recommendation to certify and approve, conditionally certify and approve, or deny the bank proposal and major project permit in accordance with the provisions of WCC Chapters [20.88](#) and [22.05](#).
 6. Following receipt of the recommendation, the County Council shall proceed with review in accordance with the provisions outlined in WCC Chapters [20.88](#) and [22.05](#).
 7. The bank sponsor shall be responsible for the cost of any third-party review.
- C. **Award of Bank Credits.** The award of bank credits for an approved bank may be negotiated based on habitat acreage, habitat quality, and contribution to a regional conservation strategy that has been approved by the County and other appropriate regulatory agency(ies). Credit availability may vary in accordance with agreed-upon performance criteria for the development of the resource value in question. Awarded bank credits, subject to the approval of the County and regulatory agency(ies), may be made transferable. Whether out-of-kind mitigation credit will be allowed at a

particular bank will require a fact-specific inquiry on a case-by-case basis for the project creating the impacts.

D. Use of Bank Credits.

1. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:
 - a. The bank is certified under state rules;
 - b. The administrator determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
 - c. The proposed use of credits is consistent with the terms and conditions of the certified bank instrument.
2. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the certified bank instrument.
3. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the certified bank instrument. In some cases, the service area of the bank may include portions of more than one adjacent drainage basin for specific wetland functions.

16.16.264 In-Lieu Fees.

To aid in the implementation of off-site mitigation, the County may develop an in-lieu-fee program. This program shall be developed and approved through a public process and be consistent with federal rules, state policy on in-lieu-fee mitigation, and state water quality regulations. An approved in-lieu-fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu-fee program sponsor, a governmental or nonprofit natural resource management entity. Credits from an approved in-lieu-fee program may be used when subsections A through F of this section apply:

- A. The approval authority determines that it would provide environmentally appropriate compensation for the proposed impacts.
- B. The mitigation will occur on a site identified using the site selection and prioritization process in the approved in-lieu-fee program instrument.
- C. The proposed use of credits is consistent with the terms and conditions of the approved in-lieu-fee program instrument.
- D. Land acquisition and initial physical and biological improvements of the mitigation site must be completed within five years of the credit sale.
- E. Projects using in-lieu-fee credits shall have debits associated with the proposed impacts calculated by the applicant's qualified wetland scientist using the method consistent with the credit assessment method specified in the approved instrument for the in-lieu-fee program.
- F. Credits from an approved in-lieu-fee program may be used to compensate for impacts located within the service area specified in the approved in-lieu-fee instrument.

16.16.265 Critical Areas Protective Measures.

A. General measures (applicable to all projects)

1. **Building Setbacks.** Buildings and other structures shall be set back a minimum distance of 10 feet from the edge of geological hazard setback, a critical area buffer, or from the critical area

where no buffer is required, unless otherwise determined by the Director that a shorter distance will suffice. This setback is to avoid conflicts with tree branches and/or critical root zones of trees that are in the buffer or will be planted in the buffer. The following uses may be allowed in the building setback from the buffer if they do not cause damage to the critical root zone of trees in the buffer:

- a. Landscaping;
 - b. Uncovered decks less than 30 inches in height;
 - c. Building overhangs 18 inches or less;
 - d. Impervious surfaces, including driveways, parking lots, roads, and patios; provided, that such surfaces conform to the applicable water quality standards and that construction equipment does not enter or damage the buffer or critical area;
 - e. Clearing and grading;
 - f. Utilities, including wells, septic systems, and propane tanks with fuel capacities up to 500 gallons.
2. Temporary protection measures to identify location of critical areas and buffers such as construction fencing, erosion and sediment control, or similar shall be required during construction of the proposed project.
- B. **Project Specific Measures.** Based on the specifics of the project, the Director will determine which of the following apply:
1. **Tree Protection.** If significant trees are identified, such that their drip line extends beyond the reduced buffer edge, the following tree protection requirements must be followed:
 - a. A tree protection area shall be designed to protect each tree or tree stand during site development and construction. Tree protection areas may vary widely in shape, but must extend a minimum of five feet beyond the existing tree canopy area along the outer edge of the dripline of the tree(s), unless otherwise approved by the department.
 - b. Tree protection areas shall be added and clearly labeled on all applicable site development and construction drawings submitted to the department.
 - c. Temporary construction fencing at least thirty inches tall shall be erected around the perimeter of the tree protection areas prior to the initiation of any clearing or grading. The fencing shall be posted with signage clearly identifying the tree protection area. The fencing shall remain in place through site development and construction.
 - d. No clearing, grading, filling or other development activities shall occur within the tree protection area, except where approved in advance by the department and shown on the approved plans for the proposal.
 - e. No vehicles, construction materials, fuel, or other materials shall be placed in tree protection areas. Movement of any vehicles within tree protection areas shall be prohibited.
 - f. No nails, rope, cable, signs, or fencing shall be attached to any tree proposed for retention in the tree protection area.
 - g. The department may approve the use of alternate tree protection techniques if an equal or greater level of protection will be provided.
 2. **Deterrent Devices.** The Director, as a condition of permit approval, may require that the outer boundary of a wetland or habitat conservation area and its buffer, a mitigation site, a

designated open space, or a conservation easement be identified with signs, markers, and/or fencing to minimize potentially harmful intrusions from adjacent land uses, to alert citizens to a potential public health or safety risk associated with a critical area, or to accomplish other objectives specifically provided for elsewhere in this chapter. The Director shall provide specifications on the type, content, and size of the signs prior to permit approval. The signs shall be posted near primary access points and approximately every 200 feet along the critical area boundary.

3. **Notice on Title.** The owner of any property containing any critical area or buffer that are not altered by a proposed development shall record a document with the County Auditor Real Estate Records, on a form provided by the Director, and provide a copy of the filed notice to the Department of Planning and Development Services prior to the project permit being issued. This requirement may be waived by the Director for certain geologically hazardous areas if s/he finds that the risk is so low as to not warrant notification (e.g., old alluvial deposits). The notice on title shall provide notice of:

- a. The presence of a critical area(s) or buffer(s) on the property, and that limitations on actions in or affecting the critical area or buffer exist.
- b. That restrictions on uses within the critical area apply until the Director approves a change to the restriction(s) and such approval is filed.

Such notice on title shall not be required for a development proposal by a public agency or public or private utility within a right-of-way or easement for which they do not have fee-simple title.

4. **Tracts and Easements.** Prior to final approval of any project permit, the critical areas and required buffers within the review area (as specified in the Review & Reporting Requirements of each Article of this Chapter) shall be protected using the following mechanisms:
 - a. For land divisions other than short plats, placed in a separate tract or tracts owned in common by all lots or dedicated to a public or private land trust for conservation.
 - b. For all other project permit types, placed in a protective conservation easement on a form provided or approved by Whatcom County.
 - c. Mitigation areas shall be placed in a native growth protection area (NGPA) easement, on a form provided or approved by Whatcom County.
- C. **Indemnification.** At the Director's discretion, when a permit is granted for development or use within a geologic, flood, or other hazard area, the property owner shall sign an indemnification agreement acknowledging hazards posed to the development and absolving the County of all responsibility, to be recorded against the property prior to permit issuance.

16.16.270 Reasonable Use Exceptions.

- A. If the application of this chapter would result in denial of all reasonable and economically viable use of a property, and if such reasonable and economically viable use of the property cannot be obtained by consideration of a variance, then a landowner may seek a reasonable use exception. Reasonable use exceptions are intended as a last resort when impacts to critical areas themselves (not just their buffers) cannot be avoided while allowing the applicant a reasonable and economically viable use of his or her property.

- B. Requests for reasonable use exceptions shall be a Type III project permit application and shall follow the permitting procedures for variances found in WCC Title 22 (Land Use & Development).
 - 1. If in the shoreline jurisdiction, Reasonable Use Exceptions shall be processed per the shoreline variance procedures of WCC 22.07.050 (Shoreline Variances);
 - 2. If not in the shoreline jurisdiction, then Reasonable Use Exceptions shall be processed per the variance procedures of WCC 22.05.024 (Variances).
- C. The Hearing Examiner shall only grant a reasonable use exception under all of the following conditions:
 - 1. The proposed development is otherwise allowed under Whatcom County code.
 - 2. There is no portion of the site where the provisions of this chapter allow reasonable economic use, including agricultural use or continuation of legal nonconforming uses.
 - 3. The application of this chapter would deny all reasonable and economically viable use of the property so that there is no reasonable and economically viable use with a lesser impact on the critical area than that proposed.
 - 4. There is no feasible alternative to the proposed activities that will provide reasonable economic use with less adverse impact on critical areas and/or buffers. Feasible alternatives may include, but are not limited to, locating the activity on a contiguous parcel that is under the ownership or control of the applicant, change in use, reduction in size, change in timing of activity, and/or revision of project design.
 - 5. Activities will be located as far as possible from critical areas and the project employs all reasonable methods to avoid adverse effects on critical area functions and values, including maintaining existing vegetation, topography, and hydrology. Where both critical areas and buffer areas are located on a parcel, buffer areas shall be disturbed in preference to the critical area.
 - 6. The proposed development does not pose a threat to the public health and safety.
 - 7. The proposed activities comply with all state, local and federal laws, such as special flood hazard areas restrictions and on-site wastewater disposal.
 - 8. Measures shall be taken to ensure the proposed activities will not cause degradation of groundwater or surface water quality, or adversely affect drinking water supply.
 - 9. Any proposed modification to a critical area will be evaluated by the Hearing Examiner through consideration of an approved critical area assessment report and habitat management plan and will be the minimum modification necessary to allow reasonable use of the property.
 - 10. The inability of the applicant to derive reasonable use of the property is not the result of actions by the current or previous owners in segregating or dividing the property and/or creating the condition of lack of use after September 30, 2005.
 - 11. For single-family residences, the maximum impact area shall not exceed 10% of the lot area or 2,500 square feet, whichever is greater; provided that in no instance shall it exceed 4,000 square feet. This impact area shall include the proposed residential structure as well as appurtenant development that is necessarily connected to the use and enjoyment of a single-family residence. Such appurtenant development includes garages, decks, driveways, parking, and all lawn and nonnative landscaping; except that when an extended driveway is necessary to access a portion of a development site with the least impact on critical area and/or buffers, those

portions of the driveway and drainfields shall be excluded from the maximum impact area provided that the access road or driveway meets the standards of WCC 16.16.620(D) or 16.16.720(D), as applicable.

- D. The Hearing Examiner may issue conditions of approval including modifications to the size and placement of structures and facilities to minimize impacts to critical areas and associated buffers. The Hearing Examiner may also specify mitigation requirements that ensure that all impacts are mitigated to the maximum extent feasible using best available science.

16.16.273 Variances.

- A. Where strict application of and compliance with the dimensional requirements of this chapter renders an undue hardship, permit applicants may seek a variance for relief.
- B. As described in WCC 22.05.024 (Variances) there are two types of variances pertaining to this Chapter: Minor and Major variances.
 - 1. Minor variances shall be limited to variances for a 25% to 50% reduction of critical area buffers.
 - 2. Major variances include all other variances.
- C. Variance applications shall be processed pursuant to WCC 22.05.024 (Variances), or if in the shoreline jurisdiction WCC 22.07.050 (Shoreline Variances), and meet the criteria therein.

16.16.275 Nonconforming Uses, Structures, and Lots.

The following provisions shall apply to legally existing uses, structures, or lots that do not meet the specific standards of this chapter:

- A. The lawful use of any legal nonconforming building, structure, land, or premises existing on September 30, 2005, or authorized under a permit or approval issued, or otherwise vested, prior to that date may be continued, subject to this section and the provisions for a nonconforming structure in WCC Chapter [20.83](#); provided, that agricultural activities shall conform to Article 8 of this chapter (Conservation Program on Agriculture Lands).
- B. If a nonagricultural nonconforming use or structure is intentionally abandoned for a period of 12 months or more, then any future use shall be consistent with the provisions of this chapter.
- C. Expansion, alteration, and/or intensification of a nonconforming use is prohibited.
- D. Expansion, alteration, and/or intensification of a legal nonconforming building, or structure (including normal maintenance and repair), is allowed unless such use will produce impacts that degrade the critical area, including but not limited to vegetation clearing; additional impervious surfaces; generation of surface water runoff; discharge, or risk of discharge of pollutants; increased noise, light or glare; or increased risk associated with geologically hazardous areas.
- E. Nonconforming structures that are completely destroyed by fire, explosion, flood, or other casualty may be restored or replaced in kind if there is no alternative that allows for compliance with the standards of this chapter; provided, that:
 - 1. Intentional demolition or removal is not a casualty.
 - 2. The reconstruction process is commenced within 18 months of the date of such damage; and
 - 3. The reconstruction does not expand, enlarge, or otherwise increase the nonconformity, except as provided for in subsection C of this section.
- F. Nonconforming uses, structures, and lots in the shoreline jurisdiction shall be governed by the shoreline management provisions of WCC Title [23](#).

- G. When a project permit is sought for a parcel containing a nonconforming structure that has been intentionally abandoned for a period of five years or more, the Director may require removal of the nonconforming building and restoration of the critical area or buffer in accordance with this chapter as a condition of permit approval.

16.16.280 Appeals.

Final permit decisions shall be subject to appeal in accordance with the procedures of WCC Chapter [22.05](#).

16.16.285 Penalties and Enforcement.

- A. Any person who violates any of the provisions of this chapter shall be liable for a civil offense and may be fined a sum not to exceed \$1,000 for each offense. After a notice of violation has been given, each day of site work in conjunction with the notice of violation shall constitute a separate offense.
1. The penalty provided in subsection A of this section shall be assessed and may be imposed by a notice in writing either by certified mail with return receipt requested or by personal service to the person incurring the same. The notice shall include the amount of the penalty imposed and shall describe the violation with reasonable particularity. In appropriate cases, corrective action shall be taken within a specific and reasonable time.
 2. Within 30 business days after the notice is received, the person incurring the penalty may apply in writing to the County for remission or mitigation of such penalty. Upon receipt of the application, the County may remit or mitigate the penalty upon whatever terms the County in its discretion deems proper. The County's final decision on mitigation or revision shall be reviewed by the Hearing Examiner if the aggrieved party files a written appeal therewith of said decision within 10 business days of its issuance.
- B. If work activity has occurred on a site in violation of this chapter, prompt corrective action, restoration, or mitigation of the site will be required when appropriate. If this provision is not complied with, the County may restore or mitigate the site and charge the property owner for the full cost of such an activity. Additionally, any and all permits or approvals issued by the County may be denied for that site for a period of up to six years.
- C. In the event any person violates any of the provisions of this chapter, the County may issue a correction notice to be delivered to the owner or operator, or to be conspicuously posted at the site. In a nonemergency situation, such notice may include notice of the intent to issue a stop work order no less than 10 business days following the receipt of the correction notice, and provide for an administrative pre-deprivation hearing within 10 business days of the notice. In an emergency situation where there is a significant threat to public safety or the environment, the County may issue a stop work order. The stop work order shall include, in writing, the right to request an administrative pre-deprivation hearing within 72 hours following receipt of the stop work order. Failure to comply with the order to stop work shall be a gross misdemeanor punishable upon conviction by a minimum fine of \$500.00 up to a maximum fine of \$1,000 or one year in jail, or both. Under no circumstance may the court defer or suspend any portion of the minimum \$500.00 fine for any conviction under this section. Each day or part thereof of noncompliance with said order to stop work shall constitute a separate offense.

- D. The County may suspend or revoke a permit if the applicant violates the conditions or limitations set forth in the permit or exceeds the scope of the work set forth in the permit.
- E. The prosecuting attorney may enforce compliance with this chapter by such injunctive, declaratory, or other actions as deemed necessary to ensure that violations are prevented, ceased, or abated.
- F. Any person who, through an act of commission or omission, procures, aids, or abets in the violation shall be considered to have committed a violation for the purposes of the civil penalty.
- G. After the Fact Permit Fee. After the fact permit application fees shall be double the amount established by the unified fee schedule.

16.16.295 Open Space and Conservation.

The following programs may be employed to minimize the burden to individual property owners from application of the provisions of this chapter:

- A. Open Space. Any property owner whose property contains a critical area or buffer and who meets the applicable qualifying criteria may apply for open space taxation assessment pursuant to Chapter [84.34](#) RCW.
- B. Native Growth Protection Area (NGPA) Easement. Any person who owns an identified critical area or its associated buffer may place a NGPA easement over that portion of the property by naming the County or its qualified designee under RCW [64.04.130](#) as beneficiary of the conservation. This NGPA easement may be in lieu of separate critical areas tracts that qualify for open space tax assessment described in subsection A of this section. The purpose of the easement shall be to preserve, protect, maintain, and limit use of the affected property. The terms of the NGPA easement may include prohibitions or restrictions on access and shall be approved by the property owner and the County.
- C. Conservation Futures Fund. The County may consider using the conservation futures property tax fund as authorized by RCW [84.34.230](#) for the acquisition of properties containing significant critical areas and their associated buffers.

Article 3. Geologically Hazardous Areas

16.16.300 Purpose.

The purpose of this article is to reduce risks to human life and safety and reduce the risk of damage to structures and property from geologic hazards, to allow for natural geologic processes supportive of forming and maintaining fish and wildlife habitat, and to regulate and inform land use and planning decisions. It is recognized that the elimination of all risk from geologic hazards is not feasible to achieve but the purpose of this article is to reduce the risk to acceptable levels.

16.16.310 Geologically Hazardous Areas – Designation, Mapping, and Classification.

- A. Designation. Lands determined to be landslide, seismic, alluvial fan, volcanic, erosion (including channel migration zones), tsunami, seiche and landslide generated waves or mine hazard areas are hereby designated as geologically hazardous areas. Development in these geologic hazard areas can put human life, safety, health, and development at risk, alter geologic processes, adversely affect natural resources, and put the development and surrounding developments and uses at risk.
- B. Mapping. The approximate location and extent of known potential geologically hazardous areas are shown on maps maintained by the County. These maps are useful as a guide for project applicants and/or property owners, and County review of development proposals. However, they do not provide a conclusive or definitive indication of geologically hazardous area presence or extent. Potential geologically hazardous areas may exist that do not appear on the maps, and some potential geologically hazardous areas that appear on the maps may not meet the geologically hazardous areas designation criteria. The County shall update the maps periodically as new information becomes available and may require additional studies during the development review process to supplement and/or confirm the mapping. This chapter does not imply that land outside mapped geologically hazardous areas or uses permitted within such areas will be without risk. This chapter shall not create liability on the part of Whatcom County or any officer or employee thereof for any damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.
- C. Classification. For purposes of this chapter, geologically hazardous areas shall include all of the following:
 - 1. Landslide Hazard Areas. Landslide hazard areas shall include areas potentially susceptible to landslides based on a combination of geologic, topographic, and hydrologic factors, as specified below. They include any areas susceptible to mass movement due to any combination of bedrock, soil, slope (gradient), slope aspect, slope form (concave, convex, planar), geological structure, surface and subsurface hydrology, or other factors. Landslide hazard areas shall also include areas along which landslide material may be routed or which may be subject to deposition of landslide-delivered material. Potential landslide hazard areas include but are not limited to the following areas:
 - a. Potential Landslide Hazard Areas. Potential landslide hazard areas exhibit one or more of the following characteristics:

- i. Areas designated as quaternary slumps, earthflows, mudflows, or landslides on maps published by the U.S. Geological Survey, Washington State Department of Natural Resources, or other reputable sources;
 - ii. Areas with all three of the following characteristics:
 - (A) Slopes steeper than 15%;
 - (B) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
 - (C) Springs or groundwater seepage;
 - iii. Areas that have shown movement and/or are underlain or covered by mass wastage debris;
 - iv. Potentially unstable slopes resulting from river or stream erosion or undercutting by wave erosion;
 - v. Slopes having gradients steeper than 80% subject to rockfall during seismic shaking;
 - vi. Areas that show past sloughing or calving of sediment or rocks resulting in a steep slope that is poorly vegetated;
 - vii. Slopes that are parallel or sub-parallel to planes of weakness (which may include but not be limited to bedding planes, soft clay layers, joint systems, and fault planes) in subsurface materials;
 - viii. Areas that show evidence of, or are at risk from, snow avalanches;
 - ix. Deep-seated landslide areas characterized by one or more of the following features: scalloped ridge crests at the top of the slope, crescent-shaped depressions, head scarps, side scarps, ponds or sag areas on midslopes, benches and scarps on midslope areas, hummocky ground, or linear fractures in the ground. These features may be evident in aerial images, topographic maps, LiDAR imagery or on the ground;
 - x. Areas below unstable slopes that could be impacted by landslide run-out;
 - xi. Areas above or adjacent to unstable slopes that could be impacted if the landslide area expands;
 - xii. Any area with a slope of 40% or steeper and with a vertical relief of 10 or more feet except areas composed of competent bedrock or properly engineered slopes designed and approved by a geotechnical engineer licensed in the state of Washington and experienced with the site;
 - xiii. Areas within which land use activities could affect the slope stability, including but not limited to areas with subsurface hydrologic flow, groundwater recharge areas and surface water flow;
 - xiv. Areas of historical landslide movement including coastal shoreline areas mapped by the Department of Ecology Coastal Zone Atlas or the Department of Natural Resources slope stability mapping as unstable ("U" or Class 3), unstable old slides ("UOS" or Class 4), or unstable recent slides ("URS" or Class 5).
- b. Active Landslide Hazard Areas. Active landslide hazard areas are areas that exhibit indicators noted in subsection (C)(1)(a) of this section that have been determined through geological assessment to be presently failing or very likely to fail in the near future.

2. **Seismic Hazard Areas.** Whatcom County is located in a seismically active area that will be subject to ground motion during local and regional earthquakes. Seismic hazards and risk are partially addressed in the International Building Code (IBC) or International Residential Code (IRC). Additional seismic hazard areas for the purpose of this chapter include:
 - a. Areas designated as having a “high” and “moderate to high” risk of liquefaction susceptibility as mapped on the Liquefaction Susceptibility Map by the Washington State Department of Natural Resources.
 - b. Areas that are identified as underlain by liquefiable soils and due to local topography are also subject to or interpreted as being potentially impacted by lateral spreading.
 - c. Areas located within 500 feet of quaternary fault zones with surface offsets.
3. **Alluvial Fan Hazard Areas.** Any area located at the base of a confined mountain channel and determined to be susceptible to clear water flooding, debris-laden flows and floods, and erosional impacts shall be designated as an alluvial fan hazard area. Watershed hydrology, geology, slope conditions, topography, current and historic land uses, roads and road drainage, valley bottom conditions, and channel conditions upstream of an alluvial fan area are all fundamental to potential hazards and risks on alluvial fans. Alluvial fan hazard areas shall include those areas on alluvial fans potentially impacted by:
 - a. Sediment-laden flows (e.g., debris flows and debris floods);
 - b. Clear water floods;
 - c. Stream channel changes (including channel avulsion, incision, aggradation or lateral erosion and migration);
 - d. Erosion.
4. **Volcanic Hazard Areas.** Volcanic hazard areas are those areas that have been affected, or have the potential to be affected, by pyroclastic flows, pyroclastic surges, lava flows, or ballistic projectiles, ash and tephra fall, volcanic gases, and volcanic landslides. Also included are areas that have been or have the potential to be affected by Case M, Case I, or Case II lahars, or by debris flows or sediment-laden events originating from the volcano or its associated deposits. In addition, volcanic hazards include secondary effects such as sedimentation and flooding due to the loss of flood conveyance as a result of river channel and flood plain aggradation. The implications of secondary effects may be observed at some distance from the initiating event, and may continue to impact affected drainages over many decades following the initiating event. Secondary effects may significantly alter existing stream and river channels, associated channel migration zones and floodplains due to stream and river bed aggradation and channel avulsion. Volcanic hazards include areas that have not been affected recently, but could be affected by future events. Volcanic hazard areas are classified into the following categories:
 - a. **Pyroclastic Flow Hazard Areas.** Areas that could be affected by pyroclastic flows, pyroclastic surges, lava flows, and ballistic projectiles in future eruptions. During any single eruption, some drainages may be unaffected by any of these phenomena, while other drainages are affected by some or all phenomena. Recurrence interval is not known.
 - b. **Ash/Tephra Fall Hazard Areas.** The location of ash/tephra fall hazards at Mount Baker is predominantly controlled by the prevailing westerly winds observed on the west coast of North America. However, easterly winds do occur in the region and direct ash/tephra fall

- impacts to Whatcom County population centers are certainly a possibility. Health hazards, power outages, negative impacts to machinery and aircraft, structural damage (e.g., roof collapse) and extensive disruption of daily activities are all potential hazards.
- c. Lateral Blast Hazard Areas. Lateral blast hazards result from low-angle, explosive volcanic eruptions that emanate from the flank of a volcano. The occurrence of a lateral blast is largely unpredictable, both with respect to timing and direction, and does not appear to be a common feature of eruptive activity at Mount Baker or at other volcanoes globally. Extensive destruction is likely within the lateral blast zone, and mitigation is generally considered unachievable.
 - d. Volcanic Landslide Hazard Areas. Landslides are common on volcanoes due to their relative height, steepness, and weakness in both the underlying bedrock and the volcanic deposits due to magma movement and chemical weathering. Landslide size is highly variable depending on site conditions and type, but may achieve high velocity and momentum which can carry a landslide across valleys and ridgelines. Given the range of possible landslide types and sizes, specific hazards, risk zones and recurrence interval have not been delineated at Mount Baker. Volcanic landslide hazards are associated with lahar hazards as they pose the potential to generate small- to large-scale cohesive lahars.
 - e. Lahar Hazard Areas.
 - a. Case M Lahar Hazard Areas. Areas that could be affected by cohesive lahars that originate as enormous avalanches of weak, chemically-altered rock from the volcano. Case M lahars can occur with or without eruptive activity. A single, post-glacial Case M lahar deposit is known to have traveled down the Middle Fork Nooksack River, and is postulated to have continued down the main stem of the Nooksack River, eventually reaching Bellingham Bay, and to have also flowed north to Canada along the prehistoric path of the Nooksack River. Case M lahars are thus interpreted to pose a threat to the Sumas River drainage due to the potential for bed aggradation and channel avulsion to overtop the low-lying drainage divide that exists between the Nooksack and Sumas River drainages. Case M lahars are considered high-consequence, low-probability events.
 - b. Case I Lahar Hazard Areas. Areas that could be affected by relatively large non-cohesive lahars, which most commonly are caused by the melting of snow and glacier ice by magmatic activity and associated processes, but which can also have a non-eruptive origin. The average recurrence interval for Case I lahars, based on deposits identified along the flanks of Mount Baker, is postulated to be 500 years or greater. However, renewed magmatic activity at Mount Baker would be indicative of greatly increased potential for Case I lahar generation; this may reduce the recurrence interval to approximate that of Case II lahars.
 - c. Case II Lahar Hazard Areas. Areas that could be affected by moderately large debris avalanches or small cohesive lahars, or other types of debris flow generated on the east flank of Mount Baker at Sherman Crater or the upper Avalanche Gorge. Case II lahars impact the Baker Lake basin and drainage, and are considered correlative to Case I lahars that may impact the primary drainages on the west and north of Mount Baker,

but with increased frequency and comparable volume. The postulated recurrence interval for Case II lahars at Mount Baker is less than 100 years.

5. Erosion Hazard Areas. Erosion hazard areas shall include:
 - a. Channel migration zones, also known as riverine erosion areas, are defined as the areas along a river or stream within which the channel(s) can be reasonably predicted to migrate over time. This is a result of natural and normally occurring geomorphic, hydrological, and related processes when considered with the characteristics of the river or stream and its surroundings, and in consideration of river and stream management plans. Channel migration hazard areas shall include potential channel migration, channel avulsion, bank erosion, and stability of slopes along the river or stream;
 - b. Coastal erosion areas that are subject to shoreline retreat from wind, wave, and tidal erosion.
6. Tsunami Hazard Areas. Tsunami hazard areas include coastal areas susceptible to flooding, inundation, debris impact, and/or mass wasting as the result of a tsunami generated by seismic events.
7. Seiche and Landslide Generated Wave Hazard Areas. Seiche and landslide generated wave hazard areas include lake and marine shoreline areas susceptible to flooding, inundation, debris impact, and/or mass wasting as the result of a seiche or landslide generated waves. No known best available science is currently available to characterize potential seiche hazards in Whatcom County.
8. Mine Hazard Areas. Mine hazard areas shall include those lands in proximity to abandoned mines and associated underground mine workings where mine workings are less than 200 feet below ground level. Mine workings include adits (mine entrances), gangways (haulage tunnels), rooms and chutes (large voids), drifts, pillars (rock left for support) and air shafts. Mine hazards include subsidence, which is the uneven downward movement of the ground surface caused by underground workings caving in; sink holes; contamination of ground and surface water from tailings and underground workings; concentrations of lethal or noxious gases; and underground mine fires.

16.16.320 Geologically Hazardous Areas – Protective Measures.

In addition to the applicable general protective measures found in WCC [16.16.265](#), the following requirements shall apply to all activities in geologically hazardous areas:

- A. **General.** New developments shall be located and/or engineered and constructed to reduce risks to life, health, safety, and buildings, and not increase potential for landslides or erosion that could impact either other properties, public resources, or other critical areas. The County may impose conditions on development activity in a geologically hazardous area as needed to:
 1. Protect human life and safety;
 2. Minimize the potential for property damage related to seismic events, erosion and/or landslides;
 3. Minimize the need for stream or riverbank or coastal bluff stabilization in the future;
 4. Reduce public liabilities for damages associated with geologic hazards;
 5. Protect slope stability and minimize erosion, seismic, and/or landslide hazard risks;

6. Maintain natural sediment and erosion processes that are integral to the health and sustainability of freshwater and marine ecosystems as well as minimizing impacts to stream, river, and coastal processes such as channel infill, channel migration, sediment transport, or flooding;
- B. **Impact Avoidance.** Impact avoidance measures shall include, but not be limited to, locating the use/development outside of the hazard area, reducing the number, size or scale of buildings and appurtenant features; altering the configuration or layout of the proposed development; implementing special engineering methods for construction, drainage, runoff management, etc.; preserving native vegetation; and other feasible protective measures as determined by an alternative's analysis. For some geologic hazards (except for lahar hazards), impact avoidance may mean no development will be permitted on a property. So long as an applicant complies with WCC [16.16.350](#)(B), the County shall not require lahar hazard impact avoidance measures that reduce the number, size, or scale of buildings or appurtenant features; or prevent uses otherwise allowed per the property's zoning district based solely on the property's location within a lahar hazard zone.
- C. **Stormwater Management.** Development shall manage on-site stormwater by developing a properly sized stormwater management system using appropriate stormwater techniques to protect geologically hazardous areas. Low Impact Development and Low Impact Development Best Management Practices are preferred, unless demonstrated to be infeasible.
- D. **Location of Alterations.** New development shall be directed toward portions of a parcel or parcels under contiguous ownership that are not subject to, or at risk from, geological hazards (except for lahar hazards) and/or are outside any setback or buffer established by this chapter.
- E. **Review by Qualified Professional.** A geologist or other qualified professional, licensed in the state of Washington, shall review development proposals that occur in potentially geologically hazardous areas to determine the potential risk. If development takes place within an identified geologically hazardous area requiring design or structural elements to minimize the hazard, the mitigation shall be designed by a qualified professional licensed in the state of Washington with expertise in mitigation of geological hazards.
- F. **Life of Structure.** Proposed development shall be sited far enough from erosion and landslide hazard areas to ensure at least 100 years of useful life for the proposed structure(s) or infrastructure. The location shall be determined by a geologist or other qualified professional licensed in the state of Washington and be based on site-specific evaluation of the landslide and/or erosion hazard.

16.16.322 Geologically Hazardous Areas – General Use or Modification.

- A. **Remodels and Additions.** Any proposed remodel or addition to an existing permitted or nonconforming structure that exceeds a valuation of greater than 50% of the fair market value shall be required to ensure that the entire structure is improved in accordance with all Article 3 requirements.
- B. **Critical Facilities Prohibited.** Critical facilities as defined in WCC [16.16.900](#) shall not be constructed or located in geologically hazardous areas if there is a feasible alternative location outside geologically hazardous areas that would serve the intended service population. If allowed, the

critical facility shall be designed and operated to minimize the risk and danger to public health and safety to the maximum extent practicable.

- C. **Agricultural Activities.** Agricultural activities (uses and structures) may be allowed within geologically hazardous areas without a conservation farm plan as long as the activity does not increase the potential for landslides, channel migration, or alluvial fan hazards on or off the site; except, that a conservation farm plan shall be required for agricultural activities within landslide hazard areas and associated landslide hazard area setbacks (WCC [16.16.325\(C\)](#)).
- D. **Land Division.** Land that is located wholly within a landslide hazard area, riverine or coastal erosion hazard area, alluvial fan hazard area, lahar hazard area, or mine hazard area or its buffer may not be subdivided to create buildable parcels entirely within the hazardous area. Land that is located partially within a hazard area or its setback may be divided; provided, that each resulting lot has sufficient buildable area outside of the hazardous area with provision for drainage, erosion control and related features that will not adversely affect the hazard area or its setback.

16.16.325 Landslide Hazard Areas – Use and Modification.

- A. **Allowed Uses and Modifications.** The following uses and modifications may be allowed in active landslide hazard areas when all reasonable measures have been taken to minimize risks and other adverse effects associated with landslide hazards, and when the amount and degree of the alteration are limited to the minimum needed to accomplish the project purpose:
 - 1. **Reasonable Use.** Developments that will not increase the threat to the health or safety of people and will not increase potential for landslides on or off the site and meet the reasonable use standards as set forth in WCC [16.16.270](#).
 - 2. **Utilities.** Utility lines and pipes that are above ground, properly anchored and/or designed so that they will continue to function in the event of a slope failure or movement of the underlying materials and will not increase the risk or consequences of static or seismic slope instability or result in a risk of mass wasting. Such utility lines may be permitted only when the applicant demonstrates that no other feasible alternative is available to serve the affected population.
 - 3. **Trails.** Trails shall meet all of the following:
 - a. The applicant demonstrates that no other feasible alternative exists.
 - b. The trail engineering design and construction methods minimize the need for major repair or reconstruction.
 - c. Specific construction standards to minimize impacts, including drainage and drainage maintenance plans, may be required.
 - d. Exceptions or deviations from technical standards for width or other dimensional measurements may require a variance.
 - 4. **Development Access.** Access driveways and roads shall meet all of the following:
 - a. The applicant demonstrates that no other feasible alternative exists, including through the provisions of Chapter [8.24](#) RCW.
 - b. A qualified professional designs the driveway or access road to minimize the need for major repair or reconstruction. The design shall provide a greater level of protection than road or driveway standards outside of geological hazardous areas.

- c. Specific construction standards to minimize impacts, including drainage and drainage maintenance plans, may be required.
 - d. Exceptions or deviations from technical standards for width or other dimensional measurements may require a variance.
- 5. **Stormwater.** Stormwater conveyance through a properly designed stormwater pipe when no other storm-water conveyance alternative is feasible. The pipe shall be located above ground and be properly anchored and/or designed so that it will continue to function in the event of a slope failure or movement of the underlying materials and will not increase the risk or consequences of static or seismic slope instability or result in increased risk of mass wasting activity.
- B. **Landslide Hazard Management Zone.** Alteration may be allowed within 300 feet of an active landslide hazard area when the Director determines that the following standards are met:
 - 1. The proposed alteration includes all appropriate measures to avoid, eliminate, reduce, or otherwise mitigate risks to health and safety.
 - 2. The proposed alteration is located outside of a landslide hazard area and any required setback, as set forth in WCC [16.16.325\(C\)](#).
 - 3. The development will not decrease slope stability on adjacent properties. The development shall not increase the risk or frequency of landslide occurrences.
 - 4. The removal and disturbance of vegetation, clearing, or grading shall be limited to the area of the approved development.
 - 5. The development is outside of the area of potential upslope or downslope surface movement or potential deposition in the event of a slope failure.
 - 6. The development will not increase or concentrate surface water discharge or sedimentation to adjacent properties beyond predevelopment conditions.
 - 7. The proposed alterations will not adversely impact other critical areas.
 - 8. Structures and improvements shall minimize alterations to the slope contour, and shall be designed to minimize impervious lot coverage unless such alterations or impervious surfaces are needed to maintain slope stability.
- C. **Landslide Hazard Area Setbacks.** Setbacks shall be required from the edges of any identified landslide hazard area in accordance with the following:
 - 1. The size of the setback shall be based on the findings of a qualified professional and shall minimize the risk of property damage, death, or injury resulting from landslides both on and off the property; provided, that the Director may require a minimum setback in accordance with International Building Codes adopted by Whatcom County.
 - 2. The setback shall include consideration of the hydrologic contribution area to the potential landslide area and/or the area subject to the potential for mass movement, and the downhill area subject to potential deposition.
 - 3. The setback shall include consideration of vegetation on the potential landslide area and in areas above and below the potential landslide area. The Director shall have the authority to require vegetation or other measures to protect or improve slope stability and shall have the authority to require a mitigation plan developed in accordance with WCC [16.16.260](#), and a

conservation easement in accordance with WCC [16.16.265](#)(C) to ensure appropriate vegetation improvements are installed, maintained, and preserved.

4. Developments on sites that are directly adjacent to a wetland, marine shoreline, or other habitat conservation area as defined in Article 7 of this chapter may be subject to additional buffer requirements and standards as set forth in the subsequent articles of this chapter.

16.16.340 Seismic Hazard Areas – Use and Modification.

Development may be allowed in seismic hazard areas when all of the following apply:

- A. Structures in seismic hazard areas shall conform to applicable analysis and design criteria of the International Building Code.
- B. Public roads, bridges, utilities, and trails shall be allowed when there are no feasible alternative locations, and geotechnical analysis and design are provided that minimize potential damage to roadway, bridge, and utility structures, and facilities will not be susceptible to damage from seismically induced ground deformation. Mitigation measures shall be designed in accordance with the most recent version of the American Association of State Highway and Transportation Officials (AASHTO) Manual or other appropriate document.

16.16.345 Alluvial Fan Hazard Areas – Use and Modification.

The following uses and modifications may be allowed in alluvial fan hazard areas when all reasonable measures have been taken to minimize risks and other adverse effects associated with alluvial fan hazards, when the amount and degree of alteration are limited to the minimum needed to accomplish the project purpose, and when the applicable general protective measures found in WCC [16.16.265](#) have been applied:

- A. **Reasonable Use.** Developments that will minimize the threat to the health or safety of people and will not increase the risks of alluvial fan hazards on or off the site and meet the reasonable use standards as set forth in WCC [16.16.270](#).
- B. **Infrastructure.** Roads, utilities, bridges, and other infrastructure that are located and designed to minimize adverse impacts on critical areas and avoid the need for channel dredging or diking or other maintenance activities that have the potential to substantially degrade river and stream functions.
- C. Permanent residential structures and commercial developments shall be allowed in alluvial fan hazard areas only if the fan has undergone a County-approved study to assess potential hazards, determine risks, and identify mitigation measures and is deemed suitable for development. The Director shall make this determination based on a detailed assessment by a qualified professional that identifies the risks associated with a 500-year return period debris flow or the maximum credible event that could impact the alluvial fan.
- D. Accessory structures not involving human occupancy shall be allowed as long as the structure will not increase the alluvial fan hazards on or off the site.

16.16.350 Volcanic Hazard Areas – Use and Modification.

- A. Ash/Tephra Fall and Lateral Blast Hazard Areas. Development may be allowed in these areas; provided, that all reasonable measures have been taken to minimize risks and adverse effects, and when the amount and degree of the alteration is limited to the minimum needed to accomplish the

project purpose, and when the applicable general protective measures found in WCC [16.16.265](#) and the standards of WCC [16.16.320](#) have been applied.

B. Lahar Hazard Zones.

1. Subject to WCC [16.16.320](#)(A) through (C) and WCC [16.16.265](#), the following uses are allowed in any volcanic hazard areas:
 - a. Single-family residences and duplexes.
 - b. Accessory structures not involving human occupancy.
 - c. Sewer collection facilities, communication facilities, and other utilities that are not likely to cause harm to people or the environment if inundated by a lahar. Underground utilities such as pipelines shall be allowed if demonstrated through a geotechnical analysis to be sufficiently buried as to not likely be damaged by scour caused by a lahar.
 - d. Agricultural and forestry uses not including human habitation.
2. Subject to WCC [16.16.320](#)(A) through (C) and WCC [16.16.265](#) (except subsection D when located wholly within a lahar hazard zone), the following uses are allowed in volcanic hazard areas subject to the submittal and approval of a volcanic hazard emergency management plan meeting the requirements of subsection (B)(3) of this section; however, this requirement may be waived for properties located in an area with an estimated lahar arrival time of more than 60 minutes. The County will maintain travel time projection maps to estimate lahar approach times.
 - a. Expansion of legal nonconforming uses meeting criteria of WCC [16.16.275](#) and WCC Chapter [20.83](#).
 - b. All other uses allowed per the property's zoning district.
3. Where required by subsection (B)(2) of this section, a volcanic hazard emergency management plan shall be submitted for approval and meet the following requirements:
 - a. Is consistent with and integrated into a community emergency plan maintained by the sheriff's office of emergency management.
 - b. Includes an emergency evacuation plan.
 - c. Is required to be updated every five years.
 - d. Evacuation route maps must be posted on the premises.

16.16.355 Erosion Hazard Areas – Use and Modification.

- A. General Standards. For coastal, riverine, and stream erosion hazard areas, the following activities shall be allowed when the applicable general protective measures found in WCC [16.16.265](#) have been applied and as follows:
1. Developments that minimize the threat to the health or safety of people and will not increase the risks of erosion hazards on or off the site and meet the reasonable use or variance standards as set forth in WCC [16.16.270](#) or [16.16.273](#), respectively.
 2. Discharge of surface water drainage into a coastal or riverine erosion hazard area, provided there are no other alternatives for discharge, and the drainage is collected upland of the top of the active erosion hazard area and directed downhill in an appropriately designed stormwater pipe that includes an energy dissipating device at the base of the hazard area. The pipe shall be located on the surface of the ground and be properly anchored so that it will continue to

- function under erosion conditions and not create or contribute to adverse effects on downslope critical areas. The number of pipes shall be minimized along the slope frontage.
3. Stormwater retention and detention systems, such as dry wells and infiltration systems using buried pipe or French drains, provided they are located outside the identified channel migration zone, designed by a qualified professional and shall not affect the stability of the site.
 4. Utility lines when no feasible conveyance alternative is available. The line shall be located above ground and properly anchored and/or designed so that it will not preclude or interfere with channel migration and will continue to function under erosion conditions; provided, that utility lines may be located within channel migration zones if they are buried below the scour depth for the entire width of the Channel Migration Zone (CMZ).
 5. Public roads, bridges, and trails when no feasible alternative alignment is available. Facilities shall be designed such that the roadway prism and/or bridge structure will not be susceptible to damage from active erosion.
 6. Access to private development sites may be allowed to provide access to portions of the site that are not critical areas if there are no feasible alternative alignments. Alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter [8.24](#) RCW. Exceptions or deviations from technical standards for width or other dimensions and specific construction standards to minimize impacts may be specified.
 7. Shoreline stabilization may be permitted when consistent with the shoreline stabilization regulations found in 23.40.190 (Shoreline Stabilization), regardless of whether the proposed project is within shoreline jurisdiction or not.
 8. New residences shall be located outside of channel migration hazard areas or marine shoreline retreat areas. Accessory structures not involving human occupancy with a footprint equal to or less than 2,500 square feet shall be allowed; provided, that they are located at the outer edge of the migration zone as defined by this chapter; and provided, that the Director may allow larger accessory structures where mitigating measures are feasible and provided for by the applicant.
 9. New public flood protection measures and expansion of existing ones may be permitted, subject to WCC Title [17](#), Article 4 of this chapter, and a state hydraulic project approval; provided, that bioengineering or soft armoring techniques shall be used where feasible. Hard bank armoring may occur only in situations where soft approaches do not provide adequate protection.
- B. Erosion Hazard Area Setbacks. In addition to the applicable general protective measures found in WCC [16.16.265](#), the Director shall have the authority to require setbacks from the edges of any coastal, stream, or riverine hazard erosion area in accordance with the following:
1. The size of the setback shall be based on the findings of a qualified professional and shall protect critical areas and processes and minimize the risk of property damage, death or injury resulting from erosion over the life of the development, typically identified as 100 years; provided, that the Director may require a minimum setback in accordance with International Building Codes adopted by Whatcom County.
 2. The setback shall include the uphill area subject to potential erosion, the downhill area subject to potential deposition, and any area subject to landslide as a result of erosion.
 3. The setback shall include woody vegetation adequate to stabilize the soil and prevent soil movement. If the designated setback area lacks adequate woody vegetation, the Director shall

have the authority to require vegetation enhancement or other measures to improve slope stability.

4. Developments on sites that are directly adjacent to a wetland or marine shoreline or other habitat conservation area as defined in Article 7 of this chapter may be subject to additional setback requirements and standards as set forth in the subsequent articles of this chapter.

16.16.365 Tsunami Hazard Areas – Use and Modification.

The standards of WCC [16.16.320](#) shall apply. For development within tsunami hazard areas the proposed development shall be designed to provide protection from the tsunami hazard that meets the projected hazard on the Department of Natural Resources Tsunami Inundation Maps. For other low-lying coastal areas not included on the inundation maps, development shall be designed to provide protection for debris impact and an inundation as determined by current Department of Natural Resource modeling, unless other measures can be shown to provide equal or greater protection.

16.16.367 Seiche and Landslide Generated Wave Hazard Areas – Use and Modification.

Standards for seiche and landslide generated wave hazards will only apply if the hazard area is mapped by the United States Geologic Survey or the Department of Natural Resources, Division of Geology and Earth Resources or other credible source approved by Whatcom County. If a mapped hazard is present, the standards of WCC [16.16.320](#) and [16.16.350](#) shall apply. For residential development within mapped seiche and landslide generated wave hazard areas, the proposed development shall be designed to withstand the mapped hazard. If the risk of the event is less than 0.1% on a yearly basis, development standards may not be required, but notice on property title will be required.

16.16.370 Mine Hazard Areas – Use and Modification.

The standards of WCC [16.16.320](#) and [16.16.350](#) shall apply.

16.16.375 Geologically Hazardous Areas – Review and Reporting Requirements.

- A. When County critical area maps or other sources of credible information indicate that a site proposed for development or alteration is, or may be, located within an active or potential geologically hazardous area, the Director shall have the authority to require the submittal of a geological assessment report.
- B. A geologic hazards assessment report for a geologically hazardous area shall include a field investigation and contain an assessment of whether or not the type of potential geologic hazard identified is present or not present and if development of the site will increase the potential for landslides or erosion on or off the site. Geology hazard assessment reports shall be prepared, stamped, and signed by a qualified professional. The report should:
 1. Be appropriate for the scale and scope of the project;
 2. Include a discussion of all geologically hazardous areas on the site and any geologically hazardous areas off site potentially impacted by or which could impact the proposed project. If the affected area extends beyond the subject property, the geology hazard assessment may utilize existing data sources pertaining to that area;
 3. Clearly state that the proposed project will not decrease slope stability or pose an unreasonable threat to persons or property either on or off site and provide a rationale as to those conclusions based on geologic conditions and interpretations specific to the project;

4. Provide a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, and other adequate information to determine compliance with the requirements of this article;
 5. Provide conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts of the proposed development, including the potential adverse impacts to adjacent and down-current properties.
 6. Geotechnical reports shall conform to accepted technical standards and generally follow the guidelines set forth in the Washington State Department of Licensing Guidelines for Preparing Engineering Geology Reports in Washington (2006). In some cases, such as when it is determined that no landslide or erosion risk is present, a full report may not be necessary to determine compliance with this article, and in those cases a stamped letter or abbreviated report may be provided;
 7. If a landslide or erosion hazard is identified, provide minimum setback recommendations for avoiding the landslide or erosion hazard, recommendations on stormwater management and vegetation management and plantings, other recommendations for site development so that the frequency or magnitude of landsliding or erosion on or off the site is not altered, and recommendations are consistent with this article;
 8. For projects in seismic hazard areas, the report shall also include a detailed engineering evaluation of expected ground displacements, amplified seismic shaking, or other liquefaction and/or dynamic settlement effects and proposed mitigation measures to ensure an acceptable level of risk for the proposed structure type or other development facilities such as access roads and utilities;
 9. For projects in mine hazard areas, the report shall also include a description of historical data and remnant mine conditions, if available, dates of operation, years of abandonment, strength of overlying rock strata, and other information needed to assess stability of the site together with analysis of surface displacement or foundation stress from collapse of workings.
- C. A geological assessment for a specific site may be valid for a period of up to five years when the proposed land use activity and site conditions affecting the site are unchanged. However, if any surface and subsurface conditions associated with the site change during that five-year period, the applicant may be required to submit an amendment to the geological assessment.

Article 4. Frequently Flooded Areas

16.16.400 Purpose.

The purposes of this article are to:

- A. Reduce the risk to life and safety, public facilities, and public and private property that results from floods.
- B. Avoid or minimize impacts to fish and wildlife habitats that occur within frequently flooded areas.
- C. Protect and maintain the beneficial ecological functions and values of frequently flooded areas, including providing the necessary flow regime to form and maintain a full range of functional and accessible salmonid habitats both within and outside of frequently flooded areas.
- D. To ensure compliance with FEMA National Flood Insurance Program (NFIP) protection standards for critical habitats of species listed under the Endangered Species Act.
- E. In conjunction with the provisions of WCC Title [17](#), establish review procedures that provide an integrated approach to managing floodplain development and maintaining the capacity of the floodplain or floodway to convey and store flood waters.

16.16.410 Frequently Flooded Areas – Designation and Mapping.

- A. Frequently flooded areas are areas located along major rivers, streams, and coastal areas where the depth, velocity, intensity and frequency of flood water during major events present a risk to human life and property. Areas susceptible to these types of hazards are hereby designated as frequently flooded areas and subject to the provisions of this article.
- B. Frequently flooded areas shall include, but not be limited to:
 1. Special flood hazard areas as mapped on the current effective Federal Emergency Management Agency's Flood Insurance Rate Maps (FIRM). This includes coastal high hazard areas as defined by this chapter and as identified and designated on the FIRM maps as Zone VE or V; provided, that tsunami hazard areas are designated as geologically hazardous areas and subject to the provisions of Article 3 of this chapter.
 2. Other flood hazard areas identified by the County public works department based on review of historical data, high water marks, photographs of past flooding, or similar information from federal, state, county, or other valid sources when base flood elevation data from the Federal Insurance and Mitigation Administration has not been provided or is not accurate.

16.16.420 Frequently Flooded Areas – General Standards.

- A. All development shall conform to the provisions of WCC Title [17](#), Flood Damage Prevention, and the applicable provisions of this chapter.
- B. Development within frequently flooded areas shall be allowed only when it is consistent with all of the following:
 1. FEMA's National Flood Insurance Program (NFIP), including the protection standards for critical habitats for listed species;
 2. The mitigation sequence in WCC [16.16.260](#);
 3. Article 7, Habitat Conservation Areas, of this chapter;
 4. The applicable general protective measures found in WCC [16.16.265](#).

- C. The Director shall have the authority to require a habitat assessment and, if necessary, a mitigation plan prepared by a qualified professional, in accordance with the FEMA Regional Guidance for the Puget Sound Basin, and mitigate for adverse impacts to the ecological functions of frequently flooded areas; provided, that such mitigation shall be consistent and compatible with the goal of protecting health and safety and minimizing risks to property.

16.16.430 Frequently Flooded Areas – Review and Report Requirements.

- A. When County critical area maps or other sources of credible information indicate that a site proposed for development is or may be located within a frequently flooded area, the County public works department's river and flood division and/or the Director shall have the authority to require a critical area assessment report.
- B. The public works department shall have primary responsibility for reviewing and approving proposed developments for consistency with WCC Title [17](#). The Director shall review development proposals for consistency with the standards provided in this chapter. Either may place conditions for approval and/or require mitigation in accordance with this chapter.
- C. In addition to the requirements of WCC [16.16.255](#), critical areas assessment reports for frequently flooded areas shall:
 - 1. Identify any federally listed species and associated habitats, and demonstrate that no harm will occur to such species or habitats as a result of development (inclusive of mitigation) within frequently flooded areas.
 - 2. Address adverse impacts to ecological functions and processes, including riparian vegetation. Positive impacts may also be discussed.
 - 3. Include mitigation for adverse effects on frequently flooded areas' ecological functions, where applicable.
- D. The Director shall have the authority to modify the requirements of subsection C of this section when s/he determines that any portion of these requirements is unnecessary given the scope and/or scale of the proposed development.
- E. The Director shall have the authority to require additional information to that required in subsection C of this section that discloses and describes the effects of proposed development on frequently flooded area functions, including, but not limited to, impacts on: storage and conveyance of flood water; channel migration; peak flows and flow velocities; redd scour and displacement of rearing juvenile fish; sediment quality in streams; shear stress and bank erosion; water quality; wildlife habitat; fish access; and nutrients cycling or other hyporheic functions that link surface and groundwater systems.
- F. Critical areas assessment report requirements may be waived for single-family developments and structures accessory to agricultural uses when the Director and the Public Works department determine that the development does not meet the FEMA requirements for a habitat assessment in FEMA Regional Guidance for the Puget Sound Basin.

Article 5. Critical Aquifer Recharge Areas

16.16.500 Purpose.

The purposes of this article are to:

- A. Preserve, protect, and conserve Whatcom County's groundwater resources and their functions and values for current and future generations by protecting critical aquifer recharge areas from contamination.
- B. Prevent adverse impacts on groundwater quantity by regulating development activities that could deplete aquifer storage, reduce groundwater levels, and/or diminish infiltration and replenishment of groundwater.
- C. Prioritize the management, protection, and conservation of groundwater recharge areas as sources of potable water supply.
- D. Establish review procedures for development activities that have the potential to adversely affect critical aquifer recharge areas.

16.16.510 Critical Aquifer Recharge Areas – Designation, Classification and Mapping.

- A. Critical aquifer recharge areas play a crucial role in supplying potable water (as defined by WAC [365-190-030\(2\)](#)). These recharge areas have geologic conditions that allow high infiltration rates, which contribute significantly to the replenishment of groundwater. These conditions also create a high potential for groundwater contamination. These areas are hereby designated as critical areas and subject to the provisions of this chapter.
- B. The approximate location and extent of critical aquifer recharge areas are shown on the County's critical area maps. These maps are to be used as a guide and do not provide a definitive critical area designation. The County shall update the maps as recharge areas are identified and as new information becomes available.
- C. Critical aquifer recharge areas shall be designated and classified as follows:
 - 1. Low, Moderate, and High Susceptibility Aquifer Recharge Areas. Aquifer recharge areas susceptible to degradation or depletion because of hydrogeologic characteristics are those areas meeting the criteria established by the State Department of Ecology (Guidance Document for the Establishment of Critical Aquifer Recharge Area Ordinances, July 2000, Publication No. 97-30, Version 4.0).
 - 2. Wellhead Protection Areas. The area defined by the boundaries of the 10-year time of groundwater travel, in accordance with WAC [246-290-135](#). For purposes of this chapter, all wellhead protection areas shall be designated as highly susceptible critical aquifer recharge areas.
- D. If special groundwater management areas or susceptible groundwater management areas are established in Whatcom County in accordance with WAC [173-200-090](#) or [173-100-010](#), respectively, then these areas shall be incorporated into the highly susceptible aquifer designation.

16.16.520 Critical Aquifer Recharge Areas – General Standards.

In addition to the applicable general protective measures found in WCC [16.16.265](#), all development in a critical aquifer recharge area shall meet the following standards:

- A. The proposed development will not cause contaminants to enter the aquifer and will not significantly affect the recharging of the aquifer in an adverse manner.
- B. The proposed development must comply with the water source protection requirements and recommendations of the Federal Environmental Protection Agency, State Department of Health, and the Whatcom County health department.
- C. The proposed development must be designed and constructed in accordance with the County stormwater management requirements or other applicable stormwater management standards (Whatcom County Development Standards Chapter 2, WCC Title [20](#)).

16.16.525 Critical Aquifer Recharge Areas – Use and Modification.

The following development activities, when proposed in moderate and high susceptibility critical aquifer recharge areas, have the potential to adversely affect groundwater quality and/or quantity and shall require submittal of a critical areas assessment report as defined in WCC [16.16.255](#) and [16.16.535](#):

- A. Any development with an on-site domestic septic system at a gross density greater than one system per residence per acre.
- B. All storage tanks and storage facilities for hazardous substances and/or hazardous wastes; provided, that:
 - 1. The tanks must comply with Department of Ecology regulations contained in Chapters [173-360](#) and [173-303](#) WAC as well as International Building Code requirements;
 - 2. All new underground tanks and facilities shall be designed and constructed so as to prevent releases due to corrosion or structural failure for the operational life of the tank, or have a secondary containment system to prevent the release of any stored substances;
 - 3. All new aboveground storage tanks and facilities shall be designed and constructed so as to prevent the release of a hazardous substance to the ground, groundwaters, or surface waters by having primary and secondary containment.
- C. Vehicle repair, servicing and salvaging facilities; provided, that the facility must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur. Dry wells shall not be allowed on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.
- D. Use of reclaimed wastewater must be in accordance with adopted water or sewer comprehensive plans that have been approved by the State Departments of Ecology and Health and the Whatcom County council per Chapter [57.16](#) RCW; provided, that:
 - 1. Surface spreading must meet the groundwater recharge criteria given in RCW [90.46.010](#)(10) and [90.46.080](#).
 - 2. Direct injection must be in accordance with the standards developed by authority of RCW [90.46.042](#).
- E. Any other development activity that the Director determines is likely to have a significant adverse impact on groundwater quality or quantity, or on the recharge of the aquifer. The determination must be made based on credible scientific information.

- F. Metals and hard rock mining and new sand and gravel mining subject to the provisions of the County's current mineral resource lands (MRL) review procedures in WCC Chapter [20.73](#); provided, that for new MRLs such activities shall be prohibited within the 10-year travel time zone of wellhead protection areas.

16.16.530 Critical Aquifer Recharge Areas – Prohibited Uses.

The following developments and uses are prohibited in critical aquifer recharge areas:

- A. New landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste of more than 2,000 cubic yards, and inert and demolition waste landfills.
- B. Underground Injection Wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells.
- C. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade).
- D. Facilities that store, process, or dispose of chemicals containing perchloroethylene (PCE) or methyl tertiary butyl ether (MTBE).
- E. Facilities that store, process, or dispose of radioactive substances.
- F. Other activities that the Director determines would significantly degrade groundwater quality and/or reduce the recharge to aquifers currently or potentially used as a potable water source, or that may serve as a significant source of base flow to a regulated stream. The determination must be made based on credible scientific information.

16.16.535 Critical Aquifer Recharge Areas – Review and Report Requirements.

- A. When County critical area maps or other sources of credible information indicate that the proposed development activities listed in WCC [16.16.525](#) occur within a critical aquifer recharge area, the Director shall have the authority to require a critical area assessment report and to regulate developments accordingly. Critical areas assessment reports for aquifer recharge areas shall meet the requirements of WCC [16.16.255](#) and this section. Assessment reports shall include the following site- and proposal-related information unless the Director determines that any portion of these requirements is unnecessary given the scope and/or scale of the proposed development:
 - 1. Available information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all critical aquifer recharge areas located on site or immediately adjacent to the site, and permeability of the unsaturated zone;
 - 2. Groundwater depth, flow direction and gradient based on available information;
 - 3. Currently available data on wells and springs within 1,300 feet of the project area;
 - 4. The presence and approximate location of other critical areas, including surface waters, within 1,300 feet of the project area based on available data and maps;
 - 5. Existing and available historic water quality data for the area to be affected by the proposed activity;
 - 6. Proposed best management practices;
 - 7. The effects of the proposed project on the groundwater quality and quantity, including:
 - a. Potential effects on stream flow, wetlands and/or other resources, and on ecosystem processes;

- b. Predictive evaluation of groundwater withdrawal effects on nearby wells and surface water features; and
 - c. Predictive evaluation of contaminant transport based on potential releases to groundwater; and
- 8. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for emergency response provisions as well as regular inspection, repair, and replacement of structures and equipment that could fail.
- B. If the applicant can demonstrate through a valid hydrogeological assessment that geologic and soil conditions underlying their property do not meet the criteria for low, moderate, or high susceptibility, the property shall not be considered a critical aquifer recharge area.

Article 5.5. Areas within the Rural Residential District of Lummi Island

16.16.540 Areas within the Rural Residential District of Lummi Island.

16.16.541 Exempt Wells.

Wells drilled as a replacement of an existing well are exempt from this article as long as the withdrawal rate is not increased by more than 20% of the existing well. If baseline withdrawal rate information is not available, this must be established by a licensed well driller prior to well replacement.

16.16.542 Minimum Well Spacing for all New Wells.

Wells shall have a minimum of 200 feet distance between a new well and an existing operating well.

16.16.543 Requirements for Public Water System Wells, Non-Group B Two Party Wells, and Non-Domestic Wells.

In addition to the minimum well spacing, the following measures are required for public water system wells, non-Group B two party wells, and nondomestic wells. (Includes “public water system” wells and non-Group B two party wells as defined under Whatcom County drinking water regulations and nondomestic use wells pumping greater than 250 gpd. “Public water system” is defined under WCC Chapter [24.11](#) as any water system providing piped water for consumption, excluding a system serving only one single-family residence and any system with four or fewer connections serving only residences on the same farm. A “non-Group B two party well” is defined in WCC Chapter [24.11](#) as a water system using one well to serve two single-family residences for which the director of health has waived all public water system requirements.)

A. Chloride Monitoring and Testing.

1. **Monitoring.** Well owners shall collect and have water samples analyzed for chloride concentration twice annually, in April and August, and submitted to the Whatcom County health department.
2. **Chloride Determinations for New Wells or Increased Pumping of Existing Wells.** Applications for new wells, applications to convert an existing private well into a two party well, any application to expand the number of connections of a public water system, and nondomestic use wells proposing a greater than 20% increase in groundwater withdrawals in an existing well require a minimum 24-hour-duration pumping test at 100% of the proposed average daily demand, at the end of which a water sample will be collected for analysis of chloride concentration. Subdivisions using individual wells are required to test wells simultaneously or, alternatively, have a licensed hydrogeologist evaluate well interference and water quality changes. Subdivision wells shall remain accessible for future testing in the event of subdivision expansion.
3. **Restrictions on New Wells or Increased Pumping of Existing Wells.** New wells cannot be permitted, existing private wells cannot be converted to two party wells, existing public water systems cannot expand beyond their existing number of approved connections, and nondomestic wells cannot increase pumping rates greater than 20% if chloride concentrations measured at the end of the test specified in subsection (A)(2) of this section are greater than 100 mg/L. For systems expanding 20% or less within one year, the highest chloride

determination within the past year in subsection (A)(1) of this section cannot be greater than 100 mg/L.

4. Limit on Water Use by Existing Wells. Any increase (0 to 20%) in water use will not be permitted if either semiannual analysis in the previous 12-month period indicates greater than 100 mg/L chloride concentration. If the semi-annual chloride determinations have not been submitted as required, then the pump testing requirement of subsection (A)(2) of this section shall apply.
 5. Prior to 10 days before the pumping test, all property owners within 1,000 feet of the well location shall be notified by first class mail informing them of the test and providing contact information of the person responsible for the testing.
- B. Arsenic Monitoring and Testing in the Unconsolidated Aquifer.
1. The following monitoring and testing is required unless the well is determined not to be located in the unconsolidated sandstone aquifer. A Washington State licensed hydrogeologist must make the determination in a submitted report.
 2. Arsenic Determinations for New Wells or Increased Pumping of Existing Wells. Applications for new wells, applications to convert an existing private well into a two party well, any application to expand the number of connections of a public water system, and nondomestic use wells proposing a greater than 20% increase in groundwater withdrawals in an existing well require a minimum 24-hour-duration pumping test at 100% of the proposed average daily demand, at the end of which a water sample will be collected for analysis of arsenic concentration.
 3. Restrictions on New Wells or Increased Pumping of Existing Wells. New wells cannot be permitted, existing private wells cannot be converted to two party wells, existing public water systems cannot expand beyond their existing number of approved connections, and nondomestic wells cannot increase pumping rates greater than 20% if arsenic concentrations measured at the end of the test specified in subsection (B)(2) of this section are greater than 10 µg/L.
 4. Limit on Water Use by Existing Wells. Any increase (0 to 20%) in water use will not be permitted if the most recent arsenic determination indicated greater than 10 µg/L arsenic concentration. If no arsenic concentration has been determined in the past three years, the pumping test requirement in subsection (B)(2) of this section shall apply.
 5. Prior to 10 days before the pumping test, all property owners within 1,000 feet of the well location shall be notified by first class mail informing them of the test and providing contact information of the person responsible for the testing.

16.16.544 Administrative Waiver.

Administrative waivers may be granted to any section of these requirements by petition to the administering agency. Waiver request must demonstrate that the project is consistent with the intent of these requirements; no health hazard would result from this action; and must be stamped by a licensed Washington State hydrogeologist.

Article 6. Wetlands

16.16.600 Purpose.

The purposes of this article are to:

- A. Recognize and protect the beneficial functions, values, and services performed by wetlands, which include, but are not limited to, providing food, breeding, nesting and/or rearing habitat for fish and wildlife; recharging and discharging groundwater; contributing to stream flow during low flow periods; stabilizing stream banks and shorelines; storing storm and flood waters to reduce flooding and erosion; and improving water quality through biofiltration, adsorption, retention and transformation of sediments, nutrients, and toxicants.
- B. Regulate land use to avoid adverse effects on wetlands and maintain the functions, services, and values of freshwater and estuarine wetlands throughout Whatcom County.
- C. Establish review procedures for development proposals in and adjacent to wetlands.
- D. Establish minimum standards for identifying and delineating wetlands.

16.16.610 Wetlands – Designation, Rating, and Mapping.

- A. Wetlands shall be delineated in accordance with the requirements of RCW [36.70A.175](#). Unless otherwise provided for in this chapter, all areas within the county determined to be wetlands in accordance with the U.S. Army Corps of Engineers Wetlands Delineation Manual, 1987 Edition, and the Western Mountains, Valleys, and Coast Region Supplement (Version 2.0), 2010 or as revised, are hereby designated critical areas and are subject to the provisions of this article.
- B. The approximate location and extent of wetlands are shown on the County's critical area maps. A property-specific assessment is necessary to determine the wetland boundary.
- C. Wetlands shall be rated based on categories that reflect the functions and values of each wetland. Wetland categories shall be based on the criteria provided in the Washington State Wetland Rating System for Western Washington, revised 2014, and as amended thereafter, as determined using the appropriate rating forms and associated figures contained in that publication. These categories are generally defined as follows:
 - 1. Category I. Category I wetlands are: (a) relatively undisturbed estuarine wetlands larger than one acre; (b) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; (c) bogs; (d) mature and old-growth forested wetlands larger than one acre; (e) wetlands in coastal lagoons; (f) interdunal wetlands that score eight or nine habitat points and are larger than one acre; and (g) wetlands that perform many functions well (scoring 23 points or more). These wetlands: (a) represent unique or rare wetland types; (b) are more sensitive to disturbance than most wetlands; (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (d) provide a high level of functions.
 - 2. Category II. Category II wetlands are: (a) estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre; (b) interdunal wetlands larger than one acre or those found in a mosaic of wetlands; or (c) wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3. Category III. Category III wetlands are: (a) wetlands with a moderate level of functions (scoring between 16 and 19 points); (b) can often be adequately replaced with a well-planned mitigation project; and (c) interdunal wetlands between 0.1 and one acre. Wetlands scoring between 16 and 19 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.
4. Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than 16 points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

16.16.612 Exceptions to Regulation.

- A. All wetlands shall be regulated regardless of size; provided, that the following wetlands may be exempt from the requirement to avoid impacts (WCC 16.16.225 General Regulations), and they may be filled if the impacts are fully mitigated based on the remaining actions in WCC 16.16.260 (General Mitigation Requirements). In order to verify the following conditions, a critical area report for wetlands meeting the requirements in WCC 16.16.255 (Critical Areas Assessment Reports) must be submitted.
 1. All isolated Category IV wetlands less than 4,000 square feet that:
 - a. Are not associated with riparian areas or their buffers;
 - b. Are not associated with shorelines of the state or their associated buffers;
 - c. Are not part of a wetland mosaic;
 - d. Do not score 6 or more points for habitat function based on the 2014 update to the Washington State Wetland Rating System for Western Washington: 2014 Update (Ecology Publication #14-06-029, or as revised and approved by Ecology);
 - e. Do not contain a Priority Habitat or a Priority Area for a Priority Species identified by the Washington Department of Fish and Wildlife, do not contain federally listed species or their critical habitat, or species of local importance identified in WCC 16.16.710 (Habitat Conservation Areas – Designation, Mapping, and Classification).
 2. Wetlands less than 1,000 square feet that meet the above criteria and do not contain federally listed species or their critical habitat are exempt from the buffer provisions contained in this Chapter.

16.16.620 Wetlands – Use and Modification.

The following uses and modifications may be permitted in wetlands and/or wetland buffers as specified when, pursuant to WCC [16.16.255](#), [16.16.260](#), and [16.16.630](#), all reasonable measures have been taken to avoid adverse effects on wetland functions and values as documented through an alternatives analysis, the amount and degree of alteration are limited to the minimum needed to accomplish the project purpose, and mitigation is provided for all adverse impacts to wetlands and their buffers that cannot be avoided:

- A. **Reasonable Use.** Developments that meet the reasonable use exception standards as set forth in WCC [16.16.270](#).

B. Utilities.

1. **Utility lines** in Category II, III, and IV wetlands and their buffers and/or Category I wetland buffers when no feasible conveyance alternative is available shall be designed and constructed to minimize physical, hydrologic, and ecological impacts to the wetland, and meet all of the following:
 - a. The utility line is located as far from the wetland edge and/or buffer as possible and in a manner that minimizes disturbance of soils and vegetation.
 - b. Clearing, grading, and excavation activities are limited to the minimum necessary to install the utility line and the area is restored following utility installation.
 - c. Buried utility lines shall be constructed in a manner that prevents adverse impacts to surface and subsurface drainage. This may include regrading to the approximate original contour or the use of trench plugs or other devices as needed to maintain hydrology.
 - d. Best management practices are used in maintaining said utility corridors such that maintenance activities do not expand the corridor further into the critical area.
 - e. The least impactful construction or installation method is used as demonstrated through an alternatives analysis.
2. **On-site sewage disposal systems (OSS)** may be permitted in wetland buffers when accessory to an approved single-family residence when:
 - a. It is not feasible to connect to a public sanitary sewer system; and
 - b. It is located as far as possible from the wetland; and
 - c. It is operated and maintained in accordance with WCC 24.05.160; provided, that adverse effects on water quality are avoided.

- C. **Public Roads or Bridges.** New or expanded public roads or bridges in Category II, III, and IV wetlands and their buffers and/or Category I wetland buffers when no feasible alternative alignment is available and the road or bridge is designed and constructed to minimize physical, hydrologic, and ecological impacts to the wetland, including placement on elevated structures as an alternative to fill, where feasible.

- D. **Private Access.** Access to private development sites may be permitted to cross Category II, III, or IV wetlands or their buffers, provided the access meets the following:
1. For direct wetland fill, there are no feasible alternative alignments. Alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter [8.24](#) RCW.
 2. Design and construction methods maintain preconstruction hydrologic connectivity across the access road or driveway.
 3. The access is designed to cause the least impact to the wetland and/or its buffer (which may require the applicant to apply for an exception or deviation from the Development Standards).
 4. Access is not achievable through the administrative provisions of WCC 16.16.640 (Wetland Buffer Modification).

E. Agricultural Uses.

1. Construction of an appurtenant structure that is associated with an agricultural use; or the reconstruction, remodeling, or maintenance of such structures in wetland buffers, subject to all of the following specific criteria:
 1. The structure is located within an existing lot of record and is an ongoing agricultural use.

2. There is no other feasible location with less impact to critical areas.
 3. Clearing and grading activity and impervious surfaces are limited to the minimum necessary to accommodate the proposed structure and, where possible, surfaces shall be made of pervious materials.
 2. Ongoing agricultural activities, subject to the following:
 - a. The activities are conducted in accordance with all applicable provisions of this chapter and WCC Title [17](#); or
 - b. The agricultural activity is in compliance with the Conservation Program on Agricultural Lands (CPAL) as described in Article 8 of this chapter.
- F. **Domestic wells** serving single-family developments (including plats, short plats, and individual single-family residences) and necessary appurtenances, including a pump and appropriately sized pump house, but not including a storage tank, in wetland buffers when all of the following conditions are met:
1. There is no viable alternative to the well site outside of the buffer and the well is located as far back from the wetland edge as is feasible;
 2. The well is more than 75 feet deep; and
 3. Any impacts to the wetland and buffer from staging equipment and the well-drilling process are mitigated.
- G. **Stormwater Management Facilities.**
1. Stormwater management facilities, limited to detention/retention/treatment ponds, media filtration facilities, and lagoons or infiltration basins, or bioretention cells (engineered or rain gardens) may be permitted within the outer 50% of a Category II, III or IV wetland buffer; provided, that:
 - a. Construction of the stormwater facility does not displace or impact a forested buffer;
 - b. The width of the buffer between the stormwater facility and the wetland edge is not less than the low intensity land use buffer standards in WCC [16.16.630](#);
 - c. There is no other feasible location for the stormwater facility and the facility is located, constructed, and maintained in a manner that minimizes adverse effects on the buffer and adjacent critical areas;
 - d. The stormwater facility is designed to mimic and resemble natural wetlands and meets applicable county or state stormwater management standards and the discharge water meets state water quality standards; and
 - e. Low impact development approaches have been implemented to the maximum extent feasible per the Department of Ecology stormwater manual.
 2. Surface water or stormwater conveyance or discharge facilities such as dispersion trenches, level spreaders, and outfalls may be permitted within a Category III or IV wetland buffer on a case-by-case basis when the Director determines that all of the following are met:
 - a. Due to topographic or other physical constraints, there are no feasible alternative locations for these facilities in the outer buffer area or outside the buffer.
 - b. The discharge is located as far from the wetland edge and/or buffer as possible and in a manner that minimizes disturbance of soils and vegetation.
 - c. The discharge outlet is designed to prevent erosion and promote infiltration.

- d. The dispersion outfall is within the outer 25% of the buffer, unless a closer location is demonstrated to be the only feasible location. Alternative locations shall be the maximum distance from the wetland to alleviate the site constraint.
 3. Phosphorus-reducing BMP structures approved and installed through the homeowners' improvement program (or as may be renamed) within the Lake Whatcom watershed to treat runoff from existing development may be permitted within the outer 50% of a Category II, III or IV wetland buffer.
- H. **Recreation.** Passive recreation facilities that are part of a non-motorized trail system or environmental education program, including walkways, wildlife viewing structures, or public education trails; provided, that all of the following criteria are met:
1. There is no other feasible alternative route with less impact on the critical area.
 2. The trail minimizes erosion and sedimentation, hydrologic alteration, and disruption of natural processes such as wood recruitment and natural wildlife movement patterns.
 3. Private trails shall not exceed four feet in width and public trails shall not exceed 10 feet in width, though some portions may be wider to meet the requirements of the Americans with Disabilities Act.
 4. They shall be made of pervious material or elevated where feasible.
 5. They shall be designed to avoid removal of significant trees.
 6. Trails may include limited viewing platforms that shall not exceed eight feet in width and shall be made of pervious materials where feasible.
 7. When located in the buffer, they should be located in the outer 25% of the buffer; except, that public trails may be permitted closer to the wetland when necessary to provide wetland educational opportunities or for public health and safety; provided, that when closer than the outer 25%, the trail width is the minimum necessary for the trail class.
 8. They shall be constructed and maintained in a manner that minimizes disturbance of the buffer and associated critical areas.
 9. If they must cross a wetland, they shall be elevated, constructed to minimize supports, and be the minimum size necessary to accommodate the level of service.

16.16.630 Wetland Buffers.

To protect the integrity, functions, and values of wetlands, the Director shall have the authority to require buffers from the edges of all wetlands, including reestablished or created wetlands, (in addition to the building setback required by WCC [16.16.265\(A\)\(1\)](#)) in accordance with the following:

- A. Wetland buffers shall be measured horizontally from a perpendicular line established by the wetland boundary based on the base buffer width identified in Table 1.
- B. Wetland buffers shall not include areas that are functionally and effectively disconnected from the wetland by an existing, legally established road or other substantially developed surface.
- C. The wetland buffer standards required by this Article presume the existence of a dense, multi-storied native vegetation community in the buffer adequate to protect the wetland functions and values. When a buffer lacks adequate vegetation, the Director may increase the standard buffer, require buffer planting or enhancement, and/or deny a proposal for buffer reduction or buffer averaging.

- D. The standard wetland buffer shall be based on a combination wetland category, habitat function score (from the wetland rating form), and land use intensity. The intensity of the land use shall be determined in accordance with the definitions found in Article 9 of this chapter unless the Director determines that a lesser level of impact is appropriate based on information provided by the applicant demonstrating that the proposed land use will have a lesser impact on the wetland than that contemplated under the buffer standard otherwise appropriate for the land use, as specified in WCC [16.16.640](#).
- E. Standard buffer widths are shown in Table 1. However, for Category I or II wetlands with “special characteristics” as determined and defined through the Washington State Department of Ecology (2014) Wetland Rating System (including estuarine, coastal lagoons, wetlands of high conservation value, bogs, forested, and interdunal wetlands), only buffers in the highest habitat score (8 to 9) group are applied.

Table 1. Standard Wetland Buffer Widths

Wetland Category	Habitat Function Score	Land Use Intensity*		
		High Buffer Width (feet)	Moderate Buffer Width (feet)	Low Buffer Width (feet)
Category I	8 – 9	300	225	150
	6 – 7	150	110	75
	3 – 5	100	75	50
Category II	8 – 9	300	225	150
	6 – 7	150	110	75
	3 – 5	100	75	50
Category III	8 – 9	300	225	150
	6 – 7	150	110	75
	3 – 5	80	60	40
Category IV	3 – 9	50	40	25

* Definitions for high, moderate, and low intensity land use are provided in Article 9 of this chapter.

16.16.640 Wetland Buffer Modification.

Buffer widths may be increased, decreased, or averaged in accordance with the following provisions, which provide flexible approaches to maximize both ecological functions and allowed uses. All mitigation proposed shall be consistent with State and this Chapter.

- A. **Buffer Width Increasing.** The Director may require the standard buffer width to be increased by the distance necessary to protect wetland functions and provide connectivity to other wetland and habitat areas for one of the following:
1. To protect the function and value of that wetland including, but not limited to, compensating for a poorly vegetated buffer or a buffer that has a steep slope (greater than 30%); or
 2. To prevent windthrow damage; or
 3. To protect wetlands or other critical areas from landslides, erosion or other hazards.
 4. To maintain viable populations of existing species listed by the Federal or State government as endangered, threatened or sensitive; or

5. When a Category I or II wetland is located within 300 feet of:

- a. Another Category I, II or III wetland; or
- b. A fish and wildlife HCA; or
- c. A Type S or F stream; or
- d. A high impact land use that is likely to have additional impacts.

The increased buffer distance may be limited to those areas that provide connectivity or are necessary to protect wetland and habitat functions. If the wetland contains variations in sensitivity, increasing the buffer widths will only be done where necessary to preserve the structure, function and value of the wetland.

B. **Buffer Width Averaging.** Buffer width averaging allows limited reductions of buffer width in specified locations while requiring increases in others. The widths of buffers may be averaged if this will improve the protection of wetland functions.

1. Averaging of required buffer widths will be allowed only if the applicant demonstrates that all of the following criteria are met:

- a. The area of the buffer proposed for averaging has not been reduced pursuant to subsection (C). Buffer averaging is not allowed if the buffer has been reduced.
- b. Averaging is necessary to accomplish the purpose of the proposal and no reasonable alternative is available; and
- c. Averaging width will not adversely impact the wetland functions and values; and
- d. The wetland has significant differences in characteristics that affect its habitat functions; and
- e. The total area contained within the wetland buffer after averaging is no less than that contained within the standard buffer prior to averaging; and
- f. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower functioning or less sensitive portion; and
- g. The buffer width of a Category I, II, or III wetland shall not be reduced below 75% of the standard buffer width.

2. Averaging of required buffer widths will be allowed for the following when the dimensional standards of subsection (B)(1) are met:

- a. To protect a natural feature (e.g., a stand of trees or snags) that otherwise would fall outside of the standard buffer.
- b. To provide connections with adjacent habitats or to address those situations where pre-existing development has reduced a buffer area to a width less than the required standard.

C. **Buffer Width Reduction.** The Director shall have the authority to reduce the standard buffer widths identified in WCC 16.16.630 (Wetland Buffers) as follows:

1. The buffers of moderate and low impact land use projects may be reduced when all of the following apply:

- a. The area of the buffer proposed for reduction has not been averaged pursuant to subsection (B). Buffer reduction is not allowed if the buffer has been averaged.
- b. The applicant demonstrates buffer averaging is not feasible.
- c. The buffer shall not be reduced to less than 75% of the required buffer.

- d. Prior to considering buffer reductions, the applicant shall demonstrate application of mitigation sequencing as required in WCC 16.16.260 (General Mitigation Requirements).
 - e. To minimize impacts and provide equivalent functions and values as required by this section, the Director may require any or all of the following:
 - i. The use of alternative on-site wastewater systems in order to minimize site clearing, where appropriate;
 - ii. Using low impact development (LID) and LID best management practices where appropriate;
 - f. The buffer reduction shall not adversely affect the functions and values of the adjacent wetlands;
 - g. All buffer reduction impacts are mitigated and result in equal or greater protection of the wetland functions and values. This includes enhancement of existing degraded buffer area and provide mitigation for the disturbed buffer area.
2. High impact land use projects may apply moderate land use intensity buffers when:
- a. For wetlands that score 3-5 habitat points, all applicable impact reduction measures from the following list are implemented (from Department of Ecology Publication No. 05-06-008, Wetlands in Washington State, Volume 2, Appendix 8C (as updated in 2018):
 - i. Directing lights away from the wetland and buffer.
 - ii. Locating activities that generate noise away from the wetland and buffer.
 - iii. Routing all new, untreated runoff away from wetland while ensuring wetland is not dewatered.
 - iv. Establishing covenants limiting use of pesticides within 150 feet of wetland.
 - v. Applying integrated pest management.
 - vi. Retrofitting stormwater detention and treatment for roads and existing adjacent development.
 - vii. Preventing channelized flow from lawns that directly enters the buffer.
 - viii. Infiltrating or treating, detaining, and dispersing into the buffer new runoff from impervious surfaces and new lawns.
 - ix. Posting signs at the outer edge of the critical area or buffer to clearly indicate the location of the critical area according to the direction of the County.
 - x. Using privacy fencing.
 - xi. Planting with dense native vegetation appropriate for the County to delineate buffer edge and to discourage disturbance.
 - xii. Using low impact development (LID) and LID best management practices where appropriate.
 - xiii. Establishing a permanent conservation easement or tract to protect the wetland and the associated buffer.
 - xiv. Using best management practices to control dust.
 - b. For wetlands that score 6 points or more for habitat function:
 - i. All applicable impact reduction measures of subsection (C)(2)(a) are implemented, and;
 - ii. A relatively undisturbed, vegetated corridor at least 100 feet wide between the wetland and any other Priority Habitats is protected pursuant to WCC 16.16.260(I) (General

Mitigation Requirements – Permanent Protection). If no option for providing such a corridor is available, then only subsection (i) applies.

3. In all circumstances when the buffer between the area of reduction and the wetland is degraded, this degraded portion of the buffer shall include replanting with native vegetation in order to achieve a dense vegetative community.
 4. Any person who alters or proposes to alter regulated wetlands shall reestablish, create, rehabilitate, or enhance (or a combination thereof) areas of wetland in order to compensate for wetland losses at the ratios described in mitigation ratios for projects in Western Washington in Table 8C-11 (as updated in 2014) in Department of Ecology Publication No. 05-06-008, Wetlands in Washington State, Volume 2, Section 8C.2.3.
- D. **Buffer Width Variance.** Standard buffer widths may be reduced by more than 25% through a variance pursuant to WCC 16.16.273 (Variances); provided, that buffer averaging beyond that allowed in subsection (B) is prohibited.

16.16.670 Wetlands – Review and Reporting Requirements.

- A. When County critical area maps or other sources of credible information indicate that a site proposed for development or alteration may contain wetland indicators, contain or abut wetlands or wetland buffers, the Director may require a site evaluation (reconnaissance) or critical area assessment report by a qualified professional to determine whether or not a regulated wetland is present and, if so, its relative location in relation to the proposed project area or site. If no regulated wetlands are present, then wetland review will be considered complete.
- B. If the Director determines that a wetland indicator is more likely than not present, s/he shall require a wetland assessment report pursuant to WCC [16.16.255](#) and sub-sections C and D of this section.
- C. A wetland assessment is an element of a critical area assessment report that describes the characteristics of the subject property and adjacent areas. The wetland assessment shall include the occurrence, distribution, delineation, and determination of the wetland category and standard wetland buffers as set forth in WCC [16.16.630](#), and may include analysis of historical aerial photos, and review of public records.
- D. A wetland assessment shall include the following site- and proposal-related information unless the Director determines that any portion of these requirements is already required by Article 2, or unnecessary given the scope and/or scale of the proposed development:
 1. Location information (legal description, parcel number, and address);
 2. A vicinity map;
 3. A site plan that includes scale and wetlands and associated buffers and proposed development if appropriate;
 4. A qualitative written assessment and accompanying maps of wetlands and buffers within 300 feet of the site and an estimate of the existing acreage for each. For on-site wetlands, the assessment shall include the dominant and subdominant plant species; soil type, color and texture; sources of hydrology (patterns of surface and subsurface water movement, precipitation, etc.); topography; and other pertinent information. The assessment of off-site

- wetlands shall be based on available information and shall not require accessing off-site properties;
5. Wetland Analysis. An analysis of all wetlands and buffers (to the extent they can be legally accessed) including, at a minimum, the following information:
 - a. Wetland delineation conducted by a qualified professional and completed in accordance with WCC [16.16.610](#)(A).
 - b. The wetland boundary shall be marked in the field (with flagging left in the field for Whatcom County verification and placed high enough to allow line of sight with vegetation growth) and surveyed using a methodology appropriate to scale of development. The surveyed wetlands areas shall be mapped showing location and size of all wetlands. Methodology used shall be in the report with description of equipment (specs), accuracy, and pertinent description of how the coordinates were gathered.
 - c. Determination of each wetland size.
 - d. Description of each wetland class and category.
 - e. Description of overall water sources and drainage patterns on site. Include all streams and drainages (Type S, F, Np, or Ns streams), shorelines, floodplains, flood-prone areas.
 - f. Description of vegetation, hydrologic conditions, and soil and substrate conditions.
 - g. Description of wildlife and habitat. Include all critical habitat for threatened and endangered species within 300 feet of the development footprint.
 - h. Topographic elevation, at two-foot contours provided by Whatcom County PDS for single-family proposals.
 - i. Functional assessment of the wetland and adjacent buffer using a local or state agency-recognized method and including the reference of the method and all data sheets.
 - j. Standard buffer requirements for each wetland. Copies of the wetland rating forms and associated figures from the Ecology Wetland Rating System for Western Washington, as amended.
 - E. For single-family building permits, the applicant may hire a qualified professional to prepare the assessment report or may request that the County assess the regulated wetland(s) and buffers and determine the impacts associated with the project, subject to the following:
 1. Availability of County staff shall be at the discretion of the Director and subject to workload and scheduling constraints.
 2. Fees for County staff services shall be in accordance with the unified fee schedule.
 - F. If a regulated wetland buffer from a neighboring property extends onto a proposed development site for which review under this chapter is required, the Director shall have the authority to require that deterrent devices be placed at the edge of the buffer in accordance with WCC [16.16.265](#). The applicant shall provide documentation that no buffer encroachment will occur. The documentation shall be on a form provided by the Department.

16.16.680 Wetlands – Mitigation Standards.

In addition to the applicable general protective measures found in WCC [16.16.265](#), activities that adversely affect wetlands and/or wetland buffers shall include mitigation sufficient to achieve no net loss of wetland function and values in accordance with WCC [16.16.260](#) and this section.

- A. In determining the extent and type of mitigation required, the Director may consider all of the following when applicable:
1. The ecological processes that affect and influence critical area structure and function within the watershed or sub-basin;
 2. The individual and cumulative effects of the action upon the functions of the critical area and associated watershed;
 3. Observed or predicted trends regarding the gains or losses of specific wetland types in the watershed, in light of natural and human processes;
 4. The likely success of the proposed mitigation measures;
 5. Effects of the mitigation actions on neighboring properties; and
 6. Opportunities to implement restoration actions formally identified by an adopted shoreline restoration plan, watershed planning document prepared and adopted pursuant to Chapter [90.82](#) RCW, a watershed plan prepared pursuant to Chapter [400-12](#) WAC, a salmonid recovery plan or project that has been identified on the watershed management board habitat project list or by the Washington State Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement, a fully authorized mitigation bank (WCC [16.16.263](#)), or an in-lieu-fee program.
- B. **Type of Mitigation.**
1. **Wetland Alterations.** Compensatory mitigation projects shall restore, create, rehabilitate, enhance, and/or preserve equivalent wetland functions and values pursuant to no net loss of function and area. Compensation for wetland alterations shall occur in the following order of preference:
 - a. Reestablishing (also referred to as restoring) wetlands on upland sites that were formerly wetlands.
 - b. Creating wetlands on disturbed upland sites such as those consisting primarily of nonnative, invasive plant species.
 - c. Rehabilitation of existing wetlands for the purposes of repairing or restoring natural and/or historic hydrologic functions.
 - d. Enhancing existing significantly degraded wetlands.
 - e. Preserving Category I or II wetlands that are under imminent threat; provided, that preservation shall only be allowed in combination with other forms of mitigation when the Director determines that the overall mitigation package fully replaces the functions and values lost due to development.
 2. **Buffer Alterations.** Compensatory mitigation for buffer impacts:
 - a. Shall be consistent with WCC [16.16.630](#) through [16.16.660](#); and
 - b. May include enhancement of degraded buffers by planting native species, removing structures and impervious surfaces within buffers, and other measures to achieve equivalent or greater buffer functions.
- C. **Mitigation Ratios.**
1. Compensatory mitigation for wetland alterations shall be based on the wetland category and the type of mitigation activity proposed. The replacement ratio shall be determined according to the ratios provided in Table 2; provided, that the replacement ratio for preservation shall be 10

times the ratio for reestablishment or creation. The created, reestablished, rehabilitated, or enhanced wetland area shall, at a minimum, provide a level of function equivalent to the wetland being altered and shall be located in an appropriate landscape setting.

2. The mitigation ratios noted in Table 2 shall not apply to mitigation banks as defined by this chapter. Credit and debit procedures for mitigation banks shall be determined in accordance with the mitigation banking provisions outlined in WCC [16.16.263](#).
3. The Director shall have the authority to adjust the mitigation ratios in Table 2 when one or more of the following apply:
 - a. When a combination of mitigation approaches is proposed. In such cases, the area of altered wetland shall be replaced at a 1:1 ratio through reestablishment or creation, and the remainder of the area needed to meet the ratio can be replaced by enhancement or rehabilitation using Table 2.
 - b. When the project proponent has a demonstrated ability, based on past performance, to successfully design, construct, monitor and maintain wetland mitigation projects/sites.
 - c. When use of the guidance for Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington (Department of Ecology Publication No. 10-06-011, as amended) results in a lower mitigation ratio than the standard ratios.
4. For permanent impacts to wetland buffers, unless the Director approves a habitat management plan with different ratios, mitigation shall be provided at the following ratios:
 - a. Where the mitigation is in place and functional before the impact occurs (i.e., advanced mitigation), at a ratio determined by the functions, values, and goals of an advanced mitigation plan.
 - b. Where the mitigation is in place within 1 year of the impact occurring, at a 1:1 ratio (area or function).
 - c. Where the mitigation is placed after 1 year of the impact occurring, at a 1.25:1 ratio (area or function).
 - d. For retroactive permits the Director may require the ratio to be up to double the ratio in subsection (c) above.

Table 2. Compensatory Mitigation Ratios for Projects in Western Washington¹

Category and Type of Wetland Impacts	Reestablishment or Creation	Rehabilitation Only	Reestablishment or Creation (R/C) and Rehabilitation (RH)	Reestablishment or Creation (R/C) and Enhancement (E)	Enhancement Only
All Category IV	1.5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II Estuarine	Case-by-case	4:1 Rehabilitation of an estuarine wetland	Case-by-case	Case-by-case	Case-by-case
All other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I	No alteration allowed unless an essential public facility				

(Ratios indicate mitigation area to area disturbed.)

16.16.690 Wetland Mitigation Plan.

- A. In addition to meeting the requirements of WCC [16.16.260](#)(B), a mitigation plan for wetland and wetland buffer impacts shall meet the following:
1. Provide an analysis of existing wetland functions and values and a detailed description of the effects of the proposed development on wetland and buffer function and value, including the area of direct wetland disturbance, area of buffer disturbance, area of buffer reduction, and area of buffer averaging, including documentation that the functions and values will be increased through reduction or average; effects of stormwater management; proposed hydrologic alteration including changes to natural drainage or infiltration patterns; effects on fish and wildlife species and their habitats; clearing and grading impacts; temporary construction impacts; and effects of increased noise, light, and human intrusion.
 2. The plan shall be based on applicable portions of the Washington State Department of Ecology's Guidelines for Developing Freshwater Wetland Mitigation Plans and Proposals, 2004, or other appropriate guidance document that is consistent with best available science.
 3. The plan shall contain sufficient information to demonstrate that the proposed activities are logistically feasible, constructible, ecologically sustainable, and likely to succeed. Specific information to be provided in the plan shall include:
 - a. The rationale for site selection;
 - b. General goals of the plan, including wetland function, value, and acreage;
 - c. Description of baseline (existing) site conditions including topography, vegetation, soils, hydrology, habitat features (e.g., snags), surrounding land use, and other pertinent information;

¹ From Wetlands in Washington, Volume 2, Appendix 8C, Guidance on Widths of Buffers and Ratios for Compensatory Mitigation for Use with the Western Washington Wetland Rating System, Table 8C-11.

- d. Field data confirming the presence of adequate hydrology (surface and/or groundwater) to support existing and mitigated wetland area(s);
 - e. Nature of mitigation activities, including area of restored, created, enhanced, rehabilitated and preserved wetland, by wetland type;
 - f. Detailed grading and planting plans showing proposed post-construction topography; general hydrologic patterns; spacing and distribution of plant species; size and type of proposed planting stock; watering or irrigation plans; and other pertinent information;
 - g. To facilitate establishment of a stable community of native plants, a description of site treatment measures including removal of noxious weeds and/or invasive species, use of mulch and fertilizer, placement of erosion and sediment control devices, and best management practices that will be used to protect existing wetlands and desirable vegetation;
 - h. A demonstration that the site will have adequate buffers sufficient to permanently protect the wetland functions.
- B. All mitigation projects shall be monitored in accordance with WCC [16.16.260\(C\)](#) for a period necessary to establish that performance standards have been met. The Director shall have the authority to extend the monitoring period for up to 10 years and require additional monitoring reports when any of the following conditions apply:
- 1. The project does not meet the performance standards identified in the mitigation plan.
 - 2. The project does not provide adequate replacement for the functions and values of the impacted critical area.
 - 3. The project involves establishment of forested plant communities, which require longer time for establishment.
- C. Reports shall be submitted annually for the first three years following construction and at the completion of years five, seven and 10 if applicable to document milestones, successes, problems, and contingency actions of the mitigation.

Article 7. Fish & Wildlife Habitat Conservation Areas (HCA)

16.16.700 Purpose.

The purposes of this article are to:

- A. Protect, restore, and maintain native fish and wildlife populations by protecting and conserving fish and wildlife habitat and protecting the ecological processes, functions and values, and biodiversity that sustain these resources.
- B. Protect marine shorelines, valuable terrestrial habitats, lakes, ponds, rivers, and streams and their associated riparian areas, and the ecosystem processes on which these areas depend.
- C. Regulate development so that isolated populations of species are not created and habitat degradation and fragmentation are minimized.
- D. Maintain the natural geographic distribution, connectivity, and quality of fish and wildlife habitat and ensure no net loss of such important habitats, including cumulative impacts.

16.16.710 Habitat Conservation Areas – Designation, Mapping, and Classification.

- A. Habitat conservation areas are those areas identified as being of critical importance to the maintenance of certain fish, wildlife, and/or plant species. These areas are typically identified either by known point locations of specific species (such as a nest or den) or by habitat areas or both. All areas within the county meeting these criteria are hereby designated critical areas and are subject to the provisions of this article.
- B. The approximate location and extent of identified fish, wildlife, and sensitive plant habitat areas are shown on the County's critical area maps as well as state and federal maps. A property-specific assessment is necessary to determine the extent of the HCA.
- C. Habitat conservation areas shall include all of the following:
 - 1. Surface Waters of the State.
 - a. All waterbodies that meet the criteria for Type S, F, Np, or Ns waters as set forth in WAC [222-16-030](#) of the Washington Department of Natural Resources' (DNR) Water Typing System, as now or hereafter amended.
 - i. Type S waters are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC [222-16-030](#)(1) as now or hereafter amended, as a Type S water and are inventoried as "shorelines of the state" under the Shoreline Management Master Program for Whatcom County, pursuant to Chapter [90.58](#) RCW. Type S waters contain salmonid fish habitat.
 - ii. Type F waters are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC [222-16-030](#)(2) as now or hereafter amended, as Type F water. Type F waters contain habitat for salmonid fish, game fish and other anadromous fish.
 - iii. Type Np waters are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC [222-16-030](#)(3) as now or hereafter amended, as Type Np water. Type Np waters do not contain fish habitat.
 - iv. Type Ns waters are those surface waters which meet the criteria of the Washington Department of Natural Resources, WAC [222-16-030](#)(4) as now or hereafter amended,

as a Type Ns water. These streams are areas of perennial or intermittent seepage, ponds, and drainage ways having short periods of spring or storm runoff. Type Ns waters do not contain fish.

2. Ditches or other artificial watercourses are considered streams for the purposes of this chapter when:
 - a. Used to convey natural streams existing prior to human alteration; and/or
 - b. The waterway is used by anadromous or resident salmonid or other resident fish populations; or
 - c. Flows directly into shellfish habitat conservation areas.
3. Areas in which federally listed species are found, have a primary association with, or contain suitable or federally defined critical habitat for said listed species, as listed in the U.S. Fish and Wildlife's Threatened and Endangered Species List or Critical Habitat List (<http://ecos.fws.gov/ecp/>) or the National Marine Fisheries Service (NMFS) (<https://www.fisheries.noaa.gov/species-directory/threatened-endangered>), as amended.
4. Areas in which state-listed priority species are found, have a primary association with, or contain suitable habitat for said listed species, as listed in the Washington Department of Fish and Wildlife's Priority Habitats and Species List. (<http://wdfw.wa.gov/mapping/phs/> or <http://wdfw.wa.gov/conservation/phs/list/>), as amended.
5. State priority habitats and areas associated with state priority species as listed in Washington Department of Fish and Wildlife's Priority Habitats and Species List (<http://wdfw.wa.gov/mapping/phs/> or <http://wdfw.wa.gov/conservation/phs/list/>), as amended.
6. Areas in which state-listed rare plant species are found, or contain suitable habitat for said listed species, as listed in the Department of Natural Resources' Natural Heritage Program (<http://www1.dnr.wa.gov/nhp/refdesk/plants.html>), as amended.
7. Areas in which state-listed saltwater critical areas are found, as listed in WAC [173-26-221](#)(2)(c)(iii).
8. Areas in which state-listed freshwater critical areas are found, as listed in WAC [173-26-221](#)(2)(c)(iv).
9. Naturally occurring or manmade ponds and lakes under 20 acres in size and created prior to September 30, 2005, excluding agricultural, fire protection, and stormwater facilities.
10. Waters of the state.
11. Natural area preserves, aquatic reserves, and natural resource conservation areas as defined by the Washington Department of Natural Resources.
12. Portions of the San Juan Islands National Monument within Whatcom County (including Chuckanut Rock, tip of Eliza Island, Eliza Island Rocks, Lummi Rocks, Baker's Reef, Carter Point, Carter Point Rock, and Seal Rock at the north end of Lummi Island, and subsequently designated areas).
13. Frequently flooded areas that are subject to the Federal Emergency Management Agency's National Flood Insurance Program Biological Opinion (FEMA BiOp).

14. Species and Habitats of Local Importance. Locally important species and habitats that have recreational, cultural, and/or economic value to citizens of Whatcom County, including the following:
- a. Species. The Department of Planning and Development Services shall maintain a current list of species of local importance as designated by the County Council.
 - b. Habitats.
 - i. The marine nearshore habitat, including coastal lagoons, and the associated vegetated marine riparian zone. These areas support productive eelgrass beds, marine algal turf, and kelp beds that provide habitat for numerous priority fish and wildlife species including, but not limited to, forage fish, seabird and shorebird foraging and nesting sites, and harbor seal pupping and haulout sites. This designation applies to the area from the extreme low tide limit to the upper limits of the shoreline jurisdiction; provided, that reaches of the marine shoreline that were lawfully developed for commercial and industrial uses prior to the original adoption of this chapter may be excluded from this designation, but not otherwise exempt from this chapter.
 - ii. The Chuckanut wildlife corridor, which extends east from Chuckanut Bay and adjacent marine waters, including Chuckanut Mountain, Lookout Mountain, the northern portions of Anderson Mountain, and Stewart Mountain continuing along the southern Whatcom County border to Mount Baker/Snoqualmie National Forest boundary. This area represents the last remaining place in the Puget Trough where the natural land cover of the Cascades continues to the shore of Puget Sound.
 - iii. The Department of Planning and Development Services shall maintain a current list and map of habitats of local importance, as designated by the County Council.
- D. In addition to the species, habitats, and wildlife corridors identified in subsection (C)(12) of this section, the Council may designate additional species, habitats of local importance, and/or wildlife corridors as follows:
1. In order to nominate an area, species, or corridor to the category of “locally important,” an individual or organization must:
 - a. Demonstrate a need for special consideration based on:
 - i. Identified species of declining population;
 - ii. Documented species sensitive to habitat manipulation and cumulative loss;
 - iii. Commercial, recreational, cultural, biological, or other special value; or
 - iv. Maintenance of connectivity between habitat areas;
 - b. Propose relevant management strategies considered effective and within the scope of this chapter;
 - c. Identify effects on property ownership and use; and
 - d. Provide a map showing the species or habitat location(s).
 2. Submitted proposals shall be reviewed by the County and may be forwarded to the State Departments of Fish and Wildlife, Natural Resources, and/or other local, state, federal, and/or tribal agencies or experts for comments and recommendations regarding accuracy of data and effectiveness of proposed management strategies.

3. If the proposal is found to be complete, accurate, and consistent with the purposes and intent of this chapter and the various goals and objectives of the Whatcom County comprehensive plan and the Growth Management Act, the County Council will hold a public hearing to solicit comment. Approved nominations will become designated locally important habitats, species, or corridors and will be subject to the provisions of this chapter.
4. The Council may remove species, habitats, or corridors from this list if it can be shown that there is no longer a need to provide protection beyond that afforded by WDFW management strategies. Species and habitats of local importance that are not regulated elsewhere in this chapter may be removed if sufficient evidence has been provided by qualified professionals that demonstrates that the species no longer meets any provisions of subsection (D)(1)(a) of this section.

16.16.720 Habitat Conservation Areas – Use and Modification.

The following activities may be permitted in habitat conservation areas and/or their buffers when, pursuant to WCC Chapter [16.16 \(Critical Areas\)](#), all reasonable measures have been taken to avoid adverse effects on species and habitats, any applicable Washington Department of Fish and Wildlife management recommendations have been applied, mitigation is provided for all adverse impacts that cannot be avoided, and the amount and degree of the alteration are limited to the minimum needed to accomplish the project purpose; provided, that locally important species and habitats shall be subject to WCC 16.16.710(C)(12):

- A. **Reasonable Use.** Developments that meet the reasonable use or variance standards set forth in WCC [16.16.270](#) and [16.16.273](#), respectively.
- B. **Utilities.**
 1. **Utility lines** and facilities may be permitted when all of the following criteria are met:
 - a. The least impactful construction or installation methodology is used as demonstrated through an alternatives analysis.
 - b. Impacts to fish and wildlife habitat and/or corridors shall be avoided to the maximum extent possible.
 - c. Where feasible, installation shall be accomplished by boring beneath the scour depth of the stream or waterbody and the width of the channel migration zone where present.
 - d. Trenching of utilities across a stream channel shall be conducted as perpendicular to the channel centerline as possible whenever boring under the channel is not feasible. Utilities shall be installed below potential scour depth regardless of method.
 - e. Crossings shall be contained within the footprint of an existing road or utility crossing where possible.
 - f. The utility installation shall not increase or decrease the natural rate, extent, or opportunity of channel migration.
 2. **On-site sewage disposal systems (OSS)** may be permitted in FWHCA buffers when accessory to an approved single-family residence when:
 - a. It is not feasible to connect to a public sanitary sewer system; and
 - b. It is located as far as possible from the FWHCA buffer; and

- c. It is operated and maintained in accordance with WCC 24.05.160; provided, that adverse effects on water quality are avoided.
- 3. **Domestic wells** serving single-family developments (including plats, short plats, and individual single-family residences) and necessary appurtenances, including a pump and appropriately sized pump house, but not including a storage tank, in HCA buffers when all of the following conditions are met:
 - a. There is no viable alternative to the well site outside of the buffer and the well is located as far back from the wetland edge as is feasible;
 - b. Any impacts to the HCA buffer from staging equipment and the well-drilling process are mitigated.
- C. **Stream crossings**, provided they meet all the following criteria:
 - 1. The stream crossing is for an allowed use.
 - 2. There is no other feasible alternative route with less impact on critical areas.
 - 3. The crossing minimizes interruption of natural processes such as channel migration, the downstream movement of wood and gravel, and the movement of all fish and wildlife. Bridges are preferred for all stream crossings and should be designed to maintain the existing stream substrate and gradient, span the bankfull width, or be proven to not have an appreciable increase in backwater elevation at a minimum of a 100-year event and provide adequate vertical clearance for debris likely to be encountered at high water.
 - 4. Culverts shall be designed according to applicable state and federal guidance criteria for fish passage as identified in Water Crossing Design Guidelines, WDFW 2013, as amended, and/or the National Marine Fisheries Service Guidelines for Salmonid Passage at Stream Crossings, 2000 (and subsequent revisions), and in accordance with a state hydraulic project approval. The applicant or property owner shall maintain fish passage.
 - 5. The County may require that existing culverts be removed, replaced, or fish passage barrier status corrected as a condition of approval if the culvert is detrimental to fish passage or water quality.
 - 6. Roadway widths at culvert crossings shall be limited to the minimum width necessary to accommodate the roadway's classification. Culvert length shall be the minimum that is compatible with the roadway width.
 - 7. Shared common crossings are the preferred approach where multiple properties can be accessed by one crossing.
- D. **Private Access.** Access to private development sites may be permitted to cross FWHCAs and their buffers if:
 - 1. There are no feasible alternative alignments. Alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter [8.24](#) RCW.
 - 2. The access is designed to cause the least impact to the habitat conservation area and/or its buffer (which may require the applicant to apply for an exception or deviation from the Development Standards)
 - 3. Access is not achievable through the administrative provisions of WCC 16.16.740 (Buffer Modification).

- E. **Agricultural Uses.** Construction or improvements, other than buildings, that are associated with an agricultural use in the outer 25% of the CPAL designated buffer; or the reconstruction, remodeling, or maintenance of such structures in a habitat conservation area buffer, subject to all of the following criteria:
1. The structure is located within an existing lot of record and is an ongoing agricultural use.
 2. There is no other feasible location with less impact to critical areas. However, this provision does not apply to the reconstruction, maintenance and/or remodeling of preexisting structures.
 3. Clearing and grading activity and impervious surfaces are limited to the minimum necessary to accommodate the proposed structure and, where possible, surfaces shall be made of pervious materials.
 4. Unavoidable adverse effects on critical areas are mitigated in accordance with this chapter.
- F. **Stormwater Management Facilities.**
1. Stormwater management facilities limited to detention/retention/treatment ponds, media filtration, lagoons and infiltration basins may be permitted in a stream buffer, subject to all of the following standards:
 - a. The facility is located in the outer 50% of the standard stream buffer and does not displace or impact a forested riparian community;
 - b. There is no other feasible location for the stormwater facility and the facility is located, constructed, and maintained in a manner that minimizes adverse effects on the buffer and adjacent critical areas;
 - c. The stormwater facility meets applicable county or state stormwater management standards and the discharge water meets state water quality standards; and
 - d. Low impact development approaches have been considered and implemented to the maximum extent feasible.
 2. Stormwater conveyance or discharge facilities such as dispersion trenches, level spreaders, and outfalls may be permitted in a habitat conservation area buffer on a case-by-case basis when the Director determines that all of the following are met:
 - a. Due to topographic or other physical constraints, there are no feasible locations for these facilities outside the buffer;
 - b. The discharge is located as far from the ordinary high-water mark as possible and in a manner that minimizes disturbance of soils and vegetation, except on shoreline slopes where location shall be determined by site characteristics to minimize adverse impacts;
 - c. The discharge outlet is designed to prevent erosion and promote infiltration;
 - d. The discharge meets freshwater and marine state water quality standards, including the need to evaluate cumulative impacts to 303(d) impaired water bodies and total maximum daily load (TMDL) standards as appropriate at the point of discharge. Standards should include filtration through mechanical or biological means, vegetation retention, timely reseeding of disturbed areas, use of grass-lined bioswales for drainage, and other mechanisms as appropriate within approved stormwater “special districts”; and
 - e. The discharge outlet is designed to exclude fish from entering or migrating into stormwater conveyance systems.

3. Phosphorus-reducing BMP structures approved and installed through the homeowners' improvement program (or as may be renamed) within the Lake Whatcom watershed to treat runoff from existing development may be permitted within fish and wildlife habitat conservation area buffers, provided that they are located the maximum feasible distance from the ordinary high-water mark.

G. Recreation.

1. **Trails.** Construction of trails may be permitted in a habitat conservation area buffer when not directly related to a crossing and are subject to all of the following standards:
 - a. There is no other feasible alternative route with less impact on the critical area.
 - b. The trail minimizes erosion and sedimentation, hydrologic alteration, and disruption of natural processes such as channel migration, wood recruitment and natural wildlife movement patterns.
 - c. Private trails shall not exceed four feet in width, and public trails shall not exceed 10 feet in width, though some portions may be wider to meet the requirements of the Americans with Disabilities Act.
 - d. They shall be made of pervious material or elevated where feasible.
 - e. They shall be designed to avoid removal of significant trees.
 - f. Trails may include limited viewing platforms that shall not exceed eight feet in width and shall be made of pervious materials where feasible.
 - g. The trail through riparian (stream) buffer shall be located in the outer 25% of the standard buffer, unless necessary to provide educational opportunities.
 - h. The trail is constructed and maintained in a manner that minimizes disturbance of the buffer and associated critical areas.
2. **Marinas and Launch Ramps.** Construction, reconstruction, repair, and maintenance of marinas and launch ramps may be permitted when consistent with the regulations found in WCC 23.40.060 (Marinas and Launch Ramps), regardless of whether the proposed project is within shoreline jurisdiction or not.
3. **Docks.** Construction, reconstruction, repair, and maintenance of docks may be permitted when consistent with the Army Corps of Engineers' Regional General Permit 6 (Structures in Inland Marine Waters of Washington State) and the regulations found in WCC 23.40.150 (Mooring Structures), regardless of whether or not the proposed project is within shoreline jurisdiction.
4. **Accessory Structures.** When located in the shoreline jurisdiction, residential recreational accessory structures—such as a boat equipment storage shed, a small uncovered boat storage rack, a fire pit, and a pathway leading to the shoreline—may be permitted in an HCA buffer; provided,
 - a. Such structures are located as far from the shoreline as feasible and on previously-impacted buffer areas;
 - b. The maximum area, inclusive of existing lawfully-established accessory structures, shall be limited to 10% of the buffer's area or 500 square feet, whichever is less;
 - c. No more than 20% of the linear length of shoreline is occupied by a building or structure;
 - d. Individual structures shall be limited to a total footprint area of 100-square feet and 10-feet in height; and

- e. The shoreline is 75% or at ratios outlined in WCC 16.16.760, whichever is greater, planted (or replanted) with native vegetation to a minimum depth of 15 feet landward from the ordinary high-water mark.
 - f. This provision shall not apply to residential developments authorized using the constrained lot provisions of WCC 23.40.150(B).
- H. **Relocation of streams**, or portions of streams, when there is no other feasible alternative and when the relocation will result in equal or better habitat and water quality and quantity, and will not diminish the flow capacity of the stream or other natural stream processes; provided, that the relocation meets state Hydraulic Project Approval requirements and that relocation of shoreline streams shall be prohibited unless the relocation has been identified formally by the Washington State Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement or identified in watershed planning documents prepared and adopted pursuant to Chapter [90.82](#) RCW, the WRIA 1 Salmonid Recovery Plan, or the WRIA 1 Watershed Management Board Habitat Project List, or the County's Shoreline Restoration Plan.
- I. **Clearing and grading**, when allowed as part of an authorized activity or as otherwise allowed in these standards, may be permitted; provided, that the following shall apply:
 - 1. Grading is allowed only during the designated dry season, which is typically regarded as May to October of each year; provided, that the County may extend or shorten the designated dry season on a case-by-case basis, based on actual weather conditions. Special scrutiny shall be given to Lakes Samish, Padden, and Whatcom watersheds, and water resource special management areas as described in WCC [20.80.735](#).
 - 2. Appropriate erosion and sediment control measures shall be used at all times, consistent with best management practices in the Department of Ecology's Stormwater Management Manual for Western Washington. The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, disturbed topsoil shall be salvaged and/or redistributed to other areas of the site. Areas shall be revegetated as needed to stabilize the site.
 - 3. The moisture-holding and infiltration capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all are-as of the project area not covered by impervious surfaces.
- J. **Shoreline Stabilization** may be permitted when consistent with the shoreline stabilization regulations found in 23.40.190 (Shoreline Stabilization), regardless of whether the proposed project is within shoreline jurisdiction or not.
- K. **Public Flood Protection Measures** may be permitted, subject to WCC Title [17](#), Article 4 of this chapter and a state hydraulic project approval; provided, that bioengineering or soft armoring techniques shall be used where feasible. Hard bank armoring may occur only in situations where soft approaches do not provide adequate protection.
- L. **In-stream structures** such as, but not limited to, high-flow bypasses, dams, and weirs, shall be allowed only as part of a watershed restoration project as defined pursuant to WCC Title [23](#) or identified in watershed planning documents prepared and adopted under Chapter [90.82](#) RCW, the salmonid recovery plan or watershed management board habitat project list, and the County's shoreline restoration plan and upon acquisition of any required state or federal permits. The

structure shall be designed to avoid adverse effects on stream flow, water quality, or other habitat functions and values.

- M. All other development may be allowed in shellfish protection districts outside of actual shellfish habitats with a valid project permit and when the requirements of subsection O of this section are met.
- N. Alteration or removal of **beaver-built structures** more than two years old; provided, that:
 - 1. The property owner can show that the beaver dam is harming or likely to harm his or her property.
 - 2. It has been demonstrated that beaver deceivers or auto leveler devices cannot appropriately resolve ponding/backwatering that is negatively affecting adjacent land or property.
 - 3. Impacts to wetland, river, or stream functions are minimized and mitigation is provided to compensate for lost ecological value.
 - 4. The property owner obtains an HPA from WDFW prior to initiating alteration or removal of the beaver-built structure.
 - 5. The property owner provides a copy of the HPA to the Director.
- O. On Eliza Island, applicants shall complete the U.S. Fish and Wildlife Service (USFWS) self-assessment to determine whether a USFWS bald eagle permit is needed and, if so, apply for one. Development activities near bald eagle habitat shall be carried out consistent with the National Bald Eagle Guidelines.
- P. **Timber Removal.**
 - 1. To allow for greater flexibility in a development proposal when an application has been submitted for a Conversion Option Harvest Plan (COHP) or a Class IV General FPA, an applicant has the opportunity to remove timber within the standard buffers if the applicant's mitigation measures incorporate all of the performance standards based upon water type listed in Table 3. In conformance with professional standards used by the Washington Department of Natural Resources for forest practices in sensitive areas, all removal of timber within HCA buffers shall be subject to conditions specified by the Director in conjunction with an on-site technical team review in which participation by representatives of the proponent, Ecology, WDFW, WDNR and natural resource representatives of affected Indian tribes is solicited.
 - 2. The intent of this section is to provide an additional opportunity for an applicant to propose some level of timber removal within the riparian habitat zone, as long as it can be demonstrated that the function of the buffer can be maintained at the levels described below. If the buffer, in its current state, cannot meet these standards, then the Director will not be able to give its approval for any activity which would inhibit recovery of or degrade the current buffer.
 - 3. The current performance of a given buffer area is compared to its potential performance as rated by the Soil Conservation Service's most recent Soil Survey of Whatcom County. In consultation with a representative from the Natural Resource Conservation Service, Soil Conservation District, or professional forester, the applicant will determine the capability of the site for woodland management, using the most suitable tree species according to the soil survey, and establish the stand characteristics that would be expected from a mature stand of those species established on site:

4. If the current stand can exceed the riparian protection that could be expected based on site potential, then additional activity may be allowed provided the following performance standards can be met.
5. The provisions of WCC 16.16.720.P above shall not apply within shoreline jurisdiction.

Table 3. Performance-Based Riparian Standards*

Water type	Performance Standards
Type S	<p>Maintain 95% of total LWD recruitment expected to enter freshwater stream(s) from a mature stand; and</p> <p>Maintain 85% of the trees which are greater than 24 inches DBH within 100 feet of the water(s); and</p> <p>Maintain an average of 75% canopy cover (based on canopy densitometer readings at the water(s) edge).</p> <p>The applicant may further request some limited timber harvest of up to 30% of the merchantable timber within the outer 100 feet of any 200-foot required buffer provided the harvest:</p> <ul style="list-style-type: none"> (a) Does not reduce the LWD and canopy requirements; and (b) The applicant will increase the total buffer size by 50 feet to mitigate for the limited timber harvest in the required buffer to provide additional wildlife habitat. The additional 50-foot buffer shall retain a minimum of 50% of the total number of trees with 25% of the total trees left having a diameter at breast height (DBH—4-1/2 feet) greater than 12 inches; and (c) No more than 50% of the dominant trees in the outer 100 feet may be harvested.
Type F	<p>Maintain 85% of total LWD recruitment expected to enter freshwater stream(s) from a mature stand; and</p> <p>Maintain 85% of the trees which are greater than 18 inches DBH within 100 feet of the water(s); and</p> <p>Maintain an average of 75% canopy cover (based on canopy densitometer readings at the water(s) edge).</p>
Types Np and Ns	<p>Maintain 50% of total LWD recruitment expected to enter freshwater stream(s) from a mature stand; and</p> <p>Maintain 85% of the trees which are greater than 24 inches DBH within 50 feet of the water(s); and</p> <p>Maintain an average of 75% canopy cover (based on canopy densitometer readings at the water(s) edge).</p>

* Note: These standards must be exceeded before additional activity can be permitted within the riparian zone. Applicants electing to employ performance-based mitigation in accordance with the above matrix shall include appropriate analysis and justification in their site assessment/habitat management plan.

16.16.730 Habitat Conservation Area Buffers.

In addition to the applicable general protective measures found in WCC [16.16.265](#) and [16.16.720](#), the Director shall have the authority to require buffers from the edges of all habitat conservation areas in accordance with the following:

A. General.

1. Buffers shall be established for activities adjacent to habitat conservation areas as necessary to protect the integrity, functions, and values of the resource. Buffer widths shall reflect the sensitivity of the species or habitat present and the type and intensity of the proposed adjacent human use or activity. Buffers shall not include areas that are functionally and effectively disconnected from the [habitat conservation area](#) by an existing, legally established road or other substantially developed surface.
2. The standard buffer widths required by this Article are considered to be the minimum required and presume the existence of a dense vegetation community in the buffer zone adequate to protect the ecological functions and values at the time of the proposed activity. When a buffer lacks adequate vegetation to protect critical area functions, the Director may increase the standard buffer, require buffer planting or enhancement, and/or deny a proposal for buffer reduction or buffer averaging.
3. The standard buffer shall be measured landward horizontally from the edge of the ordinary high-water mark as identified in the field. The required buffer shall be extended to include any abutting regulated wetland(s), landslide hazard areas, and/or erosion hazard areas and required buffers.
4. For streams, the standard buffer is measured from the ordinary high water on both sides of the stream; provided, that for streams with identified channel migration zones, the buffer shall extend outward horizontally from the outer edge of the channel migration zone on both sides.
5. Portions of streams that flow underground may be exempt from these buffer standards at the Director's discretion when it can be demonstrated that no adverse effects on aquatic species will occur.

B. Habitat Conservation Areas Buffer Widths.

1. Standard buffer widths for habitat conservation areas shall be as identified in Table 4.
2. For habitat conservation areas not listed in Table 4, including those of locally important habitats and species and State priority habitats and areas with which federally listed or state priority species have a primary association, minimum buffers shall be based on habitat a management plan prepared pursuant to WCC 16.16.750. The Director shall have the authority to require a critical area assessment report and/or habitat management plan (HMP) pursuant to WCC 16.16.750, and may require mitigation to ensure that unmitigated adverse effects do not occur.

Table 4. Buffer Requirements for HCAs

Habitat Conservation Area	Buffer Requirement
Type S – Freshwater	Streams – 200 feet Lakes – 100 feet
Type S – Marine	150 feet

Habitat Conservation Area	Buffer Requirement
Type F – Lake	100 feet
Type F – Stream	150 feet
Type Np	50 feet
Type Ns	50 feet
Manmade ponds identified in 16.16.710(C)(10)	25 feet, unless otherwise approved through a Habitat Management Plan pursuant to subsection (B)(2), above, or a Conservation Farm Plan pursuant to Article 8

16.16.740 Habitat Conservation Area Buffer Modification.

Buffer widths may be increased, decreased, or averaged in accordance with the following provisions, which provide flexible approaches to maximize both ecological functions and allowed uses. All mitigation proposed shall be consistent this Chapter.

A. **Buffer Width Increasing.** The Director may require the standard buffer width to be increased or to establish a non-riparian buffer, when such buffers are necessary for one of the following:

1. To protect priority fish or wildlife using the HCA.
2. To provide connectivity when a Type S or F waterbody is located within 300 feet of:
 - a. Another Type S or F water body; or
 - b. A fish and wildlife HCA; or
 - c. A Category I, II or III wetland;
3. To comply with the requirements of a habitat management plan prepared pursuant to WCC 16.16.750.
4. To protect fish and wildlife habitat, maintain water quality, ensure adequate flow conveyance, provide adequate recruitment for large woody debris, maintain adequate water temperatures, or maintain in-water conditions.
5. To compensate for degraded vegetation communities, Clean Water Act 303(d) impaired water bodies, or steep slopes adjacent to the habitat conservation area.
6. To maintain areas for channel migration and/or frequently flooded areas.
7. To protect adjacent or downgradient areas from erosion, landslides, or other hazards.
8. To protect waters from high intensity adjacent land uses.

The increased buffer distance may be limited to those areas that provide connectivity or are necessary to protect habitat functions. Increasing the buffer widths will only be done where necessary to preserve the structure, function and value of the habitat.

B. **Buffer Width Averaging.**

1. Buffer width averaging allows limited reductions of buffer width in specified locations while requiring increases in others. Averaging of required buffer widths shall be allowed only where the applicant demonstrates that all of the following criteria are met:
 - a. The buffer has not been reduced pursuant to subsection (C). Buffer averaging is not allowed if the buffer has been reduced.

- b. Averaging is necessary to accomplish the purpose of the proposal and no reasonable alternative is available due to site constraints caused by existing physical characteristics such as slope, soils, or vegetation; and
 - c. The habitat contains variations in sensitivity due to existing physical characteristics; and
 - d. Averaging will not adversely impact the functions and values of fish and wildlife conservation areas; and
 - e. Averaging meets performance standards for protecting fish species; and
 - f. The total area contained within the buffer after averaging is no less than that contained within the standard buffer prior to averaging; and
 - g. The slopes adjacent to the habitat conservation area within the buffer area are stable and the gradient does not exceed 30%; and
 - h. The buffer width shall not be reduced below 75% of the standard buffer width.
2. In the specified locations where a buffer has been reduced to achieve averaging, the Director may require enhancement to the remaining buffer to ensure no net loss of ecologic function, services, or value.

C. Buffer Width Reduction.

1. The Director shall have the authority to reduce buffer widths on a case-by-case basis; provided, that the general standards for alternatives analysis and mitigation sequencing per WCC [16.16.260](#) have been applied, and when the applicant demonstrates to the satisfaction of the Director that all of the following criteria are met:
- a. The buffer has not been averaged pursuant to subsection (B). Buffer reduction is not allowed if the buffer has been averaged.
 - b. The applicant demonstrates buffer averaging is not feasible.
 - c. The buffer shall not be reduced to less than 75% of the standard buffer specified in Table 4.
 - d. The slopes adjacent to the habitat conservation area within the buffer area are stable and the gradient does not exceed 30% (see Article 3 of this chapter).
 - e. The applicant has demonstrated application of mitigation sequencing as required in WCC 16.16.260 (General Mitigation Requirements).
 - f. To minimize impacts and provide equivalent functions and values as required by this section, the Director may require any or all of the following:
 - i. The use of alternative on-site wastewater systems in order to minimize site clearing, where appropriate;
 - ii. Using low impact development (LID) and LID best management practices where appropriate;
 - g. All buffer reduction impacts are mitigated and result in equal or greater protection of the HCA functions and values. This includes enhancement of existing degraded buffer area and provide mitigation for the disturbed buffer area.
2. In all circumstances when the buffer between the area of reduction and the [habitat conservation area](#) is degraded, this degraded portion of the buffer shall include replanting with native vegetation in order to achieve a dense vegetative community.

- D. **Buffer Width Variance.** Standard buffer widths may be reduced by more than 25% through a variance pursuant to WCC 16.16.273 (Variances); provided, that buffer averaging beyond that allowed in subsection (B) is prohibited.

16.16.750 Habitat Conservation Areas – Review and Reporting Requirements.

- A. When County critical area maps or other sources of credible information indicate that a site proposed for development or alteration is more likely than not to contain habitat conservation areas or buffers, or could adversely affect a habitat area or buffer, the Director shall require a site evaluation (field investigation) by a qualified professional or other measures to determine whether or not the species or habitat is present. If no habitat conservation areas are present, then review will be considered complete. If the site evaluation determines that the species or habitat is present, the Director shall require a critical areas assessment report or habitat management plan (HMP), except; provided, that
1. No report or evaluation shall be required for developments outside of buffers within the upland portions of shellfish conservation areas.
 2. The Director shall have the authority to waive the report requirement when he/she determines that the project is a single-family building permit development that involves less than one-half acre of clearing and/or vegetation removal and will not directly disturb the species, or specific areas or habitat features that comprise the habitat conservation area (nest trees, breeding sites, etc.) as indicated by a site plan or scaled drawing of the proposed development.
- B. In addition to the reporting requirements of WCC [16.16.255](#), the habitat conservation area assessment report/HMP shall describe the characteristics of the subject property and adjacent areas, including condition, quality, function, and values of the habitat conservation area at a scale appropriate to the function being evaluated (see WAC [365-196-830\(6\)](#)). The assessment shall include determination of appropriate buffers as set forth in WCC [16.16.740](#). The assessment shall also include field identification and/or delineation of habitat areas, analysis of historical aerial photos, and review of public records as necessary to determine potential effects of the development action on critical areas. Assessment reports shall include the following site- and proposal-related information unless the Director determines that any portion of these requirements is unnecessary given the scope and/or scale of the proposed development:
1. A map drawn to a common scale or survey showing the following information:
 - a. Topographic, hydrologic, and vegetative features.
 - b. The location and description of wildlife and habitat features, and all critical areas on or within 200 feet of the site, or farther, given the scale appropriate to the function being evaluated.
 - c. Proposed development activity.
 - d. Existing physical features of the site including buildings, fences, and other structures, roads, parking lots, utilities, water bodies, etc.
 - e. Surrounding land uses and zoning (to ensure appropriate buffer).
 2. An analysis, including an analysis of cumulative impacts, of how the proposed development activities will affect the fish and wildlife habitat conservation area and/or buffer, including the area of direct disturbance; effects of stormwater management; effects on any 303(d) impaired

- water bodies; proposed alteration to surface or subsurface hydrology; natural drainage or infiltration patterns; clearing and grading impact; temporary construction impacts; effects of increased intensity of use (including noise, light, human intrusion, etc.).
3. Provisions to reduce or eliminate adverse impacts of the proposed development activities on the functions and values of the habitat conservation area including, but not limited to:
 - b. Buffering;
 - c. Clustering of development;
 - d. Retention of native vegetation;
 - e. Access limitations;
 - f. Seasonal restrictions on construction activities in accordance with the guidelines developed by the Washington State Department of Fish and Wildlife, the U.S. Army Corps of Engineers, the salmonid recovery plan and/or other agency or tribe with expertise and jurisdiction over the subject species/habitat; and
 - g. Other appropriate and proven low impact development techniques.
 4. Management recommendations developed by WDFW through its Priority Habitat and Species program.
 5. Additional information including, but not limited to, direct observations of species use or detailed physical and biological characteristics both on and off site at an appropriate scale (see WAC [365-196-830](#)(6)). The assessment of off-site conditions shall be based on available information and shall not require accessing off-site properties.
 6. Applicants near a bald eagle nest shall complete the U.S. Fish and Wildlife Service (USFWS) self-assessment to determine whether a USFWS bald eagle permit is needed, and if so, apply for one. Development activities near bald eagle habitat shall be carried out consistent with the National Bald Eagle Guidelines.
- C. All habitat management plans should be prepared in consultation with the State Department of Fish and Wildlife and/or other federal, state, local or tribal resource agencies with jurisdiction and expertise in the subject species/habitat, and shall contain a review of the most current best available science applicable to the subject species/habitat.
 - D. For single-family building permits, the applicant may hire a qualified professional to prepare the assessment report or may request that the County assess the regulated HCA(s) and buffers and determine the impacts associated with the project, subject to the following:
 1. Availability of County staff shall be at the discretion of the Director and subject to workload and scheduling constraints.
 2. Fees for County staff services shall be in accordance with the Unified Fee Schedule.

16.16.760 Habitat Conservation Areas – Mitigation Standards.

Activities that adversely affect habitat conservation areas and/or their buffers as determined by the Director shall include mitigation sufficient to achieve no net loss of habitat functions and values or an ecological lift in accordance with WCC [16.16.260](#) and this section.

- A. Mitigation in the form of habitat restoration or enhancement is required when a habitat is altered permanently as a result of an approved project. Alterations shall not result in net loss of habitat.

- B. All mitigation sites shall have buffers consistent with the buffer requirements established in WCC [16.16.740](#); provided, that the Director shall have the authority to approve a smaller buffer when existing site constraints (such as a road) prohibit attainment of the standard buffer. Mitigation actions shall not create buffer encumbrances on adjoining properties.
- C. Mitigation projects involving in-water work including, but not limited to, installation of large woody debris shall be designed to ensure there are no adverse hydraulic effects on up- or downgradient properties. The County Public Works River and Flood Division shall review any such mitigation projects for compliance with this provision.
- D. As applicable, apply mitigation standards of the Army Corps of Engineer Regional General Permit 6 for inland marine waters as amended February 12, 2020.
- E. For permanent impacts to habitat conservation areas or their buffers, mitigation shall be provided at the following ratios, unless the Director approves a habitat management plan with greater ratios:
 - 1. Where the mitigation is in place and functional before the impacts occur (i.e., advanced mitigation), at a ratio determined by the functions, values, and goals of an advanced mitigation plan.
 - 2. Where the mitigation is in place within 1 year of the impact occurring, at a 1:1 ratio (area or function).
 - 3. Where the mitigation is placed after 1 year of the impact occurring, at a 1.25:1 ratio (area or function).
 - 4. For retroactive permits the Director may require the ratio shall be up to double the ratio in subsection (3) above.

Article 8. Conservation Program on Agriculture Lands (CPAL)

16.16.800 Purpose.

- A. The well-being of farms and ranches in Whatcom County depends in part on good quality soil, water, air, and other natural resources. Agricultural operations that incorporate protection of the environment, including critical areas and their buffers as defined by this chapter, are essential to achieving this goal.
- B. The purpose of the CPAL program is to allow farmers practicing ongoing agricultural activities that may affect critical areas, their functions and values, and/or their buffers to do so either (1) in accordance with the standard requirements of this chapter or (2) pursuant to a conservation farm plan voluntarily prepared and approved pursuant to this article. If farmers and ranchers are willing to enter into the CPAL program, and demonstrate no impacts to critical areas through the assessment, then flexibility in these provisions may be extended to them. If not, then they must observe the standard provisions of this chapter.
- C. This program shall be subject to continued monitoring and adaptive management to ensure that it meets the purpose and intent of this chapter.

16.16.810 Resource Concerns.

Agricultural operations, including the keeping of horses and other large animals, have the potential to create adverse impacts to critical areas. It is the County's policy to minimize such impacts.

- A. **Nutrient Pollution of Water.** Animal waste contains nutrients (nitrogen and phosphorous). With each rain, these wastes can wash off the land and into the nearest stream, lake, or wetland. In surface water, phosphorous and nitrogen fertilize aquatic plants and weeds. As the plants and weeds proliferate and decay, the dissolved oxygen that fish need to survive is depleted. Nitrogen in the form of nitrate is easily dissolved in and carried with rainfall through our permeable soils to groundwater. Nitrate concentrations exceeding the maximum contaminate level for safe drinking water are found in many wells of Whatcom County. These can present a significant human health risk, particularly to the very old and young.
- B. **Pathogen Pollution of Water.** Manure contains bacteria and other pathogens. These can make the water unfit for drinking without treatment or shellfish unfit for human consumption. They can also make water unsafe for human contact and recreational sports such as fishing, swimming or water skiing. Both surface and groundwater are vulnerable to this type of pollution.
- C. **Sediment Pollution to Surface Water.** Regardless of the amount of supplemental feed provided, large animals will continue grazing until all palatable vegetation is gone. On especially small lots (one or two acres), the animals that are allowed free and continuous access to vegetation quickly graze-out and trample pasture grasses and forbs. These areas are then susceptible to invasion by weeds, including noxious weeds, and brush. The resulting bare ground is subject to erosion from wind and water. Lands that lack adequate vegetation are subject to erosion, and contaminated runoff from these areas can enter water bodies and wetlands and interfere with fish and wildlife habitat.
- D. **Degradation of Riparian Areas.** The term "riparian" is defined in Article 9 of this chapter and includes the areas adjacent to streams, lakes, marine shorelines and other waters. A healthy riparian area is essential to protecting fish and wildlife, including salmon and shellfish. Dense riparian vegetation

along the water's edge will slow and protect against flood flows; provide infiltration and filtering of pollutants; secure food and cover for fish, birds and wildlife; and keep water cooler in summer. If it occurs, uncontrolled grazing has the potential to remove important riparian vegetation.

16.16.820 Classification and Applicability.

- A. A conservation farm plan identifies the farming or ranching activities and the practice(s) necessary to avoid their potential negative impacts (resource concerns). Practice selection depends upon the types of livestock raised and crops grown. Based upon the type and intensity of the operation, some generalizations can be made as to the resource concerns and remedies that apply.
- B. Some operations present relatively low risks to critical areas because of their benign nature, timing, frequency, or location. For these operations, the resource concerns and remedies are relatively easy to identify and implement. These are described in more detail as Type 1 agricultural operations subject to standardized conservation farm plans in WCC [16.16.830](#) and [16.16.840\(A\)](#).
- C. Where the potential negative impacts to critical areas are moderate or high, solutions are more difficult to formulate and implement. In those circumstances, a more rigorous planning process is required. In such cases, a formal written plan shall provide the desired environmental protection. These types of operations are described as agricultural operations requiring custom conservation farm plans in WCC [16.16.830](#) and [16.16.840\(B\)](#) or (C).
- D. Any agricultural activity that an assessment by the Conservation District or a Conservation District-approved third party determines has no adverse impacts to critical areas, based on number/type of animals, type of soils, productivity of the pasture, among other factors, or already-implemented best management practices, shall not be required to have a farm plan and shall be deemed to be in compliance with the provisions of CPAL and this Chapter.
- E. Agricultural activities that qualify for coverage include:
 1. Type 1 Operations.
 - a. To qualify as a Type 1 operation, a farm shall not exceed one animal unit per one acre of grazable pasture. These operations present a low potential risk to critical area degradation including ground/surface water contamination because the animals kept generate fewer nutrients than can be used by the crops grown there.
 - b. Critical areas on Type 1 operations are protected against the potential negative impacts of agricultural activities through the implementation of an approved standard conservation farm plan prepared in accordance with WCC [16.16.830](#) and [16.16.840\(A\)](#).
 - c. Those operators qualifying for a Type 1 (standard) conservation farm plan may elect to do a Type 2 (custom) conservation farm plan if they want to use "Prescribed Grazing" (NRCS Practice 528A) to manage vegetative filter strips installed alongside critical areas.
 2. Type 2 Operations.
 - a. Type 2 operations are farms that include, but are not limited to, those that exceed one animal unit per one acre of grazable pasture; farms that have orchards, vineyards, small-fruit field or row crops; and drainage improvement districts. These operations present a potential moderate risk to critical area degradation, including ground or surface water contamination, because the nutrients applied from manure or commercial fertilizers may exceed that which can be easily used by the crops grown there without careful planning and

- management. The agricultural activities are also likely to be much more intense than Type 1 operations, posing greater potential risks to other critical areas.
- b. Critical areas on Type 2 operations are protected against the potential negative impacts of agricultural activities through the implementation of an approved custom conservation farm plan prepared in accordance with WCC [16.16.830](#) and [16.16.840\(B\)](#).
3. Type 3 Operations.
- a. Type 3 operations include dairies and animal feeding operations/concentrated animal feeding operations (AFO/CAFOs). These operations are already regulated by state and federal governments (see Chapter [90.64](#) RCW et seq.; [40](#) CFR [122.23](#) and [40](#) CFR Part 412).
 - b. Critical areas are protected against the potential negative impacts of Type 3 agricultural activities through the implementation of an approved custom conservation farm plan prepared in accordance with WCC [16.16.830](#) and [16.16.840\(C\)](#).

16.16.830 Conservation Farm Plans – General Standards.

- A. All conservation farm plans shall include all practicable measures, including best management practices, to maintain existing critical area functions and values.
- B. A conservation farm plan shall not recommend nor authorize:
 - 1. Filling, draining, grading, or clearing activities within critical areas or buffers:
 - a. Except on ongoing agricultural land where such activities are a demonstrated essential part of the ongoing agricultural use or part of routine maintenance; and
 - b. When it does not expand the boundaries of the ongoing agricultural use; and
 - c. The appropriate permits for doing so have been obtained.
 - 2. The construction of new structures. New structures shall be constructed in compliance with the applicable standard requirements of this chapter and the Whatcom County Code.
 - 3. New or expanded drainage systems. Routine maintenance of existing drainage systems may be allowed, but only in compliance with the Washington State Hydraulic Code (Chapter [220-660](#) WAC) and the best management practices found in the “Drainage Management Guide for Whatcom County Drainage Improvement Districts.”
 - 4. The conversion of land to agricultural use.
- C. Other plans prepared for compliance with state or federal regulations (e.g., nutrient management plans), or to obtain an accredited private third-party certification (e.g., GLOBALG.A.P.), or similar plans may be used as part of or in lieu of a conservation farm plan if the Director determines they adequately address the requirements of this title.

16.16.840 Conservation Farm Plan Requirements.

- A. **Type 1 (Standard) Conservation Farm Plans.** Owners of Type 1 operations have limited options to control animal waste because their operations are small. The required conservation farm plan can be prepared by the landowner and include a simple map of the property, a standard checklist designed to protect water quality, and the following additional components:
 - 1. System Siting and Design. Barns, corrals, paddocks, or lots are to be sited to avoid runoff directly into critical areas.

- a. Where structures exist in critical areas or buffers and cannot be relocated, corrective measures must be taken if necessary to avoid runoff of pollutants and bacteria to critical areas.
- b. Along regulated streams, lakes, ponds, or wetlands (Note that ditched channels may or may not meet the definition of a stream. See Article 9, Definitions):
 - i. Where trees and shrubs already exist, they shall be retained and managed to preserve the existing functions of the buffer pursuant to the USDA Natural Resource Conservation Service's (NRCS) Conservation Practice 391, "Riparian Forest Buffer."
 - ii. Where trees and shrubs are absent, a strip or area of herbaceous vegetation shall be established and maintained between barns, corrals, paddocks, and grazing areas pursuant to the NRCS Conservation Practice 393, "Vegetative Filter Strip," and USDA's buffer width design tool for surface runoff found in the publication "Conservation Buffers Design Guidelines for Buffers, Corridors, and Greenways." Livestock shall be excluded from the vegetative filter strips established to protect critical areas pursuant to NRCS Practice 472, "Access Control."
2. Manure Collection, Storage, and Use. Manure and soiled bedding from stalls and paddocks are to be removed and are to be placed in a storage facility protected from rainfall so that runoff does not carry pollutants and bacteria to critical areas. Manure is to be used as cropland fertilizer. The rate and timing of manure application shall not exceed crop requirements or cause surface or groundwater water quality degradation. It is to be applied in a manner to avoid runoff of nutrients and bacteria to critical areas.
3. Pasture Management. Pastures are to be established and managed pursuant to "Prescribed Grazing" (NRCS Practice 528A).
4. Exercise or Barn Lots. These normally bare areas must be stabilized and managed to prevent erosion and sediment movement to critical areas. A diversion terrace shall be installed, where necessary, to hinder flow to and across the lot or paddock. Runoff from the lot must be treated via the vegetative filter strip or riparian buffer as described in subsection (A)(1) of this section to avoid contaminants reaching critical areas.
5. Existing native vegetation within critical areas and their buffers shall be retained.
6. Chemical additions, including fungicides, herbicides, and pesticides, shall not be applied within 50 feet of standing or flowing water except by a licensed applicator.
7. Fertilizers Other Than Manure. The rate and timing of fertilizer application shall not exceed crop requirements, or cause surface or groundwater quality degradation.
- B. **Type 2 (Custom) Conservation Farm Plans.** In addition to the elements of a Type 1 conservation farm plan, Type 2 plans must address the following:
 1. In developing the elements that an approved conservation farm plan must contain, the Director may authorize the use of the methods, technologies, and best management practices of the Natural Resources Conservation Service. Other standards may be used when such alternatives have been developed by a land grant college or a professional engineer with expertise in the area of farm conservation planning.

2. Implementation of the conservation farm plan must protect existing values and functions of critical areas. Benchmark conditions are to be captured and described in the plan. This may consist of photo documentation, written reports or both.
3. Wetlands shall be conserved pursuant to the provisions of Title 180 – National Food Security Act Manual (see <http://www.nrcs.usda.gov/programs/wetlands/index.html>).
4. Custom conservation farm plans need not address the application, mixing, and/or loading of insecticides, fungicides, rodenticides, and pesticides; provided, that such activities are carried out in accordance with the Washington State Department of Agriculture and all other applicable regulations including, but not limited to: the provisions of Chapter [90.48](#) RCW, the Clean Water Act, United States Code (USC) Section 136 et seq. (Federal Insecticide, Fungicide, and Rodenticide Act), Chapter [15.58](#) RCW (Pesticide Control Act), and Chapter [17.21](#) RCW (Pesticide Application Act).
5. Where potential significant impacts to critical areas are identified through a risk assessment, then plans shall be prepared to prevent and/or mitigate same by:
 - a. A planning advisor; or
 - b. Through the USDA Natural Resources Conservation Service; or
 - c. The Whatcom conservation district; or
 - d. An eligible farmer or rancher, who participates in this program by:
 - i. Attending a County-sponsored or approved workshop, and
 - ii. Conducting a risk assessment of their farm or ranch, alone or with a planning advisor's assistance, and
 - iii. Developing a plan to prevent and/or mitigate any identified risks, and
 - iv. Having the plan approved pursuant to WCC [16.16.290](#).

One resource for guidance is "Tips on Land and Water Management for Small Farm and Livestock Owners in Whatcom County, Washington." It can be obtained from the Whatcom conservation district's website: <http://www.whatcomcd.org/small-farm>. Other guidance may also be used, provided it is consistent with the best available science criteria in WAC [365-195-900](#) through [365-195-925](#).

- C. **Type 3 (Custom) Conservation Farm Plans.** Conservation farm plans meeting the criteria of state and federal laws pertaining to AFO/CAFOs (see Chapter [90.64](#) RCW et seq., [40](#) CFR [122.23](#) and [40](#) CFR Part 412) fulfill the requirements of this chapter. (See U.S. EPA "Final Guidance – Managing Manure Guidance for Concentrated Animal Feeding Operations (CAFOs)" at: <http://epa.gov/guide/cafo/>).

16.16.850 Preparation and Approval of Conservation Farm Plans.

Conservation farm plans shall be subject to County review, approval, monitoring, adaptive management, and enforcement in accordance with the following:

- A. The Director shall review and approve all conservation farm plans.
- B. Table 5 shows which entities may prepare and/or provide technical assistance and recommendations in preparing which type of conservation farm plan:

Table 5. Who May Prepare Conservation Farm Plans

Who May Prepare	Type 1 Operations	Type 2 and 3 Operations
The farm operator	X	
Whatcom County planning and development services	X	X
A qualified consultant	X	
A watershed improvement district (for a farm or ranch that is within its boundaries)	X	
The Whatcom conservation district	X	X
A planning advisor	X	X

- C. The farm operator can seek conservation farm plan approval directly through the department of planning and development services, or grant permission to any of the entities listed in Table 5 to prepare and submit it. If the conservation farm plan is prepared by any entity listed in Table 5 other than the Whatcom conservation district, the Department will conduct a site visit prior to plan approval in order to assess critical areas and sufficiency of the plan to protect water quality and critical areas.

16.16.860 Monitoring and Compliance.

- A. The Director and/or the farm operator shall periodically monitor plan implementation and compliance beginning one year after plan approval and every two years thereafter, through the life of the plan, or more frequently at the Director's discretion. The monitoring may include periodic site inspections, self-assessment by the farm operator, or other appropriate actions. For a time period of up to every five years, self-certification is allowed for Type 1 conservation farm plans, or if the plan is prepared by the Whatcom conservation district or planning advisor and approved by the department. If a sufficient self-certification monitoring report (must include photos and implemented best management practices) is not submitted within 30 days of request, County staff may make a site visit. Site visits will be coordinated with the landowner/farm operator. Prior to carrying out a site inspection, the Director shall provide reasonable notice to the owner or manager of the property as to the purpose or need for the entry, receive confirmation, and afford at least two weeks in selecting a date and time for the visit. At the landowner's/farm operator's discretion, staff may be accompanied by the planning advisor or Whatcom conservation district planner.
- B. Where the planning advisor has reason to believe that there is an imminent threat to public health or significant pollution with major consequences occurring as a result of the agricultural operations, the planning advisor will advise the agricultural operator of his or her concerns in writing. While the planning advisor may provide suggestions for resolving the issue, the responsibility for compliance and resolution of issues rests solely with the farm operator. If compliance issues are not promptly resolved, the planning advisor shall promptly withdraw from representing the farm operator, notify the Director of such, and may report such situations to the Director for subsequent action and enforcement in accordance with WCC [16.16.285](#).

- C. The farm practices described in an approved conservation farm plan will be deemed to be in compliance with this chapter so long as the landowner/farm operator is properly and fully implementing the practices and responding to possible adaptive management requirements according to the timeline in the plan. This will be verified through conservation farm plan implementation monitoring.
- D. Agricultural operations shall cease to be in compliance with this article, and a new or revised conservation farm plan will be required, when the Director determines that any of the following has occurred:
1. When a farm or ranch operator fails to properly and fully implement and maintain their conservation farm plan.
 2. When implementation of the conservation farm plan fails to protect critical areas. If so, a new or revised conservation farm plan shall be required to protect the values and functions of critical areas at the benchmark condition.
 3. When substantial changes in the agricultural activities of the farm or livestock operation have occurred that render the current conservation farm plan ineffective. Substantial changes that render a conservation farm plan ineffective are those that:
 - a. Degrade baseline critical area conditions for riparian and wetland areas that existed when the plan was approved; or
 - b. Result either in a direct discharge or substantial potential discharge of pollution to surface or ground water; or
 - c. The type of agricultural practices changes from Type 1 to Type 2, Type 2 to Type 3, or Type 1 to Type 3 operations.
 4. When the increase in livestock or decrease in land base or nutrient export results in the farm being out of balance between the nutrients generated and to be used by growing crops.
 5. When a new or revised conservation farm plan is required, and the farm operator has been so advised in writing and a reasonable amount of time has passed without significant progress being made to develop said plan. Refusal or inability to provide a new plan within a reasonable period of time shall be sufficient grounds to revoke the approved conservation farm plan and require compliance with the standard provisions of this chapter.
 6. When an owner or manager denies the Director reasonable access to the property for technical assistance, monitoring, or compliance purposes, then the Director shall document such refusal of access and notify the owner of his/her findings. The owner shall be given an opportunity to respond in writing to the findings of the Director, propose a prompt alternative access schedule, and to state any other issues that need to be addressed. Refusal or inability to comply with an approved conservation farm plan within a reasonable period of time shall be sufficient grounds to revoke said plan and require compliance with the standard provisions of this chapter.
- E. With one exception, Whatcom County will not use conservation farm plans (standard or custom) as an admission by the landowner that s/he has violated this chapter. Disclosure of current farm practices, structures on conservation farm plan documents, or observations made through monitoring inspections or conservation farm plan approval, will not be used to bring other enforcement actions against a farm operator. The exception is that when matters of major life, health, environment, or safety issues, as determined by the Director, are observed and the

landowner fails to immediately and permanently remediate, then the observations may be used in an enforcement action.

16.16.870 Limited Public Disclosure.

- A. Conservation farm plans will not be subject to public disclosure unless required by law or a court of competent jurisdiction;
- B. Provided, that the County will collect summary information related to the general location of a farming enterprise, the nature of the farming activity, and the specific best management practices to be implemented during the conservation farm plan review process. The summary information shall be provided by the farm operator or his/her designee and shall be used to document the basis for the County's approval of the plan.
- C. Upon request, the County may provide a sample conservation farm plan, exclusive of site- or property-specific information, to give general guidance on the development of a conservation farm plan.

Article 9. Definitions

16.16.900 Definitions.

The terms used throughout this program shall be defined and interpreted as indicated below. When consistent with the context, words used in the present tense shall include the future; the singular shall include the plural, and the plural the singular. Any words not defined herein shall be defined pursuant to Titles 20 (Zoning), 22 (Land Use and Development), 23 (Shoreline Management Program), or their common meanings when not defined in code.

“Accessory structure” means a structure that is incidental and subordinate in intensity to a primary use and located on the same lot as the primary use. Barns, garages, storage sheds, and similar appurtenances are examples. Structures that share a common wall with a primary residential structure shall be considered an extension of the primary structure, rather than an accessory structure.

“Active alluvial fan” means a portion or all of a fan that has experienced channel changes, erosion, or deposition. Active fans can be identified based on determination by field geomorphic and topographic evidence, and by historical accounts.

“Activity” means human activity associated with the use of land or resources.

“Adaptive management” means using scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. Management policy may be adapted based on a periodic review of new information.

“Adequate water supply” means a water supply that meets requirements specified in the Whatcom County drinking water ordinance (WCC Chapter [24.11](#)).

“AFO” is an acronym for animal feeding operation.

“Agricultural activities” means those activities directly pertaining to the production of crops or livestock including, but not limited to: cultivation; harvest; grazing; animal waste storage and disposal; fertilization; the operation and maintenance of farm and stock ponds or drainage ditches, irrigation systems, and canals; and normal maintenance, repair, or operation of existing serviceable structures, facilities, or improved areas. The construction of new structures or activities that bring a new, non-ongoing agricultural area into agricultural use are not considered agricultural activities.

“Agricultural land” is land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, or animal products, or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW [84.33.100](#) through [84.33.140](#), or livestock, and/or lands that have been designated as capable of producing food and fiber, which have not been developed for urban density housing, business, or other uses incompatible with agricultural activity.

“Alluvial fan” means a fan-shaped deposit of sediment and organic debris formed where a stream flows or has flowed out of a mountainous upland onto a level plain or valley floor because of a sudden change in sediment transport capacity (i.e., significant change in slope or confinement).

“Alluvium” is a general term for clay, silt, sand, gravel, or similar other unconsolidated detrital materials, deposited during comparatively recent geologic time by a stream or other body of running water, as a sorted or semi-sorted sediment in the bed of the stream or on its floodplain or delta.

“Alteration” means any human-induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing (vegetation), draining, construction, compaction, excavation, or any other activity that changes the character of the critical area.

“Anadromous fish” means fish species that spend most of their lifecycle in salt water, but return to freshwater to reproduce.

“Animal unit” means 1,000 pounds of livestock live weight.

“Aquifer” means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs (Chapter [173-160](#) WAC).

“Aquifer susceptibility” means the ease with which contaminants can move from the land surface to the aquifer based solely on the types of surface and subsurface materials in the area. Susceptibility usually defines the rate at which a contaminant will reach an aquifer unimpeded by chemical interactions with the vadose zone media.

“Aquifer vulnerability” is the combined effect of susceptibility to contamination and the presence of potential contaminants.

“Bankfull width” means:

1. For streams – The measurement of the lateral extent of the water surface elevation perpendicular to the channel at bankfull depth. In cases where multiple channels exist, bankfull width is the sum of the individual channel widths along the cross section (see Forest Practices Board Manual, Section 2).
2. For lakes, ponds, and impoundments – Line of mean high water.
3. For tidal water – Line of mean high tide.
4. For periodically inundated areas of associated wetlands – Line of periodic inundation, which will be found by examining the edge of inundation to ascertain where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland.

“Base flood” is a flood event having a 1% chance of being equaled or exceeded in any given year, also referred to as the 100-year flood. Designations of base flood areas on flood insurance map(s) always include the letters A (zone subject to flooding during a 100-year flood, but less so than V zones) or V (zone subject to the highest flows, wave action, and erosion during a 100-year flood).

“Bedrock” is a general term for rock, typically hard, consolidated geologic material that underlies soil or other unconsolidated, superficial material or is exposed at the surface.

“Best available science” means information from research, inventory, monitoring, surveys, modeling, synthesis, expert opinion, and assessment that is used to designate, protect, or restore critical areas. As defined by WAC [365-195-900](#) through [365-195-925](#), best available science is derived from a process that includes peer-reviewed literature, standard methods, logical conclusions and reasonable inferences, quantitative analysis, and documented references to produce reliable information.

“Best management practices” means conservation practices or systems of practices and management measures that:

1. Control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxins, and sediment;
2. Minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of waters, wetlands, and other fish and wildlife habitat;
3. Control plant site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material.

“Buffer (the buffer zone)” means the area adjacent to the outer boundaries of critical areas including wetlands; habitat conservation areas such as streams, lakes, and marine shorelines; and/or landslide hazard areas that separates and protects critical areas from adverse impacts associated with adjacent land uses.

“CAFO” is an acronym for concentrated animal feeding operation.

“CFR” is an acronym for Code of Federal Regulations.

“Channel migration zone (CMZ)” means the area along a river or stream within which the channel can reasonably be expected to migrate over time as a result of normally occurring processes. It encompasses that area of current and historic lateral stream channel movement that is subject to erosion, bank destabilization, rapid stream incision, and/or channel shifting, as well as adjacent areas that are susceptible to channel erosion. There are three components of the channel migration zone: (1) the historical migration zone (HMZ) – the collective area the channel occupied in the historical record; (2) the avulsion hazard zone (AHZ) – the area not included in the HMZ that is at risk of avulsion over the timeline of the CMZ; and (3) the erosion hazard area (EHA) – the area not included in the HMZ or the AHZ that is at risk of bank erosion from stream flow or mass wasting over the timeline of the CMZ. The channel migration zone may not include the area behind a lawfully constructed flood protection device. Channel migration zones shall be identified in accordance with guidelines established by the Washington State Department of Ecology.

“Clearing” means destruction of vegetation by manual, mechanical, or chemical methods and that may result in exposed soils. Clearing includes, but is not limited to, actions such as cutting, felling, thinning, flooding, killing, poisoning, girdling, uprooting, or burning.

“Commercial fish” means those species of fish that are classified under the Washington State Department of Fish and Wildlife Food Fish Classification as commercial fish (WAC [220-12-010](#)).

“Compensatory mitigation” means a project for the purpose of mitigating, at an equivalent or greater level, unavoidable critical area and buffer impacts that remain after all appropriate and practicable avoidance and minimization measures have been implemented. Compensatory mitigation includes, but is not limited to: wetland creation, restoration, enhancement, and preservation; stream restoration and relocation; rehabilitation; and buffer enhancement.

“Conservation” means the prudent management of rivers, streams, wetlands, wildlife and other environmental resources in order to preserve and protect them. This includes the careful use of natural resources in order to prevent depletion or harm to the environment.

“Conservation easement” means a legal agreement that the property owner enters into to restrict uses of the land for purposes of natural resources conservation. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property.

“Contaminant” means any chemical, physical, biological, or radiological substance that does not occur naturally in groundwater, air, or soil or that occurs at concentrations greater than those in the natural levels (Chapter [172-200](#) WAC).

“County” means Whatcom County, Washington.

“CPAL” is an acronym for Conservation Program on Agriculture Lands.

“Critical aquifer recharge areas” means areas designated by WAC [365-190-080](#)(2) that are determined to have a critical recharging effect on aquifers (i.e., maintain the quality and quantity of water) used for potable water as defined by WAC [365-190-030](#)(2).

“Critical area tract” means land held in private ownership and retained in an open undeveloped condition (native vegetation is preserved) in perpetuity for the protection of critical areas.

Critical Areas. The following areas shall be regarded as critical areas:

1. Critical aquifer recharge areas;
2. Wetlands;
3. Geologically hazardous areas;
4. Frequently flooded areas;
5. Fish and wildlife habitat conservation areas.

“Critical areas report” means a report prepared by a qualified professional or qualified consultant based on best available science, and the specific methods and standards for technical study required for each applicable critical area. Geotechnical reports and hydrogeological reports are critical area reports specific to geologically hazardous areas and critical aquifer recharge areas, respectively.

“Critical facilities (essential facilities)” means buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes pursuant to the most recently adopted International Building Code (IBC).

“Critical habitat” means habitat areas with which endangered, threatened, sensitive or monitored plant, fish, or wildlife species have a primary association (e.g., feeding, breeding, rearing of young, migrating). Such areas are identified herein with reference to lists, categories, and definitions

promulgated by the Washington State Department of Fish and Wildlife as identified in WAC [232-12-011](#) or [232-12-014](#); in the Priority Habitat and Species (PHS) Program of the Department of Fish and Wildlife; or by rules and regulations adopted by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or other agency with jurisdiction for such designations.

“Critical saltwater habitat” includes all kelp beds, eelgrass beds, spawning and holding areas for forage fish, such as Pacific herring, surf smelt and Pacific sandlance; subsistence, commercial and recreational shellfish beds; mudflats, intertidal habitats with vascular plants; and areas with which priority species have a primary association.

“Cumulative impact” means effects on the environment that are caused by the combined results of past, current and reasonably foreseeable future activities. Evaluation of such cumulative impacts should consider: (1) current circumstances affecting the critical area and relevant natural processes; (2) reasonably foreseeable future development that may affect the critical area; and (3) beneficial effects of any established regulatory programs under other local, state, and federal laws.

“Debris flow” means a moving mass of rock fragments, soil, and mud, more than half of the particles being larger than sand size; a general term that describes a mass movement of sediment mixed with water and air that flows readily on low slopes.

“Debris torrent” means a violent and rushing mass of water, logs, boulders and other debris.

“Deepwater habitats” means permanently flooded lands lying below the deepwater boundary of wetlands. Deepwater habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium in which the dominant organisms live. The boundary between wetland and deepwater habitat in the marine and estuarine systems coincides with the elevation of the extreme low water of spring tide; permanently flooded areas are considered deepwater habitats in these systems. The boundary between wetland and deepwater habitat in the riverine and lacustrine systems lies at a depth of two meters (6.6 feet) below low water; however, if emergent vegetation, shrubs, or trees grow beyond this depth at any time, their deepwater edge is the boundary.

“Delineation” means the precise determination of wetland/non-wetland boundaries in the field according to the application of the specific method described in the Corps of Engineers Wetlands Delineation Manual, 1987 Edition, as amended, and the Western Mountains, Valleys, and Coast Region Supplement (Version 2.0) 2010, or as revised.

Designated Species, Federal. Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status.

Designated Species, State. State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable or

declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC [232-12-014](#) (state endangered species) and WAC [232-12-011](#) (state threatened and sensitive species). The State Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status.

“Development” means any land use activity, action, or manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, site work, and installation of utilities; land division, binding site plans, and planned unit developments; dredging, drilling, dumping, filling, grading, clearing, or removal of any sand, gravel, or minerals; shoreline stabilization works, driving of piling, placing of obstructions; or any project of a permanent or temporary nature that interferes with the normal public use of the surface of the waters overlying lands subject to the act at any stage of water level. "Development" does not include dismantling or removing structures if there is no other associated development or redevelopment.

“Director” means the director of the Whatcom County Department of Planning and Development Services, or his/her designee.

“Ditch” or “drainage ditch” means an artificially created watercourse constructed to convey surface or groundwater. Ditches are graded (manmade) channels installed to collect and convey water to or from fields and roadways. Ditches may include:

1. Irrigation ditches;
2. Waste ways;
3. Drains;
4. Outfalls;
5. Operational spillways;
6. Channels;
7. Stormwater runoff facilities; or
8. Other wholly artificial watercourses.

This definition is not meant to include artificial water courses that conveys or historically conveyed (prior to human alteration) waters of the state, is used by anadromous or other fish populations, or flows directly into shellfish habitat conservation areas.

“Emergency activities” means those activities which require immediate action within a time too short to allow full compliance with this chapter due to an unanticipated and imminent threat to public health, safety or the environment. Emergency construction does not include development of new permanent protective structures where none previously existed. All emergency construction shall be consistent with the policies of Chapter [90.58](#) RCW and this chapter. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not an emergency.

“Emergent wetland” means a wetland with at least 30% of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

“Enhancement” means actions performed within an existing degraded critical area and/or buffer to intentionally increase or augment one or more functions or values of the existing critical area or buffer. Enhancement actions include, but are not limited to, increasing plant diversity and cover, increasing wildlife habitat and structural complexity (snags, woody debris), installing environmentally compatible erosion controls, or removing nonindigenous plant or animal species.

“Erosion” means a process whereby wind, rain, water and other natural agents mobilize, transport, and deposit soil particles.

“Erosion hazard areas” means lands or areas underlain by soils identified by the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) as having “severe” or “very severe” erosion hazards and areas subject to impacts from lateral erosion related to moving water such as river channel migration and shoreline retreat.

“Estuarine wetland” means the zero-gradient sector of a stream where it flows into a standing body of water together with associated natural wetlands; tidal flows reverse flow in the wetland twice daily, determining its upstream limit. It is characterized by low bank channels (distributaries) branching off the main stream to form a broad, near-level delta; bank; bed and delta materials are silt and clay; banks are stable; vegetation ranges from marsh to forest; and water is usually brackish due to daily mixing and layering of fresh and salt water.

“Exotic” means any species of plants or animals that is not indigenous to the area.

“Farm pond” means an open water depression created from a non-wetland site in connection with agricultural activities.

“Feasible” means an action, such as a development project, mitigation, or preservation requirement that meets all of the following conditions:

1. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;
2. The action provides a reasonable likelihood of achieving its intended purpose; and
3. The action does not physically preclude achieving the project’s primary intended legal use.

In cases where this chapter requires certain actions “unless they are infeasible,” the burden of proving infeasibility is on the applicant/ proponent. In determining an action’s infeasibility, the County may weigh the action’s relative costs and public benefits, considered in the short- and long-term time frames.

“Feasible alternative” means an action, such as development, mitigation, or restoration, that meets all of the following conditions: (1) the action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results; (2) the action provides a reasonable likelihood of achieving its intended purpose; and (3) the action does not physically preclude achieving the project’s primary intended legal use. Feasibility shall take into account both short- and long-term monetary and nonmonetary costs and benefits.

“Fen” means a mineral-rich wetland formed in peat that has a neutral to alkaline pH. Fens are wholly or partly covered with water and dominated by grass-like plants, grasses, and sedges.

“Fill material” means any solid or semisolid material, including rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure that, when placed, changes the grade or elevation of the receiving site.

“Filling” means the act of transporting or placing by any manual or mechanical means fill material from, to or on any soil surface, including temporary stockpiling of fill material.

“Fish and wildlife habitat conservation areas” are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to: rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species. “Fish and wildlife habitat conservation areas” does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company unless they meet the qualifications of WCC 16.16.710(B).

“Fish habitat” means a complex of physical, chemical, and biological conditions that provide the life-supporting and reproductive needs of a species or life stage of fish. Although the habitat requirements of a species depend on its age and activity, the basic components of fish habitat in rivers, streams, ponds, lakes, estuaries, marine waters, and nearshore areas include, but are not limited to, the following:

1. Clean water and appropriate temperatures for spawning, rearing, and holding;
2. Adequate water depth and velocity for migrating, spawning, rearing, and holding, including off-channel habitat;
3. Abundance of bank and in-stream structures to provide hiding and resting areas and stabilize stream banks and beds;
4. Appropriate substrates for spawning and embryonic development. For stream- and lake-dwelling fishes, substrates range from sands and gravel to rooted vegetation or submerged rocks and logs. Generally, substrates must be relatively stable and free of silts or fine sand;
5. Presence of riparian vegetation as defined in this article. Riparian vegetation creates a transition zone, which provides shade and food sources of aquatic and terrestrial insects for fish;
6. Unimpeded passage (i.e., due to suitable gradient and lack of barriers) for upstream and downstream migrating juveniles and adults.

“Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

"Floodplain" is synonymous with one hundred-year floodplain and means that land area susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulation maps or a reasonable method which meets the objectives of the act. "Floodway" means the area, as identified in a master program, that either: (a) Has been established in federal emergency management agency flood insurance rate maps or floodway maps; or (b) Consists of those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition, topography, or other indicators of flooding that occurs with reasonable regularity, although not necessarily annually. Regardless of the method used to identify the floodway, the floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state. "Forested wetland" means a wetland with at least 30% of the surface area covered by woody vegetation greater than 20 feet in height, excluding monotypic stands of red alder or cottonwood that average eight inches in diameter at breast height or less.

"Frequently flooded areas" means lands in the floodplain subject to a 1% or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance and attenuation functions, as determined by the County in accordance with WAC [365-190-080](#)(3). Classifications of frequently flooded areas include, at a minimum, the "special flood hazard area" designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

"Function assessment" or "functions and values assessment" means a set of procedures, applied by a qualified consultant, to identify the ecological functions being performed in a wetland or other critical area, usually by determining the presence of certain characteristics, and determining how well the critical area is performing those functions. Function assessments can be qualitative or quantitative and may consider social values potentially provided by the wetland or other critical area. Function assessment methods must be consistent with best available science.

"Functions" means the processes or attributes provided by areas of the landscape (e.g., wetlands, rivers, streams, and riparian areas) including, but not limited to, habitat diversity and food chain support for fish and wildlife, groundwater recharge and discharge, high primary productivity, low flow stream water contribution, sediment stabilization and erosion control, storm and flood water attenuation and flood peak desynchronization, and water quality enhancement through biofiltration and retention of sediments, nutrients, and toxicants. These beneficial roles are not listed in order of priority.

"Functions, services, and value" means the beneficial functions that critical areas perform, the services they provide humans, and the values people derive from these roles including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, groundwater recharge and discharge, erosion control, wave

attenuation, protection from hazards, providing historical and archaeological resources, noise and visual screening, open space, and recreation. These beneficial roles are not listed in order of priority.

“Game fish” means those species of fish that are classified by the Washington State Department of Wildlife as game fish (WAC [232-12-019](#)).

“Geologically hazardous areas” means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

“Gradient” means a degree of inclination, or a rate of ascent or descent, of an inclined part of the earth’s surface with respect to the horizontal; the steepness of a slope. It is expressed as a ratio (vertical to horizontal), a fraction (such as meters/kilometers or feet/miles), a percentage (of horizontal distance), or an angle (in degrees).

“Grading” means any excavating or filling of the earth’s surface or combination thereof.

“Grazable acres” means both pasture and hay land as described in the Whatcom County Standard Farm Conservation Planning Workbook.

“Groundwater” means all water that exists beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water within the boundaries of the state, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves (Chapter [90.44](#) RCW).

“Groundwater management area” means a specific geographic area or subarea designated pursuant to Chapter [173-100](#) WAC for which a groundwater management program is required.

“Groundwater management program” means a comprehensive program designed to protect groundwater quality, to assure groundwater quantity, and to provide for efficient management of water resources while recognizing existing groundwater rights and meeting future needs consistent with local and state objectives, policies and authorities within a designated groundwater management area or subarea and developed pursuant to Chapter [173-100](#) WAC.

“Growing season” means the portion of the year when soil temperatures are above biologic zero (41 degrees Fahrenheit).

“Growth Management Act” means Chapters [36.70A](#) and [36.70B](#) RCW, as amended.

“Habitats of local importance” designated as fish and wildlife habitat conservation areas include those areas found to be locally important by Whatcom County pursuant to WCC [16.16.710](#)(C)(12).

“Hazard tree” (outside the shoreline jurisdiction) means a tree whose risk evaluation, as determined through a Whatcom County approved tree risk assessment method, is high. Risk evaluation is the combined measurement of: tree failure identification, probability of failure, potential damage to permanent physical improvements to property causing personal injury, and consequences. A tree that constitutes an airport hazard is considered a hazard tree. A hazard tree whose failure is imminent and consequences of damage to permanent physical improvements to property causing personal injury are significant is considered an emergency. “Imminent” in this instance means failure

has started or is most likely to occur in the near future, even if there is no significant wind or increased load. Imminent may be determined by a qualified consultant (defined in this section) or when mutually agreed upon by a landowner and Whatcom County.

“Hazard tree” (within the shoreline jurisdiction) means any tree that is susceptible to immediate fall due to its condition (damaged, diseased, or dead) or other factors, and which because of its location is at risk of damaging permanent physical improvements to property or causing personal injury.

“Hazardous substance” means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC [173-303-090](#) or [173-303-100](#).

“High intensity land use” means land use that includes the following uses or activities: commercial, urban, industrial, institutional, retail sales, residential (more than one unit/acre), high-intensity new agriculture (dairies, greenhouses, raising and maintaining animals), high-intensity recreation (golf courses, ball fields), hobby farms, and Class IV special forest practices, including the building of logging roads.

“Hydraulic project approval (HPA)” means a permit issued by the State Department of Fish and Wildlife for modifications to waters of the state in accordance with Chapter [75.20](#) RCW.

“Hydric soil” means a soil that is or has been saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the NRCS “Field Indicators of Hydric Soils” Version 7, and/or the Corps of Engineers Wetlands Delineation Manual, as amended.

“Hydrologic soil groups” means soils grouped according to their runoff-producing characteristics under similar storm and cover conditions. Properties that influence runoff potential are depth to seasonally high-water table, intake rate and permeability after prolonged wetting, and depth to a low permeable layer. Hydrologic soil groups are normally used in equations that estimate runoff from rainfall, but can be used to estimate a rate of water transmission in soil. There are four hydrologic soil groups:

1. Low runoff potential and a high rate of infiltration potential;
2. Moderate infiltration potential and a moderate rate of runoff potential;
3. Slow infiltration potential and a moderate to high rate of runoff potential; and
4. High runoff potential and very slow infiltration and water transmission rates.

“Hydrophytic vegetation” means macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

“Hyporheic zone” means the saturated zone located beneath and adjacent to streams that contain some proportion of surface water from the surface channel. The hyporheic zone serves as a filter for nutrients, as a site for macroinvertebrate production important in fish nutrition and provides other functions related to maintaining water quality.

“Impervious surface” means a hard surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development or that causes water to run off the

surface in greater quantities or at an increased rate of flow compared to natural conditions prior to development. Common impervious surfaces may include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater. Impervious surfaces do not include surface created through proven low impact development techniques.

“In-kind compensation” means to replace critical areas with substitute areas whose characteristics and functions mirror those destroyed or degraded by a regulated activity.

“Infiltration” means the downward entry of water into the immediate surface of soil.

“Intertidal zone” means the substratum from extreme low water of spring tides to the upper limit of spray or influence from ocean-derived salts. It includes areas that are sometimes submerged and sometimes exposed to air, mud and sand flats, rocky shores, salt marshes, and some terrestrial areas where salt influences are present.

“Invasive species” means a species that is: (1) nonnative (or alien) to Whatcom County, and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions.

“Lahar” means a mudflow and debris flow originating from the slopes of a volcano.

“Lahar hazard area” means areas that have been or potentially could be inundated by lahars or other types of debris flows, according to a map showing volcano hazards from Mount Baker, Washington.

“Lake” means a naturally or artificially created body of deep (generally greater than 6.6 feet) open water that persists throughout the year. A lake is larger than a pond, greater than one acre in size, equal to or greater than 6.6 feet in depth, and has less than 30% aerial coverage by trees, shrubs, or persistent emergent vegetation. A lake is bounded by the ordinary high-water mark or the extension of the elevation of the lake’s ordinary high-water mark with the stream where the stream enters the lake.

“Landfill” means a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill.

“Landslide” means a general term covering a wide variety of mass movement landforms and processes involving the downslope transport, under gravitational influence of soil and rock material *en masse*; included are debris flows, debris avalanches, earthflows, mudflows, slumps, mudslides, rock slides, and rock falls.

“Landslide hazard areas” means areas that, due to a combination of site conditions like slope inclination and relative soil permeability, are susceptible to mass wasting.

“Low intensity land use” means land use that includes the following uses or activities: forestry (cutting of trees only), low intensity open space (such as passive recreation and natural resources

preservation), unpaved trails, utility corridors without maintenance roads and little or no vegetation management, or similar uses that do not require land disturbance.

“LWD” is an acronym for large woody debris.

“Maintenance or repair” means those usual activities required to prevent a decline, lapse or cessation from a lawfully established condition or to restore the character, scope, size, and design of a serviceable area, structure, or land use to a state comparable to its previously authorized and undamaged condition. This does not include any activities that change the character, scope, or size of the original structure, facility, utility or improved area beyond the original design.

“Major development” means any project for which a major project permit is required pursuant to WCC Chapter [20.88](#). For the purposes of this chapter, “major development” shall also mean any project associated with an existing development for which a major development permit has been required or other existing legally nonconforming development for which a major development permit would otherwise be required if developed under the current land use regulations outlined in WCC Title [20](#).

“Mass wasting” means downslope movement of soil and rock material by gravity. This includes soil creep, erosion, and various types of landslides, not including bed load associated with natural stream sediment transport dynamics.

“Mature forested wetland” means a wetland with an overstory dominated by mature trees having a wetland indicator status of facultative (FAC), facultative-wet (FACW), or obligate (OBL). Mature trees are considered to be at least 21 inches in diameter at breast height.

“Maximum credible event” means the largest debris flow event that can be hypothesized from geologic processes within a watershed above an alluvial fan with consideration of the volume of sediment and debris that would be available within the drainage combined with material from landslides that would enter the drainage, and the volume of water that could become trapped behind and within the debris flow or dammed within the drainage.

“May” means the action is allowable, provided it conforms to the provisions of this title.

“Mean annual flow” means the average flow of a river or stream (measured in cubic feet per second) from measurements taken throughout the year. If available, flow data for the previous 10 years should be used in determining mean annual flow.

“Mitigation” means individual actions that may include a combination of the following measures, listed in order of preference:

1. Avoiding an impact altogether by not taking a certain action or parts of actions;
2. Minimizing impacts by limiting the degree or magnitude of an action and its implementation;
3. Rectifying impacts by repairing, rehabilitating, or restoring the affected environment;
4. Reducing or eliminating an impact over time by preservation and maintenance operations during the life of the action;
5. Compensating for an impact by replacing or providing substitute resources or environments;
and
6. Monitoring the mitigation and taking remedial action when necessary.

“Mitigation bank” means a site where wetlands or similar habitats are restored, created, enhanced, or in exceptional circumstances, preserved, expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to aquatic resources.

“Mitigation bank instrument” means the documentation of agency and bank sponsor concurrence on the objectives and administration of the bank. The “bank instrument” describes in detail the physical and legal characteristics of the bank, including the service area, and how the bank will be established and operated.

“Mitigation bank review team” or “MBRT” means an interagency group of federal, state, tribal and local regulatory and resource agency representatives that are invited to participate in negotiations with the bank sponsor on the terms and conditions of the bank instrument.

“Mitigation bank review team process” or “MBRT process” means a process in which the County and other agencies strive to reach consensus with the MBRT members on the terms, conditions, and procedural elements of the bank instrument.

“Mitigation bank sponsor” means any public or private entity responsible for establishing and, in most circumstances, operating a bank.

“Mitigation plan” means a detailed plan indicating actions necessary to mitigate adverse impacts to critical areas.

“Moderate intensity land use” means land use that includes the following uses or activities: residential (one unit/gross acre or less), moderate-intensity open space (parks with biking, jogging, etc.), moderate-intensity new agriculture (orchards, hay fields, nurseries, raising and harvesting crops requiring annual tilling), paved trails, building of logging roads, and utility corridors or rights-of-way shared by several utilities and including access/maintenance roads.

“Monitoring” means evaluating the impacts of development proposals over time on the biological, hydrological, pedological, and geological elements of ecosystem functions and processes, and/or assessing the performance of required mitigation measures through the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features compared to baseline or pre-project conditions and/or reference sites.

“Native vegetation” means plant species that are indigenous to Whatcom County and the local area.

“Nearshore habitat” means the zone that extends seaward from the marine shoreline to a water depth of approximately 20 meters (66 feet). Nearshore habitat is rich biologically, providing important habitat for a diversity of plant and animal species.

“No net loss” means the maintenance of the aggregate total of the County’s critical area functions and values as achieved through a case-by-case review of development proposals. Each project shall be evaluated based on its ability to meet the no net loss goal.

“Off-site mitigation” means to replace critical areas away from the site on which a critical area has been adversely impacted by a regulated activity.

“Ongoing agriculture” means those activities conducted on lands defined in RCW [84.34.020](#)(2), and those activities involved in the production of crops and livestock, including, but not limited to, operation and maintenance of existing farm and stock ponds or drainage ditches, irrigation systems, changes between agricultural activities, and maintenance or repair of existing serviceable structures and facilities. Activities that bring an area into agricultural use are not part of an ongoing activity. An operation ceases to be ongoing when the area on which it was conducted has been converted to a nonagricultural use, or has lain idle for more than five consecutive years unless that idle land is registered in a federal or state soils conservation program. Forest practices are not included in this definition.

“Ordinary high water mark” means the mark or line on all lakes, rivers, streams, and tidal water that will be found by examining the beds and banks and ascertaining where the presence and action of waters are so common and usual and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland in respect to vegetation (RCW [90.58.030](#)(2)(b)).

“Person” means any individual, trustee, executor, other fiduciary, corporation, firm, partnership, association, organization, or other entity, either public or private, acting as a unit.

“Planned unit development (PUD)” means one or a group of specified uses, such as residential, resort, commercial or industrial, to be planned and constructed as a unit. Zoning or subdivision regulations with respect to lot size, building bulk, etc., may be varied to allow design innovations and special features in exchange for additional and/or superior site amenities or community benefits.

“Planning advisor” means those qualified individuals who have technical experience and training necessary to prepare conservation farm plans for agricultural lands and who have been certified a technical service provider by the USDA Natural Resources Conservation Service (see <http://techreg.usda.gov>) and signed the practice and confidentiality agreement.

“Pond” means an open body of water, generally equal to or greater than 6.6 feet deep, that persists throughout the year and occurs in a depression of land or expanded part of a stream and has less than 30% aerial coverage by trees, shrubs, or persistent emergent vegetation. Ponds are generally smaller than lakes. Farm ponds, ponds built for the primary purpose of combating fires, stormwater facilities, and beaver ponds less than two years old are excluded from this definition.

“Potable” means water that is suitable for drinking by the public (Chapter [246-290](#) WAC).

“Preservation” means actions taken to ensure the permanent protection of existing, ecologically important critical areas and/or buffers that the County has deemed worthy of long-term protection.

“Primary association” means the use or potential use of a habitat area by a listed or priority species for breeding/spawning, rearing young, resting, roosting, feeding, foraging, and/or migrating on a frequent and/or regular basis during the appropriate season(s) as well as habitats that are used less frequently/regularly but which provide for essential life cycle functions such as breeding/nesting/spawning.

“Priority habitat” means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: comparatively high fish or wildlife density; comparatively high fish or wildlife species diversity; fish spawning habitat; important wildlife habitat; important fish or wildlife seasonal range; important fish or wildlife movement corridor; rearing and foraging habitat; important marine mammal haulout; refuge; limited availability; high vulnerability to habitat alteration; unique or dependent species; or shellfish bed. A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as a consolidated marine/estuarine shoreline, talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or nonpriority fish and wildlife (WAC [173-26-020](#)(24)).

“Priority species” means wildlife species of concern due to their population status and their sensitivity to habitat alteration, as defined by the Washington State Department of Fish and Wildlife.

“Project” means any proposed or existing activity regulated by Whatcom County.

“Project permit” or “project permit application” means any land use or environmental permit or approval required by Whatcom County, including, but not limited to, building permits, subdivisions, binding site plans, planned unit developments, conditional uses, shoreline substantial development permits, variances, lot consolidation relief, site plan review, permits or approvals authorized by a comprehensive plan or subarea plan.

“Qualified professional” or “qualified consultant” means a person with experience and training with expertise appropriate for the relevant critical area subject in accordance with WAC [365-195-905](#)(4). A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, soil science, engineering, environmental studies, fisheries, geology, geomorphology or a related field, and related work experience, and meet the following criteria:

1. Is listed on a roster of qualified professionals or qualified consultants prepared by the Director and made available to the public.
2. A qualified professional for wetlands must have a degree in wildlife biology, ecology, soil science, botany, or a closely related field and a minimum of five years of professional experience in wetland delineation and assessment associated with wetland ecology in the Pacific Northwest or comparable systems. The following is required to be submitted to be placed on the roster:
 - a. Curriculum vitae or resume;
 - b. Three complete and approved wetland delineations (as primary author on at least one), conducted in accordance with the *U.S. Army Corps of Engineers Wetlands Delineation Manual, 1987*, or as amended; and
 - c. One complete and approved wetland delineation using the *U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, 2010*, or as amended. Successful completion of a wetland class using this manual may be substituted for this requirement.

3. A qualified professional for habitat conservation areas must have a degree in wildlife biology, ecology, fisheries, or a closely related field and a minimum of three years of professional experience related to the subject species/habitat type or approved equivalent work experience.
4. A qualified professional for geologically hazardous areas must be a professional engineering geologist or geotechnical engineer, licensed in the state of Washington.
5. A qualified professional for critical aquifer recharge areas means a Washington State licensed hydrogeologist, geologist, or engineer.
6. A qualified professional for tree risk assessment means a certified arborist or certified tree professional with a current ISA Tree Risk Assessment Qualification.
7. Anyone who has had their professional licensure or certification revoked for violations of the provisions of their profession does not meet the definition of a qualified professional or qualified consultant.

“RCW” is an acronym for Revised Code of Washington.

“Reasonable use” means a property that is deprived of all reasonable use when the owner can realize no reasonable return on the property or make any productive use of the property. “Reasonable return” does not mean a reduction in value of the land, or a lack of a profit on the purchase and sale of the property, but rather, where there can be no beneficial use of the property; and which is attributable to the implementation of the critical areas ordinance.

“Reasonable use exception” means an exception to the standards of this title that allows for any one of the uses allowed within a given zoning designation which cannot otherwise conform to the requirements set forth in this title, including the variance criteria; that have the least impact on the critical areas found on the subject property.

“Recharge” means the process involved in the absorption and addition of water from the unsaturated zone to groundwater.

“Reestablishment” means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former critical area. Reestablishment results in rebuilding a former critical area and results in a gain in acres and functions. Activities could include removing fill, plugging ditches, or breaking drain tiles.

“Rehabilitation” means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded critical area. Rehabilitation results in a gain in function but does not result in a gain in area. Activities could involve breaching a dike to reconnect wetlands to a floodplain or returning tidal influence to a wetland.

“Resident fish” means a fish species that completes all stages of its life cycle within freshwater and frequently within a local area.

“Restoration” means measures taken to restore an altered or damaged natural feature, including:

1. Active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

2. Actions performed to reestablish structural and functional characteristics of a critical area that have been lost by alteration, past management activities, or catastrophic events.

“Retroactive Permit” means a permit applied for after the development, use, or activity has occurred, generally to bring such development, use, or activity into compliance through code enforcement.

“Rills” means steep-sided channels resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery. Rill erosion tends to occur on slopes, particularly steep slopes with poor vegetative cover.

“Riparian corridor” or “riparian zone” means the area adjacent to a water body (stream, lake or marine water) that contains vegetation that influences the aquatic ecosystem, nearshore area and/or fish and wildlife habitat by providing shade, fine or large woody material, nutrients, organic debris, sediment filtration, and terrestrial insects (prey production). Riparian areas include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., zone of influence). Riparian zones provide important wildlife habitat. They provide sites for foraging, breeding and nesting; cover to escape predators or weather; and corridors that connect different parts of a watershed for dispersal and migration.

“Riparian vegetation” means vegetation that tolerates and/or requires moist conditions and periodic free-flowing water, thus creating a transitional zone between aquatic and terrestrial habitats which provides cover, shade and food sources for aquatic and terrestrial insects for fish species. Riparian vegetation and their root systems stabilize stream banks, attenuate high-water flows, provide wildlife habitat and travel corridors, and provide a source of limbs and other woody debris to terrestrial and aquatic ecosystems, which, in turn, stabilize stream beds.

“Scrub-shrub wetland” means a wetland with at least 30% of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

“Seiche” is a standing wave in an enclosed or partially enclosed body of water. Seiches are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other. When the wind stops, the water rebounds to the other side of the enclosed area. The water then continues to oscillate back and forth for hours or even days. In a similar fashion, earthquakes, tsunamis, or severe storm fronts may also cause seiches along ocean shelves and ocean harbors. Seiches and seiche-related phenomena have been observed on lakes, reservoirs, swimming pools, bays, harbors and seas. The key requirement for formation of a seiche is that the body of water be at least partially bounded, allowing the formation of the standing wave.

“Seismic hazard areas” means areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

“SEPA” is a commonly used acronym for the State Environmental Policy Act.

“Shellfish” means invertebrates of the phyla Arthropoda (class Crustacea), Mollusca (class Pelecypoda) and Echinodermata.

“Shellfish habitat conservation areas” means all public and private tidelands suitable for shellfish, as identified by the Washington State Department of Health classification of commercial growing

areas, and those recreational harvest areas as identified by the Washington State Department of Ecology are designated as shellfish habitat conservation areas pursuant to WAC [365-190-80](#). Any area that is or has been designated as a shellfish protection district created under Chapter [90.72](#) RCW is also a shellfish habitat conservation area.

“Shellfish protection district” means the Drayton Harbor shellfish protection district (DHSPD) and the Portage Bay shellfish protection district (PBSPD) (WCC Chapter [16.20](#)), or other area formed by the County based on RCW Title [90](#), in response to State Department of Health (DOH) closures or downgrades of a commercial shellfish growing area due to a degradation of water quality as a result of pollution. These areas include the watershed draining to the shellfish beds as part of the shellfish habitat conservation area.

“Shorelands” or “shoreland areas” means those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter [90.58](#)RCW.

“Shoreline” (Shoreline Management Act) means all of the water areas of the state, including reservoirs and their associated wetlands, together with lands underlying them, except:

1. Shorelines on segments of streams upstream from a point where the mean annual flow is 20 cubic feet per second or less and the wetlands associated with such upstream segments; and
2. Shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

“Shorelines” means all of the water areas of the state as defined in RCW [90.58.030](#), including reservoirs and their associated shorelands, together with the lands underlying them, except:

1. Shorelines of statewide significance;
2. Shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second (cfs) or less and the wetlands associated with such upstream segments; and
3. Shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

“Shoreline Jurisdiction.” See WCC 23.20.010.

“Shorelines of statewide significance” means those areas defined in RCW [90.58.030](#)(2)(e).

“Shorelines of the state” means the total of all “shorelines,” as defined in RCW [90.58.030](#)(2)(d), and “shorelines of statewide significance” within the state, as defined in RCW [90.58.030](#)(2)(e).

“Single-family development” means the development of a single-family residence permanently installed and served with utilities on a lot of record.

“Site” means any parcel or combination of contiguous parcels, or right-of-way or combination of contiguous rights-of-way, under the applicant’s/proponent’s ownership or control that is the subject of a development proposal or change in use.

“Slope” means:

1. Gradient.

2. The inclined surface of any part of the earth's surface, delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

"Soil" means all unconsolidated materials above bedrock described in the Soil Conservation Service Classification System or by the Unified Soils Classification System.

"Special Flood Hazard Area (SFHA)" means the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual chance flood is also referred to as the base flood or 100-year flood. On the FIRM maps, SFHAs are labeled as Zone A, Zone AO, Zone AH, Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30.

"Species of local importance" are those species that are of local concern due to their population status or their sensitivity to habitat alteration or that are game species.

"Sphagnum bog" means a type of wetland dominated by mosses that form peat. Sphagnum bogs are very acidic, nutrient-poor systems, fed by precipitation rather than surface inflow, with specially adapted plant communities.

"Stormwater Manual" or "Stormwater Management Manual for Western Washington" means the version of the Department of Ecology's Stormwater Management Manual for Western Washington most recently adopted by council.

"Streams" means those areas where surface water flows are sufficient to produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds, and defined-channel swales. The channel or bed need not contain water year-round. This definition is not meant to include ditches or other artificial water courses unless they are used to convey streams naturally occurring prior to human alteration, and/or the waterway is used by anadromous or other fish populations, or flows directly into shellfish habitat conservation areas.

"Structure" means a permanent or temporary building or edifice of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner whether installed on, above, or below the surface of the ground or water, except for vessels.

"Substantially Developed Surface" is a legally established area of non-vegetated impervious surface.

"Surface waters of state." See definition for "waters of the state"

"Survey" means one of the following:

1. Mapping using a compass and tape; or
2. Mapping using a smart phone or hand-held GPS; or
3. A survey completed by a licensed surveyor.

"Swale" means a shallow drainage conveyance with relatively gentle side slopes, generally with flow depths less than one foot.

"Technical administrator" means the Director of the Department of Planning and Development Services. This term is no longer used, but is still found older documents.

“Toe” means the lowest part of a slope or cliff; the downslope end of an alluvial fan, landslide, etc.

“Top” means the top of a slope; or in this chapter it may be used as the highest point of contact above a landslide hazard area.

“Unavoidable” means adverse impacts that remain after all appropriate avoidance and minimization measures have been implemented.

“USDA” is an acronym for the United States Department of Agriculture

“Utilities” means all lines and facilities used to distribute, collect, transmit, or control electrical power, natural gas, petroleum products, information (telecommunications), water, and sewage.

“Volcanic hazard areas” means geologically hazardous areas that are subject to pyroclastic flows, lava flows, debris avalanche, or inundation by debris flows, mudflows, or related flooding resulting from volcanic activity.

“WAC” is an acronym for Revised Code of Washington.

“Waters of the state” or “state waters” means all lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and other surface waters and watercourses within the jurisdiction of Washington State (RCW 90.48.020).

“Watershed” means a geographic region within which water drains into a particular river, stream or body of water. There are approximately 122 watersheds (e.g., Bertrand, Ten Mile, Dakota, Canyon Creek, Lake Whatcom, Lake Samish) identified in WRIA 1 and 3. These are nested within approximately 14 sub-basins (e.g., North Fork Nooksack, Drayton Harbor, Sumas River, Friday Creek), which are nested within four basins (e.g., Nooksack River, Fraser River, Samish River, coastal).

“Watershed improvement district” means a special district established pursuant to Chapter [85.38](#) RCW citation.

“WDFW” is an acronym for the Washington State Department of Fish and Wildlife.

“Wellhead protection area” means the area (surface and subsurface) managed to protect ground-water-based public water supplies.

“Wet meadow” means palustrine emergent wetlands, typically having disturbed soils, vegetation, or hydrology.

“Wet season” means the period generally between November 1st and March 30th of most years when soils are wet and prone to instability. The specific beginning and end of the wet season can vary from year to year depending on weather conditions.

“Wetland” means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-

lined swales, canals, detention facilities, retention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands include those artificial wetlands intentionally created to mitigate wetland impacts.

“Wetland buffer” means a designated area contiguous or adjacent to a wetland that is required for the continued maintenance, function, and ecological stability of the wetland.

“Wetland class” means the general appearance of the wetland based on the dominant vegetative life form or the physiography and composition of the substrate. The uppermost layer of vegetation that possesses an aerial coverage of 30% or greater of the wetland constitutes a wetland class. Multiple classes can exist in a single wetland. Types of wetland classes include forest, scrub/shrub, emergent, and open water.

“Wetland delineation” means the precise determination of wetland boundaries in the field according to the application of specific methodology as described in the Corps of Engineers Wetlands Delineation Manual, 1987 Edition, and the Western Mountains, Valleys, and Coast Region Supplement (Version 2.0) 2010, or as revised, and the mapping thereof.

“Wetland edge” means the boundary of a wetland as delineated based on the definitions contained in this chapter.

Wetland Enhancement. See “mitigation.”

“Wetland mitigation bank” means a site where wetlands and buffers are restored, created, enhanced or, in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

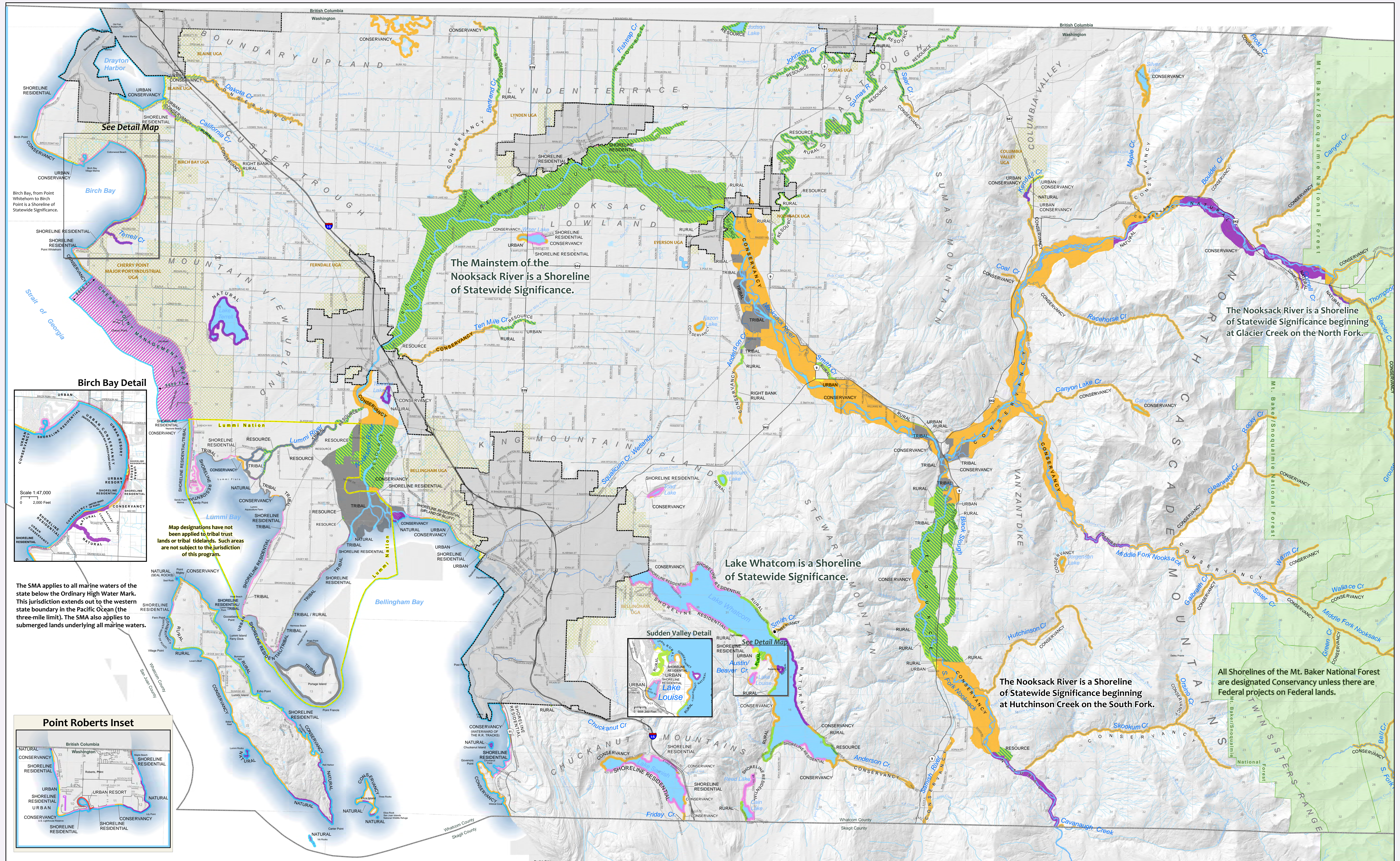
Wetland Restoration. See “mitigation” and “reestablishment.”

“Windthrow” means a natural process by which trees are uprooted or sustain severe trunk damage by the wind.

“Wood waste” means solid waste consisting of wood pieces or particles generated as a byproduct or waste from the manufacturing of wood products, handling and storage of raw materials and trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hog fuel, and log sort yard waste, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

“WRIA” is an acronym for Water Resource Inventory Area

DRAFT Shoreline Environment Designations 7/8/2024



Official Shoreline Map

Shoreline Area Designations

- Urban
- Urban Resort
- Urban Conservancy

Shoreline Residential

- Rural
- Resource
- Conservancy

Natural

- Tribal
- Cherry Point Mgmt. Area
- Aquatic

Lummi Nation Boundaries

- City Boundaries
- Urban Growth Area

Applies to all areas waterward of OHWM on Shorelines of the State

0 0.5 1 2 3 4 Miles
1 inch = 5,417 feet
0 1,000 2,000 4,000 Meters



About this Map:

The information depicted on this map is intended to be used with Whatcom County's Shoreline Management Plan, adopted May 27, 1976. Revised 7/8/2024 to comply with Washington Administrative Code 173-26. Approved by Department of Ecology 6/25/2024.

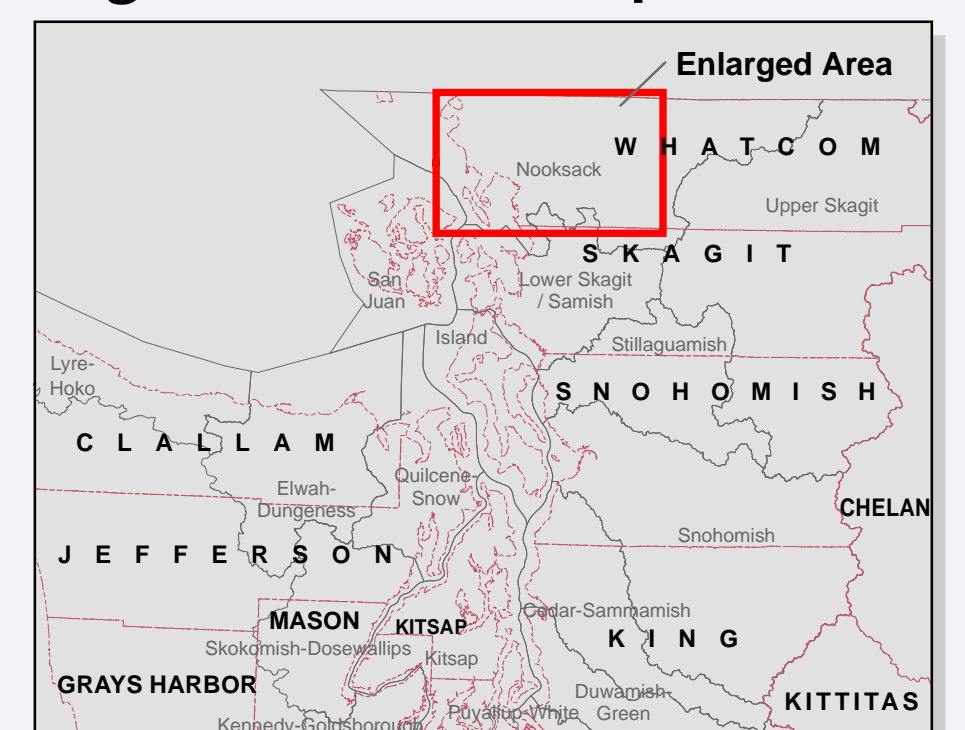
Shoreline Jurisdiction:

The purpose of the official shoreline environment designations map is to depict graphically those areas of Whatcom County falling under the jurisdiction of this program, and the shoreline environment designations of those areas. The map does not necessarily identify or depict the lateral extent of shoreline jurisdiction nor does it identify all associated wetlands. The lateral extent of the shoreline jurisdiction shall be determined on a case-by-case basis based on the location of the ordinary high water mark (OHWM), floodway, floodplain, and presence of associated wetlands.

USE OF WHATCOM COUNTY'S MAP IMPLIES THE USER'S AGREEMENT WITH THE FOLLOWING STATEMENT:

Whatcom County disclaims any warranty of merchantability or warranty of fitness of this map for any particular purpose, either express or implied. No representation or warranty is made concerning the accuracy, currency, completeness or quality of data depicted on this map. Any user of this map assumes all responsibility for use thereof, and further agrees to hold Whatcom County harmless from and against any damage, loss, or liability arising from any use of this map.

Puget Sound Area Map



SMP Periodic Update 2020

Exhibit H: Written Public Comments on the Draft Amendments received by staff (updated 9/20/2021 to include P/C Hearing testimony)

(Note: Some section numbers in the draft documents have been revised after some of the earlier comments were received and may no longer be accurate.)

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
BP01	Jeff Chalfant, BP	9/18/20	B	C/P Ch. 11	Removal of “policies” from code and moving it to the Comprehensive Plan – County staff confirmed that all language was transferred to Comp Plan without edits (except for grammatical corrections).	Correct.
BP02	Jeff Chalfant, BP	9/18/20	D	23.20.050(B)(10)	Adding Cherry Point Management Area as a new “Shoreline Environment” – County staff confirmed that this is a simplification step and that no changes to permitted uses or development were made.	Correct. While the CPMA was treated like an environment designation, it just wasn’t called out as such.
BP03	Jeff Chalfant, BP	9/18/20	D	23.30.030(D), 23.40.125(E)(1)(e), 23.40.150(C)(2), 23.40.210(B)(8)	The use of galvanized steel appears to be a newly prohibited material for use in or above shoreline. While we understand the limitation for the use of such materials in water there are no feasible alternatives for use above the water on our pier for equipment and structural components. It is our understanding based on our discussion that our comment is consistent with feedback received from the Parks Department and was not the intent and that an adjustment to the language will be made to allow for use above the water.	We have removed the (newly added) prohibition on galvanized steel, as we could find no mention of it in state law or guidance.
BP04	Jeff Chalfant, BP	9/18/20	D	23.30.040(I) & 23.40.020(F)(4)	Fences and signs have specific limitations in terms of size, height, and setback that cannot be accommodated due to requirements of the Coast Guard and other Federal agencies associate with industrial security requirements. We recommend the addition of a provision that will allow for the construction of security fencing and signage required by such regulations including Chemical Facility Anti-Terrorism Standards (CFATS) codified a 6 CFR, Part 27.	Based on this comment we have added to 23.40.020(F)(9) (Shoreline Bulk Provisions) “provided, that the Director may exempt security fencing from this requirement as required by federal or state regulations” to acknowledge that in certain circumstances higher fences may be allowed. Additionally, we have added “Signage required by state or federal security requirements” as an exemption to 20.40.020(F)(10)(b)).

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
BP05	Jeff Chalfant, BP	9/18/20	D	23.40.010(B)	<i>Table 1 – Shoreline uses for Cherry Point Environment Area</i> Fill and Excavation activities are shown as a prohibited use. However, there are development activities that are permitted within the Cherry Point Environment that require the use of fill and excavation. County staff acknowledged this discrepancy as unintentional and will amend the language to ensure that fill and grading activities are allowed as a part of approved use and development.	The existing regulation in 23.40.125(E)(3) has always said that fill is prohibited in the CPMA, though provides an exception of “the minimum necessary to access piers or other structures that provide access to the water.” We believe this covers your concern. We have, however, clarified that “fill or excavation waterward of the OHWM requires a shoreline conditional use permit,” which is a requirement of the SMA. In the Use Table 1 we have also changed it to be “X/C*,” meaning that fill and excavation is prohibited except as otherwise permitted by the specific regulations (i.e., 23.40.125(E)(3))
BP06	Jeff Chalfant, BP	9/18/20	D	23.40.010	<i>Table 1 – Shoreline uses for Cherry Point Environment Area, Shoreline Stabilization</i> Revetments are shown as a prohibited use; however, bulkheads are allowed as a conditional use. The definition of bulkheads indicates that revetments are sometimes bulkheads. We understand that this is an unintended circular reference and that the County will amend the definition of bulkhead to remove the reference to revetments and replace with a more appropriate reference to the use of rip rap.	We have struck “such as a revetment or seawall” from the definition of bulkhead (20.60.020(16)) to address this circular inconsistency.
BP07	Jeff Chalfant, BP	9/18/20	D	23.40.010	<i>Table 1 – Shoreline uses for Cherry Point Environment Area, Industrial Moorage</i> The heading of the table indicates industrial moorage includes piers, docks and buoys. The definition of pier indicates that it includes other structures not normally considered to fit Ecology’s definition of a pier such as mooring buoys. County staff clarified that the intent was not to prohibit the installation of buoys and that the definition for piers will be amended to be consistent with the Ecology definition and that it will be clarified that buoys are permitted in the Cherry Point Management Area.	We have deleted the term “recreational” in reference to mooring buoys in Table 1 and added a P (permitted) in the Cherry Point Environment. Additionally, we have modified Table 1 to indicate that mooring buoys are not included as general public, commercial, or industrial moorage for the purposes of the table; the mooring buoys row does.
DOEWG01	Nate Brown, DOE	9/21/20	F	16.16.630	We acknowledge and support the County’s proposed adoption	Comment noted.

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
	Wetlands Group				of buffer tables from Ecology's Wetland Guidance. This approach provides the most flexibility by basing the widths of buffers on three factors: the wetland category, the intensity of the impacts, and the functions or special characteristics of the wetland.	
DOEWG02	Nate Brown, DOE Wetlands Group	9/21/20	F	16.16.225(8)	<p>We are particularly concerned about the provision allowing alteration of "functionally disconnected"...wetlands. This term appears to be undefined in the CAO. In addition, there are no acreage thresholds for this provision. Nor is there apparent consideration that wetlands that are unconnected to larger undisturbed landscapes can still provide important functions, specifically water quality and hydrologic storage. Additionally, some Category III wetlands may provide high habitat functions, which warrant larger buffers, not weaker protections.</p> <p>We also note that this change does not appear to be supported by any findings in the Whatcom County Best Available Review: Addendum to the 2005 BAS Report. Nor does this approach align with the strategies detailed in the Birch Bay Watershed Characterization and Watershed Planning Pilot Study: https://fortress.wa.gov/ecy/publications/documents/0706030.pdf.</p> <p>We offer the following questions in an attempt to better understand the County's rationale for this approach:</p> <ul style="list-style-type: none"> • What scientific basis is there for reducing protections on these wetlands? • Has any analysis been conducted to indicate these wetlands are not important resources in the UGA? • Has any analysis been conducted of how many wetlands would be affected and what the functions and values of those wetlands are? • Would mitigation be required to occur within the UGAs? If not, what are the cumulative effects of large-scale loss of wetlands in the UGAs in the County? <p>In the absence of this information it is unclear how implementation of this provision could achieve No Net Loss of ecological function. In addition, the concept of functional isolation cannot</p>	Deleted "functionally disconnected" and amended as per conversation with DOE staff.

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
					<p>be applied in SMA jurisdiction since all wetlands within that area are considered associated wetlands, by definition.</p> <p>We recommend the County either conduct a more refined analysis and resulting policy, informed by existing special studies, to develop a scientifically-based approach, or delete subsection (8) from the draft.</p>	
DOEWG03	Nate Brown, DOE Wetlands Group	9/21/20	F	16.16.640(C)(1)	<p><i>Buffer width reduction</i></p> <p>We are concerned about the apparently redundant and potentially additive buffer reduction that is allowed by this section. We cannot determine whether subsection (C)(1) can be applied in addition to the Ecology-recommended buffer reduction strategy listed in subsection (C)(2).</p> <p>If they can both be applied to a single project then they would result in buffers that are well below what science says is necessary to protect wetland functions. For example, in the current draft, a 150-foot buffer for a Category 3 wetland that has moderate habitat function adjacent to high intensity land use. Allowing this buffer to be reduced to 75 feet through additive reductions in (1) and (2) will not provide a buffer adequate to protect the wetlands' habitat functions.</p> <p>We recommend that the language, with respect to these two reduction strategies, be clarified such that they cannot be applied to the same proposal.</p>	Amended as per conversation with DOE staff to clarify that buffer reductions are not additive.
DOEWG04	Nate Brown, DOE Wetlands Group	9/21/20	F	16.16.640(C)(2)	<p>May allow High Impact uses to be reduced to Moderate buffer width if Ecology's minimizing measures are implemented. Per Ecology's CAO guidance, in addition to the minimizing measures, there must be a relatively intact corridor between the wetland and other wetland/priority habitat. Additionally, as worded in the draft regs, this provision does not imply how the applicant chooses which measures to incorporate into the proposal or how many. The wording should be modified to encourage all reasonable/applicable measures. As currently worded, an applicant may argue for the reduction based on minimal measures.</p>	Amended as per conversation with DOE staff to meet DOE guidance.
DOEWG05	Nate Brown, DOE	9/21/20	F	16.16.640(C)(3)	<p>If a buffer width is reduced, then any remaining "substantial"</p>	Deleted "substantial" and amended as

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
	Wetlands Group				(needs a definition) portion of the buffer that is degraded shall be replanted with native vegetation. It is unclear how this relates to buffer mitigation ratios described in 16.16.680(H). The addition of a statement clarifying the applicability of buffer mitigation ratios is needed.	per conversation with DOE staff.
FSJ01	Level Pratt, Friends of the San Juans	9/16/20	F	16.16.710(C)(2)	<p>In the Fish and Wildlife section of the CAO of the SMP (Ch. 16.16), the County mentions ESA-listed species managed by U.S. Fish and Wildlife, but makes no mention of NOAA Fisheries ESA involvement or authority. Further, the County fails to explicitly acknowledge that the marine nearshore is NOAA Fisheries designated critical habitat for Puget Sound Chinook salmon (Figure attached). Research has clearly demonstrated the importance of the marine and estuarine nearshore to the sustainability and recovery of Puget Sound Chinook.</p> <p>To more fully support Chinook and Southern Resident orca recovery, as well as meeting Goals 10A and 10K of the Shoreline Master Program (see also WAC 173-26-221(2)(C)(iii)), Friends of the San Juans recommends the following revision (new text underlined) in WCC §23.05.065(A):</p> <p>16.16.710(C)(2) Areas in which federally listed species are found, have a primary association with, or contain suitable habitat for said listed species, as listed in the U.S. Fish and Wildlife's Threatened and Endangered Species List or Critical Habitat List (http://ecos.fws.gov/ecp/) or the National Marine Fisheries Service (NMFS) (https://www.fisheries.noaa.gov/species-directory/threatened-endangered), as amended. <u>Note: As of September 2005, NMFS designated the estuarine and marine nearshore environment (extreme high water to a depth of approximately 30 meters mean lower low water, as Puget Sound Chinook Critical Habitat (see Federal Register / Vol. 70, No. 170, 9/2/05) that includes most of the Whatcom County estuarine and marine coastline.</u></p>	We have amended the section (though in practice we've always looked at both lists).
FSJ02	Level Pratt, Friends of the San Juans	9/16/20	F	16.16.225(B)(8)	We also have concerns about a provision in the CAO that is proposed to be incorporated into the SMP that allows for "Alteration of functionally disconnected Type III or IV wetlands when	Based on this and discussions with DOE staff, we have deleted "functionally disconnected" from this provision. Addition-

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
					associated with an approved commercial development within an Urban Growth Area;" (WCC §16.16.225.B.8). There is no explanation or definition of a "functionally disconnected" wetland. It is our understanding that they do not exist in the shoreline jurisdiction. The fact they're in the shoreline assumes a functional relationship. We respectfully recommend that the County cite this CAO section as excepted (not included) in the SMP (WCC §23.05.065.A).	ally, based on communication with DOE staff, we have added that the wetlands have to have a habitat score of less than 6 to qualify.
FW/WEC01	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	B	C/P Ch. 11	<p>We strongly support the Climate Change/Sea Level Rise policies with necessary improvements.[They go on to explain why addressing this is important, their interpretation of state requirements, and supporting material.]</p> <p>But more is needed. It is important that wetland and aquatic vegetation be allowed to occur to maintain shoreline functions and values. So we recommend the addition of the following policy on page 11-31 of the PDF version to read as follows.</p> <p><u>Policy 11AA-8: New lots and new and expanded development should be located so they will not interfere with the landward expansion and movement of wetlands and aquatic vegetation as sea level rises.</u></p>	This is a policy decision and all comments will be forwarded to the P/C and Council.
FW/WEC02	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	B	C/P Ch. 11	<p>We recommend that proposed Policy 11AA-5 be modified to read as follows:</p> <p><u>Policy 11AA-5: Whatcom County shall monitor the impacts of climate change on Whatcom County's shorelands, the shoreline master program's ability to adapt to sea level rise, and other aspects of climate change at least every periodic update, and revise the shoreline master program as needed. Whatcom County shall should periodically assess the best available sea level rise projections and other sciences related to climate change within shoreline jurisdiction, and incorporate them into future program updates, as relevant.</u></p>	This is a policy decision and all comment will be forwarded to the P/C and Council.
FW/WEC03	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.05.130(A)	<p>Modify the property rights section so that it is consistent with state and federal law.</p> <p>Proposed 23.05.130(A) would provide that the regulation of private property must be consistent with all relevant constitu-</p>	Our attorney believes that this language does not allow the County to override the SMP. It simply states a legal truth—that regulation of property must be consistent

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
					tional and other legal limitations including local laws. This provision would allow W/C to adopt policies or regulations that override the Ecology's approved SMP. This violates the SMA and cannot be adopted.	with other laws. This does not somehow give the County permission to amend the SMP without Ecology's approval.
FW/WEC04	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.05.130(E)	Proposed 23.05.130(E) provides that this "program shall not be applied retroactively in a way that requires lawfully existing uses and developments (as of the original effective date of this program) to be removed." This provision will prevent the amortization of existing uses in hazardous areas, such as channel migration zones, frequently flooded areas, and areas subject to sea level rise. This would allow frequently flooded homes to always be rebuilt, no matter the hazard. This is poor policy and should not be adopted.	Our attorney agrees with the commenter on this matter; we have removed (E).
FW/WEC05	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.10.030(C)(2)	Proposed 23.10.030(C)(2) provides "that substantive amendments shall become effective immediately upon adoption by the Department of Ecology." But all SMP amendments must be approved by Ecology and become effective 14 days after Ecology adopts them. Proposed 23.10.030(C)(2) should be modified to reflect these requirements.	The commenter is correct. Though we'd amended similar language in 23.05.090 to meet this requirement, we missed it in this section. The section has now been revised.
FW/WEC06	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.10.030(C)(3)	Proposed 23.10.030(C)(3) provides that the County Council makes final decisions on shoreline conditional use permits and variances. Ecology must approve both conditional use permits and variances. So this section should provide that these are final County decisions, not final decisions on the permits.	The commenter is correct. Though proposed Ch. 22.07 correctly spells it out, we missed it in this section. The section has now been revised.
FW/WEC07	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.30.010(B)	Modify so that it is consistent with the SMA and SMP Guidelines. The WA Court of Appeals has held that "reasonable and appropriate uses should be allowed on the shorelines <i>only if they will result in no net loss of shoreline ecological functions and systems</i> . See RCW 90.58.020; WAC 173-27-241(3)(j)." However proposed 23.30.010(B) exempts development, use, and activities within the shoreline jurisdiction and within "legally existing substantially developed areas" from the no net loss requirement. This violates the SMA and SMP Guidelines cited by the court of appeals. Proposed 23.30.010(B) also ignores avoidance and minimization and can be read to exempt development in critical areas from the no net loss standard. We rec-	We have amended the text as the commenter has suggested.

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					omment that proposed 23.30.010(B) be modified to read as follows: B. Development, use, and activities within the shoreline jurisdiction and outside of critical areas and legally existing substantially developed areas shall avoid and minimize adverse impacts, and any unavoidable impacts shall be mitigated to meet no net loss of ecological function and ecosystem-wide processes pursuant to WAC 173-26-186.	
FW/WEC08	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.30.010(B)	The mitigation sequencing requirement in <i>existing</i> WCC 23.30.010(B) must be retained or included elsewhere in the SMP regulations. Mitigation sequencing applies to all development in shorelines jurisdiction, not just development that adversely impacts critical areas. Deleting existing WCC 23.30.010(B) and relying only on the critical areas regulations violates WAC 173-26-201(2)(e)(ii)(A) and other provisions of the SMP Guidelines.	WAC 173-26-201(2)(e)(ii)(A) seems to be addressing how one applies mitigation sequencing to mitigation applied through SEPA review for those types of impacts not regulated by the SMP (e.g., traffic impacts). The County has already adopted WAC 197-11-768 by reference in our SEPA regulations (WCC 16.08.175).
FW/WEC09	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.30.050 Ch. 16.16	We recommend that shoreline jurisdiction be expanded to include the 100-year floodplain and that the buffers for river and stream shoreline be increased to use the newly recommended 200-year SPTH of 204 feet and that this width should be measured from the edge of the channel, channel migration zone, or active floodplain whichever is wider. This will help maintain shoreline functions and Chinook habitat.	Proposed WCC 23.20.010(B)(4 lists the shoreline jurisdiction as including “floodways and contiguous floodplain areas landward <i>two hundred feet from such floodways</i> ,” straight from RCW 90.58.030. The 204 ft. referenced is not a hard SPTH; this is the weighted 3 rd Quantile. WDFW Vol 2 provides a step by step process to determine the Riparian Management Area for a parcel based on the ability of a given soil type to support tree growth. The 200 yr. index curve is variable, and as shown in Figure A2-33 of Vol. 2. The SPTH in Whatcom Co. ranges from 101' to 250'. The buffer on Type S Freshwater is proposed to be 200 feet (16.16.740(B), Table 4), measured, presumably, from the edge of the floodway.
FW/WEC10	Tim Trohimovich, Fu-	9/16/20	D	23.30.060	We strongly support the amendments to 23.30.060 to require	This section was developed in consulta-

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	turewise, and Rein Attemann, Washington Environmental Council				review of sites that may have cultural or archaeological resources but are concerned that the SMP update deletes the inadvertent discovery requirements in the existing SMP. Even with predevelopment review, cultural resources can still be inadvertently discovered. Proposed WCC 23.30.606 provides that certain state and federal inadvertent discovery provisions apply, but they delete the County's provisions. This will prevent Whatcom County from requiring compliance with the inadvertent discovery requirements. So we recommend that the existing inadvertent discovery requirements in "B" be retained so the County can effectively address the inadvertent discovery of cultural resources.	tion with the Lummi Nation Tribal Historic Preservation Office and the WA State Dept. of Archaeology & Historic Preservation, so we assume it meets all requirements. 23.30.060(B)(3)(a) still requires an inadvertent discovery plan conform to DAHP's most current management standards when warranted.
FW/WEC11	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.30.070(A)(3)	Proposed WCC 23.30.070(A)(3) must be deleted. WAC 173-26-221(4)(d)(iii) does not allow developments to not provide public access because "[o]ther reasonable and safe opportunities for public access to the shoreline are located within ¼-mile of the proposed development site" as the proposed amendments do.	WAC 173-26-221 applies to the establishment of environment designation boundaries and provisions, and there is no subsection (4)(d), so we're not clear as to what the commenter is referring.
FW/WEC12	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.30.080	<p>We recommend that the SMP require new lots and new buildings be located outside the area of likely sea level rise and if that is not possible, buildings should be elevated above the likely sea level rise. These requirements will provide better protection for buildings, property, and people and will also allow wetlands and marine vegetation to migrate as the sea level rises. We recommend the following new section be added to the SMP periodic update:</p> <p><u>23.30.080 Sea Level Rise.</u></p> <p>A. <u>New lots shall be designed and located so that the buildable area is outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</u></p> <p>B. <u>Where lots are large enough, new structures and buildings shall be located so that they are outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</u></p> <p>C. <u>New and substantially improved structures shall be elevat-</u></p>	<p>Before adopting specific regulations, we'd need to know the details of likely sea level rise (location, elevation, magnitude, etc.). The COB and WCPW are currently developing the CoSMoS model, which should provide the best data for Whatcom County. The policies being introduced would set us up for developing such regulations once this model is completed.</p> <p>It should also be noted that in reviewing development proposals, PDS already requires structures to be built above the anticipated flood stage through the County's critical area (i.e., geohazard/tsunami) and flood regulations.</p> <p>Nonetheless, this is a policy decision and all comments will be forwarded to the P/C and Council.</p>

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					<u>ed above the likely sea level rise elevation in 2100 or for the life of the building, whichever is less.</u>	
FW/WEC13	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.40.010	<i>Table 2, Shoreline Use.</i> We recommend that bulkheads and other forms of hard armoring should be shoreline conditional uses. This ensures that these damaging uses will get an appropriate level or review. The SMP should also provide that all property owners seeking to construct a bulkhead on the shoreline of their property must receive Hydraulic Project Approval (HPA) from the Washington Department of Fish & Wildlife per 2SHB 1579 starting on July 1, 2019.	Our code already allows requires staff to do the same level of review as a substantial or CUP and to condition administrative permits. It also requires a geotechnical analysis for all shoreline stabilization types to ensure the least impactful method is selected. Obtaining an HPA is already a state requirement for any work in waters of the state. WCC 23.05.040(C) reminds applicants that it's their duty to seek any other required permits from other agencies. Additionally, a standard condition on all of our permits is that one may need additional permits from other agencies. We do not believe that we should be listing every state and federal permit one may need in every section of code where such might apply.
FW/WEC14	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.90.130(C) (existing)	We oppose the elimination of environment specific impervious surface and open space requirements in current 23.90.130(C) Table 2, Buffer, Setbacks, Height, Open Space, and Impervious Surface Coverage Standards for Shoreline Development. WAC 173-26-211(5)(b)(ii)(D) requires rural conservancy shoreline environments to limit impervious surfaces to ten percent of the lot which Table 2 currently does. Research by the University of Washington in the Puget Sound lowlands has shown that when total impervious surfaces exceed 5 - to 10% and forest cover declines below 65% of the basin, then salmon habitat in streams and rivers is adversely affected. This science documents the need to retain the existing impervious surface limits and open space standards to achieve no net loss.	New Table 3. Bulk Regulations for Shoreline Development still contains impervious surface limits meeting this requirement. However, we did miss the open space requirements, and have added them back in as 23.40.020(E) and Table 3
FW/WEC15	Tim Trohimovich, Fu-	9/16/20	D	23.40.125(B)(2)	We strongly support the fossil fuel use regulations in proposed	Comment noted.

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	turewise, and Rein Attemann, Washington Environmental Council				23.40.125(B)(2). The changing climate shows the need for a just transition away from fossil fuels. The proposed fossil fuel use regulations are an important step in this important transition. We support them.	
FW/WEC16	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.40.010	In the Cherry Point Aquatic Reserve we recommend that conditional use permits be required for changes of use, that existing uses be defined specifically, and that new piers, docks, wharfs, and wings be prohibited at Cherry Point. These measures are necessary to protect the valuable resources of the Cherry Point Aquatic Reserve.	The County Council is considering such regulations for Title 20 (Zoning), which would also apply. Staff doesn't believe they need to be repeated here. Nonetheless, we have incorporated their proposed use requirements into 23.40.010 Table 2 (Use Table).
FW/WEC17	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.40.140	<p>We oppose the amendments to 23.40.140 Mining policies and regulations and urge the County to retain the existing policies and regulations as they are needed to achieve no net loss.</p> <p>If mining is going to be allowed in floodplains, floodways, and channel migration zones, which the County is proposing to allow, then additional standards are needed. First, mines should be located outside the channel migration zone so that they do not increase the rate of channel migration. Second, mines should be no deeper than the bottom of the nearby streams and rivers so when the river moves into the mine, which is a certainty, the impacts will be reduced. Third, the mine reclamation plan should have a design so that when the river or stream moves into the mine, the mine workings are not so wide that the captured sediments destabilize the river or stream or increase erosion risks on upstream properties.</p> <p>We recommend that the following new regulation be added.</p> <p><u>D. Mining in the 100-year floodplain, floodway, or channel migration zones shall meet the following standards:</u></p> <p><u>i. Mines should be located outside the channel migration zone unless there is no feasible alternative site.</u></p> <p><u>ii. Mines shall be no deeper than the bottom of the nearby streams and rivers.</u></p> <p><u>iii. The mine reclamation plan shall have a design so that when the river or stream moves into the mine it is not</u></p>	Such mining has always been allowed; we're not changing that. Nonetheless, all comments will be forwarded to the P/C and Council.

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					<u>so wide or deep that the captured sediments destabilize the river or stream or increase erosion risks on upstream properties.</u>	
FW/WEC18	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	23.40.140	<p>In 2020, the legislature adopted RCW 90.48.615(2) which prohibits “[m]otorized or gravity siphon aquatic mining or discharge of effluent from such activity to any waters of the state that has been designated under the endangered species act as critical habitat, or would impact critical habitat for salmon, steelhead, or bull trout. This includes all fresh waters with designated uses of: Salmonid spawning, rearing, and migration.”</p> <p>We recommend that the SMP Update prohibit motorized or gravity siphon aquatic mining and discharging effluent from this type of mining in shorelines that are the critical habitat for salmon, steelhead, or bull trout and that salmonids use for spawning, rearing, and migration.</p>	We have added a section regarding this.
FW/WEC19	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	D	(existing) 23.100.150	<p>We oppose the amendments to remove policies and regulations encouraging or requiring low-impact development.</p> <p>The update removes some policies and regulations that encouraged, allowed the County to require, or required low-impact development techniques. For example, former (C)(2) on page 156 provided that “[c]lustering and low impact development techniques may be required where appropriate to minimize physical and visual impacts on shorelines in accordance with policies and regulations of WCC 23.90.090.” This regulation has been deleted. While the subdivision regulations are now proposed to allow the County to require clustering, the requirement for low-impact development has been deleted. Low impact development is an important technique for reducing development’s water quality impacts on rivers, lakes, streams, wetlands, and Puget Sound. We urge the County to retain these policies and regulations; they needed to maintain no net loss of shoreline resources.</p>	Former 23.100.150 (C)(2) was moved to 23.40.130(A)(10), though without the reference to LID. At the time, we had been thinking about stormwater LID techniques, which is covered by a general regulation of meeting our Title 20 stormwater regulations; we had not been thinking about LID in terms of plat design. The term has now been reinstated. 23.40.130(A)(10).
FW/WEC20	Tim Trohimovich, Futurewise, and Rein Attemann, Washington	9/16/20	D	(existing) 23.40.200(A)(10), (11), and (12)	Do not delete existing 23.40.200(A)(10), (11), or (12) prohibiting freestanding signs between the right-of-way and buildings, the waterbodies, or placing them in critical areas buffers, or the sign	The SMA, WAC, or DOE guidelines do not address signs. For simplicity’s sake we were proposing to just have our Title

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	Environmental Council				limits in Table 2, Sign Area Limits. Existing WCC 23.40.200(A)(10), (11), and (12) currently prohibit many freestanding signs between the right-of-way and buildings the waterbodies or placing them in critical area buffer. Signs are not a priority shoreline use, but the policy of the SMA calls on the County and Ecology to protect shoreline views. These existing regulations are necessary to implement the policy of the SMA and cannot be deleted. Existing Table 3 is also needed to limit the sizes of signs in shoreline jurisdiction to implement the policy of the SMA. Again, it cannot be legally deleted.	20 sign regulations address signs. However, T-20 does not address these circumstances, so we have reinserted existing 23.40.200(A)(10), (11), & (12) as 23.40.200(A)(6), (7), & (8). Existing Table 3 does not address sign size.
FW/WEC21	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	16.16.265(A)(1)	Require wider setbacks between development and shoreline and critical areas buffers to protect homes and property from wildfire danger. Whatcom County is susceptible to wildfires. Climate change has the potential to increase wildlife risk through changes in fire behavior, wildfire ignitions, fire management, and the vegetation that fuels wildfire. Setbacks from critical areas buffers provide an area in which buildings can be repaired and maintained without having to intrude into the buffer. It also allows for the creation of a Home Ignition Zone that can protect buildings from wildfires and allow firefighters to attempt to save the buildings during a wildfire. Since a 30-foot-wide Home Ignition Zone is important to protect buildings, we recommend that 16.16.265(A)(1) require a setback at least 30 feet wide adjacent to shoreline and critical area buffers. Combustible structures, such as decks, should not be allowed within this setback to protect the building from wildfires. This will increase protection for people and property.	This distance was established by Council and staff is not proposing to change it. However, all comments will be provided to them. (Note that this comment contradicts comments GCD12 and MES09.)
FW/WEC22	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	Article 3	We strongly support updating the Geohazard Area standards in Article 3. Whatcom County is susceptible to landslides. The SMP Guidelines, in WAC 173-26-221(2)(c)(ii)(B), provide: "Do not allow new development or the creation of new lots that would cause foreseeable risk from geological conditions to people or improvements during the life of the development." Landslides are a	16.16.322(D) already precludes land divisions, and requires risk-reducing measures be taken for non-division development in geohazard areas. 16.16.310 also covers landslide deposits, scarps and flanks.

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					<p>type of geological hazard that can result in major impacts to people and property.</p> <p>We strongly support designating the landslide deposits, scarps and flanks, and areas with susceptibility to deep and shallow landslides as geologically hazardous areas. This will better protect people and property.</p>	
FW/WEC23	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	Article 3	Landslides are capable of damaging commercial, residential, or industrial development at both the tops and toes of slopes due to the earth sliding and other geological events. So the areas at the top, toe, and sides of the slope are geological hazards. We recommend these areas be designated as landslide hazards.	CAO Article 3 already covers this.
FW/WEC24	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	Article 3	<p>Require the review of geologically hazardous areas capable of harming buildings or occupants on a development site.</p> <p>We recommend that the regulations require review of any landslide capable of damaging the proposed development. Geological hazards, such as landslides are capable of damaging property outside the hazard itself. The 2014 Oso slide ran out for over a mile (5,500 feet) even though the slope height was 600 feet. A 2006 landslide at Oso traveled over 300 feet. Recent research shows that long runout landslides are more common than had been realized. This research documents that over the past 2000 years, the average landslide frequency of long runout landslides in the area near the Oso landslide is one landslide every 140 years. The landslides ran out from 787 feet to the 2,000 feet of the 2014 landslide. So we recommend that Whatcom County require review of all geological hazards capable of harming a proposed lot or building site.</p>	CAO Article 3 already covers this.
FW/WEC25	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	16.16.325(C)	We support WCC 16.16.325(C) which requires individualized setbacks from landslide hazard areas based on the actual hazard. WCC 16.16.325(C) will help protect people and property. Construction should not be allowed in these setbacks.	Comment noted.
FW/WEC26	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	Article 5.5	<p>To protect the coastal aquifers, we recommend that Article 5.5 apply to all areas subject to saltwater intrusion.</p> <p>All of the islands in the County and its marine shorelines have</p>	To staff's knowledge, only Lummi Island has been designated as a vulnerable seawater intrusion areas by the County Council (which is why it has the rules in

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					<p>the potential for wells to be contaminated by salt water. WAC 173-26-221(2)(a) requires that shoreline master programs must provide for management of critical areas designated as such pursuant to RCW 36.70A.170(1)(d) located within the shorelines of the state with policies and regulations that ... [p]rovide a level of protection to critical areas within the shoreline area that assures no net loss of shoreline ecological functions necessary to sustain shoreline natural resources." Critical areas include areas with a critical recharging effect on aquifers used for potable waters.</p> <p>Saltwater intrusion can worsen until wells "must be abandoned due to contaminated, unusable water." Saltwater intrusion is often worsened by over-pumping an aquifer. The Western Washington Growth Management Hearings Board has held that Growth Management Act requires counties to designate vulnerable seawater intrusion areas as critical aquifer recharge areas. The Board also held that counties must adopt development regulations "to protect aquifers used for potable water from further seawater degradation."</p>	Art. 5.5).
FW/WEC27	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	Table 1, Standard Wetland Buffer Widths	We support updating the buffer widths to conform to Ecology's most recent recommendations, as they are based on best available science	Comment noted.
FW/WEC28	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	16.16.640(B)	Buffer averaging should not allow widths less than 75% of the required buffer for all wetlands. Type IV wetlands have important functions and values. Allowing 50% buffer reductions for type IV wetlands is inconsistent with best available science and should not be allowed.	Based on this comment we have removed the allowance for Type IV wetlands in 16.16.640(B) and inserted the language from 2016 DOE Guidance (XX.040 Exemptions and Allowed Uses in Wetlands) providing exceptions to regulation of certain wetlands/buffers from regulation in a new section 16.16.612.
FW/WEC29	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	16.16.740(B)	<p>Retain using the PHS recommendations as the default for buffers and management recommendation priority habitats and species.</p> <p>Currently, Table 4, Buffer Requirements for Habitat Conservation Areas (HCAs), provides that for areas with which federally</p>	While the text in the table is proposed for deletion, amended (B)(2) requires that minimum buffers be based on habitat a management plan prepared pursuant to WCC 16.16.750, subsection (B)(4) of

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					listed species have a primary association, state priority habitats, and areas with which priority species have a primary association the "[m]inimum buffers shall be based on recommendations provided by the Washington State Department of Fish and Wildlife PHS Program; provided, that local and site-specific factors shall be taken into consideration and the buffer width based on the best available information concerning the species/habitat(s) in question and/or the opinions and recommendations of a qualified professional with appropriate expertise." This requirement is being deleted and instead the buffers are based on a habitat a management plan. While we recognize the habitat management plan will include information on the PHS program recommendation and a survey of best available science related to the species or habitat, the current requirement is clearer that the default buffer should be the PHS recommendations. We think this is clearer and provides better protection for priority species and habitats and recommend it be retained.	which requires that assessment reports include Management recommendations developed by WDFW through its PHS program. Thus, the requirement is still there (and always was, as this section isn't proposed for modification).
FW/WEC30	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20	F	16.16.740(B)	We also recommend that the required consultation with Indian Tribes and Nations in Table 4 be retained. They have significant expertise on fish and wildlife and their habitat needs.	16.16.750(C) still allows for agency and tribal consultation.
FW/WEC31	Tim Trohimovich, Futurewise, and Rein Attemann, Washington Environmental Council	9/16/20			We support preparing a No Net Loss technical memo. While WAC 173-26-090(2)(d)(ii) provides that "[t]he review process provides the method for bringing shoreline master programs into compliance with the requirements of the act that have been added or changed since the last review and for responding to changes in guidelines adopted by the department, together with a review for consistency with amended comprehensive plans and regulations," this provision does not excuse compliance with WAC 173-26-090(2)(d)(i) and cannot override RCW 90.58.080(4)(a) of the Shoreline Management Act. So, while SMPs must be brought into compliance with new laws and new SMP Guidelines, they must also comply with all current provisions of the SMA and the SMP Guidelines including the no net loss requirement. We urge Whatcom County to update the SMP to achieve no net loss.	A NNL technical memo will be prepared prior to the P/C making their recommendations to Council. We thought it more appropriate to do this task after the public comment period in case the proposals needed to be amended.
GCD01	Glyn & Carol Davies	9/23/20	D	23.10.160(C)	A penalty of double standard post development is excessive.	This section doesn't say that penalties in

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					Please consider reducing the penalty to the cost of mitigation plus a percentage penalty in the range of 15% - 25%.	the way of fines are doubled; it says that "corrective action, restoration, or mitigation" will be required at a double ratio "when appropriate" as a way to discourage violations.
GCD02	Glyn & Carol Davies	9/23/20	D	23.30.040(C)	Please consider clarifying the planting of vegetation to minimize impacts to views from the water requirement in this provision. For example, views from the water are optimized by plants and shrubs that do not exceed 3' – 4' in height. Dense, forested vegetation on the shoreline is highly obstructive to views, so this provision should be clear regarding the type of vegetation that protects views.	This provision is aimed at protecting views from the water. The SMA requires protecting views to <i>and from</i> the water. (RCW 90.58.020))
GCD03	Glyn & Carol Davies	9/23/20	D	23.40.020(F)	Suggest adding a 15 th provision to this clause to conform to 16.16.720(G)(4) Accessory Uses. "When located in the shoreline jurisdiction, residential water-oriented accessory structures may be permitted in an HCA buffer; provided that the size shall be limited to 10% of the buffer's area or 500 square feet, whichever is less."	We have added a cross reference to that section.
GCD04	Glyn & Carol Davies	9/23/20	D	23.40.150(A)(2)	"No pier or dock shall be used for a residence." This provision should be deleted since it contradicts 23.40.150(A)(A) that allows moorage for single family residences.	23.40.150(A)(A) to which the commenter refers is proposed for deletion. Furthermore, it refers to "moorage associated with a SFR," which means a private dock at a private SFR (i.e., a personal dock), which is still allowed. The prohibition in 23.40.150(A)(2) refers to someone living on their boat or dock.
GCD05	Glyn & Carol Davies	9/23/20	D	23.40.150(A, B, & C)	<i>Dimensional Standards – Freshwater and Marine – tables</i> Please consider allowing ramps to be 6' wide rather than 4' wide as a safety measure when transporting kayaks, canoes, or boating provisions, equipment and supplies to the dock for launching (kayaks or canoes) or loading into a boat (ice chests, water skis, wakeboards, etc.). 4' is narrow when carrying bulky items to the float, and can be dangerous, particularly if the ramp or pier is high off the water due to the shoreline configuration relative to the float. This would also mean increasing the square footage for the individual use dock or pier to 520 sq. ft. to accommodate	WDFW regulations in WAC 220-660-140 and 380 limit the width of residential dock ramps to 4' wide.

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					a 6' wide ramp, and increasing the added square footage if the dock has to be extended due to water depth to 6 sq. ft. rather than 4 sq. ft.	
GCD06	Glyn & Carol Davies	9/23/20	D	23.40.150(A, B, & C)	We also suggest changing the minimum water depth to either 10' measured below ordinary high water, or 6' measured over mean low low water. This is to allow adequate clearance for propellers to protect the sea floor or lake bed from turbulence when a boat is operating in shallow water	Changing to a 10' standard would essentially allow a doubling of the length of docks on our lakes, when we're required to minimize overwater structures. It would also interfere with public navigation.
GCD07	Glyn & Carol Davies	9/23/20	D	23.40.150(C)(8)	Please consider adding a qualifier to this provision stating "...unless shoreline constraints, and/or positioning of pilings make it infeasible to create sufficient buoyancy for the float without positioning flotation components under a portion of the grating."	This standard is from WDFW regulations in WAC 220-660-140 and 380.
GCD08	Glyn & Carol Davies	9/23/20	D	23.40.150(D)(6)	Please consider increasing the size of a covered moorage accessory for a single-family pier or dock to 500 sq. feet (25 x 20) and 20 ft. in height above OHWM to accommodate larger boats that are increasingly common on the lakes in Whatcom County. Also please consider deleting the requirement in this provision that the cover (the "roof materials") be "...translucent or at least 50% clear skylights." The purpose of a covered moorage is to protect the boat, principally from sunlight, which is not served by a translucent cover. Additionally, even if the cover is translucent, the boat under it is not, which defeats the purpose of a translucent cover in any case.	These standards are from DOE guidance.
GCD09	Glyn & Carol Davies	9/23/20	D	23.40.170(C)(3)	Please consider increasing the total allowed footprint of home, sidewalks and similar structures, parking areas and normal appurtenances to "the greater of 40% of the total area of the lot or 4,000 sq. ft." 2,500 sq. ft. is small for just the residence by today's standards, and is prohibitively small when it includes the garage, driveway, sidewalks, decks, patios, etc. in addition to the home.	This provision is existing and is for construction on constrained lots, which by definition cannot accommodate larger development; if one wants a larger home, one can buy an unconstrained lot.
GCD10	Glyn & Carol Davies	9/23/20	F	16.16.235(4)(b)(iii)	Why is tree replacement at a 3:1 ratio? Please consider a tree replacement ratio of 1:1.	A 3:1 ratio is based on DOE guidance, which recommends a ratio of 4:1 for mature trees and 2:1 for young trees. For simplicities sake, we averaged it. Additionally, this is the same replacement

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						ratio in on Council's adopted tree protection regulations for Lake Whatcom and our other special watershed districts.
GCD11	Glyn & Carol Davies	9/23/20	F	16.16.235(B)(5)(e)	Please consider a pruning height for shrubs on the order of 2' – 3' in order to minimize view obstruction.	We have now moved that provision from the view corridor section to the vegetation management section.
GCD12	Glyn & Carol Davies	9/23/20	F	16.16.265(A)(1)	Please consider eliminating the building setback. The purpose of the critical area buffer is to provide protection; with generous buffer requirements (100' for shoreline, 50' – 100' for critical areas, etc.) there is no need for an additional 10' building setback (or consider reducing the building setback to 5' from the buffer).	This setback was established by Council and staff is not proposing to change it. We have, however, amended the section to allow for a reduction where the setback isn't warranted, modeled on the COB's similar regulation. (Note that this comment contradicts comment FW/WEC21.)
GCD13	Glyn & Carol Davies	9/23/20	F	16.16.265(A)(1)(b)	Please consider allowing for a grade-level deck that is covered by a corresponding deck on the 2 nd floor, as well as the bottom of the stairs/staircase for access to a second level deck, if any.	Comment noted.
GCD14	Glyn & Carol Davies	9/23/20	F	16.16.270(C)(12)	Same comment as GCD08 above: Please consider increasing the total allowed footprint of home, garages/shops, decks, parking, and all lawn and nonnative landscaping to "the greater of 40% of the total area of the lot or 4,000 sq. ft." 2,500 sq. ft. is small for just the residence by today's standards, and is prohibitively small when it includes the garage, driveway, sidewalks, decks and patios and lawn in addition to the home. Also, 23.40.170.C.3 allows an additional 500 sq. ft. for landscaping, lawn, turf, ornamental vegetation, or garden. This provision should match and allow the same additional 500 sq. ft.	Reasonable use as proposed would now be the last effort to avoid a constitutional taking and allow development on very constrained lots and these cases should be rare. The new paradigm is to administratively allow up to 50% buffer reduction (with mitigation) through a minor variance (administrative) and a greater reduction with a public hearing (Hearing Examiner). This new approach should provide greater flexibility while cutting down on costs to applicants and cases going to the H/E. The shoreline code cited is what is allowed without a shoreline variance; an applicant always has the option to seek a larger footprint through a variance.
GCD15	Glyn & Carol Davies	9/23/20	F	16.16.620(F)	Please allow for a storage tank when a storage tank is mandated by County requirements for the well.	A storage tank is not required to be adjacent to a well, as is a pump(house); it could be placed elsewhere on a property,

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						outside of critical areas/buffers.
GCD16	Glyn & Carol Davies	9/23/20	F	16.16.620(G)(2)(d)	Please consider allowing the dispersion outfall within the outer 50% of the buffer.	The 25% is existing language; however, we have proposed adding, "unless a closer location is demonstrated to be the only feasible location" to account for odd circumstances.
GCD17	Glyn & Carol Davies	9/23/20	F	16.16.265(A)(1)	Please consider eliminating the building setback. The purpose of the critical area buffer is to provide protection; with generous buffer requirements (100' for shoreline, 50' – 100' for critical areas, etc.) there is no need for an additional 10' building setback (or consider reducing the building setback to 5' from the buffer).	We have added text to the section describing its purpose. However, this setback was established by Council and staff is not proposing to change it.
GCD18	Glyn & Carol Davies	9/23/20	F	16.16.680(F)	Please consider limiting the replacement ratio for preservation to 3 times the ratio for reestablishment or creation (in most cases, 1:1 ratio should be applicable, so a 3 times ratio is generous and should suffice).	Mitigation ratios for wetland impacts are taken verbatim from DOE guidance.
GCD19	Glyn & Carol Davies	9/23/20	F	16.16.720(A)	Since you are proposing eliminating provision "O" under this section that calls out residential, perhaps reference residential use in this provision: "...including, without limitation, residential uses."	We're not sure to what the commenter is referring.
GCD20	Glyn & Carol Davies	9/23/20	F	16.16.720(B)(3)	Please allow for a storage tank when a storage tank is mandated by County requirements for the well.	Tanks do not necessarily need to be next to a well, as a pump house does. Tanks could be located elsewhere on a property, outside of critical areas/buffers.
GCD21	Glyn & Carol Davies	9/23/20	F	16.16.720(G)(1)(d)	Please consider 6 foot width for private trails.	Comment noted.
GCD22	Glyn & Carol Davies	9/23/20	F	16.16.745(C)(1)(c)	Please consider allowing buffer reduction to 65% of the standard buffer specified in the table.	The amendments proposed are intended to meet DOE guidance. As such, we cannot vary without developing our own Best Available Science.
GCD23	Glyn & Carol Davies	9/23/20	F	16.16.760(8)	Please consider mitigation at 1:1 ratio regardless of whether placed before or after impact occurs. Sometimes mitigation must occur after the impact occurs for logistical reasons. This should not result in a 25% penalty.	This ratio is not proposed for amendment; Council approved it in 2017 to account for temporal loss.
LNTHPO01	Tamela Smart, Lummi Nation Tribal Historic Preservation Office	9/15/20	D	23.60.030(18)	One of our primary concerns is the use of the term "significant" in regards to cultural resources. This term has a specific meaning under Federal law. The definition that is included for this	The term significant has been deleted from the definition of "cultural resource site" as it is no longer used in the regula-

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					term on page 227 is taken from the Federal process and it does not apply here. Under state law a different process is followed.	tions.
MES01	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.255(B)	Subsection (5) was stricken, and a side bar note says this is addressed by (4). This does not appear to be the case as 4 is an allowance for water dependent use.	We think the commenter erred in his reference. Allowance for water dependent uses is subsection (3); (4) refers to uses allowed by Ch. 16.16, which includes activities allowed with or without notification.
MES02	Ed Miller, Miller Environmental Services	9/18/20	F	6.16.255(B)(8)	<i>Alteration of functionally disconnected Type III or IV wetlands with associated with an approved commercial development within an Urban Growth Area.</i> Please define “functionally disconnected”. If this was intended to mean “isolated wetlands”, this provision would exclude many wetlands that have seasonally flowing outlets within the Birch Bay area. Also, why doesn’t this exemption apply to residential development in other UGAs?	The term “functionally disconnected” has been deleted.
MES03	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.225(C)	Please define “ecological connectivity” and “habitat corridors.” It appears this section will grant the County the authority to protect/prohibit development over areas outside of defined critical areas and their buffers. The language is vague, which will create unpredictable review and requirements. A corridor could be 10 feet wide or >300 feet wide, depending on which species we are seeking to maintain a corridor for. Additionally, corridors are already covered in the CAO, as a WDFW priority habitat covered under the HCA section.	The commenter is correct. However, this verbiage was added in response to the Council’s direction in the adopted scoping document.
MES04	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.225(D)	Was this section intended to apply to native plant communities within critical areas and buffers or within any native plant community “associated” with critical areas? What does “associated” mean? This could potentially imply that any native vegetation beyond the regulated buffer should be prioritized for protection. This new section seeks to extend authority over all vegetation (native and non-native) on a property.	The CAO only applies to critical areas and their buffers, and as adopted by reference in the SMP, only applies to the shoreline jurisdiction. This proposed language does not extend authority over all vegetation on a property.
MES05	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.230(B)	We noted the verbiage change from the prior “exempt activities” title. With this modification, no activities would be exempt from the critical areas ordinance. Additionally, under subsection B of this section, the language was modified to remove the allowance to prune or plant ornamental or native trees within critical	Per state law, <i>all</i> activities are subject to the CAO, including those listed here. They are not exempt; they just don’t need a permit or review. We changed the title

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					areas or buffers. This would take away any rights to prune or plant native or non-native trees in lawfully established gardens or landscaped areas, including fruit trees? Why? This seems to be taking away some existing established rights. This section is inconsistent with 16.16.235.B.4.a.i.	to make it clearer. Pruning (and all vegetation management) still listed as an activity allowed in buffers with notification (16.16.230((B)(4)). We removed <i>planting</i> so people don't think they can plant new non-native trees in the buffer. However, one can still maintain existing vegetation.
MES06	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.235(B)(4)(b)(iv)(B)(2)	Evergreen trees may not be appropriate for all environments, particularly wetlands with high levels of seasonal ponding. We recommend removing the evergreen tree requirement.	This language is the same that is used in our tree protection regulations for our watersheds. Nonetheless, we agree that in certain circumstances evergreens may not be the best choice. Therefore we have added, "unless otherwise approved by the Director."
MES07	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.235(B)(5)	What is the time scale when referring to "one-time"? The life of the tree? The duration of property ownership? Please clarify.	This was unclear. We have removed "a one-time," but added "a cumulative total of." We were trying to limit the total amount of buffer that could be cleared.
MES08	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.255(C)(3)	"Habitat corridor" and "ecological connectivity" are general ecology terms, not defined in this code and not regulated as a critical area – unless they are a specific, identified HCA (such as old growth/mature forest, Oregon White Oak, etc.). Biodiversity areas and corridors are identified as a state "priority habitat" by Washington Department of Fish and Wildlife (WDFW)– with corridors defined as "relatively undisturbed and unbroken tracts of vegetation that connect fish and wildlife habitat conservation areas, priority habitat, areas identified as biologically diverse, or valuable habitat within a city or UGA." Critical areas reports are already required to cover biodiversity areas and corridors as an HCA. If the intent of this added section is to include other areas in addition to those currently regulated as critical areas, it seems to be an extension of and addition of a new regulated area.	The commenter is correct. However, this verbiage was added in response to the Council's direction in the adopted scoping document.
MES09	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.265(A)(1)	What is the intent of the building setback? If it is to protect tree root zones and allow for building access and maintenance, a building setback is not always needed. For example, a new	This setback was established by Council and staff is not proposing to change it. We recognize, however, that there may

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					building within a grass field would not disturb root zones within a buffer or result in significant disturbance by a homeowner walking around the house. Assuming this 10-foot building setback area would or could be tabulated as impact, the setback will effectively reduce the allowed "reasonable use" footprint (which is proposed to be reduced back down to 2,500 square feet under this code). Forcing applicants to build smaller homes on reasonable use lots in order to accommodate a 10-foot building setback will significantly reduce the buildable area on a property. For example, a 50 x 50-foot building (2,500 SF) would have to shrink to 40 by 30-foot building (1,200 SF) if it is against a road setback in order to leave a 10-foot building setback around three sides of the structure.	be instances where the setback isn't warranted and have amended the section to allow for a reduction in such cases, modeled on the COB's similar regulation.
MES10	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.265(B)(1)	Significant Trees" needs to be defined in the CAO.	The WCC has too many disparate definition sections, many of which define the same words differently. Staff is working toward ultimately having one definition chapter. But until that happens, we're trying not to add new definitions where words are already defined elsewhere, which is why we've added "Any words not defined herein shall be defined pursuant to Titles 20 (Zoning), 22 (Land Use and Development), 23 (Shoreline Management Program), or their common meanings when not defined in code" at the beginning of the definition section.
MES11	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.270(C)(12)	<i>Reasonable Use Exceptions. For single-family residences, the maximum impact area may be no larger than 2,500 square feet. This impact area shall include the residential structure as well as appurtenant development that are necessarily connected to the use and enjoyment of a single-family residence. These appurtenant developments include garages/shops, decks, parking, and all lawn and nonnative landscaping.</i> Why is reasonable use reduced from 4,000 SF to 2,500 SF? The County Council previously approved the larger area so that	Reasonable use as proposed would now be the last effort to avoid a constitutional taking and allow development on very constrained lots and these cases should be rare. The new paradigm is to administratively allow up to 50% buffer reduction (with mitigation) through a minor variance (administrative) and a greater reduction with a public hearing (Hearing Examiner). This new approach should provide great-

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					<p>property owners could use a reasonable portion of their 5, 10, 20-acre properties with a house, shop, garden, etc. If the intent is to make it the same as the SMP reasonable use allowance (2,500 square feet), please explain why they need to be the same. Shoreline lots fall within 200 feet of the shoreline, a more highly protected area designated by the Shoreline Management Act. Additionally, shoreline lots are often smaller-sized lots. A majority of non-shoreline lots in the County are at least five acres in size. No specific reasoning is given on why the reasonable use allowance is being lowered, despite the recent critical areas code update in 2017 which brought it to 4,000 square feet.</p> <p>This is particularly concerning if a 10-foot building setback is required to be included within the reasonable use allocation area, severely reducing building size. Potentially, a property owner with five acres or more could be limited to a 1,000 SF house with a required 10-foot building setback and max out the reasonable use allowance with a small house footprint.</p>	<p>er flexibility while cutting down on costs to applicants and cases going to the H/E. The shoreline code cited is what is allowed without a shoreline variance; an applicant always has the option to seek a larger footprint through a variance.</p>
MES12	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.630(C) & 16.16.740(A)(1)	<p>This section of code was revised to remove the provision that buffers do not extend across substantially developed areas and/or across legally established roads. The language was changed to only include “existing, legally established substantially developed surface”. This change would allow larger buffers to include disconnected area on the opposite side of roads or developed surfaces (such as buildings). Please explain the reason for this change. We are not aware of any Department of Ecology guidance that proposes including disconnected portions of buffer across roads or developed areas.</p> <p>While some wildlife species may cross roads (e.g. birds, mammals), it seems unlikely that water-dependent species (e.g., amphibians) would regularly access buffers across roads and buildings. Since the intent of the buffer is to protect the functions of the wetland, perhaps the analysis should focus on what functions a disconnected buffer would provide to a wetland across a road or building. The disconnected buffer would not provide</p>	<p>Hydrologic or water quality functions are not the only reason for buffers. While small water-dependent species (e.g., amphibians) may not cross roads, many others do, or they nest, roost, or any number of other activities. DOE guidance does not provide provisions for reducing buffers because of minor (e.g., dirt driveways) intrusions.</p>

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					hydrologic or water quality functions for the wetland across the road. This change would substantially increase the amount of regulated buffer areas in Whatcom County, particularly in conjunction with the larger buffers proposed under this code change. As such, it seems there should be some reasoning provided as to why this change is needed or even valid.	
MES13	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.640(A)	How will the Director determine what distance is necessary to increase the buffer if it's "poorly vegetated"? This appears subjective as there is no definitive science that provides clear buffer widths in these cases – they could vary depending on what function or which species you are seeking to protect. What would qualify as "poorly vegetated"? Bare dirt? Grass? Significant coverage of invasive species? This section of code could be interpreted and applied very differently among staff, decreasing predictability and consistency for landowners. The section has also been altered from the existing code to allow for buffer increases to "provide connectivity to other wetland and habitat areas". This seems to be an especially broad provision to increase buffers almost anywhere.	Staff is proposing amendments to this section to provide better rationale (based on DOE guidance) for an already existing section.
MES14	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.640(B)(2)	<i>Buffer Width Averaging. In the specified locations where a buffer has been reduced to achieve averaging, the Director may require enhancement to the remaining buffer to ensure no net loss of ecologic function, services, or value.</i> This section effectively eliminates the intent of buffer averaging and converts it to buffer reduction by requiring mitigation. Buffer averaging is an important and simple way to allow more flexibility for property owners that need to make minor buffer adjustments. This section will also reduce consistency and predictability (each staff member could apply this differently), and will increase the cost for simple projects by requiring plantings, monitoring, bonding, etc. by thousands of dollars.	The intent that if the remaining reduced buffer area is degraded, it is now narrower and lacks the vegetation to properly function. If it is well vegetated, enhancement would not be necessary (nor required).
MES15	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.640(C)(1)(c)	<i>Buffer Width Reduction. The buffer shall not be reduced to less than 75 percent of the standard buffer.</i> The existing code section allows for up to a 50 percent (or min-	We are responding to comments from DOE regarding having to meet their latest guidance.

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					imum of 25 feet) reduction of a Category IV wetland buffer, while higher category wetland are restricted to a 25 percent reduction. Why is this being changed? Is there guidance from the Department of Ecology supporting the change or data from Whatcom County showing that the current allowed reduction up to 50 percent for Category IV wetlands is not working? Category IV wetlands are generally low functioning wetlands – why are we further restricting buffer flexibility here?	
MES16	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.640(C)(1)(e)(iii)	Does this mean the Director could require property owners to protect non-critical area and non-buffer areas with a conservation easement? This essentially gives the Director unlimited authority to restrict uses over non-protected uplands on properties, further limiting uses on properties without clear rationale, size limitations/restrictions, or predictability. Again, this section of code will create highly unpredictable review, requirements, and result in additional cost and critical areas assessment report revisions, depending on staff interpretations and personal beliefs. Additionally – allowed buffer reductions already require buffer mitigation to offset the impact. Please provide rationale for requiring additional mitigation that may include non-designated critical areas.	This is not intended to be in addition to mitigation, but one of the ways to achieve no net loss through the mitigation sequence while applying landscape ecology principals.
MES17	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.640(C)(1)(g) & 16.16.640(C)(3)	<i>Buffer Width Reduction. All buffer reduction impacts are mitigated and result in equal or greater protection of the wetland functions and values. This includes enhancement of existing degraded buffer area and provide mitigation for the disturbed buffer area.</i> Define “degraded”. This could result in the Director arbitrarily requiring acres of additional planting, above and beyond the 1:1 or 1.25:1 buffer mitigation. How is the amount of area determined? What if the area is an active hayfield or established pasture that is in use? The Director could remove the ability to use a legally established, non-conforming uses and require planting over such area. This again will add uncertainty, lack of predictability, and significantly increase costs without any clear limitations on how much planting could be required. Additionally, this sounds like two things are now required – enhancement of	The planting of degraded buffers has been a part of our CAO since 2005 and is based on DOE guidance. Based on case history, we are only clarifying that the area that might be enhanced is limited to the specific portions of the buffer being reduced, not anywhere on the lot, and certainly not outside critical area buffers (and thus does not “grant unlimited potential for mitigation requirements”). Per DOE guidance, “degraded” is any portion of a buffer that is not in a densely vegetated community.

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					existing degraded buffer and conducting additional mitigation. Why are property owners penalized for the current condition of the property – that may have been in place for generations? Also, it should be noted that buffers are not static, and have been increasing with every update and version of the CAO. As a result, areas which now may be considered “degraded buffer,” potentially requiring additional enhancement (per the draft change), may not have even been regulated as buffer a few years ago.	
MES18	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.680(C)(4)	<p><i>Mitigation Ratios. For impacts to wetland buffers, mitigation shall be provided at the follow ratios... (1) Where the mitigation is placed after the impact occurs, at a 1.25:1 ratio (area or function); and (2) where the mitigation is in place and functional before the impact occurs (i.e. advanced mitigation), at a 1:1 ratio (area or function).</i></p> <p>Planting mitigation prior to project construction is complicated because of access for equipment, permit issuance, and seasonal constraints (plants generally must be planted in winter or spring) – which doesn't always coincide with project construction. At the stage when the mitigation is designed and the critical areas assessment report is submitted to the County for review with the site plan, we don't know when or if planting could occur prior to project construction. This makes it impossible to assume applicants could achieve a 1:1 mitigation ratio unless they are using an established mitigation bank to offset their impacts. Why is this being changed? Is there a directive from the Department of Ecology or data in Whatcom County supporting this, and the higher ratio?</p>	The amendments to this section are proposed to meet Best Available Science and DOE guidance to account for temporal loss, i.e., the time between impact and when mitigation is providing the same functions and values as to prior to the impact.
MES19	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.720(D)	<p><i>Private Access. Access to existing legal lots may be permitted to cross habitat conservation areas if there are no feasible alternative alignments.</i></p> <p>This section as modified implies that no new lots could be created (subdivided) if a road would be needed to cross through a habitat conservation area. This could include trumpeter swan loafing areas (which are roughly mapped on WDFW priority habitats and species maps), biodiversity corridors, bat habitat</p>	We believe Mr. Miller was reviewing an older draft. We have since amended this subsection (and subsection (C) to clarify how subdivisions could still occur.

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					(which includes entire townships where bats are mapped), streams, Pileated woodpecker habitat (which is not mapped by WDFW and must be determined by the project biologist or County staff), and many other priority habitats.	
MES20	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.630(F)	<i>Table 1 Standard Wetland Buffer Widths.</i> Based on a sampling of numerous projects in Whatcom County, the most common wetland category is a Category III with a moderate habitat score (110 or 150-foot buffers for moderate or high intensity land uses respectively). However, we also find that Category III wetlands with a high habitat score occur. This could easily occur in a wetland of small to moderate size (5,000 to 10,000 square feet), and partially in a pasture. The updated buffer for this type of wetland would be 225 feet or 300 feet (for moderate or high intensity development respectively). A 225-foot buffer would result in over 3.6 acres of land that would be protected as buffer. On a five-acre property, with multiple wetlands, this could easily create many more reasonable use properties, resulting in many more variances.	Based on conversations with DOE staff, Table 1 is proposed to be updated to be consistent with their latest guidance. Mr. Miller provides a good example as to why staff is proposing an (up to 50%) administratively approved minor variance.
MES21	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.740(A)	<i>Buffer Widths</i> This is the same concern as comment MES12, and would allow for buffers to extend to areas across roads.	Hydrologic or water quality functions are not the only reason for buffers. While small water-dependent species (e.g., amphibians) may not cross roads, many others do, or they nest, roost, or any number of other activities. DOE guidance does not provide provisions for reducing buffers because of minor (e.g., dirt driveways) intrusions.
MES22	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.740(B)	<i>Table 4. Buffer Widths.</i> What is a Type O water? No definition is given and there is no other correlation with any other part of the HCA section or Washington State water typing. The buffer provision for natural ponds and lakes under 20 acres was previously 50 feet, but was removed. What are the buffers for small lakes and natural ponds? The added water typing buffers in the table include a 100-foot buffer for lakes. Assumedly	A definition of Type O waters is provided in §16.16.710(C)(1)(a)(v). Natural ponds and lakes under 20 acres fall into one of the five listed types, which are generally based on size, permanence, and presence of fish.

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					natural ponds and small lakes would not be required to have the same buffer as large lakes in the County. Currently artificially created ponds (created prior to 2005) do not require a buffer, is this still the case?	
MES23	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.745(A)	<i>Buffer Width Increasing.</i> There is a new provision to this section that allows the Director to extend Type S or F buffers to resources within 300 feet – including Category III wetlands, other HCA's or other waters. Again, this is an exceptionally broad provision to add in additional regulated areas that are not currently designated as critical areas or buffers in the existing or even the proposed amended code. There is also no clear guidance on how this would be done. The amount of additional area in Whatcom County this could include is hard to imagine. The extension of every fish stream or lake buffer to another resource within 300 feet is essentially extending most of the buffer areas to 300 feet.	This provision has been borrowed from Skagit County as a way to provide inter-jurisdictional consistency, making it easier for our consultants working in multiple jurisdictions.
MES24	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.745(B)	<i>Buffer Averaging.</i> Same concern as comment MES14.	The intent is that if the remaining reduced buffer area is degraded, it is now narrower and lacks the vegetation to properly function. If it is well vegetated, enhancement would not be necessary (nor required).
MES25	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.745(C)	<i>Buffer Reduction.</i> Same concern as comment MES17 and MES18.	Planting of degraded buffer has been a part of our CAO since 2005 and based on DOE guidance. We have only tried to clarify based on case history; we are clarifying that the area that might be enhanced is limited to the specific location being reduced. Per DOE guidance, degraded is any portion of a buffer that is not in a densely vegetated community.
MES26	Ed Miller, Miller Environmental Services	9/18/20	F	16.16.760(B)	<i>Buffer Mitigation.</i> Same concern as comment MES18.	It is being amended to meet DOE guidance.
NES01	Molly Porter, North-	9/14/20	F	16.16.270(C)(12)	Please provide additional clarification on what is included in the	Whatever fits in 2,500 sq. ft. We could set

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	west Ecological Services				maximum allowed 2,500 sq. ft. impact area to provide consistency in application. The text states driveways shall be the minimum necessary but does not specify if any of this square footage shall be included in the allowed 2,500 sq. ft. impact area. Is there a minimum square footage of parking area that is required to be included? Is the 10-foot building setback counted towards this allowance?	specific numbers, but that would provide less flexibility to a homeowner.
NES02	Molly Porter, Northwest Ecological Services	9/14/20	F	16.16.270(C)(12)	<p>For projects that require a critical area buffer impact, it appears these will be reviewed in the following order: reduction of up to 25% administered by the Director; a minor variance (buffer reduction of 25-50%) administered by the Director; a major variance (buffer reduction beyond 50%) administered by the Director; and last, if major variance is denied or if all other code requirements including mitigation cannot be met, a reasonable use application is administered by the Hearing Examiner. A flow chart similar to Table 1. Project Permit Processing Table in 22.05, may be helpful to describe this process and requirements associated with each.</p> <p>Please clarify if there are any specific criteria for minor and minor variances in regards to total allowed impact area. It appears variances have no maximum allowable footprint and can be permitted as long as mitigation sequencing is applied and impacts can be mitigated.</p>	The commenter is correct; and a flow chart might be helpful; we'll try to develop one. As to variance criteria, see WCC 22.07.050. There are no criteria in regards to total allowed impact area (though one would have to mitigate).
NES04	Molly Porter, Northwest Ecological Services	9/14/20	F	16.16.640(C)(1)(g) & 16.16.640(C)(3)	Both sections appear to require mitigation, as well as additional enhancement of 'existing degraded buffer area' to provide mitigation for the 'disturbed buffer area.' Please define 'degraded buffer area' and 'disturbed buffer area,' and provide additional clarity on how much additional enhancement may be required beyond the standard 1:1 and 1.25:1 mitigation ratios. Further defining these terms and the amount of enhancement that is expected will help clarify the application of this code section to specific projects.	Per DOE guidance "degraded" is the difference between existing conditions and a densely vegetated community. As each site is different, it would be difficult to have a code that accounts for every variation. We are trying to balance having a code that is a "cookbook" verses providing flexibility to homeowners and their consultants.
NES05	Molly Porter, Northwest Ecological Services	9/14/20	F	16.16.640(B)(1)(a) & (C)(1)(a)	Buffer averaging is preferred to buffer reduction [16.16.640(C)(1)(b)]. Sections 16.16.640(B)(1)(a) and (C)(1)(a) imply a development proposal cannot use a combination of buffer averaging in one area and buffer reduction in another.	Clarification has been added.

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					Clarification could be added to state buffer averaging is not allowed if the portion of impacted buffer has already been reduced. This would allow mitigation plans to use buffer averaging where feasible (preferred) and buffer enhancement to compensate for the remainder of buffer reduction.	
NES06	Molly Porter, Northwest Ecological Services	9/14/20	F	16.16.740, Table 4	Provide definition of a Type O stream. This stream type does not appear to be defined in the Washington Administrative Code (WAC 222.16.030), Washington Department of Natural Resources (WDNR) water typing system, or anywhere in the Code update.	A definition of the water types has been added.
NES07	Molly Porter, Northwest Ecological Services	9/14/20	F	16.16.710(C)(1)(b)(i)	Throughout 16.16.710(C)(1) the term "natural streams" has been revised to "natural waters." The term "waters" leaves ambiguity which could be interpreted to mean wetlands or water flowing out of wetlands. Under this definition, 16.16.710(C)(1)(b) would regulate any artificial man-made ditch that receives water from a wetland and categorize the ditch as a stream that would require a stream buffer. Many ditches, including roadside ditches, receive water from wetlands and could be regulated as streams. Is this the intent of this change? If not, for clarity, the term "natural waters" could be replaced "waters of the state" which is defined in (16.16.900).	Based on this comment we have amended the section to say "waters of the state" rather than "natural waters."
NWC01	Katrina Jackson, Northwest Wetlands Consulting	9/9/20	F	16.16.680	As written, it isn't clear that the area of substantial surface and the area beyond the substantial surface are no longer functioning as a part of the buffer protection. As I read it, the provision only seems to address the substantial surface itself.	Correct.
NWC02	Katrina Jackson, Northwest Wetlands Consulting	9/9/20	F	16.16.273	Can we presume that the minor variance is in addition to the standard buffer reduction? Otherwise the minor variance would force many more projects to the Hearing Examiner than under the current reasonable use. For example a 100' buffer would go to 75' minimum; then with minor variance the buffer could then be modified to 25% to 50% of that number or 56.25 or 37.5. When the 10' building setback is added, the relief is no way near what reasonable use is allowing currently especially on smaller lots where the separation is many times only 10' to 20' between the wetland and the foundation. As I describe the minor variance would still require a 66.25	The proposed new approach would allow the applicant to request, and the County to vary, any numerical or dimensional standard to provide reasonable development. It would be the duty of the Hearing Examiner to determine if a legally permissible project has been recommended.

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					foot to 47.5 foot separation between the foundation and the wetland. It is our belief that even a variance on the standard buffer reduction would overburden the Hearing Examiner if reasonable use would under the revisions be required to go to the hearing examiner. You state "They would be limited to variances for a 25% to 50% reduction of critical area buffers (when mitigated and they meet certain criteria) but would address most of the instances that reasonable use exceptions are currently applied for. We believe that overall, these changes would significantly reduce the number cases having to go to the Hearing Examiner." Perhaps you have better statistic than I do about the narrow buffers we have needed under reasonable use. I do a lot of work in Sudden Valley and for the most part many of the projects can stay about 35 feet from a critical area, but those would under the revisions be moved to the hearing examiner.	
NWC03	Katrina Jackson, Northwest Wetlands Consulting	9/9/20	F	16.16.265(B)(4)	<p>Is the intent that the conservation easement shall only apply to the specific altered buffer on properties containing critical areas and/or associated buffers? If so then it should so state. It seems since Notice on title is expected for properties that have critical areas and/or assoc. buffers that are not altered. My thoughts go to the properties that have an established house, want to put a shop in one corner and may need to alter a buffer to do so, but the permittee should not be asked to then identify all of the non-altered wetlands or buffers on the rest of the acreage. So then the applicant would do a conservation easement for the altered buffers and or wetlands, and then also a notice on title to cover any of the other critical areas that are unaltered. If all wetlands and buffer on the property are required to be placed in a CE when only one wetland and/or wetland buffer is altered, this would result in excessive wetland delineation, surveying of wetland boundaries, and reporting costs.</p> <p>Also alteration to buffers on a property should be allowed in the future modified to the full extent of the code provisions and not forced locked into a conservation easement when the first project might only be a minor modification.</p>	<p>The commenter raises a good point. We have revised the section to refer to the "review area."</p> <p>As to the 2nd point, our conservation easements do allow for future development as permitted by code.</p>
NWC04	Katrina Jackson,	9/9/20	F	16.16.680	It seems that some effort has been made in part of the code to	Comment noted.

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	Northwest Wetlands Consulting				use the label of compensatory mitigation. Thank you. When a violation occurs clearing or overlayment, once repaired the reparation area should not be then placed in a conservation easement. Because the word mitigation is still somewhat interchangeable in the code or in the minds of those enforcing the code, it needs to be clear that only compensatory mitigation areas are to be placed in conservation easements.	
NWC05	Katrina Jackson, Northwest Wetlands Consulting	9/9/20	F	16.16	<p>Administratively, through reasonable use, wetlands are being filled. This action does not show up as an administrative option under minor variance. As written it looks like wetland fill would need to go to hearing examiners as well. This again would send several more of the single family small residential lots to the hearing examiner. Basically I like the idea of administrative variance or minor variance, but with changes it looks significantly more restrictive than the current practices for what can be handled without going to the hearing examiner.</p> <p>You might also talk with the City of Bellingham. I was working on a stream buffer reduction below minimum standards, very soon after the hearing examiner had told the City to start handling these as an administrative variance and to quit sending them to the hearing examiner. I found this interesting.</p>	Staff's recollection is that staff has only been approving wetland fill for a SFR through administratively processed reasonable use exceptions (RUE) for the last 2 years, and that has only happened once. However, we do not believe that wetland fill (or other uses approve through an RUE ought to be approved by staff; thus the reason for the proposed change.
PA01	Paul Anderson	9/18/20	F	16.16.225(B)(8)	I recommend that this provision be listed "as excepted in WCC § 23.05.065," since it is not applicable for shoreline associated wetlands. Interpretation and enforcement of this section within shoreline jurisdiction is problematic as shoreline associated wetlands by definition (WAC 173-22-030(1)) have proximity and influence with the shoreline water and therefore, are not "functionally disconnected".	Based on this and discussions with DOE staff, we have deleted "functionally disconnected" from this provision. Additionally, based on communication with DOE staff, we have added that the wetlands have to have a habitat score of less than 6 to qualify.
PA02	Paul Anderson	9/18/20	F	16.16.260(G)(1)	Three years is not adequate to establish whether a mitigation site will successfully compensate for lost critical area functions, especially where that mitigation includes the planting of shrubs and trees. In terms of wetland mitigation, state and federal agencies have required a minimum of five years monitoring for several years and I recommend that five years be the minimum monitoring required in the SMP.	Though staff had not proposed to amend this section, based on this comment we realized that the existing code does not reflect current practices. We have updated this section to do so, and to address Mr. Anderson's comment.

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PA03	Paul Anderson	9/18/20	F	16.16.640(C) & 16.16.720(D)	<p><i>[Wetland] Buffer Width Reduction</i></p> <p>Allowing an outright reduction in buffer width will not protect critical area (wetland or fish and wildlife habitat) functions or shoreline ecological functions. The only time a reduction in adopted buffer widths should be allowed (no > than a 25% reduction) is when it is used with buffer averaging (see Buntén et al. 2016). To ensure that there is no net loss of shoreline ecological functions, I recommend that this provision be stricken within shoreline jurisdiction. This same concern and recommendation applies to 16.16.720.D. (Buffer Width Variance).</p>	We have added language to this section from DOE guidance, clarifying that buffer reductions are not allowed outright, but only under certain (DOE approved) circumstances.
PA04	Paul Anderson	9/18/20	F	16.16.710(C)(2)	<p><i>Habitat Conservation Areas – Designation, Mapping, and Classification: “Areas in which federally listed species are found, have a primary association with, or contain suitable habitat for said listed species, as listed in the U.S. Fish and Wildlife’s Threatened and Endangered Species List or Critical Habitat List...”</i></p> <p>Within shoreline jurisdiction, this section needs to be edited to also include the National Marine Fisheries Service (NMFS), the federal agency responsible for managing marine species listed under the Endangered Species Act that includes Puget Sound Chinook salmon (<i>Oncorhynchus tshawytscha</i>) and Southern Resident killer whales (<i>Orcinus orca</i>). These two iconic species are of significant cultural, commercial and recreational importance for the Pacific Northwest and not acknowledging their importance and presence within the SMP is a substantial oversight. Due to its critical importance for Chinook salmon rearing and migration, NMFS designated the marine and estuarine nearshore (extreme high water to approx. 30 meters depth), including most of the Whatcom County coast, as critical habitat for the recovery of Puget Sound Chinook in September 2005 (see Federal Register, Vol. 70, No. 170, 9/2/05). NMFS is acknowledged as a regulatory agency in WCC §16.16.900 (Definitions; “Critical habitat”).</p> <p>The marine and estuarine nearshore within the County meets the definition of a Fish and Wildlife Habitat Conservation Area in</p>	We have amended 16.16.710(C)(2) to include NMFS listings and critical habitat.

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					WAC 365-190-130 and, more importantly for the SMP, the definition of Critical Saltwater Habitat in WAC 173-26-221(2)(C). I respectfully recommend that the County include reference to NMFS-managed listed species in the SMP and that the marine and estuarine nearshore is designated critical habitat for Puget Sound Chinook. To simplify the permitting process and assist staff and applicants in understanding this update, I would also recommend that the salmonid habitat maps be updated to show the marine and estuarine nearshore as a regulated critical area.	
PA05	Paul Anderson	9/18/20	F	16.16.720 & 16.16.740	<i>Habitat Conservation Areas – Use and Modification and Habitat Conservation Area Buffers</i> Since shorelines and shorelands (associated wetlands) include more than just streams and the SMP protective standards apply to those other waters, I recommend changing “stream(s)” to “water(s)” in Table 3 (§16.16.720) and in §16.16.740. Also, since tidal waters include a number of species and habitats of cultural, commercial and recreational importance (e.g., shellfish areas; Chinook salmon), what is the rationale and science to support requiring a wider buffer on marine versus freshwater habitats; 150 and 200 feet, respectively? To ensure no net loss of ecological function, I recommend that the upland buffer on marine habitats be increased to 200 feet, which is well within the buffer range reported in the scientific literature (see Protecting Nearshore Habitat and Functions in Puget Sound; Protection of Marine Riparian Functions In Puget Sound, Washington; available from WDFW: https://wdfw.wa.gov/).	Amended per this suggestion (though in Table 3 only for the performance standards that apply to all waters.) And while the buffer is proposed to be 150’ in the marine areas, we are still managing for NNL in the entire shoreline jurisdiction.
WCPW01	Atina Casas, W/C Public Works	9/18/20	E	22.05.020	Shoreline Substantial is included in both the Type II and Type III sections of the table. The footnote (c) in the Type II section explains the circumstances when a Shoreline Substantial will be processed as a Type III. This footnote should also be in the Type III section for further clarity.	Comment noted.
WCPW02	Atina Casas, W/C Public Works	9/18/20	E	22.07.020(B)(1)	How will the applicant know what the dollar amount is when OFM changes it every 5 years? Will updated values be shown on the permit application form so applicants know if their project qualifies based on the current value at the time of application	Correct, the application is changed when OFM updates the amount.

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					submittal?	
WCPW03	Atina Casas, W/C Public Works	9/18/20	E	22.07.030(A)	<i>A. Shoreline substantial development permits are considered Type II applications pursuant to WCC 24 22.05.020 (Project Permit Processing Table).</i> For clarity, add a sentence that this permit could be considered a Type III application pursuant to 22.05.090(2) (Open Record Public Hearing).	We have modified the sections to clarify.
WCPW04	Atina Casas, W/C Public Works	9/18/20	F	16.16.680(H)(1)	Consider keeping the wetland buffer impact mitigation ratio 1:1 for public road and bridge projects. Mitigation is not possible before impacts. And between clear zone requirements for vehicle safety and limited right-of-way, there often isn't onsite area available to accommodate a 1.25:1 mitigation ratio.	The mitigation ratios are proposed to be amended to meet DOE guidance. Nonetheless, Public Works could choose to enhance publicly owned property now and apply the mitigation to future projects (i.e., advance mitigation).
WCPW05	Atina Casas, W/C Public Works	9/18/20	F	16.16.760(B)(8)	Consider an HCA buffer impact mitigation ratio of 1:1 for public road and bridge projects. Mitigation is not possible before impacts. And between clear zone requirements for vehicle safety and limited right-of-way, there often isn't onsite area available to accommodate a 1.25:1 mitigation ratio.	The mitigation ratios are proposed to be amended to meet DOE guidance. Nonetheless, Public Works could choose to enhance publicly owned property now and apply the mitigation to future projects (i.e., advance mitigation).
WCPW06	Atina Casas, W/C Public Works	9/18/20	F	16.16.900	Add a definition for Critical Facilities, which is referenced in 16.16.322.	A definition has been added.
WCPW07	Chris Elder, W/C Public Works	9/18/20	B	C/P Ch. 11	Under the Council approved scope of possible amendments, topic #6 highlights Climate Change/Sea Level Rise with the recommended action of "Develop and/or strengthen policies regarding climate change/sea level rise, including the incorporation and use of new data (as it becomes available), to review and revise, if warranted, shoreline use regulations". The proposed amendments to the Shoreline Master Program have not sufficiently addressed this topic based on available data including projected impacts of climate change and have not incorporated best management practices developed to address the projected impacts of climate change.	Policies regarding climate change/ sea level rise have been developed and/or strengthened and are proposed to be included in Chapter 11 of the CompPlan (pg. 11-30).
WCPW08	Chris Elder, W/C Public Works	9/18/20			Related to climate change, the most significant projected climate impacts related to the SMP update include sea level rise and increases in coastal and riverine flooding, both in magnitude and	Before adopting specific regulations, it seems like we'd need to know the details of likely sea level rise (location, elevation,

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					<p>frequency. I have included the several regional and state scientific climate data reports and data informed recommendations on how to incorporate projected climate change impacts such as sea level rise and increased coastal and riverine flooding into planning processes. The list of resources supplied is located at the end of this memo.</p> <p>It should be noted that Whatcom County is currently participating in development of a local Coastal Storm Modeling System (CoSMoS) which will further inform the extent of potential impacts of sea level rise combined with storm surge, wind currents, barometric pressure, and other environmental factors. Data from this effort will inform the magnitude and area of impact and will support selection of an actual sea level rise elevation and/or shoreline impact zone, but existing data already highlights that sea level rise has occurred and will continue to occur at an increasing rate.</p>	<p>magnitude, etc.) and anticipate the development of the CoSMoS model (on which the COB and WCPW are working), which should provide the best data for Whatcom County. The policies being introduced would set us up for developing such regulations once this model is completed.</p> <p>It should also be noted that in reviewing development proposals, PDS already requires structures to be built above the anticipated flood stage through the County's critical area (i.e., geohazard/tsunami) and flood regulations.</p> <p>Nonetheless, this is a policy decision and all comments will be forwarded to the P/C and Council.</p>
WCPW09	Chris Elder, W/C Public Works	9/18/20			<p>While this periodic update to the Shoreline Master Program may not spur development or adoption of an actual sea level rise projection for Whatcom County shorelines, staff recommends developing new code language that clearly identifies the projected impacts of sea level rise and increased impacts of riverine and coastal flooding within Title 23. Furthermore code improvement must require applicants pursuing development within the shoreline jurisdiction to perform a climate vulnerability assessment for the proposed action and highlight mitigation measures proposed to address projected climate impacts. This language will support applicants in mitigating climate risk to their private investment and will support local government in protecting public safety, private property, and environmental health.</p>	<p>Your comments will be forwarded to the P/C & Co/C for their consideration.</p>
WCPW10	Chris Elder, W/C Public Works	9/18/20			<p>The resources described below have been attached to this comment letter to support the above comments and recommendations:</p> <ul style="list-style-type: none"> The University of Washington's Climate Impacts Group Shifting Snowlines and Shorelines (2020) highlights this significant climate changes occurring within our region and does provide summary projections of potential changes in 	<p>Thank you.</p>

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					<p>sea level.</p> <ul style="list-style-type: none"> • The Extreme Coastal Water Level in Washington State (Guidelines to Support Sea Level Rise Planning) (2019) provides valuable guidance regarding incorporation of sea level rise projections into local planning. • Maps of Climate and Hydrologic Change for the Nooksack River Watershed (2017) highlights the projected changes in seasonal precipitation in the Nooksack River which projects an increase in winter precipitation over the next 30 years of between 9.5% and 20.8% which will contribute to increased magnitude and frequency of flooding. • Incorporating Sea Level Change in Civil Works Programs is a US Army Corps of Engineers regulation requiring consideration of sea level impacts on all coastal projects as far inland as the extent of estimated tidal influence and providing guidance for incorporating the direct and indirect physical effects of projected future sea level change across the project life cycle in managing, planning, engineering, designing, constructing, operating, and maintaining projects and systems of projects. • Integrating Climate Resilience into Flood Risk Management (2010) provides significant policy guidance and considerations. <p>Additional online resources that may support development of climate change related improvements can be found at the following sites.</p> <ul style="list-style-type: none"> • https://toolkit.climate.gov/ • https://toolkit.climate.gov/tool/adaptation-tool-kit-sea-level-rise-and-coastal-land-use 	
RES01	Ander Russell, Re-Sources	9/17/20	D	23.30.020	<p><i>SMP Scoping Document Item 5 : Consistency with Shoreline Management Act (RCW 90.58) and 2003 SMP Update Guidelines (WAC 173- 26) – Thank you for adding language referencing WCC Title 23 Shoreline Regulations 23.30.020 as it pertains to mitigation. We feel that in order to adequately address item 5b from the Scoping Document further clarification is needed on exactly what mitigation actions are needed for development. Please add clarification and reference WCC 16.16.</i></p>	<p>5b from the scoping document is “Clarify development mitigation requirements.” We feel we have done this in many sections of both Title 23 & WCC 16.16. While most of the “clarifying” has been done to the text of WCC 16.16, it pertains to shoreline permits since the CAO is adopted as part of the SMP.</p>

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RES02	Ander Russell, Re-Sources	9/17/20	D	23.40.020(G)	<i>Shoreline Bulk Provisions – Buffers, Setbacks, Height, Open Space and Impervious Surface Coverage</i> – Thank you for adding in language about the need for mitigation under G (Development activities allowed in buffers and setbacks). Please clarify and strengthen that language. Any impacts from activities happening within the critical area buffer must be mitigated please show how this will be done.	The text of that section clearly states, “provided...that they comply with all the applicable regulations in WCC Chapter 16.16, including mitigation.” Please note that mitigation requirements are in WCC 16.16, a part of the SMP, and that both need to be read together.
RES03	Ander Russell, Re-Sources	9/17/20	B & D	C/P Ch. 11 & Title 23	<p><i>Climate Change/Sea Level Rise</i> – Thank you for the updated language concerning climate change and sea level rise that was added to the Chapter 11 of the CompPlan (Exhibit B). We strongly support the recommended changes outlined by Futurewise and WEC for this scoping item. A comprehensive approach to addressing the impacts of climate change by protecting natural shorelines and other natural systems will help our community withstand and recover from the increase in those impacts over time.</p> <p>Please add language to reflect a focus on climate change and sea level rise impacts to Exhibit D. The SMP and CompPlan must do a better job at addressing sea level rise and other climate change impacts. We understand that the bulk of the revisions in this area have been added to Exhibit B. However, the words climate change and sea level rise do not appear at all in Exhibit D.</p> <p>Climate change impacts on sea levels, storm surges and riverine and marine flooding are extensively documented and must be planned for and addressed in all County regulations and planning documents. The County need not look any further than its own report on climate change impacts to have the data needed to develop and strengthen policies around climate change, flooding and sea level rise. Just this past winter Whatcom County was inundated with unprecedented flooding from heavy rains that breached dikes and submerged houses. The cost of the damage from the flooding between late January through early February was over \$4 million, \$2.5 million of which was related to road and infrastructure damage.</p>	<p>Before adopting specific regulations, it seems like we’d need to know the details of likely sea level rise (location, elevation, magnitude, etc.) and anticipate the development of the CoSMoS model (on which the COB and WCPW are working), which should provide the best data for Whatcom County. The policies being introduced would set us up for developing such regulations once this model is completed.</p> <p>It should also be noted that in reviewing development proposals, PDS already requires structures to be built above the anticipated flood stage through the County’s critical area (i.e., geohazard/tsunami) and flood regulations.</p> <p>Nonetheless, this is a policy decision and all comments will be forwarded to the P/C and Council.</p>

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					<p>Further recommendations on how to incorporate climate change impacts on rising sea levels, storm surges, and riverine and marine flooding in to Exhibits B and D:</p> <ul style="list-style-type: none"> • Make the changes recommended by Futurewise/WEC to Exhibit B, policy 11 AA-5 and include new policy 11 AA-8 outlined in their letter. • We strongly support the addition of a Sea Level Rise section to Exhibit D. We support the language proposed for a new Section 23.30.080 by Futurewise and WEC in their letter. • Shoreline maps should be updated to include Best Available Science (BAS) and reflect any additional areas that are now considered within the 200' of the OHWM as a matter of shoreline jurisdiction. • Given the impacts of sea level rise on property and life, please prevent construction in areas that will be underwater in the next 30 years. The Washington Coastal Hazards Resilience Network has the best available science on this with various sea level rise projections depending on various greenhouse gas scenarios. • Whatcom County has over 50 Toxic Cleanup Sites in marine shoreline areas.³ Please add language about what steps can be taken to plan for Sea Level Rise impacts on those sites. Proactive steps to protect communities, water and habitat now will prevent high costs down the road. • Science around climate change, sea level rise, storm surges and their impacts is dynamic and evolving - often at a faster pace than required SMP update timelines. Strengthen the language around assessing and incorporating Best Available Science. Be specific about the intervals at which BAS will be assessed and what the process for incorporating BAS will look like. <ul style="list-style-type: none"> ○ Examples from local jurisdiction that incorporate climate impacts: <ul style="list-style-type: none"> ▪ The City of Tacoma has included many updates in their 2019 Periodic Update regarding climate 	

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					<p>change impacts. Below are the additions they are proposing which Whatcom County could incorporate:</p> <ul style="list-style-type: none"> ▪ A new general policy of “Evaluate sea level rise data and consider sea level rise risks and implications in the development of regulations, plans, and programs.” (p. 66) ▪ New site planning policies: <ul style="list-style-type: none"> ○ “Development should be located, designed, and managed both to minimize potential impacts from sea level rise and to promote resilience in the face of those impacts, by such actions as protecting wetland and shoreline natural functions, incorporating green infrastructure, retaining mature vegetation, and considering soft-shore armoring wherever possible.” (p. 69) ○ “Assess the risks and potential impacts on both City government operations and on the community due to climate change and sea level rise, with special regard for social equity.” (p. 70) ○ “Promote community resilience through the development of climate change adaptation strategies. Strategies should be used by both the public and private sectors to help minimize the potential impacts of climate change on new and existing development and operations, including programs that encourage retrofitting of existing development and infrastructure to adapt to the effects of climate change.” (p. 70) ▪ A new general policy for Critical Areas and Marine Shoreline Protection: “Protect natural processes and functions of Tacoma’s environmen- 	

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					tal assets (wetlands, streams, lakes, and marine shorelines) in anticipation of climate change impacts, including sea level rise.”	
RES04	Ander Russell, Re-Sources	9/17/20	B	C/P Ch. 11	<i>Scoping Document Item 8: Habitat</i> – Please address Scoping Document item 8a. We understand it is not necessary to have references to the WDFW and DNR Shore Friendly Program in the code in order for the County to mirror the program but referring to it adds weight and legitimacy for the use of practices outlined in the WDFW and DNR Shore Friendly Program.	8a is, “Reference WDFW and DNR’s Shore Friendly Program.” And you’re right; the code need not reference all the helpful programs the state (or feds or County) manages. However, we have added reference to that program in C/P policy 11I-2, and we do provide such references to applicants here at PDS.
RES05	Ander Russell, Re-Sources	9/17/20	F	16.16.225(C)	Please make the following changes to strengthen weak language: <u>Development proposals shall seek to maintain ecological connectivity and habitat corridors whenever possible.</u> <u>Restoration of ecological connectivity and habitat corridors shall be considered a priority restoration and mitigation action.</u>	See response to RES07. Further, until actual wildlife corridors are identified, mapped, and adopted, trying to maintain a variable corridor width dependent on the species one’s trying to manage would not be possible through piecemeal development review.
RES06	Ander Russell, Re-Sources	9/17/20	F	16.16.255(B)(3) & (5)	We support the addition of 16.16.255 B #’s 3 and 5	Comment noted.
RES07	Ander Russell, Re-Sources	9/17/20	D		Please add a wildlife corridor overlay to shoreline maps in Exhibit D or wherever else is relevant.	The only wildlife corridor that the Council has adopted is the Chuckanut Wildlife Corridor, which is shown on our critical areas maps. Our understanding is that the Council’s Wildlife Advisory Committee is looking into recommending others (based on a scientific review), but until the Council acts to adopt any new ones we have nothing to map.
RES08	Ander Russell, Re-Sources	9/17/20	D		We are generally opposed to expansions of nonconforming overwater structures, and will make recommendations to P/C & Co/C on revisions to Chapter 23.50.	Comment noted (however, the code does not allow this).
RES09	Ander Russell, Re-Sources	9/17/20	D	23.40.160	<i>Recreation</i> – Item 13d: The language around trails within critical area buffers must be strengthened. Any impacts to any portion of the critical area buffer from recreational trails must comply with all applicable regulations in WCC 16.16 and be mitigated.	In general we have tried not to repeat every requirement of one code in another (i.e., those of 16.16 in T-23, and vice versa), as there is a general rule that

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						shoreline permits are subject to 16.16. Nonetheless, we have added subsection 23.40.160(A)(6) to remind folks.
RES10	Ander Russell, Re-Sources	9/17/20			<i>Cherry Point Management Area and heavy impact industrial zone</i> – We support the Aug 17 th draft revisions to the Cherry Point Management Area section of Chapter 11. Going further, to fully implement the Comprehensive Plan policy amendments for the Cherry Point industrial zone adopted by the County in May 2017, and to maintain consistency with the proposed Cherry Point Amendments—if adopted—additional amendments to other sections of the SMP are warranted. We intend to propose additional revisions, and will seek feedback from PDS and stakeholders before submitting specific language for consideration by the P/C this Fall. Particularly, specifications for where shoreline conditional use permits are required and conditional criteria should be updated further.	Comment noted.
RES11	Ander Russell, Re-Sources	9/17/20	F	16.16.745	<i>Scoping Document Item 18: Shoreline Setbacks/Riparian Management</i> – We were unable to see where language around Scoping Document item 18b had been added. Please provide specific language to show what incentives will be provided to enhance Fish and Wildlife Habitat Conservation Areas.	18(b) reads, “Provide incentives to enhance Fish and Wildlife Habitat Conservation Areas (FWHCA). Staff had added this to the scope as we had originally considered developing a site-specific shoreline buffer program wherein incentives to enhance would allow buildings be built closer to the shoreline. However, while exploring this option we determined that additional analyses of shoreline characterization would be required, and doing so was not part of the overall scope of a periodic update.
RES12	Ander Russell, Re-Sources	9/17/20	A & B		<i>Scoping Document Item 19: Water Quality</i> – Lake Whatcom is the drinking water source for 100,000 Whatcom County residents. Scoping Document item number 19 addresses Lake Whatcom water quality. However, no recommendations about Lake Whatcom have been added to this or any section in Exhibits A or B. Please add policy language about the importance of	Ch. 10 of the CompPlan already contains an entire narrative regarding this (pg. 10-22), as well as multiple policies (Goal 10-J and its policies, pg. 10-36, as well as multiple other policies throughout). We didn’t think this all needed to be repeated.

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					Lake Whatcom as the source of drinking water for most County residents and about the current water quality improvement plan (TMDL). We understand that this language is referenced in Exhibit A, however that language is only in the narrative. Please add policy language (in Exhibit A and Exhibit B) about how the County will improve water quality specific to the TMDL for Lake Whatcom.	
RES13	Ander Russell, Re-Sources	9/17/20			<p><i>Scoping Document Item 22: No Net Loss</i> – Thank you for providing clarification in the Guide to Reviewing Draft SMP Amendments document, about the creation of a Not Net Loss Technical (NNL) memo. We support the creation of the memo and understand that it will be completed at an unspecified date after, “public review of draft amendments,” is completed.</p> <p>We agree with the statements made by Futurewise and WEC in their letter. It is very likely that until the County can show that it achieves NNL of shoreline ecological functions it may not be in compliance with the Shoreline Management Act and the Shoreline Master Guidelines.⁴</p> <p>Throughout the update clarification is needed on how no net loss (NNL) will be met and monitored. Please provide clarification in the memo of how the County will monitor activities such as forest practices, mining, construction of structures and trails, shoreline stabilization and all others in a way that will result in NNL of shoreline ecological functions.</p> <p>In order to restore salmon, orca and the shoreline ecological functions we all depend on we must think beyond bare minimum requirements. We know the NNL standard is not fully protecting shorelines and wetlands from degradation and we cannot afford to wait another 8 or 9 years for the next update.</p> <p>Please provide clarity on when the technical memo will be completed, allow for public input on the memo and if the memo or resulting actions, show that the SMP is not achieving NNL outline how NNL or net ecological gains, will be achieved and how those new standards will be incorporated in to the SMP, Comp-Plan and Critical Areas Ordinance.</p>	Comment noted. A draft will be provided to the P/C prior to their final action. The draft will need to be finalized once the Co/C has completed their review.

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RES14	Ander Russell, Re-Sources	9/17/20	C	C/P Ch. 8	Thank you for including the new Whatcom County Comprehensive Plan Chapter 8: Mineral Resource Lands in this recommended update draft.	Comment noted (though we believe you're referring to the <i>Marine</i> Resource Lands section).
RES15	Ander Russell, Re-Sources	9/17/20	D	23.30.050	<i>Vegetation Management</i> – Add language requiring the restoration of native vegetation and vegetation conservation standards (lawns and turf are prohibited) for any new building permits, expansions or change of use in the following areas: within 50' of the OHWM for Lake Whatcom or impaired water bodies on the 303(d) list.	Thank you. We had inadvertently left out some of the existing language of the vegetation management section, but have now reinserted it.
RES16	Ander Russell, Re-Sources	9/17/20	D	23.30.060	<i>Cultural Resources</i> – We support the suggestions added by Lummi Nation. Accept and approve all changes added by Lummi Nation in this section.	Comment noted.
RES17	Ander Russell, Re-Sources	9/17/20	D	23.40.040	<i>Agriculture</i> – We support staff's recommendation during scoping around manure holding facilities. We plan to make comments to the P/C & Co/C during this update process to, again, request that requirements be added that any manure holding facility permitted within the shoreline jurisdiction be in the form of above ground tanks or towers instead of earthen lagoons. In order to be protective of our waterways and groundwater, please make manure holding facilities a shoreline conditional use.	Comment noted (though we believe you brought this issue up during scoping, staff did not).
RES18	Ander Russell, Re-Sources	9/17/20	D	23.40.040	<i>Agriculture</i> – Along the same lines, to reduce the risk of contaminant run-off from flooding and seepage, consider making it mandatory for any new or replaced manure lagoons to be above ground in tanks or towers.	Comment noted.
RES19	Ander Russell, Re-Sources	9/17/20	D	23.40.140	<i>Mining</i> – We oppose the amendments to WCC 23.40.140, Mining. We support the language proposed by Futurewise and WEC in their letter. Please update this section with their language for 23.40.140(D).	Comment noted.
RES20	Ander Russell, Re-Sources	9/17/20	D	23.40.140	<i>Mining</i> – We recommend that the SMP Update prohibit motorized or gravity siphon aquatic mining and discharging effluent from this type of mining in shorelines that are the critical habitat for salmon, steelhead, or bull trout and that salmonids use for spawning, rearing, and migration. This is necessary in order to follow RCW 90.48.615(2).	We have added such language.
RES21	Ander Russell, Re-Sources	9/17/20	D	23.40.150	<i>Docks, Piers and Mooring Buoys</i> – Overwater structures, including docks, cause direct and indirect impacts to shoreline functions and habitat for salmon and forage fish like Cherry Point	Please review 23.40.150 again, as we believe we have accomplished these.

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					<p>herring during the construction process and over the useful life of the dock. The cumulative impacts of overwater structures are:</p> <ul style="list-style-type: none"> • "Increase in pollutants and habitat disturbance associated with boat operations and dock and piling maintenance", • "Increased travel distance and time for juvenile salmon and extended time in deeper water, increasing predation risk", • "Decrease in eelgrass and plant habitat and overall photosynthesis in intertidal zone", • "Alteration in juvenile salmon prey base and predation pressure", and • "Change in wave energy and longshore drift patterns, and resulting changes in upper intertidal sediment distribution" <p>Please make these changes concerning Overwater Structures:</p> <ul style="list-style-type: none"> • Add a clear preference for the use of mooring buoys. • Applicants must demonstrate conclusively that use of a moorage buoy, nearby marina, public boat ramp, or other existing shared facility is not possible. This includes providing evidence of contact with abutting property owners and evidence that they are not willing to share an existing dock or develop a shared moorage. For commercial/industrial facilities, this would include evidence that existing commercial facilities can't be shared or are inadequate for the proposed use. • Minimum grating requirements to allow for light. • Any dock, pier, and moorage pile must include an evaluation of the nearshore environment and the potential impact of the facility on the environment. 	
RES22	Ander Russell, Re-Sources	9/17/20	F	16.16.235(B)(4)	<i>Mitigation requirements for hazard trees</i> – Currently there's no requirement to mitigate, or replant, a hazard tree. We suggest adding a requirement to replant a native tree in an appropriate location on site for every hazard tree removed in the shoreline.	Please refer to 16.16.235(B)(4)
RES23	Ander Russell, Re-Sources	9/17/20	D	23.40.150	<i>Lake Whatcom</i> – The City of Bellingham's SMP (Title 22, BMC) makes many mentions of Lake Whatcom and discourages certain new uses and activities like docks (a whole section in BMC 22.09.060 "Piers, floats, pilings – Lake Whatcom and Lake Pad-	We have reviewed Bellingham's sections of code that you reference and do not see any discouragement as you say; in fact, there's has the same components as

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					den) and the spraying of herbicides (BMC 22.05.020(B)(1)(n)). Please consider mirroring the City's SMP regulations for Lake Whatcom.	ours.
RES24	Ander Russell, Re-Sources	9/17/20	D	23.40.190	<i>Bulkheads and Shoreline Armoring</i> – Bulkheads and other forms of hard armoring should be conditional uses because of their adverse impacts on the shoreline environment.	Comment noted. Please note that in the use table most of the hard armoring measures are either prohibited or require a CUP. For bulkheads specifically we did not change existing text. Furthermore, we did add text that prioritizes soft-stabilization measures, and that hard measures are of last resort.
PB01	Pam Borso	11/8/20	C	C/P Ch. 8	I would like to urge you to include the amendment to Whatcom County's comprehensive plan to include Marine Resource Lands as a way to recognize marine and tidal lands in Chapter 8 of the Comprehensive plan. Marine and tidal lands are as important as forestry, mining and agricultural lands. These lands are significant resources and along with the upland areas adjacent to them need to be protected for their cultural, social and economic values.	Your comments will be forwarded to the P/C for their consideration.
MS01	Mike Sennett	11/8/20	C	C/P Ch. 8	Whatcom County's geography stretches from the coasts of the Salish Sea to the Cascades, and all the watersheds of the three forks of the Nooksack River are gathered and delivered to the Salish Sea. It seems to me that the unique areas where land and ocean meet have been undervalued by the settler culture. The original functioning ecosystems that supported the indigenous peoples have been severely degraded. Estuaries and wetlands have been filled in, and development has sprawled along the shores in Sandy Point, resulting in shoreline armoring. Birch Bay, Drayton Harbor and The Lummi Nation's tide flats have been contaminated by dairy industry pollution. The lack of protection for our coast has resulted from a lack of recognition of its singular importance by the various governments that have oversight over those i areas. It is time to correct that myopia, and to recognize the important status of our marine lands. By adding the :Marine Resources Lands Amendment to Chapter Eight of the Comprehensive Plan,	Your comments will be forwarded to the P/C for their consideration.

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					joining Forestry, Agriculture, and Mining as codified land uses.	
KC01	Kim Clarkin	11/12/20	C	C/P Ch. 8	<p>I support calling out, recognizing and protecting Marine Resource Lands specifically in Ch. 8 of the Comprehensive Plan. I do not understand parts of the new section:</p> <ul style="list-style-type: none"> a. p8-36, para 1 makes it sound like MRLs are only marine shorelines. According to the map they actually extend to the county line. It would be helpful to describe the extent and exclusions in this section. The map shows that part of Bellingham Bay, Drayton Harbor and the shoreline around Blaine are excluded for unexplained reasons. Some of these areas are in special designations but there is no explanation of what these designations mean. Perhaps this could be clarified. b. On p8-39, Policy 8U-3 seems unnecessary. If it is meant to convey a specific meaning, could that be stated clearly? c. Policy 8U-4 refers to State marine resource lands within Whatcom County. I think we may mean State aquatic lands within the county. d. On p 8-41, goal 8W includes no policies. Is this because specifics are listed in other areas of the CompPlan? It would seem useful to incorporate policies related to e.g., reducing shading of near-shore habitat by piers and docks; reducing hard shoreline stabilization methods and incentivizing soft ones; preventing oil spills; removing creosote; protecting kelp and eelgrass beds, etc. If this is done elsewhere in the Comp Plan perhaps reference to those sections here would help integrate the Plan. e. I suggest including the boundaries of the Cherry Point Aquatic Reserve on the map. 	<ul style="list-style-type: none"> a. Portions of other jurisdictions' shoreline jurisdiction are excluded; the County has no jurisdiction there. b. You would have to ask the MRC. c. We believe the MRC chose the word "marine" instead of aquatic because they were focused on the <i>Marine</i> Resource Lands, not all aquatic lands. d. Goal 8W has no policies because the MRC did not propose any. e. Not a bad idea.
CPAPCSC 01	Cherry Point Aquatic Reserve Citizen Stewardship Committee	11/11/20	C	C/P Ch. 8	The CPAR CSC supports policies and regulations that further protect and enhance marine shoreline areas, such as the Cherry Point Aquatic Reserve. Therefore, the CPAR CSC writes this letter to express support for the Chapter 8 Marine Resource Lands addition to the Whatcom County Comprehensive Plan. This addition to Chapter 8 recognizes marine resource lands and designates long overdue protection of these marine resource lands that are vital economically, culturally, recreationally	Your comments will be forwarded to the P/C for their consideration.

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					and environmentally.	
BIAWC01	Jacquelyn Stryna, BAIWC	11/5/20	D, F		Terminology – There is initial concern about terminology that requires clarification, including terms such as “Type O water,” “functionally disconnected,” “habitat corridors,” and “ecological connectivity,” among others. Please clarify and specify where these terms are codified.	All terms are defined in Ch. 23. 60 (Definitions) of Title 23 or Article 9 (Definitions) of Ch. 16.16.
BIAWC02	Jacquelyn Stryna, BAIWC	11/5/20	F	16.16.265(A)(1)	Building setbacks – It is unclear why there is a need for building setbacks to be a minimum of 10 feet from the edge of a CA buffer (WCC 16.16). As currently written, the building setbacks further reduce the “reasonable use” footprints from a mere 4,000 square feet to 2, 500 square feet.	The 10’ building setback from critical area buffers is an existing rule (only moved in the amended version). It was adopted by Council to minimize impacts when maintaining structures (e.g., when putting a ladder up against a 2-story structure the bottom would need to stick out 5-10 feet) and to provide a “fire safe” area where combustible materials can be removed.
BIAWC03	Jacquelyn Stryna, BAIWC	11/5/20	D, F		SMP and CAO changes lend increased authority to the County over development, which restricts the freedom and business autonomy of home builders and homeowners alike. Private property rights are infringed upon with less autonomy for land owners and more authority for County government to determine garden and landscape decisions. Restated, the SMP and CAO updates specifically narrow the choices of home builders and homeowners for no reasonable benefit. These proposed updates extend County authority.	Your comments will be forwarded to the P/C for their consideration.
BIAWC04	Jacquelyn Stryna, BAIWC	11/5/20	F	16.16.270(C)(12)	Reasonable Use Exceptions/Reduction: Why is the County proposing a reasonable use reduction to such a small footprint of 2,500 square feet?	Staff has proposed to go back to the 2,500 sq. ft. maximum impact area we had prior to the 2017 Critical Areas update, as under a reasonable use exception granted by the Hearing Examiner no mitigation would be required.
BIAWC05	Jacquelyn Stryna, BAIWC	11/5/20	F	16.16.630(E)	Increased Buffers only further restrict land availability and choke the potential for a home to be built.	Your comments will be forwarded to the P/C for their consideration.
BIAWC06	Jacquelyn Stryna, BAIWC	11/5/20	D, F		Mitigation requirements cost burden projects and mitigation ratio changes impede autonomy in the construction schedule.	Your comments will be forwarded to the P/C for their consideration.
BIAWC07	Jacquelyn Stryna, BAIWC	11/5/20	D, F		All of the proposed land use modifications add to the overall project cost of building a house. This type of over-regulation directly contributes to the high cost of housing Whatcom County	Your comments will be forwarded to the P/C for their consideration.

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LSK01	Lesa Starkenburg-Kroontje, on behalf of John and Leanne Olson, Larry and Barbara Nims, and John and Gladys Van Boven	11/19/20	G	Shoreline Environment Designation Map	<p>is experiencing, plus constricts the availability of land supply.</p> <p>This letter is written on behalf of John and Leanne Olson and Larry and Barbara Nims, the owners of APN 390302 428076 0000 and 390302 485039 0000, and on behalf of John and Gladys Van Boven, the owners of APN 390302 440200 0000. Their property is located at the corner of East Pole Road and Everson Goshen Road and is depicted on the attached Assessor section map.</p> <p>My clients' property was designated as a shoreline of the state under the Shoreline Management Program during the 2008 Comprehensive Plan update. However, this entire property is part of the mineral resource overlay under the Whatcom County Code with permits to mine and the ability to change the configuration of the water body.</p> <p>In 2008 after the completion of the Shoreline Management Program update, the property owners were made aware of the designation. Whatcom County staff at the time believed that the owners had requested the designation. This was not the case. In fact, it was the Department of Ecology who mistakenly noted this area as requiring designation in their correspondence with Whatcom County in January of 2007. Had the property owner's been notified they would have explained the temporary configuration of the water body that is still actively mined.</p> <p>The property owners were told to correct the erroneous shoreline designation, they needed to wait until the next Shoreline Management Program Periodic Update. Since the periodic update time is upon us, it is now time to correct the designation. However, I see the error is continuing forward as the maps still note the area is designated as "shoreline".</p> <p>The Washington State Department of Ecology and Whatcom County have not made it a practice to designate mineral extraction sites as shorelines because the size and configuration of the shoreline is not certain until mineral extraction is complete and the mineral resource land zoning overlay removed from the</p>	Before a determination can be made, staff has requested of their attorney an approved reclamation plan.

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					<p>property.</p> <p>In fact, as mineral extraction, and its accessory uses, are considered the highest and best use for the property within the mineral resource land overlay it is presumed that expansion and contraction of the water body will continue over the course of many decades. To create a nonconformity for the preferred zoning use and the existing permits for a waterbody that may to temporary in nature is not good planning.</p> <p>This situation has been discussed many times in different permit settings with the County with the understanding that at this time of this periodic update the error would be corrected.</p>	
RFW01	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	11/12/20	A, B, C, E, G	C/P Ch. 10, Ch. 11, Ch. 8 & Title 22, & Shoreline Environment Designation Map	<p>We recommend that the P/C tentatively approve all Comprehensive Plan amendments proposed in Exhibits A, B, and C, as well as all proposed amendments to WCC Title 22 shown in Exhibit E, as well as the Shoreline Environmental Designations map.</p> <p>However, as our previous comments stated, we are recommending additional policies be added into the Comprehensive Plan, with corresponding development regulations updated in Title 22.</p>	Your comments will be forwarded to the P/C for their consideration.
RFW02	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	11/12/20	B	C/P Ch. 10	<p>Modify Policy 11AA-5 be modified to read as follows:</p> <p>Policy 11AA-5: <u>Whatcom County shall monitor the impacts of climate change on Whatcom County's shorelands, the shoreline master program's ability to adapt to sea level rise and other aspects of climate change at least every periodic update, and revise the shoreline master program as needed.</u></p> <p>Whatcom County shall<u>should</u> periodically assess the best available sea level rise projections and other science related to climate change within shoreline jurisdiction and incorporate them into future program updates, as relevant.</p>	The P/C accepted this recommendation, though retained "should" (instead of "shall") in both the 1 st and 2 nd sentences.
RFW03	Ander Russell & Eddy Ury (ReResources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich	11/12/20	B	C/P Ch. 11	<p>Add a new Policy 11AA-8 reading: <u>New lots and new and expanded development should be located so they will not interfere with the landward expansion and movement of wetlands and aquatic vegetation as sea level rises.</u></p>	Your comments will be forwarded to the P/C for their consideration.

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	(Futurewise)					
RFW04	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	11/12/20	A	C/P Ch. 8	Add an additional policy, possibly under Goal 10D: <u>Protect natural processes and functions of Marine Resource Lands and critical areas in anticipation of climate change impacts, including sea level rise.</u>	Your comments will be forwarded to the P/C for their consideration.
RFW05	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	11/12/20	D, F	Title 23, Ch. 16.16	We recommend that the P/C table all changes to WCC 16.16 and WCC 23.40 until a No Net Loss memo is prepared.	A draft NNL addendum is anticipated in December 2020. The P/C will have it prior to any final action.
MM01	Mike MacKay	11/30/20	D	23.40.190(A)(8)	1. When hard shoreline stabilization measures are demonstrated to be necessary, they must: a. Limit the size of stabilization measures to the minimum necessary; and b. Assure no net loss of shoreline ecological functions, <u>including loss of substrate for forage fish spawning; and</u> c. <u>Regular beach nourishment must be provided to retain beach material with substrate size suitable for forage fish spawning; and,</u> d. Ensure that publicly financed or subsidized shoreline erosion control measures do not restrict appropriate public access to the shoreline except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions.	Though the commenter cited §23.4.180, the text to which he is referring is found in §23.40.190(A)(8). Though staff agrees with the sentiment, we don't believe the addition to (b) is necessary, as loss of substrate for forage fish spawning is just one of many shoreline ecological functions already addressed in Ch. 16.16. Thus, it is one of many specific aspects already addressed by the general rules. Additionally, such areas are already designated as critical saltwater habitat, which is designated a Habitat Conservation Area in Ch. 16.16. The addition of (c) is similar (one specific aspect already covered by the general). But furthermore, beach nourishment is not always the best solution for all habitats. Determining whether beach nourishment is necessary should be determined through the Critical Area Assessment Report process.
MM02	Mike MacKay	11/30/20		23.50.020	Nonconforming Structures <u>H. Seasonal floating traps and weirs for enumerating salmon on</u>	Staff opposes this addition. We don't believe that we ought to blanket design-

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					<u>streams and rivers are considered a legally nonconforming structures, provided they do not impede river vessel transport or otherwise affect the normal functions of river flow and sediment transport.</u>	nate all seasonal traps and weirs as “legally nonconforming.” To achieve this status, the structure has to have been in the same place prior to August 27, 1976—or permitted prior to being made non-permissible by a change in code—and remain in place without a gap of 18 months. The fact that they’re seasonal and moved around makes that highly unlikely. Nonetheless, seasonal traps and weirs are considered a water-dependent use allowed in the aquatic environment and are permissible (though we can’t recall when anyone’s ever applied for a permit to install one).
MM03	Mike MacKay	11/30/20		23.060.060	"F" definitions <u>24. "Forage Fish" means a group of marine fishes such as surf smelt, sandlance, and herring which provide an important primary food sources for juvenile salmonids and other fish. Intertidal and subtidal gravel and sand sediments on many beaches provide the essential spawning and incubation habitat for surf smelt and sandlance.</u>	Staff isn’t opposed to adding such a definition, but think it unnecessary as “spawning and holding areas for forage fish, such as Pacific herring, surf smelt and Pacific sandlance” is already included in the definition of “Critical saltwater habitat.” Nonetheless, were it to be added it should be added to Ch. 16.16, not Title 23. However, the second sentence isn’t really part of a definition of what these fish are, just a statement of the importance of sediment to them. Staff suggests not including it.
MM04	Mike MacKay	11/30/20		23.40.090	Fill and Excavation <u>9. Marine fill or excavation shall not impede the normal movement of juvenile salmon to move along the intertidal shoreline (salmon migratory corridor) or to force them into deeper water where they are subject to increased predation.</u>	Similar to comment MM01, we find this a very specific issue already covered by the general rules. Subsection (A)(1) (and other sections of Title 23) already state that shoreline uses and modifications cannot impact shoreline ecological functions and ecosystem-wide processes. Part of our goal for this update was to

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						reduce such redundancies and we don't think each section needs to list all the potential impacts a use or modification may have.
MM05	Mike MacKay	11/30/20		23.60.190	"S" definitions 1. <u>"Salmon migratory corridor" means the intertidal pathway used by juvenile salmonids during the first few months of saltwater migration. This intertidal habitat provides protection from predators during initial entry into saltwater.</u>	Again, were such a definition added it should be added to Ch. 16.16, not Title 23. Nonetheless, staff doesn't think this definition is needed as the term is not used in either Ch. 16.16 or Title 23.
NWSF01	Eleanor Hines, NW Surfrider Foundation	11/11/20	C	Marine Resource Lands	Writing to express our strong support for the addition of marine resource lands in chapter 8 in the Comprehensive Plan. Agriculture, forest, and mineral lands are already recognized in the Whatcom County Comprehensive Plan, so the addition of Marine Resource Lands to Chapter 8 is fully supported by the Surfrider Northwest Straits Chapter. We only regret that Marine Resource Lands were not included sooner as they are extremely important economically, culturally, recreationally, and environmentally to Whatcom County. Marine resource lands deserve the same protection as our other resource lands and would add a unique protection from other current policies and regulations. We strongly support the inclusion of education and recreation in this section, and we ask that appropriate resources and capacity are allocated to ensure the Chapter 8 additions are fulfilled. We will continue to advocate for the effective and sustainable management of our marine resource lands so that future generations enjoy all the economic, cultural, recreational, and environmental benefits they provide.	Your comments will be forwarded to the P/C for their consideration.
RFW06	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	12/10/20	B		Add new Policy 11AA-8: <u>New lots and new and expanded development along the marine shoreline should be located two feet above the OHWM so they will not interfere with the landward expansion and movement of wetlands and aquatic vegetation as sea level rises. Sea level rise elevation data shall be revised every eight years or when the SMP is updated.</u>	Your comments will be forwarded to the P/C for their consideration.

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RFW07	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	12/10/20	D	Ch. 23.30	<p>Add new section:</p> <p><u>23.30.080 Sea Level Rise.</u></p> <p>A. <u>New lots shall be designed and located a minimum of two feet above the OHWM so that the buildable area is outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</u></p> <p>B. <u>Where lots are large enough, new structures and buildings shall be located so that they are outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</u></p> <p>C. <u>New and substantially improved structures shall be elevated above the likely sea level rise elevation in 2100 or for the life of the building, whichever is less.</u></p>	Your comments will be forwarded to the P/C & Co/C for their consideration.
RFW08	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	12/10/20	D	23.40.010	<p>Modify Table 1, Shoreline Use by Environment Designation: Change Liquid Manure Storage Facilities and Spreading from a Permitted use to a Conditional Use for the Rural, Resource, and Conservancy Shoreline environments.</p>	
RFW09	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	12/10/20	D	23.40.040	<p>Agriculture – Add to subsection (A) General:</p> <p><u>6. Replacement manure storage facilities must be tanks or towers.</u></p> <p><u>7. All new manure storage facilities must be tanks or towers.</u></p>	Your comments will be forwarded to the P/C for their consideration.
RFW10	Ander Russell & Eddy Ury (ReSources), Rein Attemann (Washington Environmental Council), and Tim Trohimovich (Futurewise)	12/10/20	D	23.40.140	<p>Mining – Add:</p> <p><u>D. Mining in the 100-year floodplain, floodway, or channel migration zones shall meet the following standards:</u></p> <ul style="list-style-type: none"> i. <u>Mines should be located outside the channel migration zone unless there is no feasible alternative site.</u> ii. <u>Mines shall be no deeper than the bottom of the nearby streams and rivers.</u> iii. <u>The mine reclamation plan shall have a design so that when the river or stream moves into the mine it is not so wide or deep that the captured sediments destabilize the</u> 	<p>Your comments will be forwarded to the P/C for their consideration.</p> <p>(Were this added it should probably be (B)(2), not (D).)</p>

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					<u>river or stream or increase erosion risks on upstream properties.</u>	
RFW11	Karlee Deatherage (Resources), Tim Trohimovich (Futurewise), & Rein Attemann (WEC)	1/12/21	B	11AA-8	<p>Add new policy:</p> <p><u>11AA-8: The buildable area of new lots and new and expanded development along the marine shoreline should be located two feet above the OHWM so they will be at a lower risk of damage and not interfere with the landward expansion and movement of wetlands and aquatic vegetation as sea level rises. The part of the ownership waterward of the buildable area may be used as required open space. If new data is available, sea level rise elevation data shall be revised during the SMP periodic update.</u></p>	This is a revised proposal after speaking with staff about our implementation concerns. Though staff still takes the position that we should await the CoSMoS model to be completed for Whatcom County, this policy is probably implementable.
RFW11	Karlee Deatherage (Resources), Tim Trohimovich (Futurewise), & Rein Attemann (WEC)	1/12/21	D	23.30.080	<p>Add new section:</p> <p><u>23.30.080 Sea Level Rise.</u></p> <p>A. <u>The buildable portion of new lots shall be designed and located a minimum of two feet above the OHWM so that the buildable area is outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time. The part of the ownership waterward of the buildable portion may be used as required open space.</u></p> <p>B. <u>Where lots are large enough, new structures and buildings shall be located a minimum of two feet above the OHWM so that they are outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</u></p> <p>C. <u>New and substantially improved structures shall be elevated above the likely sea level rise elevation in 2100 or for the life of the building, whichever is less.</u></p> <p>How the language will work in practice Currently new shoreline development must locate the ordinary high-water mark as part of the application for a shoreline exemption or shoreline permit. The proposed policy and regulations simply require the applicant to locate the buildable area for</p>	<p>This is a revised proposal after speaking with staff about our implementation concerns. Though this tact may be implementable, staff still takes the position that we should await the CoSMoS model to be completed for Whatcom County.</p> <p>There isn't a requirement to address climate change/sea level rise in the SMA, though we could if Council desires. However, what we understand from the DOE is that any such regulations should be built on data, which is what PS-CoSMoS will be providing. Furthermore, once the data is available, we should perform vulnerability and risk assessments to see what kind and where the problems might be, and update our shoreline inventory and characterizations. Without such science, we would be open to challenges.</p>

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					<p>new lots or the new development two feet above the ordinary high-water mark. Where existing lots are not large enough to accommodate this requirement, the new structures or buildings can be elevated. Determining the location of the area two feet above the ordinary high-water mark will require little addition time or expense.</p> <p>Why two feet of elevation? The two feet of elevation is based on the Projected Sea Level Rise for Washington State – A 2018 Assessment for Whatcom County. These science-based projections were prepared by a collaboration of Washington Sea Grant, the University of Washington Climate Impacts Group, Oregon State University, the University of Washington, and the US Geological Survey.³ These projections incorporate:</p> <ul style="list-style-type: none"> • New science showing the potential for higher sea level rise in the 21st century. • The projections are “community-scale.” They were prepared for 171 locations distributed along Washington’s coastline including Puget Sound. The projections account for variations “in the rate of vertical land movement across the state.”⁵ That is: the projections include whether an area is uplifting or subsiding. • The report was peer-reviewed. <p>Sea level rise is a real problem that is happening now. Sea level is rising and floods and erosion are increasing. The National Research Council concluded that global sea level had risen by about seven inches in the 20th century. A recent analysis of sea-level measurements for tide-gage stations, including the Astoria, Oregon and Seattle Washington tide-gauges, shows that sea level rise is accelerating. The Virginia Institute of Marine Science (VIMS) “emeritus professor John Boon, says “the key message from the 2019 report cards is a clear trend toward acceleration in rates of sea-level rise at 25 of our 32 tide-gauge stations. Acceleration can be a game changer in terms of impacts and planning, so we really need to pay heed to these patterns.” We hope the P/C agrees that it is time to address this</p>	

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					accelerating problem.	
KC02	Kim Clarkin	1/10/21	D	23.50.010(E)	<p>I support the proposed changes to regulations of non-conforming uses, structures, etc. that are to be replaced.¹ I do not believe we should approve replacements that are non-conforming. We are attempting to improve--not just maintain--the habitat and other conditions of our shorelines. Replacement should be an opportunity for bring shorelines up to our current standards and guidelines. Please vote to modify title 23 to accord with this goal.</p> <p>[¹ Note: Staff believes Ms. Clarkin is referring to Commissioner Hansen's proposal to delete the ability of a nonconforming use to change to another type of nonconforming use.]</p>	Whatcom County has some of the most lenient nonconforming regulations around, and allowing a nonconforming use to switch to another type of nonconforming use is rather rare. Nonetheless, this is what our existing nonconforming use regulations in WCC Title 20 (Zoning) allow, so staff has prepared this section of the SMP to mimic those regulations.
PB02	Pam Borso	1/11/21	D	23.40.140	<p>Please approve the following amendment to the Shoreline Management Act as presented by Jim Hansen:</p> <p>Chapter 23.40.140 Mining: Changes to Prohibit Commercial Gravel Bar Scalping</p>	<p>Gravel mining in our rivers is currently allowed. However, it is difficult to permit given other state and federal regulations, especially the Endangered Species Act (which is why we don't see much of this activity). However, Council has indicated a desire to allow some gravel mining. This desire is expressed in their docketed item PLN2019-00011:</p> <p>"Amend the Whatcom County Comprehensive Plan and Whatcom County Code to allow the seasonal extraction of sand and gravel from dry upland areas located within the 1,000 year meander zone of the Nooksack River, provided that such extraction has no negative impact on salmon spawning habitat.</p> <p>The intent is to (a) reduce the conversion of land currently used for farming, forestry and wildlife habitat into gravel pits, and (b) safely remove some of the significant sediment load that enters the Nooksack every year in an effort to re-</p>

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						duce flooding and the need to build higher flood prevention berms along the river as the climate continues to change.”
PB03	Pam Borso	1/11/21	D	23.50.010(E)	<p>Please approve the following amendment to the Shoreline Management Act as presented by Jim Hansen:</p> <p>Nonconforming Uses: Jim will propose a change that will no longer allow the replacement of one shoreline nonconforming use (Grandfathered) with another different nonconforming use.</p>	See response to KC02
MM06	Mike MacKay	1/1/21	D	23.40.140	<p>Please consider language which would prohibit mining (gravel scalping) in the Channel Migration Zone.</p> <p>I have firsthand experience how this activity can seriously impact endangered Chinook salmon in the Nooksack River. I was doing field surveys at the time as a fisheries biologist with the Lummi Tribe. These were spawner surveys documenting locations of Chinook and Chum redds (salmon nests). This took place in late September in the 1980s at a sandbar downstream of the Everson Bridge on the right bank (North side).</p> <p>At that time it was not widely known about Chinook spawning in that part of the lower river. I had talked to several gravel scalping company employees during this activity and they vehemently denied seeing any salmon spawning at these excavation sites. WA Fish and Wildlife had reluctantly issued permits for gravel scalping activities. Operators were required by WDFW to re-grade areas they excavated at the end of each day. Unfortunately this was routinely ignored.</p> <p>In this case of the Everson sandbar, the bar was dredged and the sand/silt/gravel material was stockpiled in large heaps immediately upstream of several active Chinook redds that I observed being constructed. A few days later there was a high flow event, as is common this time of year during rainstorms (late September). The stockpiled mounds were eroded away and essentially covered the redds downstream I had observed earlier. I carefully documented this with an report and photos which</p>	See response to PB02

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					<p>was sent to WDFW permit writers. Since this time WDFW has been reluctant to issue new permits for this activity on the Nooksack River.</p> <p>I have researched the effects of fine sediments on salmon redds in the literature. What occurs is that the fines less than 0.5 mm are driven down into the stream bed by the swift water into the newly built redd(s) and form a layer which effectively suffocates the eggs. This fine sediment impedes the flow of oxygenated water around the egg pockets. Adult female salmon are careful to remove fine sediments from the redd during their excavation and egg laying. While some natural occurring fines accumulate in the egg pockets as the result of high flow events, this amount usually doesn't restrict flows of circulating water to any large extent, and certainly not to the degree that an eroded nearby source of newly excavated sediment would.</p> <p>There are numerous sandy/gravel areas in the lowlands of Whatcom County not adjacent to the river available for gravel extraction. Gravel scalping should not be an allowed activity in the Channel Migration Zone or next to any flowing rivers or streams.</p>	
KC03	Kim Clarkin	1/12/21	D	23.30.080	I support the additional policy and regulation proposed by Futurewise, RE-Sources, and WEC regarding limiting new and expanded near-shore building to 2' above the OHWM. Given the projected sea levels in future, and the uncertainty surrounding the exact figure, 2' seems to me an excellent choice. We should definitely not permit people to build right at current OHWM if we want to protect their safety and investment. Please incorporate the additions to Chapter 11 of the Comprehensive Plan, and WCC 23.30.	See response to RFW11.
NTNR01	Michael Maudlin, Nooksack Tribe Natural Resources staff	1/13/21	D	23.30.070	<p>Public Access</p> <p>Trail construction within the shorelines buffer is a long-term, permanent impact to instream habitat. The loss of wood recruitment to the channel due to the removal of hazard trees and maintenance of downed wood across the trail needs to be considered in the assessment of trail impacts. The interruption of the process of natural wood delivery to the channel is largely</p>	While the writer's point may be valid, the SMA identified public access to the shorelines as a preferred use (and one of the driving forces in its adoption). While WCC Ch. 16.16 contains numerous standards for where trails may be located in critical areas and how they're built,

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					responsible for the degraded instream habitat conditions for threatened fish stocks and has led to local salmon recovery partners spending millions of dollars installing artificial logjams to offset this impact. Where trails align with existing roads or levees that already receive maintenance this is less of an additional impact, but siting recreational development within the shorelines buffer should be discouraged to be consistent with other general regulation sections.	WCC 16.16 does not address maintenance. We suggest you work w/ Whatcom County Parks Department to address this issue.
NTNR02	Michael Maudlin, Nooksack Tribe Natural Resources staff	1/13/21	D	23.40.140	Mining The Nooksack Natural Resources Department strongly opposes gravel mining in the active channel area and bars of the river. The history of instream habitat degradation associated with past mining operations has been well documented by the Lummi Nation and with the subsequent listing of fish stocks under the Endangered Species Act gravel removal from the channel is not a viable commercial activity. The disturbance from gravel mining can directly impact salmon habitat, disrupt the aquatic food web, degrade water quality, disturb emergent vegetation and alter the natural process of sediment transport and storage- all of which the SMP is designed to protect. It is simply not possible to design and conduct in-channel mining activities that will not lead to a loss of ecological function and natural process. Any sediment management activities in the river, including removal for flood management, need to maintain consistency with the WRIA 1 Salmon Recovery Plan and the on-going integrated floodplain management planning effort. This section should be edited to prohibit gravel mining from the river.	Your comments will be provided to the P/C & Co/C.
NTNR03	Michael Maudlin, Nooksack Tribe Natural Resources staff	1/13/21	D	23.40.160	Recreation As previously mentioned, trails can be a permanent impact to critical area buffers. It is important to make sure that trail location is not degrading riparian function. Limiting trails to the outer 25% of the buffer will help preserve potential wood recruitment to the channel. Ideally, recreational infrastructure would be cited outside of buffer areas to the fullest extent possible.	We agree, and WCC 16.16 does limit trail construction to the outer 25% of the buffer (except in certain limited circumstances) and mitigation is required.
MES27	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.225(D)	Replace "associated with marine, river, or lake shorelines and wetlands" with "within designated critical areas and/or buffers." The term "associated with marine, river or lake shorelines and	This new section is intended to address the SMA's requirement to preserve native plant communities associated with shore-

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					wetlands” is vague. This could imply any native plant communities any distance from a marine area, river, lake or wetland. It seems the intent should be to prioritize native plant communities within designated critical areas and/or buffers – that are specifically covered within this chapter of the CAO. Otherwise, it seems the code would be directing applicants to design projects based on plants and plant communities not covered by the CAO.	lines. Though shorelines are considered critical areas pursuant to 16.16.710, staff thought it would be easier for people to understand this rule by if we just call them out. Thus, this wouldn't expand CAO requirements outside of intended areas. Though it could be changed to read as suggested, it wouldn't have any effect on the regulation. The term “associated” refers to associated with... shorelines, as detailed in the WAC.
MES28	Ed Miller, Miller Environmental Services	2/19/21	F	6.16.255(C)(3)	Strike the new added section “Critical areas assessment reports shall... identify impacts of the proposed use/development on habitat corridors, ecological connectivity, and habitat for salmon and forage fish.” Currently, Biodiversity areas and corridors are a WA Fish and Wildlife (WDFW) Priority Habitat. All WDFW priority habitats are currently regulated as HCA's in the CAO. As such applicants are already required to address them. Additionally, habitat for salmon and forage fish are also HCA's covered in the code, as all streams and waters are included as HCA's. The term ecological connectivity is very general and could be widely interpreted to mean many different habitats not covered under the CAO. Otherwise, if that is not staff intent, it would appear this extends CAO jurisdiction over areas not designated as critical areas within the code.	This language, along with other additions, was added to address Council's direction in the Scoping Document to “Consider strengthening ecological connectivity and wildlife corridor requirements” and “Consider ways to improve protections for salmon and forage fish habitat” (Items #8b and 8c). Though, as Mr. Miller argues, Biodiversity areas, wildlife corridors, and WDFW Priority Habitats are designated as critical areas already, addressing them in critical areas assessments was often overlooked. The text was inserted as a reminder that – if there are any such features affected by a development proposal – they should be addressed in the assessment.
MES29	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.270	This section is a complete rewrite of reasonable use procedures and would require a variance (minor and major variance) before reasonable use would apply. Strike the proposed changes and return to the prior language.	The change better aligns with Department of Commerce and Department of Ecology guidance on Reasonable Use Exceptions. The current and previous CAO did not follow the guidance from State Agencies. The existing code does require a variance process to be completed before a reasonable use exception is granted. The

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						Hearing Examiner has questioned why he isn't the final decision maker, as the current code allows an administrative determination to be made after a quasi-judicial decision, and in the hierarchy of permitting, applicants should have to exhaust any administrative remedies before seeking a quasi-judicial decision. Thus, we have rewritten the processes and changed the order of the various mechanisms so that the more impactful cases are heard by the Hearing Examiner. Please see the staff report to the P/C dated 4/12/21 for a more detailed explanation as to why staff is proposing this new schema.
MES30	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.270(j)	Add the italicized text at the end of the sentence, "The project includes mitigation for unavoidable critical area and buffer impacts in accordance with the mitigation requirements of this chapter <i>or if the mitigation requirements cannot be met, to the maximum extent feasible on the property.</i> "	The section to which Mr. Miller refers is language proposed for deletion. Nonetheless, under the proposed RUE rules, his suggestion would be already be the case.
MES31	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.270(C)(12)	We also propose adding language for the reasonable use section to allow for a development footprint of up to 4,000 square feet for reasonable use single-family residential development. Buffer mitigation should be proposed to offset impacts from reasonable use development as much as possible, but development shall not be denied if the minimum 1:1 mitigation ratio cannot be achieved on the subject property. This would not apply to direct impacts to critical areas themselves, as is the case in the current code. The proposed change is a significant alteration to the code. A significant number of previously designated reasonable use projects, processed administratively, would need to go to the hearing examiner. This will significantly increase costs and time to applicants for simple single-family construction or projects with only buffer impacts – as the current code requires an open	The P/C has already tentatively voted to leave the allowable disturbed area as 4,000 sf. Please see the staff report to the P/C dated 4/12/21 for a more detailed explanation as to why staff proposed to go back to the 2,500 sf under our proposed new schema.

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					public hearing for anything more complex. The change to section j is included so that applicants aren't required to purchase another property for mitigation – which has been required in some cases, precluding any development at all (even for buffer impacts).	
MES32	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.620(D) & .720(D)	Strike the change to “existing legal lots” and keep the current language of “private development sites” in both wetland and HCA sections. This section as modified implies that no new lots could be created (subdivided) if a road would be needed to cross through a wetland or buffer or habitat conservation areas. Access to acres of unencumbered property could be restricted if one small wetland or its buffer would need to be impacted to access a development area.	We believe that Mr. Miller was reviewing an older draft, as this language has already changed. Furthermore, subsection (C) continues to allow for stream crossings to undeveloped land.
MES33	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.630(B) & 6.16.740(A)(1)	Retain the existing language stating that “buffers shall not include areas that are functionally and effectively disconnected from the wetland (or HCA) by an existing, legally established road or other substantial developed surface,” rather than the proposed “buffers shall not include areas of existing, legally established substantially developed surface”. The proposed change would allow buffers to include disconnected area on the opposite side of roads or developed surfaces (such as buildings).	The amendment is proposed so as to be completing consistent with DOE's guidance and not just the portion about functional disconnect. (See Ecology Wetland Science Volume 2.)
MES34	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.640(A)(5)	Regarding Buffer Width Increasing, strike this added section, which is not in the current code and allows staff to extend any Category II wetland buffers out to 300 feet if another wetland or HCA is within 300 feet. HCA's include mature forest, priority snags (logs on the ground, 20 feet long, 12 inches wide), streams, etc. The intent of this appears to be to increase buffers if adjacent critical areas are present. However, this is already accounted for in the wetland rating form. The habitat score, which drives the buffer width, is scored higher if habitat conservation areas are within 330 feet. The proposed draft change seems redundant when these factors are already utilized in determining the buffers in the current code - based on the wetland rating form.	The existing code already allows the Director to increase buffer widths, but with less guidance, which consultants are usually clamoring for. Thus, we “borrowed” language from Skagit County, which provides better detail on when the Director can do so. We don't see how this would result in a double counting towards buffer requirements
MES35	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.640(B)(2) & 16.16.745(B)(2)	Regarding Buffer Width Averaging, strike the proposed language “In the specified locations where a buffer has been re-	In 2005 the Department of Ecology released two volumes of Best Available

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					<p>duced to achieve averaging, the Director may require enhancement to the remaining buffer to ensure no net loss of ecologic function, services, or value.”</p> <p>This new language effectively eliminates the intent of buffer averaging and converts it to buffer reduction by requiring mitigation. Buffer averaging is an important and simple way to allow more flexibility for property owners that need to make minor buffer adjustments. This section will also reduce consistency and predictability (each staff member could apply this differently), and will increase the cost for simple projects by requiring plantings, monitoring, bonding, etc. by thousands of dollars. Additionally, the Director already has the ability to require plantings in a wetland or HCA buffer where it lacks adequate vegetation under 16.16.630.D or 16.740.B.1 – making this code addition redundant.</p>	<p>Science: Volume 1 was a synthesis of knowledge to date, and Volume 2 addressed management recommendations. Ecology addresses buffer averaging in two locations, the first is in Volume 2 section 8.3.8.3 (Buffer Averaging) and the second, in greater detail, in Appendix 8-C (Guidance on Widths of Buffers and Ratios for Compensatory Mitigation for Use with the Western Washington Wetland Rating System). In Volume 2, Section 8.3.8.3, Ecology explains three reasons why buffer averaging is in the tool kit for protection of wetlands. The first and typical reason is to allow development to occur closer than usual to the wetland in order to fit a particular development “footprint” onto a given site. The second reason is protect a natural feature (e.g., a stand of trees or snags) that otherwise would fall outside of the standard buffer. And the third reason is to provide connections with adjacent habitats or to address those situations where pre-existing development has reduced a buffer area to a width less than the required standard.</p> <p>In Appendix 8-C Ecology states “widths of buffers may be averaged if this will improve the protection of wetland functions or if it is the only way to allow for reasonable use of a parcel. There is no scientific information available to determine if averaging the widths of buffers actually protects functions of wetlands.” Ecology then proceeds to provide criteria for averaging a buffer: 1) It should not be reduced by more than ¼; 2) the area of the standard</p>

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						<p>and averaged buffer are the same; and 3) the buffer is increased adjacent to the higher functioning buffer, and there is a distinct difference between the higher functioning and lower functioning buffers. The requirement for a high function and lower function buffer eliminates the use of averaging when the buffer is entirely degraded.</p> <p>Thus, staff recommends that we amend the draft language to allow buffer averaging only when there is fully functioning and degraded habitat and add language that supports Ecology's Guidance for allowing averaging to protect ecologically significant areas outside of the buffer or habitat connectivity. Section (B)(2) would read:</p> <ol style="list-style-type: none"> 1. Averaging of required buffer widths will be allowed for the following when the dimensional standards of subsection (B)(1) are met: <ol style="list-style-type: none"> a. To protect a natural feature (e.g., a stand of trees or snags) that otherwise would fall outside of the standard buffer. b. To provide connections with adjacent habitats or to address those situations where pre-existing development has reduced a buffer area to a width less than the required standard.
MES36	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.640(C)(1)(c)	Regarding Buffer Width Reduction, retain the existing language that allows for up to 50% reduction (or 25 feet) for Category IV wetlands, rather than the proposed "The buffer shall not be re-	The maximum reduction of 75% through buffer averaging is based on DOE guid-

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					duced to less than 75% of the standard buffer. The existing code section allows for up to a 50% (or minimum of 25 feet) reduction of a Category IV wetland buffer, while higher category wetlands are restricted to a 25% reduction. Under the draft buffer averaging section, Category IV wetlands are still allowed up to a 50% reduction. This will just remove some flexibility for property owners for the lowest category of wetlands.	ance.
MES37	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.640(C)(1)(e)(iii)	Regarding Buffer Width Reduction, strike the new added section requiring "Retention of existing native vegetation on other portions of the site in order to offset habitat loss from buffer reduction." This added code section appears to increase CAO authority to other areas of the property and other project components outside of critical areas. Staff already has authority to deny proposed buffer reductions, under parts D, F and G of this code section. Part G of this section already requires mitigation for buffer reduction impacts and result in equal or greater protection for the wetland.	This section does not expand CAO authority to areas outside of critical areas; it only provides a pathway to having narrower buffers (see response to item 5, above). The proposed subsections (e) & (f) provide three ways to for an applicant to minimize impacts and provide equivalent functions and values. Subsection (iii) of these subsections lists just one of the ways an applicant of a moderate impact land use project may apply low intensity buffer widths, which are narrower. An applicant need not do this if they don't want to reduce their buffers (the wider buffers would then apply).
MES38	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.640(C)(3) & 16.16.745(C)(2)	Regarding Buffer Width Reduction, strike the draft added section "where a portion of the remaining buffer is degraded, the buffer reduction plan shall include replanting with native vegetation in the degraded portions of the remaining buffer area." The new language appears to be redundant; C.2.g of the wetland section and C.1.g of the HCA section already requires mitigation and no net loss of function for any buffer reduction. Additionally, Section 16.16.630.D and 16.16.740.A.2 also gives the Director authority to require planting in degraded buffer if needed. The draft language implies any amount of degraded buffer could be required to be planted for buffer impacts, no matter how small. This would penalize applicants who own agricultural property and/or grass/hayfields.	The planting of degraded buffers has been a part of our CAO since 2005 and is based on Best Available Science and DOE guidance. Based on case history, we are only clarifying that the area that might be enhanced is limited to the specific portions of the buffer being reduced, not anywhere on the lot, and certainly not outside critical area buffers (and thus does not "grant unlimited potential for mitigation requirements"). Per DOE guidance, "degraded" is any portion of a buffer that is not in a densely vegetated community. Ecology provides this re-

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						quirement in Appendix 8C, Section 8C.2.5 to either increase the buffer or enhance with native vegetation. Ecology's guidance for buffer size is based on science with a densely planted vegetative buffer.
MES39	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.680(H)	<p>Regarding Wetland Mitigation Ratios, maintain the existing language and strike the proposed language that requires a higher ratio of mitigation when it's done after the impact occurs.</p> <p>Generally, applicants do not conduct mitigation activities prior to permit approval, and generally go to construction as soon as permits are issued. Additionally, mitigation planting is often tied to the planting season – which is preferably fall through spring to increase survivability. This added code language would appear to add a year to applicants' timeline or penalize them with up to 25% more buffer mitigation. Additionally, no net loss of buffer function already required under 16.16.640(C)(2)(g).</p>	This proposed requirement comes from DOE guidance to account for temporal loss.
MES40	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.710(C)(1)(a)(vi) & 16.16.740(B)	<p>Strike this addition of Type O waters and associated 25-foot buffer. Return the prior designation of Natural Ponds to the buffer Table requiring a 50-foot buffer.</p> <p>The definition of Type O waters is vague and could potentially include ditches and artificial ponds. Type O waters do not correlate with Washington State water typing. If the intent is to include ponds as an HCA, we recommend restoring previous code language that included a 50-foot buffer for natural ponds and lakes under 20 acres in size and no buffer for artificial ponds.</p>	The amendment to create Type O water is proposed so as to align Ch. 16.16 with the County's Manure and Agricultural Nutrient Management regulations (WCC Ch. 16.28), which prohibit "the spreading of manure within 50 feet of drainage ditches leading to rivers and streams." This is the code that our Pollution Identification and Correction (PIC) program uses to curtail the introduction of agricultural runoff into our waterways, thereby protecting our shellfish resources. Creating a Type O water with a 25-foot buffer was suggested by our PIC managers, the Whatcom Conservation District, the Department of Agriculture, and other partner agencies so that there's a buffer between where manure might be spread and our waterways. It was determined that 25-feet

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						would be adequate for this function. Were we to revert to the existing code, then such waterways/ditches might be considered one of the other types with a larger buffer.
MES41	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.745(A)	Regarding Buffer Width Increasing, strike the new added section 16.16.745(A)(2), allowing the Director to increase HCA buffers under certain conditions. This is a new provision to the code that allows the Director to extend Type S or F buffers to resources within 300 feet – including Category III wetlands, other HCA's or other waters. Again, this is an exceptionally broad provision to add in additional regulated areas that are not currently designated as critical areas or buffers in the existing or even the proposed amended code. The extension of every fish stream or lake buffer to another resource within 300 feet is essentially extending most of the buffer areas to 300 feet.	The existing code already allows the Director to increase buffer widths, but with less guidance, which consultants are usually clamoring for. Thus, we “borrowed” language from Skagit County, which provides better detail on when the Director can do so. We don't see how this would result in a double counting towards buffer requirements
MES42	Ed Miller, Miller Environmental Services	2/19/21	F	16.16.760(B)(8)	Regarding HCA Buffer Mitigation Ratios, maintain the existing language and strike the proposed language that requires a higher ratio of mitigation when it's done after the impact occurs. Generally, applicants do not conduct mitigation activities prior to permit approval, and generally go to construction as soon as permits are issued. Additionally, mitigation planting is often tied to the planting season – which is preferably fall through spring to increase survivability. This added code language would appear to add a year to applicants' timeline or penalize them with up to 25% more buffer mitigation. Additionally, no net loss of buffer function already required under 16.16.760.	This proposed requirement comes from DOE guidance to account for temporal loss.
LNTHPO02	Tamela Smart, Lummi Nation Tribal Historic Preservation Office	3/1/21	D	23.30.060(A)(2)	A Cultural Resources <u>survey and</u> report. The current language does not include the word survey.	“Survey and” has been added to this section.
LNTHPO02	Tamela Smart, Lummi Nation Tribal Historic Preservation Office	3/1/21	D	23.30.060(A)(3)	The LNTHPO would like to be consulted whether or not cultural resources were encountered during the survey.	This section directs the County to provide the cultural resource report to DAHP—and if Native American cultural resources are addressed—to the Tribes. Staff isn't sure why such reports would need to be

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						provided to the LNTHPO if N.A. resources aren't involved. Nonetheless your comment will be provided to the P/C and Co/C.
LNTHPO02	Tamela Smart, Lummi Nation Tribal Historic Preservation Office	3/1/21	D	23.30.060(A)(5)	<p>The LNTHPO recommends that the permit also be conditioned based on the County's consultation with the affected tribes and the Department of Archaeology and Historic Preservation.</p> <p>If no cultural resources are encountered and the consulting parties concur with the findings, the Whatcom County Inadvertent Discovery Plan for cultural resources should be on-site and followed if cultural resources or human remains are encountered.</p>	<p>This section states that "any permit issued shall be conditioned on meeting the approved report's management recommendations." Given that the report, including the management recommendations, would be approved by DAHP and the Tribe(s) through consultation, then this would already be the case.</p> <p>And subsection (6) already states that any activities would still subject to the state and federal regulations regarding inadvertent discoveries regardless of whether any cultural resources are identified or not, so this, too, would already be the case.</p>
LNTHPO02	Tamela Smart, Lummi Nation Tribal Historic Preservation Office	3/1/21	D	23.30.060(A)(6)	The LNTHPO recommends that this point be made broader to state that any activities are still subject to state and federal laws and regulations regarding cultural resources and human remains.	Regardless of whether we state that any activities are still subject to the state and federal regulations, it would still be the case. Nonetheless, we have broadened the language as suggested.
RFW12	Karlee Deatherage (RE Sources), Danielle Shaw (WEC), and Tim Trohovich (Futurewise)	3/4/21	F	16.16.270	Restore Reasonable Use language in Dec 4, 2020 draft. We urge the Commission to revisit their proposed change to expand the maximum impact area for single-family residences to be no larger than 2,500 square feet in 16.16.270.C.12. The purpose of the reasonable use provision is to allow only the minimal "reasonable" use of property to avoid a constitutional taking when fully applying the standards of critical areas regulations. The courts generally decide the concept of reasonable; however, reasonable use is often interpreted as a modest single-family home. A home with a footprint 4,000 square feet is excessive. A median size house built in 2019 has 2,301 square feet of floor area. We can assume that to be less than footprint 1,500 square	Your comment will be provided to the P/C & Co/C for consideration.

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					feet. Additionally, we strongly urge the Commission to maintain the new language in the code for the processing of reasonable use exceptions. We understand this is a departure from the current code which allows administrative approval of reasonable use exceptions; however, the way Whatcom County has been processing this is contrary to the intent of reasonable use. Quasi-Judicial bodies like the Hearing Examiner should be making the final call as opposed to staff. All feasible measures to derive use of the property must also be exhausted, which includes pursuing a variance. This mirrors language used in both Skagit County and Snohomish County.	
RFW13	Karlee Deatherage (RE Sources), Danielle Shaw (WEC), and Tim Trohovich (Futurewise)	3/4/21	F	16.16.640(A)(5) and 16.16.745(A)(2)	Regarding Buffer Width Increasing, maintain staff proposed changes. The Commission received a suggestion from Miller Environmental Services, Inc. requesting this section to be removed. We disagree. The wetland rating form is not a part of the CAO and this language should be kept in code. Also, this decision could be made by the Director on a case by case basis to increase the size of the required buffer in specific instances. Striking this from the code could deprive the Director of an important tool to better protect the few remaining areas in the county that are vital for wildlife and water quality functions of wetlands and streams. The Department of Ecology's wetland guidance recommends this as an important tool as well: "Ecology's buffer recommendations are also based on the assumption that the buffer is well vegetated with native species appropriate to the ecoregion. If the buffer does not consist of vegetation adequate to provide the necessary protection, then either the buffer area should be planted or the buffer width should be increased."	Your comment will be provided to the P/C & Co/C for consideration.
RFW14	Karlee Deatherage (RE Sources), Danielle Shaw (WEC), and Tim Trohovich (Futurewise)	3/4/21	F	16.16.640(C)(1)(e)(iii)	Regarding Buffer Width Reduction, maintain staff proposed changes. This change proposed by staff allows the Director to provide flexibility in making buffer reductions while still managing and protecting landscape-scale functions and values. We could see how this could benefit a parcel if buffer reduction is occurring in an area with older stands of native trees and there	Your comment will be provided to the P/C & Co/C for consideration.

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					are other trees of similar age onsite that could be preserved and protected from unnecessary clearing. Mature trees serve critical habitat, stormwater control, and water quality functions even if they are not part of a formal buffer for a critical area.	
RFW15	Karlee Deatherage (RE Sources), Danielle Shaw (WEC), and Tim Trohovich (Futurewise)	3/4/21	F	16.16.710(C)(1)(a)(v) and 16.16.740(B)	Regarding Type O Waters and buffer, maintain staff proposed changes. Miller Environmental Services, Inc. proposes to delete the definition and buffer requirements for Type O waters which connect directly to either waters of the state (Type S waters) or fish habitat (Type F waters) via channel, pipe, culvert, stream, or wetland. We support the staff's proposal to include this because all waters are connected and we must be providing some level of protection from a water quality perspective. Ongoing Agriculture is exempt from this requirement.	Your comment will be provided to the P/C & Co/C for consideration.
RFW16	Karlee Deatherage (RE Sources), Danielle Shaw (WEC), and Tim Trohovich (Futurewise)	3/4/21	F	16.16.745(A)	Regarding Buffer Width Increasing, maintain staff proposed changes. Having the ability to increase fish and wildlife habitat conservation area buffers is crucial to lend more protection to areas that serve multiple ecosystem functions. This change may only apply to shorelines of the state (Type S waters), fish-bearing waters (Type F waters), or high value wetlands (Category I, II, or III). Again, this is a discretionary decision from the Director which means it may not always happen.	Your comment will be provided to the P/C & Co/C for consideration.
MES43	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.270 & 16.16.273	These sections are a complete rewrite of reasonable use procedures and would require a variance (minor and major variance) before reasonable use would apply. Current Code: Reasonable use provisions are currently considered prior to a variance application. A variance application is time-consuming, more expensive, and requires review/approval by the hearing examiner with a public hearing. Per 16.16.270.C.1 only reasonable use exceptions for single-family residential building or for other development proposals that would affect only buffers, but not critical areas themselves (e.g., wetlands and streams), shall be processed administratively. Other applications that directly impact critical areas, with the	Our Hearing Examiner has questioned our current schema, in particular why he isn't the final decision maker, as the current code allows an administrative determination to be made after a quasi-judicial decision, and in the hierarchy of permitting, applicants should have to exhaust any administrative remedies before seeking a quasi-judicial decision. Staff is proposing that reasonable use exceptions be the last method of altering standards to allow reasonable economic use of constrained property, and that they be decid-

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					<p>exception of single-family residential, currently have to apply for a variance application. If an applicant currently wants to propose a larger footprint than the allowed 4,000 square feet under reasonable use, they could also apply for a variance.</p> <p><i>Suggested Change:</i> Strike the proposed changes to reasonable use and variance procedures. Return to the current language. Also, add bolded language to section 16.16.270.j. The project includes mitigation for unavoidable critical area and buffer impacts in accordance with the mitigation requirements of this chapter – or if the mitigation requirements cannot be met, to the maximum extent feasible on the property.</p> <p><i>Rational for suggested change:</i> The proposed change is a significant alteration to the code and process. A significant number of previously designated reasonable use projects, processed administratively, would need to go to the hearing examiner. This will significantly increase costs and time to applicants for simple single-family construction or projects with only buffer impacts – as the current code requires an open public hearing for anything more complex. This will also create more uncertainty as to what will be allowed when a property is encumbered with critical areas and buffers. It should also be remembered, that reasonable use scenarios have increased significantly over the last four years as the result of larger buffers occurring on properties since 2017 – the result of utilization of updated Ecology wetland rating forms and guidance. Generally, critical areas, primarily wetlands, have not changed but buffers have become significantly larger.</p> <p>The change to section j is included so that applicants aren't required to purchase another property for mitigation – which has been required in some cases, precluding any development at all (even for buffer impacts).</p>	<p>ed upon by the Hearing Examiner (see 16.16.270 Reasonable Use Exceptions).</p> <p>In this schema, the degree to which one can vary standards while providing the least amount of mitigation moves up a level at each step, with the Hearing Examiner making the tougher decisions through a quasi-judicial process. This would return the reasonable use exception to truly the last effort of avoiding a taking.</p> <p>However, to counter the additional time and cost of this process, staff is also proposing to create a new category of variances, called minor variances (16.16.273 Variances). They would be limited to variances for a 25% to 50% reduction of critical area buffers (when mitigated and they meet certain criteria) but would address most of the instances that reasonable use exceptions are currently applied for. We believe that overall, these changes would significantly reduce the number of cases having to go to the Hearing Examiner and cost less to the citizens of Whatcom County overall.</p>
MES44	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.620(D) & 16.16.720(D)	<p><i>Draft Code:</i> Private Access. Access to <u>existing legal lots</u> may be permitted to cross Category II, III or IV wetlands or their buffers, provided the access meets the following... And. Private Access. Access to existing legal lots may be permitted to cross habitat</p>	<p>This formerly proposed language has already been stricken and reverted to the original language in the more recent ver-</p>

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					<p>conservation areas if there are no feasible alternative alignments.</p> <p><i>Current Code:</i> <u>Access to private development sites</u> may be permitted to cross Category II, III or IV wetlands or their buffers, provided...</p> <p><i>Suggested Change:</i> Strike the change and keep the current language, both wetland and HCA sections.</p> <p><i>Rationale for suggested change:</i> This section as modified implies that no new lots could be created (subdivided) if a road would be needed to cross through a wetland or buffer or habitat conservation areas. Access to large areas of unencumbered property could be restricted if one small wetland or its buffer would need to be impacted to access a development area. For example, creating new lots in unencumbered areas (no critical areas) per the underlying zoning might not be allowed on a 40 acre property if the crossing of a non-fish stream or the outer portion of a buffer was required.</p>	sions of Exhibit F (4/5/21)
MES45	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.640(A)(5)	<p><i>Draft Code:</i> Buffer Width Increasing: The Director may require the standard buffer width to be increased by the distance necessary to protect wetland functions and provide connectivity to other wetland and habitat areas for one of the following:</p> <p><u>(5) When a Category I or II wetland is located within 300 feet of:</u></p> <ul style="list-style-type: none"> a. <u>Another Category I, II or III wetland; or</u> b. <u>A fish and wildlife HCA; or</u> c. <u>A type S or F stream; or</u> d. <u>A high impact land use that is likely to have additional impacts.</u> <p><i>Suggested Change:</i> Strike the new, added section (5).</p> <p><i>Rationale for suggested change:</i> This added provision, not in the current code, allows staff to extend any Category II wetland buffers out to 300 feet – if another wetland or HCA is within 300 feet. HCA's include mature forest, priority snags (logs on the ground, 20 feet long, 12 inches wide), streams, etc.</p> <p>The intent of this appears to be to increase buffers if adjacent</p>	Staff believes this addition better reflects DOE guidance and Council's direction to improve connectivity.

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					critical areas are present. However, this is already accounted for in the wetland rating form. The habitat score, which drives the buffer width, is scored higher if habitat conservation areas are within 330 feet. The proposed draft change seems redundant when these factors are already utilized in determining the buffers in the current code - based on the wetland rating form. If the intent is also to protect habitat corridors, then it is also redundant, as these are already protected in the habitat conservation section of the code – State priority habitat “Biodiversity areas and corridors”.	
MES46	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.640(B)(2) & 16.16.745(B)(2)	<p><i>Draft code.</i> Buffer Width Averaging: <u>In the specified locations where a buffer has been reduced to achieve averaging, the Director may require enhancement to the remaining buffer to ensure no net loss of ecologic function, services, or value.</u></p> <p><i>Suggested Change:</i> Strike the proposed change.</p> <p><i>Rationale for Suggested Change:</i> This section effectively eliminates the intent of buffer averaging and converts it to buffer reduction by requiring mitigation in the form of added plantings. Buffer averaging is an important and simple way to allow more flexibility for property owners that need to make minor buffer adjustments. This section will also reduce consistency and predictability (each staff member could apply this differently), and will increase the cost for simple projects by requiring plantings, monitoring, bonding, etc. by thousands of dollars. Additionally, the Director already has the ability to require plantings in a wetland or HCA buffer where it lacks adequate vegetation under 16.16.630.D or 16.740.B.1, making this code addition redundant.</p>	This formerly proposed language has already been stricken and reverted to the original language in the most recent version of Exhibit F (4/5/21)
MES47	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.640(C)(1)(c)	<p><i>Buffer Width Reduction draft code:</i> <u>The buffer shall not be reduced to less than 75% of the standard buffer.</u></p> <p><i>Current Code:</i> Allows for a Category IV wetland buffer to be reduced by up to 50% or 25 feet, whichever is greater.</p> <p><i>Suggested Change:</i> Restore prior language to allow for up to 50% reduction (or 25 feet) for Category IV wetlands.</p>	Staff believes this amendment better reflects DOE guidance.

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					<i>Rationale for Suggested Change:</i> The existing code section allows for up to a 50% (or minimum of 25 feet) reduction of a Category IV wetland buffer, while higher category wetlands are restricted to a 25% reduction. Under the draft buffer averaging section, Category IV wetlands are still allowed up to a 50% reduction. This proposed change will remove flexibility for property owners for the lowest category of wetlands.	
MES48	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.710(C)(1)(a)(v) & 16.16.740(B)	<p><i>Draft Code:</i> Type O waters include all segments of aquatic areas that are not type S, F, or N waters and that are physically connected to type S or F waters by an above-ground channel, system, pipe, culvert, stream or wetland. And 16.16.740.B. Type O Buffer = 25 feet.</p> <p><i>Current Code:</i> Not present in the current code.</p> <p><i>Suggested Change:</i> Strike this addition of Type O waters and associated 25-foot buffer. Return the prior designation of Natural Ponds to the buffer Table requiring a 50 foot buffer.</p> <p><i>Rationale for Suggested Change:</i> The definition of Type O waters will include ditches and artificial ponds that eventually drain to a fish stream. This will include most of the ditching and artificial ponds in Whatcom County. This will in effect place 25-foot buffers in any front yard along a road with a County ditch – creating protected critical areas buffers along most property road frontage. Any time the County public works excavated new ditching, or extended existing new ditching, they would also be creating new critical areas and encumbering adjacent properties with a buffer for a resource that the County created. This seems problematic and overreaching. Ditching provides a function to control and direct stormwater. The department of Ecology has no recommendations designating artificial ditches as critical areas or for placing buffers on artificial ditching. This would create a new critical area, most of which are within County rights-of-way. Additionally, most of the ditches outside of road right of ways are agricultural in nature and created prior to the growth management act and the clean water act. Additionally, Type O waters do not correlate with Washington State water typing.</p>	This formerly proposed language has already been stricken and amended in the most recent version of Exhibit F (4/5/21)

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MES49	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.710(C)(b)(i)	<p><i>Draft Code:</i> Ditches or other artificial water courses are considered streams for the purposes of this chapter when: i. used to convey <u>waters of the state</u> existing prior to human alteration; and/or...</p> <p><i>Current Code:</i> Ditches or other artificial water courses are considered streams for the purposes of this chapter when: i. used to convey <u>natural streams</u> existing prior to human alteration; and/or...</p> <p><i>Suggested Change:</i> Strike the change and replace the current language.</p> <p><i>Rationale for suggested change:</i> This change seems to make the section more confusing. State definitions (italics added):</p> <p>"Waters of the state includes all lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses located within the jurisdiction of the state of Washington (RCW 90.48.020)."</p> <p>"WAC 220-660-030(153) Watercourse, river of stream means any portion of a stream or river channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state. Watercourse also means areas in which fish may spawn, reside, or pass, and tributary waters with defined bed or banks that influence the quality of habitat downstream. Watercourse also means waters that flow intermittently or that fluctuate in level during the year, and the term applies to the entire bed of such waters whether or not the water is at peak level. A watercourse includes all surface-water-connected wetlands that provide or maintain habitat that supports fish life. This definition does not include irrigation ditches, canals, stormwater treatment and conveyance systems, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans."</p> <p>Per state definition, waters of the state (that might be found in a ditch) have an ordinary high water mark and are not artificial – essentially a "natural stream". It seems the current language is</p>	Based on public comment and direction from the P/C, staff has rewritten this section to be clearer and allow lesser buffers on modified waterways that are not regulated by WDFW. See 16.16.710(C) & (D)(2) in the most recent version of Exhibit F (4/5/21).

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					consistent with state definitions and is clearer.	
MES50	Ed Miller, Miller Environmental Services	4/12/21	F	16.16.745(A)(2)	<p><i>Draft Code:</i> Buffer Width Increasing. The Director may require the standard buffer width to be increased or to establish a non-riparian buffer, when such buffers are necessary for one of the following:</p> <ol style="list-style-type: none"> 1) To protect priority fish or wildlife using the HCA 2) <u>To provide connectivity when a Type S or F water body is located within 300 feet of:</u> <ol style="list-style-type: none"> a. <u>Another Type S or F water body; or</u> b. <u>A fish and wildlife HCA; or</u> c. <u>A Category I, II or III wetland.</u> <p><i>Current Code:</i> 16.16.745.A.2 - language added, not in the current code.</p> <p><i>Suggest Changed:</i> strike the new added section 16.16.745.A.2.</p> <p><i>Rationale for suggested change:</i> This is a new provision to the code that allows the Director to extend Type S or F buffers to resources within 300 feet – including Category III wetlands, other HCA's or other waters. Again, this is an exceptionally broad provision to add in additional regulated areas that are not currently designated as critical areas or buffers in the existing or even the proposed amended code. The extension of every fish stream or lake buffer to another resource within 300 feet is essentially extending most of the buffer areas to 300 feet. If the intent is also to protect habitat corridors, then it is also redundant, as these are already protected in the habitat conservation section of the code – State priority habitat “Biodiversity areas and corridors”.</p>	Staff believes this addition better reflects DOE guidance and Council's direction to improve connectivity.
RFW17	Karlee Deatherage (RE Sources), Rein Attemann (WEC), and Tim Trohimovich (Futurewise)	4/12/21	D		<p>Incorporate regulations to prepare for accelerating sea level rise impacts.</p> <p>The SMA and SMP Guidelines require shoreline master programs to address the flooding that will be caused by sea level rise. RCW 90.58.100(2)(h) requires that shoreline master programs “shall include” “[a]n element that gives consideration to the statewide interest in the prevention and minimization of flood damages ...” WAC 173-26-221(3)(b) provides in part that “[o]ver</p>	There isn't a requirement to address climate change/sea level rise in the SMA, though we could if Council desires. However, what we understand from the DOE is that any such regulations should be built on data, which is what PS-CoSMoS will be providing. Furthermore, once the data is available, we should perform vul-

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					<p>the long term, the most effective means of flood hazard reduction is to prevent or remove development in flood-prone areas ...” “Counties and cities should consider the following when designating and classifying frequently flooded areas ... [t]he potential effects of tsunami, high tides with strong winds, sea level rise, and extreme weather events, including those potentially resulting from global climate change” The areas subject to sea level rise are flood prone areas just the same as areas along bays, rivers, or streams that are within the 100-year flood plain. RCW 90.58.100(1) and WAC 173-26-201(2)(a) also require “that the ‘most current, accurate, and complete scientific and technical information’ and ‘management recommendations’ [shall to the extent feasible] form the basis of SMP provisions.” This includes the current science on sea level rise.</p> <p>Sea level rise is a real problem that is happening now. Sea level is rising and floods and erosion are increasing. In 2012 the National Research Council concluded that global sea level had risen by about seven inches in the 20th Century. A recent analysis of sea-level measurements for tide-gage stations, including the Seattle, Washington tide-gauge, shows that sea level rise is accelerating.⁵ Virginia Institute of Marine Science (VIMS) “emeritus professor John Boon, says ‘The year-to-year trends are becoming very informative. The 2020 report cards continue a clear trend toward acceleration in rates of sea-level rise at 27 of our 28 tide-gauge stations along the continental U.S. coastline.’” “‘Acceleration can be a game changer in terms of impacts and planning, so we really need to pay heed to these patterns,’ says Boon.” The Seattle tide gage was one of the 27 that had an accelerating rate of sea level rise. The report Projected Sea Level Rise for Washington State – A 2018 Assessment projects that for a low greenhouse gas emission scenario there is a 50 percent probability that sea level rise will reach or exceed 1.2 feet by 2100 around Sandy Point and the west side of the Lummi Peninsula. Projected Sea Level Rise for Washington State – A 2018 Assessment projects that for a higher emission scenario there is a 50 percent probability that sea level rise will reach or exceed 4.5 feet by 2100 for the same area. Projections are</p>	<p>nerability and risk assessments to see what kind and where the problems might be, and update our shoreline inventory and characterizations. Without such science, we would be open to challenges.</p>

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					<p>available for all of the marine shorelines in Whatcom County and Washington State.</p> <p>The extent of the sea level rise currently projected for Whatcom County can be seen on the NOAA Office for Coastal Management Digitalcoast Sea Level Rise Viewer available at: https://coast.noaa.gov/digitalcoast/tools/slr.html. Please see map images at the bottom of this letter detailing the changes in water elevation from the current mean higher high water (MHHW) to four feet of sea level rise.</p> <p>Projected sea level rise will substantially increase flooding. As Ecology writes, “[s]ea level rise and storm surge[s] will increase the frequency and severity of flooding, erosion, and seawater intrusion—thus increasing risks to vulnerable communities, infrastructure, and coastal ecosystems.” Not only our marine shorelines will be impacted, as Ecology writes “[m]ore frequent extreme storms are likely to cause river and coastal flooding, leading to increased injuries and loss of life.”</p> <p>Zillow recently estimated that 31,235 homes in Washington State may be underwater by 2100, 1.32 percent of the state’s total housing stock. The value of the submerged homes is an estimated \$13.7 billion. Zillow wrote:</p> <p>“It’s important to note that 2100 is a long way off, and it’s certainly possible that communities [may] take steps to mitigate these risks. Then again, given the enduring popularity of living near the sea despite its many dangers and drawbacks, it may be that even more homes will be located closer to the water in a century’s time, and these estimates could turn out to be very conservative. Either way, left unchecked, it is clear the threats posed by climate change and rising sea levels have the potential to destroy housing values on an enormous scale.”</p> <p>Sea level rise will have an impact beyond rising seas, floods, and storm surges. The National Research Council wrote that:</p> <p>“Rising sea levels and increasing wave heights will exacerbate coastal erosion and shoreline retreat in all geomorphic environ-</p>	

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					<p>ments along the west coast. Projections of future cliff and bluff retreat are limited by sparse data in Oregon and Washington and by a high degree of geomorphic variability along the coast. Projections using only historic rates of cliff erosion predict 10–30 meters [33 to 98 feet] or more of retreat along the west coast by 2100. An increase in the rate of sea-level rise combined with larger waves could significantly increase these rates. Future retreat of beaches will depend on the rate of sea-level rise and, to a lesser extent, the amount of sediment input and loss.”</p> <p>These impacts are why the Washington State Department of Ecology recommends “[l]imiting new development in highly vulnerable areas.”</p> <p>Unless wetlands and shoreline vegetation can migrate landward, their area and ecological functions will decline. If development regulations are not updated to address the need for vegetation to migrate landward in feasible locations, wetlands and shoreline vegetation will decline. This loss of shoreline vegetation will harm the environment. It will also deprive marine shorelines of the vegetation that protects property from erosion and storm damage by modifying soils and accreting sediment. WEC and Futurewise’s Sept. 16, 2020 letter included maps that show the extent of this amount of sea level rise in Whatcom County and wetland migration in part of the County if the wetlands are not blocked by development. Additional maps are also enclosed with this letter.</p> <p>Flood plain regulations are not enough to address sea level rise for three reasons. Projected Sea Level Rise for Washington State – A 2018 Assessment explains two of them:</p> <p>“Finally, it is worth emphasizing that sea level rise projections are different from Federal Emergency Management Agency (FEMA) flood insurance studies, because (1) FEMA studies only consider past events, and (2) flood insurance studies only consider the 100-year event, whereas sea level rise affects coastal water elevations at all times.”</p>	

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					<p>The third reason is that floodplain regulations allow fills and pilings to elevate structures and also allow commercial buildings to be flood proofed in certain areas. While this affords some protection to the structure, it does not protect the marshes and wetlands that need to migrate.</p> <p>Because of these significant impacts on people, property, and the environment, “[n]early six in ten Americans supported prohibiting development in flood-prone areas (57%).” It is time for Washington state and local governments to follow the lead of the American people and adopt policies and regulations to protect people, property, and the environment from sea level rise. We recommend the addition of the following regulations as part of the shoreline master program periodic update:</p> <p>X. New lots shall be designed and located so that the buildable area is outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</p> <p>X2. Where lots are large enough, new structures and buildings shall be located so that they are outside the area likely to be inundated by sea level rise in 2100 and outside of the area in which wetlands and aquatic vegetation will likely migrate during that time.</p> <p>X3. New and substantially improved structures shall be elevated above the likely sea level rise elevation in 2100 or for the life of the building, whichever is less.</p>	
RFW18	Karlee Deatherage (RE Sources), Rein Attemann (WEC), and Tim Trohimovich (Futurewise)	4/12/21	F	16.16.270	<p>Restore Reasonable Use impact area language in the Dec 4, 2020 draft Exhibit F, WCC 16.16.270 Reasonable Use Exceptions.</p> <p>We urge Whatcom County to restore the proposed change from the P/C to expand the maximum impact area for single-family residences from 4,000 square feet to 2,500 square feet in 16.16.270.C.12. The purpose of the reasonable use provision is to allow only the minimal “reasonable” use of property to avoid a constitutional taking when fully applying the standards of critical</p>	Your comment will be provided to the P/C & Co/C for consideration.

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					<p>areas regulations.</p> <p>The courts generally decide the concept of reasonable; however, reasonable use is often interpreted as a modest single-family home. A home with a footprint of 4,000 square feet is excessive. A median size house built in 2019 has 2,301 square feet of floor area. We can assume that to be less than footprint 1,500 square feet.</p>	
RFW19	Karlee Deatherage (RE Sources), Rein Attemann (WEC), and Tim Trohimovich (Futurewise)	4/12/21	F	16.16.730 , Table 4	<p>Incorporate the State of Washington Department of Fish & Wildlife's new riparian buffers guidance.</p> <p>As has been reported in media and scientific reports, the southern resident orcas, or killer whales, are threatened by (1) an inadequate availability of prey, the Chinook salmon, "(2) legacy and new toxic contaminants, and (3) disturbance from noise and vessel traffic." "Recent scientific studies indicate that reduced Chinook salmon runs undermine the potential for the southern resident population to successfully reproduce and recover." The shoreline master program update is an opportunity to take steps to help recover the southern resident orcas, the Chinook salmon, and the species and habitats on which they depend.</p> <p>The SMP Guidelines, in WAC 173-26-221(3)(c), provides in part that "[i]n establishing vegetation conservation regulations, local governments must use available scientific and technical information, as described in WAC 173-26-201 (2)(a). At a minimum, local governments should consult shoreline management assistance materials provided by the department and Management Recommendations for Washington's Priority Habitats, prepared by the Washington state department of fish and wildlife where applicable."</p> <p>The State of Washington Department of Fish and Wildlife has recently updated the Priority Habitat and Species recommendations for riparian areas. The updated management recommendations document that fish and wildlife depend on protecting riparian vegetation and the functions this vegetation performs such as maintaining a complex food web that supports salmon and maintaining temperature regimes to name just a few of the</p>	<p>Pursuant to 23.230.010(B)(4) floodways and contiguous floodplain areas landward two hundred feet from such floodways are within the shoreline jurisdiction.</p> <p>And pursuant to 16.16.730 Table 4, Type S – Freshwater HCAs are proposed to have a 200-foot buffer based on National Wildlife Federation v. FEMA (Federal District Court Case No. 2:11cv-02044-rsm; NMFS Doc. #2006-00472)</p>

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					<p>functions.</p> <p>The updated Riparian Ecosystems, Volume 1: Science synthesis and management implications scientific report concludes that the "[p]rotection and restoration of riparian ecosystems continues to be critically important because: a) they are disproportionately important, relative to area, for aquatic species, e.g., salmon, and terrestrial wildlife, b) they provide ecosystem services such as water purification and fisheries (Naiman and Bilby 2001; NRC 2002; Richardson et al. 2012), and c) by interacting with watershed-scale processes, they contribute to the creation and maintenance of aquatic habitats." The report states that "[t]he width of the riparian ecosystem is estimated by one 200-year site-potential tree height (SPTH) measured from the edge of the active channel or active floodplain. Protecting functions within at least one 200-year SPTH is a scientifically supported approach if the goal is to protect and maintain full function of the riparian ecosystem." These recommendations are explained further in Riparian Ecosystems, Volume 2: Management Recommendations A Priority Habitats and Species Document of The Washington Department of Fish and Wildlife.</p> <p>Based on these new scientific documents, we recommend that shoreline jurisdiction should include the 100-year floodplain and that the buffers for rivers and streams in shoreline jurisdiction be increased to use the newly recommended 200-year SPTH and that this width should be measured from the edge of the channel, channel migration zone, or active floodplain whichever is wider. New development, except water dependent uses should not be allowed within this area. This will help maintain shoreline functions and Chinook habitat.</p>	
TSF01	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.010	Table 1 of the draft proposes to revise the shoreline use table to prohibit general aquaculture (aquaculture other than commercial geoduck and salmon net pen facilities) in aquatic areas adjacent to the Natural shoreline environment designation (SED). This proposed revision should not be adopted. No scientific or technical information is identified in the Draft Amendment that would support this revision. As recognized by the GMHB, prohibiting	The purpose of the natural shoreline area is to "ensure long-term preservation of ecologically intact shorelines" and "preservation of the area's ecological functions, natural features and overall character must receive priority over any other potential use." The Natural SED is

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					aquaculture in the Natural SED absent such support is impermissible. Allowing aquaculture in the Natural SED is consistent with the purpose and policies of the Natural SED.	only applied in a few areas of the county, primarily the headwaters of the 3 upper Nooksack branches and around state or locally controlled nature preserves. None of these areas would likely be used for aquaculture.
TSF02	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(A)(1)	<p>Strike A.1. Aquaculture that involves little or no substrate modification shall be given preference over those that involve substantial modification. The applicant/proponent shall demonstrate that the degree of proposed substrate modification is degree of proposed substrate modification is aquaculture operations at the site.</p> <p>The first sentence of this provision is unsuitable for a regulation, as it merely expresses a preference for certain activities over others. Moreover, it is inadequately defined and unsupported by scientific and technical information. To the extent that it would disfavor common shellfish aquaculture practices that have been proven to have insignificant impacts on species and habitat (e.g., those covered by the Programmatic Consultation or analyzed by Washington Sea Grant), it runs directly counter to such information in violation of the SMA and Guidelines. It would also fail to give preference to and foster shellfish aquaculture contrary to state law.</p> <p>The second sentence appears to impose a substantive requirement that any substrate modifications must be the minimum necessary for feasible operations. This restriction is similarly unsupported by scientific and technical information and fails to give preference to and foster shellfish aquaculture. In an analogous context, the GMHB held that an aquaculture regulation requiring gear use be limited to the minimum necessary for feasible operations violated state law and must be stricken.</p>	<p>Though the language is existing, the commenter may be correct regarding the 1st sentence, as it does read more like a policy rather than a regulation. And Policy 11CC-3 basically says the same thing, so that 1st sentence could be deleted (though it wouldn't have much effect on the regulation).</p> <p>Regarding the 2nd sentence (again, existing language), staff sees no legal issue in requiring methods used minimize impacts to shoreline functions. The regulation only states that the applicant demonstrate that the degree of proposed substrate modification is the minimum necessary. We would think that Taylor Shellfish Farms already uses the least impactful methods given how environmentally friendly they purport to be. Nonetheless, your comments will be provided to the P/C and Co/C for their consideration.</p>
TSF03	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(A)(2)	<p>Strike A.2 The installation of submerged structures, intertidal structures, and floating structures shall be allowed only when the applicant/proponent demonstrates that no alternative method of operation is feasible.</p>	Again, existing language, and it's only asking that the applicant demonstrate that any proposed structures be the least impactful to shoreline functions. Nonetheless,

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					Similar to the previous provision, this provision is not only unsupported by scientific and technical information, but such information demonstrates aquaculture structures do not have unacceptable impacts. This provision imposes unjustifiable use restrictions and fails to give preference to and foster aquaculture, and hence it should be deleted.	less, your comments will be provided to the P/C and Co/C for their consideration.
TSF04	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(A)(3)	<p>Strike A.3 Aquaculture proposals that involve substantial substrate modification or sedimentation through dredging, trenching, digging, mechanical clam harvesting, or other similar mechanisms, shall not be permitted in areas where the proposal would adversely impact critical saltwater habitat, or other fish and wildlife habitat conservation areas.</p> <p>This provision is insufficient in scope and detail to ensure proper implementation, as several key terms are undefined. Moreover, this regulation appears to articulate a zero-impact standard inconsistent with the SMA and the Guidelines, which acknowledge that activities will have some impacts and calls for those impacts to be minimized. This provision is particularly inappropriate given commercial shellfish beds are themselves critical saltwater habitat.</p>	Staff disagrees with the commenters conclusions. The key words are either defined or their common usage is understood, and the regulation does not articulate a zero-impact standard: It only limits certain types of practices that might have significant impacts on critical saltwater habitats.
TSF05	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(B)(9)	<p>"Where aquaculture activities are authorized to use <u>public County</u> facilities, such as boat launches or docks, the County shall reserve the right to require the applicant/proponent to pay a portion of the cost of maintenance and any required improvements commensurate with the use of such facilities."</p> <p>This revision provides important clarification that the authority to require a project proponent pay a portion of maintenance costs and required improvements applies to County, rather than any public (e.g., state or federal), facilities. Use and maintenance of non-County public facilities are properly addressed by the entities or agencies that own or control those facilities.</p>	Staff agrees with the commenter and has made this suggested edit.
TSF06	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(F)(1)	In addition to the minimum application requirements specified in WCC Title 22 (Land Use and Development), applications for aquaculture use or development shall include all information necessary to conduct a thorough evaluation of the proposed aquaculture activity, including but not limited to the following, if	Staff agrees with the commenter, but none of the language prohibits the applicant from submitting materials used in or produced by other permitting processes. Regardless of whether another agency

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					<p><u>not already provided in other local, state, or federal permit applications or equivalent reports:</u></p> <p>Aquaculture operations are subject to numerous laws and regulatory programs. Applicants for new aquaculture projects must obtain several federal and state approvals in addition to shoreline permits. The County should allow aquaculture applicants to utilize information provided in other local, state, or federal permit applications or equivalent reports in order to satisfy shoreline permit application requirements. This allowance will not hinder the County's interest in ensuring it has all information necessary to conduct a thorough evaluation of aquaculture proposals, and it is critical to avoid unnecessary burdens on applicants and streamline permitting consistent with the laws and policies discussed above.</p>	has made a decision on a permit, the County is still required to maintain a record of our decision making and would need copies of those materials to come to a rational conclusion.
TSF07	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(F)(2)	<p>Applications for aquaculture activities must demonstrate that the proposed activity will be compatible with surrounding existing and planned uses.</p> <ul style="list-style-type: none"> a. Aquaculture activities shall comply with all applicable noise, air, and water quality standards. All projects shall be designed, operated and maintained to minimize odor and noise. b. Aquaculture activities shall be restricted to reasonable hours and/or days of operation when necessary to minimize substantial, adverse impacts from noise, light, and/or glare on nearby residents, other sensitive uses or critical habitat. c. Aquaculture facilities shall not introduce incompatible visual elements or substantially degrade significantly impact the aesthetic qualities of the shoreline. Aquaculture structures and equipment, except navigation aids, shall be designed, operated and maintained to blend into their surroundings through the use of appropriate colors and materials. <p>Taylor Shellfish, along with other responsible farmers, employ numerous practices to avoid and minimize potential noise and light impacts on other shoreline users. However, to help protect</p>	Staff agrees with the commenter and has amended this section as suggested.

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					<p>the safety of its crews and provide marketable products, shellfish operators frequently need to conduct activities during nights or on weekends when there are low tides. This is recognized in the Guidelines, which state: "Commercial geoduck aquaculture workers oftentimes need to accomplish on-site work during low tides, which may occur at night or on weekends. Local governments must allow work during low tides but may require limits and conditions to reduce impacts, such as noise and lighting, to adjacent existing uses." Restricting operations to certain hours or days may compromise the safety of farm crews and/or render operations infeasible. This requirement in 2.b is incompatible with the SMA and Guidelines, and it should be removed.</p> <p>The requirement in 2.c that aquaculture facilities not introduce incompatible visual elements or substantially degrade the aesthetic qualities of the shoreline is inconsistent with the Guidelines, which instead require that that aquaculture not significantly impact aesthetic qualities. The requirement that aquaculture activities not introduce incompatible visual elements is insufficient in scope and detail to ensure proper implementation. This subsection should be aligned with state law.</p>	
TSF08	Diani Taylor, General Counsel, Taylor Shellfish Farms	4/12/21	D	23.40.050(H)(2)	<p>In the Natural shoreline environment, aquaculture activities that do not require structures, facilities, or mechanized harvest practices and that will not result in the alteration of substantially degrade natural systems or features are permitted.</p> <p>The prohibition on structures, facilities, or mechanized harvest in the Natural environment is unsupported by scientific and technical information and is accordingly inconsistent with the SMA and Guidelines. As discussed above, there is extensive scientific and technical information that demonstrates shellfish aquaculture activities, some of which include these proscribed items, have minimal impacts that are consistent with the Natural environment. The revised language shown here remedies these failures and aligns this regulation with the management policies in the Guidelines for the Natural environment.</p>	Staff disagrees with the commenter. The Natural SED is intended to remain natural and is the only SED where such structures are prohibited. It is not a general prohibition, just one for one certain SED. The Natural SED is only applied in a few areas of the county, primarily the headwaters of the 3 upper Nooksack branches and around state or locally controlled nature preserves. None of these areas would likely be used for aquaculture.
BIAWC08	Robert Lee, BIAWC	4/12/21	F	16.16.273	Reasonable Use and Variances: Staff has proposed major changes to the procedures and criteria for both. The current	Please see the responses provided for Comments GCD14, NES02, NWC02,

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					<p>2017 CAO allows PDS staff to grant reasonable use (RU) permits for one single family house under very strict criteria if CAO rules alone would deny "all reasonable and economically viable use" of the property.</p> <p>A. Variances: They now require a public hearing and approval by the Hearing Examiner (HE). The applicant must demonstrate "undue hardship" due to CAO "dimensional requirements". Frankly, it's not clear what the difference is between the scope of these and RU applications in current code.</p> <p>Per draft Section 16.16.270.A, p 30-31, Exh. F, if a person only needs a 25 to 50% CAO buffer reduction, they would apply for a Minor Variance, instead of a RU Exception per current code.</p> <p>The draft does not say whether this value is total area, width, or both. Staff decides these permits; notice to neighbors is required. We do appreciate the new minor variance idea allowing staff approval, but why they also have to provide notice to adjacent land owners?</p> <p>A Major Variance is required for any other CAO exceptions. See Section 16.16.273, p 34. Either level of variance will be a costly process; the fee is \$2750, plus critical area reports, possibly consultants and any legal costs.</p> <p>One could only apply for a Reasonable Use Exception RU if their variance app is denied. This means if you don't get adequate relief with a variance approval, one must repeat the permit process to apply for an RU, and pay double fees and costs. A person may also face an appeal to Superior Court from someone.</p>	<p>NWC05, BIA04, MES11, MES29, MES31, MES43, RFW12, & RFW18.</p> <p>In addition, variances have always required a public hearing and approval by the H/E using the same criteria. We have now introduced a "minor" variance (the creation of which has already been approved by Co/C) for minor buffer reductions. An all variances always require public notice, as we're potentially letting applicants use lesser standards than what the code prescribes, which might have impacts on neighbors.</p> <p>We have also put in a request to have a much lower fee for minor variances.</p>
BIAWC09	Robert Lee, BIAWC	4/12/21	F	16.16.270(C)(12)	<p>B. Reasonable Use Exception (RU)</p> <p>1. Footprint Size:</p> <p>Re draft Sections 270, Item C, p 31, we support the increase in the allowed "impact area" for a house via the RU process to 4,000 sq. ft., from 2,500, recently accepted by the P/C. This limit is a minimally reasonable value when you consider most of the</p>	<p>Please see the responses provided for Comments BIA04, GCD09, GCD14, MES09, MES11, MES31, NES01, RFW12, RFW13, & RFW18.</p> <p>And remember, RUEs are for lots totally constrained by critical areas. Lots that aren't so constrained can build to what-</p>

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					<p>sites will be 2 acres or larger, and many rural land owners will want barns, corrals, shops, etc.</p> <p>Also, these and all other CAO rules apply in the county's two Urban Growth Areas: Birch Bay and Columbia Valley, where lot sizes are usually much smaller, and on public sewer and water systems.</p> <p>However, "impact area" is not defined in the draft CAO. We suggest this term be defined to include only artificial impervious surfaces. We support the driveway exception as written, and ask that drainfield areas be listed as excepted too.</p> <p>There appears to be no scientific basis for either value. The 4,000 sf value will often be generally reasonable in this context for smaller lots, e.g., 1 to 5 acres. But several large rural areas are zoned 10 acre minimum. We think consideration should be given to a "sliding scale" proposal, for parcels 5 acres and larger, based on zoning, platting options, availability of drinking water, soils for septic, etc.</p> <p>Many rural residents are horse enthusiasts, and want training rings, which will push the total footprint over the 4,000 sf limit.</p>	<p>ever size the code allows for their zone. We would think that someone who wants barns, training rings, and other large structures would choose a lot not so constrained.</p>
BIAWC10	Robert Lee, BIAWC	4/12/21	E	22.05.020	<p>2. RU Process: We believe the RU decision should be made by staff instead of the Hearing Examiner (HE), a far less costly, time consuming and legalistic process.</p> <p>We believe these decisions should be based mainly on a scientific analysis of the particular situation; that is: the functions and values of the resource, and adjacent site character, mainly its natural features: e.g., soils and geology, topography, native vegetation etc.</p> <p>An important question: is there any state law, court decision or code that requires that RU's be decided by the HE, a quasi-judicial official? Or that bars professional and qualified staff from making these mainly technical and science kind of decisions?</p>	<p>Please see the responses provided for Comments GCD14, NES02, NWC02, NWC05, BIA04, MES11, MES29, MES31, MES43, RFW12, & RFW18.</p>
BIAWC11	Robert Lee, BIAWC	4/12/21	F	16.16.270(C)	<p>3. RU Criteria:</p> <p>a. We also have concerns over the fairness of some of the key</p>	<p>The RUE criteria are basically the same as the existing criteria (old (B)(2)), which come from state law and courts cases on</p>

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					<p>words/phrases/values related in the RU code, such as:</p> <p>16.16.270 A, C.2, C.3, etc.: "all reasonable and economically viable use of a property".</p> <p>The words "all" and "viable" seem more arbitrary and subjective than logical and objective. Does staff have a reliable, credible source for this language?</p> <p>The current, 2018, State Department of Commerce guidance on critical areas and this topic states, in part:</p> <p>The reasonable use permit criteria should allow for "reasonable" uses. If the criteria state that the applicant must demonstrate that no other use "is possible," or that there are "no feasible alternatives," it would conflict with the concept of a "reasonable" use as other "possible" alternatives may be so costly as to be unreasonable.</p> <p>Their 3-page excerpt on RU is attached, and a link to the complete report. The Department of Commerce has primary regulatory authority over all GMA elements, including all 5 critical areas.</p> <p>In reviewing the long list of complex criteria, all 12, for approval of a RU application (Section 270.C, almost all of p 31), we note the links in several of "reasonable" with "economics", and use of "all". Why is economics a critical factor here? The test is supposed to be "reasonable".</p> <p>See items C.2, 3, 4 and 5. It appears staff is trying to make it as difficult as possible for a person to obtain a RU exception, and obtain fair relief from the arbitrary buffers per Department of Ecology guidance on wetlands and habitat buffers.</p> <p>We say the buffers are arbitrary because they are not based on a staff accepted scientific assessment of a site's critical area resources and relevant local conditions.</p>	<p>this matter.</p> <p>And if you're going to quote the CAO handbook, might as well quote more of it, for it also says, "Unlike variances, the purpose of a reasonable use exception permit is not to allow general development within critical areas, but to allow only the minimal "reasonable" use of the property so as to avoid a constitutional taking. Four scenarios are provided to illustrate situations where a reasonable use exception might or might not be applicable:</p> <p>A – No reasonable use exception would be granted because there is sufficient space outside the critical area clearing limits.</p> <p>B – A reasonable use exception might be granted since there is insufficient space for a reasonable use. The development area would need to be limited or scaled back in size and located where the impact is minimized. The jurisdiction might consider a variance to the required setback to minimize intrusion into the protection area.</p> <p>C – A reasonable use exception would be granted for a minimal development if the property is completely encumbered and mitigation methods are applied.</p> <p>D – The jurisdiction might consider modifications to the required setback to prevent intrusion into the protection area.</p>

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						<p>The criteria for reasonable use permits need to be consistent with case law to reduce the potential for appeals and overturned decisions. Key to being consistent with case law is careful use of the term “reasonable.” Generally, the concept of “reasonable” has been left to the courts to decide, thereby making it difficult for cities to rule on whether or not a project qualifies. A reasonable use is often thought to be a modest single-family home, although some other structure might be “reasonable” depending on zoning, adjacent uses, and the size of the property.</p> <p>Some jurisdictions have allowed a reasonable use exception in only those situations where <i>all</i> economic use of a property would be denied by the critical areas regulations. Criteria that might be used to allow approval of a reasonable use exception include:</p> <ul style="list-style-type: none"> • No other reasonable economic use of the property has less impact on the critical area; • The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property; • The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this regulation, or its predecessor; • The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the devel-

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						<p>opment proposal site;</p> <ul style="list-style-type: none"> • The proposal will result in no net loss of critical area functions and values consistent with the best available science; or • The proposal is consistent with other applicable regulations and standards."
BIAWC12	Robert Lee, BIAWC	4/12/21	F	Articles 6 and 7	<p>2. Wetland and Habitat Conservation Area Buffers:</p> <p>A. General Comments:</p> <p>Such buffers are usually the most constraining, and thus costly, elements of compliance with local CAOs for landowners and land users. They often end up consuming more usable land than the area of the wetland they are supposed to protect. We have seen many examples of this, large and small.</p> <p>We're familiar with many situations where buffer requirements appear arbitrary and excessive. In one situation, where a qualified private scientist classified a 6 acre area that has been hayed for at least 75 years a Category IV wetland, the lowest value. He used the 2014 DoE Rating form, 17 pages of detailed questions, some a bit subjective. The PDS staff person said he thought it was a Cat. III. This meant the buffer increased from 60 ft. to 110 ft. of hayfield, almost doubling!</p> <p>Per the draft, DoE and staff don't think that's enough. The new Wetland Buffer table, Sec. 630.E, p 67, based on DoE guidance, will require more than a doubling, from 110 to 225 ft., for a Cat. III of any size, whether the parcel is 10,000 sf or 100 acres. We think this is excessive regulation, and it's quite commonplace in the CAO.</p> <p>The County does not have to adopt DoE staff's arbitrary and excessive buffers. They are not based on the WACs. Remember, the state Department of Commerce is the only state agency with rule making authority on GMA obligations, including critical areas. DoE's main authority on wetlands is limited to controlling the filling or alterations of wetlands through the federal Clean</p>	<p>In July 2018 the Washington Department of Ecology (DOE) modified the habitat score ranges and recommended buffer widths in their wetland buffer tables in the DOE guidance, with some minor text changes to ensure consistency. Some citizens, local environmental consulting firms, and <i>the Building Industry Association of Whatcom County</i> then requested that we amend our code to meet this new guidance, and it was docketed as PLN2019-00008.</p> <p>The project was brought before the Planning Commission on March 14, 2019. But there was confusion as to what we actually had to do at that time and what impacts it would have on development. DOE had informed staff that, while we didn't need to amend our code at that point (having just updated Ch. 16.16 (Critical Areas) (Exhibit F) that they would review our code for consistency with their guidance when Ch. 16.16 was opened for amendment again, noting that that would occur during the 2020 SMP Periodic Update.</p> <p>So at the Commission's request, staff worked with the local wetlands consultants to review the issue and try to deter-</p>

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					Water Act.	<p>mine what effects it might have. Three consulting firms provided analyses based on data from projects they had worked on. From these analyses, it appears that many of Whatcom County's lower quality wetlands (e.g., small Category IV wetlands in agricultural fields) would end up with smaller buffers, but that our higher quality wetlands (Categories II and III) would end up with larger buffers. (But even this is speculation, as ATSI noted that the comparison results are not statistically significant.) Thus, farmers may benefit but developers/ builders may suffer, as many of our lower quality wetlands are those found in agriculture fields, while our higher quality wetlands are typically found in non-agriculture rural areas.</p> <p>Nonetheless, given the Department of Ecology's statements that they'll be monitoring the SMP Update to ensure that we meet their latest guidance (which is based on Best Available Science), and given that Comprehensive Plan Policy 10M-2 directs the County to "Develop and adopt criteria to identify and evaluate wetland functions that meet the Best Available Science standard and that are consistent with state and federal guidelines," staff is proposing to amend §16.16.630 (Wetland Buffers) Table 1 (Standard Wetland Buffer Widths) to meet DOE guidance. As indicated, these changes would lessen buffers on lower quality wetlands, and increase them on higher quality ones.</p>

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BIAWC13	Robert Lee, BIAWC	4/12/21	F	Articles 6 and 7	<p>B. Buffer Details in the Draft:</p> <p>We have reviewed the Wetland and Habitat drafts and the detailed comments on them submitted February 19 and 25, 2019, for Jon Maberry by Ed Miller and Liliana Hansen, both Professional Wetland Scientists (PWS). GAC members discussed these issues with Ed recently.</p> <p>We firmly agree with the scope and substance of all 14 comments in their firm's 8-page February 19 letter, including its recommendation to delete 12 of the draft changes/additions (attached). The Miller firm is highly regarded by many BIAWC members for their professional approach to complex environmental issues.</p> <p>We also agree with the reasonable and constructive suggestions in Jon Maberry's Prepared Motions submitted to the Planning Committee February 25, attached.</p> <p>Finally, it appears to us there's a pattern in these and other parts of the draft CAO of making the rules more restrictive and less balanced between the government's legitimate police power authority and the constitutional rights of private land owners and land users.</p>	Your comment will be provided to the P/C and Co/C for consideration.
P6601	David Klanica, Phillips 66	4/12/21	A	10D-11	<p>Policy 10D-11 was added that addresses climate change: "Protect ecological functions and ecosystem-wide processes of Marine Resource Lands and critical areas in anticipation of climate change impacts, including sea level rise."</p> <p>Phillips 66 is requesting further explanation and clarification whether upland property owners who propose bulkheads, armoring, or bank stabilization to prevent shoreline erosion or sloughing due to sea level rise will be subject to new limitations or requirements that could affect the current or future use of their property.</p>	The amendments regarding shoreline stabilization regulations are found in Exhibit D (Title 23). You would want to look at both 23.40.010, Table 1, and 23.40.190.
P6602	David Klanica, Phillips 66	4/12/21	B	Governing Principle (C)(2)	The Shoreline Management Act was adopted in 1971 to protect the shorelines of the state of Washington. Certain shorelines were designated as "shorelines of statewide significance" including those areas of Puget Sound and the Strait of Juan de	As explained in the comment bubble tagged on this change, the word "significant" is proposed for deletion as there is no such threshold under SMA. Under the

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					<p>Fuca and adjacent salt waters north to the Canadian line and lying seaward from the line of extreme low tide. The Act established a system where local governments would ensure that certain developments in shoreline areas would be reviewed and protected. More specifically, these agencies would review "substantial developments" which were those that would have a "significant adverse" impact on the environment including, but not limited to fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values.</p> <p>Whatcom County has proposed in its Governing Principles (GPC2)) that it will include "policies and regulations that require mitigation of adverse impact in a manner that ensures no net loss of shoreline ecological functions." Phillips 66 is concerned about how this revised policy will be implemented as a practical matter. First, it appears to go beyond the County's statutory authority outlined in the SMA. Second, Phillips 66 is concerned that, without further clarification, it may be used inconsistently across the County. For instance, what is meant by "adverse" versus the original "significant adverse"? Must all land use permits affecting the shoreline now indicate what, if any adverse impacts might occur? Phillips 66 requests that the P/C provide more information as to how the removal of the word "significant" will change day-to-day shoreline management activities.</p>	SMA, all adverse impacts must be mitigated in order to help achieve NNL. (The term "significant impact" comes from SEPA.)
P6603	David Klanica, Phillips 66	4/12/21	B	Policies 11G-3 & 11G-4	Regarding Policy 11G-3 and Policy 11G-4 addressing the County's MOU with DAHP and Lummi Nation require the County to consult with DAHP and the Tribes. Phillips 66 is requesting additional clarification for applicant/property owner responsibilities.	Please read 23.30.050 (Cultural Resources) in Exhibit D, as that should provide the additional clarification you seek.
P6604	David Klanica, Phillips 66	4/12/21	B	Overall Goals & Policies	<p>Regarding Overall SMP Goals and Objectives for the Restoration and Enhancement Element were revised as follows: "This element provides for the timely restoration and enhancement of ecologically impaired areas in a manner that achieves a net gain in shoreline ecological functions and processes above baseline conditions as of the adoption of this program."</p> <p>Phillips 66 requests additional clarification and definition for "baseline condition" (e.g. baseline conditions at the time of application?).</p>	<p>The baseline condition was set by the comprehensive update done in 2007. As part of that update the County developed:</p> <ul style="list-style-type: none"> • Vol. 1 - Inventory and Characterization Report • Vol. II - Scientific Literature Review • Vol. III - Restoration Plan • Vol. IV - Cumulative Effects Analysis <p>all of which can be found on our SMP</p>

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						Update webpage .
P6605	David Klanica, Phillips 66	4/12/21	B	Policies 11AA -1 through 11AA-7	Regarding General Policies for Climate Change/Sea Level Rise (Policies 11AA -1 through 11AA-7): please explain/provide detail for shoreline development applicant's responsibilities pertaining to climate change and sea level rise. Will development applications be required to address climate change and sea level rise as part of the SMP application or will there be separate analysis and document requirements (e.g. when will a study addressing sea level rise be required)?	These are only general policies; we are not developing CC/SLR regulations at this time.
P6606	David Klanica, Phillips 66	4/12/21	C	Policy 8T-1	Regarding Policy 8T-1, Phillips 66 requests clarification of the methods by which the County will coordinate with landowners to protect marine resource lands.	Well, we generally do that through email, though sometimes letters, phone calls, or meetings.
P6607	David Klanica, Phillips 66	4/12/21	C	Policy 8U-2	Regarding Policy 8U-2, Phillips 66 requests clarification of the types of non-regulatory programs, options, and incentives that owners of marine resource lands can employ to meet or exceed County environmental goals.	We can't provide you a precise list, as they haven't been developed yet, but they could include tax incentives, educational programs, volunteer groups, etc.
P6608	David Klanica, Phillips 66	4/12/21	C	Policy 8V-2	Regarding Policy 8V-2, Phillips 66 requests clarification of the process by which the County will work cooperatively with local, State, Federal and Tribal agencies, adjacent upland property owners, and the general public, as applicable, to address community concerns and land use conflicts that may affect the productivity of marine resource lands.	How would we work cooperatively? Here are 10 simply ways from entrepreneur.com to cultivate team cohesion: <ul style="list-style-type: none"> • Create a clear and compelling cause • Communicate expectations • Establish team goals • Leverage team-member strengths • Foster cohesion between team members • Encourage innovation • Keep promises and honor requests • Recognize, reward and celebrate collaborative behavior
P6609	David Klanica, Phillips 66	4/12/21	D		The General Provisions of Title 23 indicate that shoreline development must be consistent with the SMA of 1971, the County's shoreline regulations and "other County land use regulations" (See Title 23 draft at lines 11-13). Title 23 then references certain requirements for "existing legal fossil-fuel refinery operations, existing legal transshipment facilities, expansions of these facilities, and new or expansions of renewable fuel refineries or	Yes, staff is well aware of this work and understands that changes have been made to Council's original proposal. However, at the time these documents were 1 st edited, their original proposal was all we had on which to rely, which is why the comment bubbles indicate that

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					<p>transshipment facilities". Related definitions are also provided on page 241 at lines 20-36. Expansions of existing fossil fuel and renewable fuel facilities are required to obtain conditional shoreline permits. (See Title 23, page 137 at lines 3-10).</p> <p>As the Planning Department is aware, industry, labor and environmental organization stakeholders have been working together to develop recommended changes to the County Council's October 2019 proposed Comprehensive Plan amendments. Many of the terms and definitions included in this proposal assume that the 2019 proposed Amendments will be adopted as is. Phillips 66 requests that terms borrowed from the 2019 proposal not be adopted at this time. Considerable progress has been made by the stakeholders and is being presented to the County Council for its consideration in the near future. We request that this proposal be delayed until the final work from the ongoing stakeholder effort is accepted or rejected and the "final" definitions and framework for when conditional use permits is finalized.</p>	we will have to substitute in any changes based on Council's final adoption of the Cherry Point fossil fuel amendments.
P6610	David Klanica, Phillips 66	4/12/21	F		Article 7 Fish and Wildlife Habitat Conservation Area was amended to now include Type O waters. Phillips 66 requests the addition of a definition of Type O waters in the Whatcom County guidance.	This proposal has already been dropped. We suggested you look at the most recent version of Exhibit F, dated 4/5/21.
WH01	Wendy Harris	4/13/21			<p>This is in response to the question that was asked at the last Planning Commission meeting regarding "waters of the state." That is not a term used in the Shoreline Management Act. Rather, it refers to all waters under its jurisdiction as "shorelines of the state" or "shorelands of the state" and these are the appropriate terms to use for waters and exposed land under SMA jurisdiction.</p> <p>Under RCW 90.58.030, "Shorelines" means all of the waters of the state, including reservoirs, and their associated shorelands, together with the lands underlying them; except (i) shorelines of statewide significance; (ii) shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and (iii) shorelines on lakes less than twenty</p>	The commenter is correct, and these are all laid out in 23.20.010 (Shoreline Jurisdiction).

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					<p>ty acres in size and wetlands associated with such small lakes. https://apps.leg.wa.gov/RCW/default.aspx?cite=90.58.030.</p> <p>In other words, only waters with minimum quantifiable measurements (size, type, velocity, etc.) are a regulated state shoreline. This is often forgotten when we hear complaints about over-regulation and unreasonableness.</p> <p>Shorelines of the state are specifically set out in the WAC. In Whatcom County, all rivers and streams that are shorelines of the state are set out in WAC 173-18-410. https://apps.leg.wa.gov/WaC/default.aspx?cite=173-18-410.</p> <p>Lakes are listed in WAC 173-20-760 and 770. https://apps.leg.wa.gov/WaC/default.aspx?cite=173-20-770; https://apps.leg.wa.gov/WaC/default.aspx?cite=173-20-760.</p> <p>There are two kinds of shorelines of the state. The most common shoreline under SMA jurisdiction imposes a no net loss standard of review to prevent any degradation beyond baseline conditions, informed by review of best available science.</p> <p>However, particularly large and significant rivers and lakes, as well as marine waters, are designated "Shorelines of Statewide Significance" (SSWS). These have increased protection through a prioritized preference of use, similar to how we apply mitigation standards. These are set out in statute, with preferred use for natural conditions that support the long-term interests of all state residents. RCW 90.58.020(f); https://app.leg.wa.gov/RCW/default.aspx?cite=90.58.020.</p> <p>The Whatcom County SSWS are the Nooksack River, Lake Whatcom, Baker Lake, and marine waters, including Birch Bay. R CW 90.58.030.</p> <p>The SMA also discusses "shorelands" or "shoreland areas", which includes lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wet-</p>	

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					<p>lands and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology.</p> <p>RCW 90.58.030(2)(d), https://app.leg.wa.gov/RCW/default.aspx?cite=90.58.030.</p> <p>I recommend the SMP Handbook, which is linked on DOE's website and explains how the SMP process works. Specific issues and provisions are separate chapters in the Handbook. https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Shoreline-Master-Plan-handbook; https://apps.ecology.wa.gov/publications/SummaryPages/1106010.html.</p> <p>P.S. If you are wondering why I have written this, it is because I do not believe that the Planning Commission and citizen committees generally are being provided with relevant and timely information on the laws and policies they are asked to review and this fails to serve public needs and public input requirements. Unless citizen-appointed committees have a comprehensive and complete understanding of the purpose and intent of the policies and laws they are asked to review, they will remain tools of the Planning Department. Please continue to ask questions and ensure that you are provided with all the information you need upfront, before beginning a large review project.</p>	
PB04	Pam Borso	4/21/21	F	16.16.270	<p>Restore Reasonable Use impact area language in the Dec 4, 2020, draft Exhibit F, WCC 16.16.270 Reasonable Use Exceptions.</p> <p>I urge Whatcom County to reject the proposed change from the Planning Commission to expand the maximum impact area for single-family residences from 2,500 sf to 4,000 sf. The purpose of the reasonable use provision is to allow only the minimal "reasonable" use of property to avoid a constitutional taking when fully applying the standards of critical areas regulations. A</p>	Your comments will be forwarded to the P/C & Co/C for their consideration.

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					4,000 sf home is excessive.	
PB05	Pam Borso	4/21/21	F		Incorporate the State of Washington Department of Fish & Wildlife's new riparian buffers guidance. The buffer requirements contained in the SMP are less than adequate to ensure no net loss of riparian and stream functions vital to fish, wildlife and our water supply.	Please see the response to comment #FW/WEC09.
PB06	Pam Borso	4/21/21	F		Incorporate regulations to prepare for accelerating sea level rise impacts. Whatcom's SMP does not incorporate protections from this peril. Not only our marine shorelines will be impacted, as Ecology writes "more frequent extreme storms are likely to cause river and coastal flooding, leading to increased injuries and loss of life." 31,235 homes in Washington State may be underwater by 2100; the value of the submerged homes is an estimated \$13.7 billion.	See responses to comments FW/WEC01, FW/WEC12, WCPW08, WCPW09, RES03, RFW07, RFW11, & RFW17.
WSPA01	Holli Johnson, Western States Petroleum Association	4/21/21			The most recent staff memorandum contains several important explanations and clarifications regarding what is meant by the "baseline" condition upon which no net loss project mitigation requirements are measured and recognizes important distinctions between what is appropriate to require for project mitigation obligations and what must be voluntary or incentive-based for restoration. These principles should be built into the language of the code itself or, at a minimum, into the language of the adopting ordinance, so as not to disappear into history once the code amendments are adopted.	Staff doesn't feel this is necessary, as this explanation is based on DOE's guidance and explanatory handouts so it true throughout the state. Nonetheless, your comment will be provided to the P/C and Co/C for consideration.
WSPA01	Holli Johnson, Western States Petroleum Association	4/21/21			The County Council is currently in the final stages of review of comprehensive plan and code amendments for fossil and renewable fuel facilities and expansions. This work is the result of many months of effort and good faith negotiations between the County and interested stakeholders, including WSPA. As noted by staff in several places in the draft shoreline master program amendments, it is imperative that these shoreline master program amendments be fully consistent with the outcome of that other County Council effort. WSPA asks for an additional opportunity to review and provide input on future revisions made by staff to achieve that consistency before these amendments to the shoreline master program are adopted.	Please refer to the response to comment P6609. The P/C's recommended amendments will be forwarded to the Co/C for their review, public hearing, and adoption (during which they may make their own amendments). We would urge you to pay attention to the SMP update page (or Council's agenda page), where new drafts are posted as decisions are made.
WSPA01	Holli Johnson, West-	4/21/21		23.40.010	The Shoreline Use and Modification Use Table establishes a	What is shown in the draft Title 23 regard-

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	ern States Petroleum Association				shoreline conditional use permit requirement for expansions of existing legal fossil fuel refinery and transshipment facilities and new or expansion of existing legal renewable fuel refinery operations or renewable fuel transshipment facilities. Conditional use permit review requirements for these facilities are being addressed in the zoning code amendments currently under review by the County Council. A separate, duplicative and potentially inconsistent shoreline conditional use permit review for the same facilities that will undergo thorough zoning code conditional use permit review is unnecessary and should be eliminated. In particular, it is not appropriate to apply shoreline conditional use permit requirements to upland activities that will be fully evaluated under the zoning code requirements applicable to those upland activities. At a minimum, this provision should clarify that such fossil fuel facilities located outside of the shoreline jurisdiction should be evaluated under the zoning code conditional use permit criteria and not pursuant to shoreline conditional use permit requirements.	ing this issue is what staff was provided over a year ago. Once Council makes a final decision on their separate Cherry Point amendments staff will rectify the differences. You should understand, though, that if both Title 20 and Title 23 require a CUP for a certain activity, the permits would be combined under WCC 22.05.030 (Consolidated Permit Review). Shoreline requirements would not be applied outside of the shoreline jurisdiction.
DK01	David Kershner	4/22/21	N/A	N/A	I have served on the Whatcom County Climate Impact Advisory Committee since its inception in 2018. While I am not writing in my capacity as a committee member, I have familiarized myself with the research on sea level rise related to climate change. The financial costs to Whatcom County taxpayers and property owners of not adequately planning for sea level rise are likely to be substantial. As you may know, the real estate company Zillow estimates that nearly \$14 billion worth of housing in Washington State could be submerged in the next 80 years under some climate change scenarios. The ecological costs will also be substantial, if we plan to prevent flooding of structures but not to allow migration of shoreline habitat. That habitat not only supports wildlife populations, it also provides economic benefits, such as recreation and fisheries. To reduce the economic toll of sea level rise and truly protect shorelines consistent with the intent of the Shoreline Management Act, I urge you to recommend revising regulations to ensure that newly-created lots only allow construction in areas that are not likely to be inundated in this century. Where existing lots	See responses to comments FW/WEC01, FW/WEC12, WCPW08, WCPW09, RES03, RFW07, RFW11, & RFW17.

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					are large enough to still allow residential, commercial, or industrial uses compatible with the zoning, I urge you to recommend a similar revision. In addition, I support revising the regulations to ensure that new or substantially changed structures be elevated above the likely sea level rise elevation for the life of the structure. Waterfront property that I own on Lummi Island would likely be constrained in its use due to these regulations. Nevertheless, new protections are the only responsible approach to shoreline planning, given what we know about sea level rise.	
DK01	David Kershner	4/22/21			As a former commercial salmon fisher, I also support strengthening riparian buffer restrictions consistent with recommendations of the Washington Department of Fish and Wildlife Riparian Ecosystems Volumes I and II. Salmon populations have declined in part due to riparian habitat degradation. We need to protect this habitat to restore healthy salmon populations.	Your comment will be forwarded to the P/C & Co/C for their consideration.
AC01	Alan Chapman	4/22/21			I have been involved in fisheries management, and watershed resource issues in Whatcom County for over 30 years. Regardless of the level of belief one might have in projections of climate change and sea level rise and associated storm surges, it does not make sense to allow development in areas of high risk. I urge the county, in the interests in avoiding significant damage to life, property and natural resources to not allow creation of lots where reasonable use would be subject to a high risk of damage from climate change effects, sea level rise, or reduce public trust ecological benefits within the foreseeable future. Where existing lots are large enough to still allow residential, commercial, or industrial uses compatible with the zoning, I urge you to recommend or require a similar risk avoidance approach. In addition, I support revising the regulations to ensure that new or substantially changed structures be elevated above the likely sea level rise elevation for the life of the structure.	See responses to comments FW/WEC01, FW/WEC12, WCPW08, WCPW09, RES03, RFW07, RFW11, & RFW17.
AC02	Alan Chapman	4/22/21			In the interest of protecting and achieving a net ecological gain of shoreline functions through consideration of locational relevant riparian buffer requirements that might be identified in the	Your comment will be forwarded to the P/C & Co/C for their consideration.

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					Washington State Department of Fish and Wildlife recent guidance on riparian guidance.	
PR01	Paula Rotondi	4/22/21	F	16.16.270	<p>As you consider changes to the Shoreline Master Plan (SMP), I urge you to make decisions based upon what will be best for those living here twenty years from now – rather than what is best for corporations' short term profits. Please draft more stringent SMP standards.</p> <p>First, regarding Reasonable Use Exceptions, please reject the proposed change to expand the maximum impact area for single family residences from 2,500 square feet to 4,000 square feet. "Reasonable Use" means there must be some minimal use such as a 2,500 square foot house. If those living here twenty years from now are to have natural treasures such as salmon fishing, crabbing, the sight of Orcas, the SMP cannot afford extravagances such as a 4,000 square foot house that will do more damage to our already damaged shorelines.</p>	Please see the responses provided for Comments BIAWC04, BIAWC09, GCD09, GCD14, MES09, MES11, MES31, NES01, RFW12, RFW13, & RFW18.
PR03	Paula Rotondi	4/22/21			Second, the buffer requirements in the SMP do not adequately protect riparian and stream functions which are essential for sustaining fish, wildlife and protecting our water supply. If people living here twenty or more years from now are to have the fish and wildlife treasures we enjoy today and have adequate supplies of clean water, then the SMP must incorporate the State of Washington Department of Fish & Wildlife's new riparian buffers guidance.	Please see the response to comment #FW/WEC09.
PR03	Paula Rotondi	4/22/21			Third, please do not add to the challenges of those living here twenty years or more from today who will be dealing with increasingly severe ramifications of climate change. Climate change causes sea level to rise and also causes more extreme storms with tide surge coastal flooding and also river flooding. The Washington State Department of Ecology, the Federal Emergency Management Agency, private investment companies, insurance companies, and real estate companies (Redfin most recently) warn that many thousands of homes worth billions of dollars will be lost due to climate change exacerbated flooding. Please include regulations in the SMP to prepare for accelerating sea level rise.	Please see the responses provided for Comments FW/WEC01, FW/WEC02, FW/WEC12, WCPW07, WCPW08, WCPW09, RES03, RFW02, RFW03, RFW04, RFW06, RFW07, RFW11, RFW17, & PB06.

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P6611	Dave Klanica, Phillips 66	4/22/21	D		<i>Extent of Jurisdiction.</i> Given the recent Department of Ecology's revocation of the Port of Kalama and Northwest Innovation Works Shoreline Conditional Use Permit, questions have been raised as to overall shoreline management authority. Whatcom County, as well as other Counties and Ecology must lawfully apply its shoreline management program requirements, particularly when seeking to require mitigation for activities that occur outside the jurisdictional shores of the State. It appears that Ecology unlawfully applied certain mitigations when the only activities within the shoreline were dredging for a new dock berth, portions of the security fence, an infiltration pond, a first-flush pond, fire suppression water storage and a containment berm for certain storage tanks. We ask that Whatcom County commit to act within its jurisdictional boundaries.	We are. Shoreline jurisdiction is addressed in §23.20.010.
P6612	Dave Klanica, Phillips 66	4/22/21			<i>Consistency with Ongoing Comprehensive Plan and Code Amendments.</i> Both WSPA and Phillip 66's previous comments request that the shoreline master program amendments be consistent with the outcome of the ongoing good faith negotiations between the County and interested stakeholders that has occurred over many months related to the Comprehensive Plan and Code Amendments. We request consistency primarily as to definitions as the development of the relevant definitions was a significant effort and even slight differences in wording across county programs could add uncertainty and confusion. Phillips 66 does not believe that all activities which will require a conditional use permit under the Code Amendments should also require a conditional use permit under the shoreline management act. The shoreline program only affects activities that are within the jurisdictional shores of the State. The Zoning requirements cover much broader non-shoreline areas. Additionally, shoreline conditional use permit requirements should not be applied to upland activities that will be fully evaluated under the zoning code requirements applicable to those upland activities. The programs also involve different decision makers and appeal paths. The differences can warrant different permitting approaches.	Please see the responses provided for Comments FW/WEC16, RES10, P6609, WSPA01
BH01	Bill Haynes, Ashton	4/22/21	D	23.50.140	Regarding the Table for Dimensional Standards (page 147), the	We agree; our math was wrong. It has

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	Engineering				<p>minimum length required to reach a moorage depth of 5' below ordinary high water.</p> <p>Ordinary High Water (OHW) elevation 314.5' has been well established on the Lake Whatcom - at least for the multiple projects I've been involved with.</p> <p>The proposed change results in a low water depth at the outer end of the dock (float) of 2'. Design low water has been established at an elevation of 311.5'.</p> <p>In a Jan. 29, 1999 letter from the WA Dept. of Ecology (DOE) to WCPDS and the WC Hearing Examiner, the DOE determined "...an in-water depth of 2.5 feet at 311.5 feet MSL is the minimum necessary draft to accommodate a standard powerboat on Lake Whatcom."</p> <p>The proposed update lowers the design depth from 2.5' to 2.0'. That depth is at the watered end of the dock only. Presumably, depths towards shore are shallower and at low water level a power boat will have less than 2' to moor in. In addition, the landward end of the float may go aground depending on the bottom contours if the outer end is at 2'. If the site is exposed to waves, the dock/boat may be tossed up and down on the lake bed.</p> <p>Assuming a 6'x20' floating dock aligned with its approach ramp, I would propose the overall minimum length required to reach an inshore depth of 5' at OHW (2' depth at 311.5'). That assumes depths offshore increase.</p>	been amended to be 5.5 feet now.
KC04	Kim Clarkin	4/22/21			<p>I am concerned about the current document's lack of land use restrictions on areas that will be affected by sea level rise. I do not agree that waiting to strengthen regulations till more information is available is a good idea. In the meantime, many decisions will be made that may harm critical areas along the changing shoreline. Those decisions may also harm the people who invest in shoreline developments that storm surges could damage. This is the kind of foresight and protection citizens expect from their government—not a laissez-faire attitude such as led</p>	<p>Please see the responses provided for Comments FW/WEC01, FW/WEC02, FW/WEC12, WCPW07, WCPW08, WCPW09, RES03, RFW02, RFW03, RFW04, RFW06, RFW07, RFW11, RFW17, & PB06.</p>

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					to the Oso disaster. Other commenters have given strong references for up-to-date scientific information the Planning Dept. can use to write pertinent and reasonable rules to distance new developments from the shoreline.	
KC05	Kim Clarkin	4/22/21			I do not see a reason for expanding the reasonable use exception to 4,000 ft2 in critical areas. That is a trophy home, not a reasonable exception. Critical areas are critical to wildlife, water and other things that we are trying to protect. Let's actually protect them.	Please see the responses provided for Comments BIAWC04, BIAWC09, GCD09, GCD14, MES09, MES11, MES31, NES01, RFW12, RFW13, & RFW18.
KC06	Kim Clarkin	4/22/21			<p>I strongly encourage you to use WDFW's most recent recommendations for riparian buffer widths for new developments. They are based on a thorough knowledge of rivers, valleys, and in-stream habitat development over the long term, and they should be incorporated in our long-term planning. No one is saying that existing developments have to be retired. New development should be completely different; recognizing our expanding understanding of the damage we wreak on ecosystems, we should aggressively seek to avoid that damage.</p> <p>I congratulate you and the Planning Department for making otherwise reasonable updates to a huge document and working toward making regulations more understandable. It has been a long slog for you, and I'm grateful for your attention to this extremely important roadmap to our future relationship with our environment. Please make it as strongly protective as you can.</p>	Please see the response to comment #FW/WEC09.
JM01	Janet Migaki	4/22/21			<p>The SMP, CAO, City and County Comprehensive Plans mention or refer to a quagmire of environmental agencies + regulations, as well as mention or refer to multiple intersecting jurisdictions, permits, ordinances, exemptions and waivers—all used for 'managing' waters of the State.</p> <p>Lake Whatcom, a significant water of the State, is not a healthy or protected source of water, yet it is used for Bellingham's drinking water. The Lake's well documented decline is troublesome since many of the lake's contaminants resist the treatment processes used by the City treatment plant and pass into public drinking water supplies.</p>	Lake Whatcom's water quality is managed through the Lake Whatcom Management Program, under the direction of the Lake Whatcom Policy Group. You can find what you're looking for at https://www.lakewhatcom.whatcomcounty.org/ .

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					<p>Where in the SMP and accompanying documents does it mention or discuss the primary and ultimate regulatory agency held fully accountable for protecting the water quality of Lake Whatcom water?</p> <p>The Lake is violating several water quality parameters +contaminants, and the water has not been tested for a full toxicology analysis since late 1990s.</p> <p>Does the SMP address protecting the Lake's total water quality? I know the 50-year TMDL tries to address low DO levels, with not encouraging reports to date. What about so many more lake water quality issues- who is accountable and responsible for protecting and keeping the lake healthy enough to be a drinking water source?</p>	
MRC01	Marine Resources Committee	4/22/21			<p>Thank you for taking the time to review the Whatcom County Marine Resources Committee's (WCMRC) comments on marine land protection. One role of the WCMRC is to work with county leadership and other key constituencies to help protect marine and enhance nearshore habitat through local and state ordinances and regulatory plans. The WCMRC supports regulations and policies that further protect and enhance marine shoreline areas that are vital economically, culturally, recreationally, and environmentally.</p> <p>The Whatcom County Marine Resources Committee supports the inclusion of the proposed amendment to Chapter 8: Marine Resources Lands policy section, as developed by the WCMRC, to the Comprehensive Plan.</p>	Your comment will be provided to the P/C and Co/C for consideration.
BIAWC14	Rob Lee, BIAWC Executive Officer	4/22/21	F		<p>We want to say thank you for:</p> <ul style="list-style-type: none"> recommending the 4,000 sq. ft. RU area, we request excluding septic systems from this square footage if covered with native landscaping. For creating the minor variance for buffer reduction of the 25% to 50%. We request that you lower the fee for minor variances. We request that any buffer reductions under Reasonable Use are decided administratively through a minor variance, 	Your comment will be provided to the P/C and Co/C for consideration.

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					Critical areas included.	
BIAWC15	Rob Lee, BIAWC Executive Officer	4/22/21	F	16.16.270 & 16.16.273	<p>Reasonable Use and Variances: We will comment separately on the permit process, "impact area" size, and criteria issues.</p> <p>A. Permit Procedure:</p> <p>1) <i>Present Process</i>: PDS staff has proposed major changes to the procedures. The current 2017 CAO allows staff to grant reasonable use (RU) permits for one single family house under very strict criteria if CAO rules alone would deny "all reasonable and economically viable use" of the property. The next step is a variance requiring Hearing Examiner (HE) approval.</p> <p>We were surprised to learn recently that these RU permits have become a major part of local wetland scientist's workload. This is due mainly to high buffer standards and tight limits on adjustment options. These conflicts between strict environmental rules and permitted, customary land uses are obviously not unusual.</p> <p>2) <i>Staff Proposed Process</i>: As we understand it, the current draft Exh F/CAO proposal, dated 4/2/2021, offers a 3-level process:</p> <p>a) Minor Variance: if a person only needs a 25 to 50% CAO buffer reduction, they will apply for this approval. The draft does not say whether this value is total area, width, or both. Staff decides these permits; an application and notice to neighbors is required. We do appreciate this new minor variance idea allowing staff approval. The concept should be used for other CAO issues. No further CAO permits are needed. See Section 16.16.273, p 34.</p> <p>b) A Major Variance is required if the Minor Variance is denied. One would apply to PDS, and the H/E would decide after a hearing. This is an expensive and slow process; the fees are now \$2,750 each, plus critical area reports, probably consultants doing the applications, a consultant or attorney at the hearing, and possible legal costs if you or an opponent appeals the decision. Anyone testifying, or you, can appeal the decision to Supe-</p>	<p>Regarding the commenter's point A.2.b: A major variance wouldn't be required if the minor variance is denied; a major variance would be applied for if one wants to reduce a buffer more than 50%. They're not sequential: one just applies for the permit one needs.</p> <p>Similarly, regarding the commenter's point A.2.b: With staff's assistance, an applicant should know whether a major variance is attainable, given the required findings (§22.07.050). Thus, if one understood one's chances to be nil, one would just apply for an RUE; so again, they don't have to be sequential.</p> <p>The biggest difference is that through a variance, whether minor or major, one must still mitigate for impacts. Under an RUE the H/E can allow impacts without requiring mitigation. This would apply on a property that is so encumbered by critical areas that nothing could fit on the lot without causing impacts and there's no room to mitigate.</p>

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					<p>rior Court, also costly and slow. See Section 16.16.273, p 34.</p> <p>c). A Reasonable Use Exception is the last resort, virtually identical to the Major Variance process and possible outcomes. It would also be decided by the HE, with high similar costs, and potential litigation. See 16.16.270. A and B.</p> <p>One may apply for an RUE only if their Major Variance app is denied. If you do not get adequate relief with a major variance, you must repeat the process to apply for and hope to be granted an RUE by the HE, paying like fees and costs again. You or an opponent may appeal this decision too to Superior Court from someone, at either stage.</p> <p>3) BIAWC/GAC Proposal: a simpler, less costly, and more practical alternative for all sides:</p> <p>a) Minor Variance (informal staff decision): expand the options to allow buffer adjustments above 50%. This would be determined mainly on a valid scientific analysis of site and vicinity functions and values of the affected wetland(s) and/or habitat(s), acceptable to qualified staff. Also, adjustments should be possible in both total buffer area and width. Can be appealed via RU process.</p> <p>b) Major Variance (formal HE decision): eliminate it, as redundant with the RU option, adding unneeded costs, complexity and time demands on both public and private parties.</p> <p>c) RUE: Use the draft as written; consider simplifying criteria per comments, information, and proposal below, per Item C.</p>	
BIAWC16	Rob Lee, BIAWC Executive Officer	4/22/21	F	16.16.270(C)(12)	<p>B. "Impact Area" size limit: For reasons stated in our April 12 2021 letter, we support the 4,000 sq. ft. value for the "impact area" to be allowed as the upper limit for buildings and other impervious surfaces, except for a minimal standard driveway. We suggest "impact area" be defined for certainty, and exclude landscaped areas using native plants and water features, and septic mounds or areas. The term "footprint" has a different meaning in the construction and real estate worlds.</p>	<p>Please see the responses provided for Comments BIAWC04, BIAWC09, GCD09, GCD14, MES09, MES11, MES31, NES01, RFW12, RFW13, & RFW18.</p> <p>And the commenter is correct about the impact area having no scientific basis; rather, it is a legal basis. The courts have</p>

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					Also, there is no scientific basis for any fixed value, 2,500 or 4,000. Also, some landowners who already have a "pre-CAO" house or other building on their parcel would be severely penalized by the 2,500 value.	consistently interpreted a reasonable use (in SFR zones) to be an averaged sized house in that jurisdiction. In Whatcom County, PDS records indicate that an averaged sized house is 1,820 sf, meaning the footprint would be around 900-1,000 sf (2-story). We would expect that someone wanting a larger home or more appurtenant improvements wouldn't choose a lot that is so encumbered by critical areas that they couldn't fit it on the property.
BIAWC17	Rob Lee, BIAWC Executive Officer	4/22/21	F		<p>C. RU Criteria: In our April 12 2021 statement, we raised several substantive questions on the "reasonableness" of some of the many RU criteria (12! see p 2-3). And we attached the full text of guidance on Reasonable Use from the state Department of Commerce again. We did omit the small p1 diagram because it was not clear how it related to the text on it or overall context.</p> <p>In general, this guidance advises "careful use" of terms such as "alternative or possible uses, etc."; and care with "economic use" etc.; see p 2-3.</p> <p>In the Synopsis of Public Comments updated April 14, 2021, staff commented at length on this guidance (pp 110-113). We have no disagreement with most comments. But in D, p 111, if you as the government are going to say: "the criteria ... need to consistent with case law...", then you have an obligation to impacted citizens to cite at least the more recent and relevant cases and point out the claimed support.</p> <p>Somewhere in the Synopsis, staff also referred to Department of Ecology guidance on this topic. I searched their site and found: "Wetland Guidance for CAO Updates"; 65p, 2016 (attached). The subject is cited on 4 pages: 8, 13 and 31-32. This excerpt is the only substantive guidance in the document, p 8:</p> <p>"Exceptions are typically addressed in a CAO in the context of</p>	Your comments will be provided to the P/C and Co/C.

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					<p>reasonable use of property. For more information about this regulatory tool, see Section VII of the Critical Areas Assistance Handbook published by the Washington State Department of Commerce: http://www.commerce.wa.gov/Documents/GMSCritical-Areas-Assist-Handbook.pdf</p> <p>We think this is an important legal issue for many county landowners. We suggest you ask the PDS/Commissions' legal counsel to review these criteria and related resources and produce a memo with a recommended set of criteria for the record before you complete your recommendations on this important issue to the County Council. The adopted CAO definitions of Reasonable Use and RU Exception should be reviewed too; attached.</p>	
BIAWC18	Rob Lee, BIAWC Executive Officer	4/22/21	F		<p>2. Buffers for wetlands and Habitat (HCAs)</p> <p>Our April 12 testimony makes several comments on this important issue. In general, the buffers make more land unusable for all kinds of essential land uses than preserving the actual wetland.</p> <p>At this point, we have carefully reviewed the 3 most recent statements by Miller Environmental Services on the many changes proposed by staff re wetland and habitat buffer and related issues. We have discussed many with him and find that we agree in general with all the comments. A few other wetland scientists have also submitted valuable comments, e.g., NW Ecological Services and NW Wetlands Consulting.</p> <p>We respectfully recommend that Planning Commission members and staff review these comments carefully, and seriously consider acceptance. Almost all are opposed to new, more restrictive language, and do not propose new text or values.</p> <p>Many of staff's proposed changes, and opposed by Miller, would tip whatever balance the CAO now has toward preservation of more non-wetland areas, i.e., buffers. Other items objected to will make the process of obtaining some flexibility in the rules</p>	Your comments will be provided to the P/C and Co/C.

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					<p>more difficult, or impossible in some cases.</p> <p>We submitted two of the three Miller letters with our April 12 letter: the February 19, 2021 letter (8 pages; 14 comments, and the Jon Maberry Prepared Motions, one page, 12 issues, dated February 25 2021.</p> <p>We are attaching the firm's most recent April 12, 2021 letter to this statement, 8 issues and 6 p.</p> <p>We are taking this approach because no active members of our GAC or of the BIAWC have the scientific credentials or experience to do the kind of objective analysis of the draft changes that Miller and the other scientists have done.</p> <p>From reading all the Miller comments, we conclude that if the CAO draft is adopted as written today, the Whatcom CAO will be one of the restrictive in the state, if not the most!</p>	
BIAWC19	Rob Lee, BIAWC Executive Officer	4/22/21	F		We do ask that the Planning Commission hold the record open for written comments for at least 2 weeks. We will review the testimony after the hearing and may want to send additional comments.	The P/C considered this request at their 4/22 hearing and denied it.
MES51	Ed Miller, Miller Environmental Services	4/22/21	F	16.16.900	<p>P/C Public Hearing Testimony: The WAC definition of “water-course,” which is where the ditches would fall, talks about the presence of a high water mark and the presence of fish; it specifically excludes irrigation ditches, canals, stormwater treatment, conveyance systems, or other entirely artificial water-courses. So it seems to me that ditches, unless they carry fish or convey a prior stream, are not waters of the state. So it seems to me that ditches are not waters of the state unless they carry fish or convey a prior stream. And from a practical standpoint, regulating ditches in Whatcom: If all the ditches become a critical area with a buffer, we'd have to do critical areas report for everyone with the ditch, with a buffer. I'm not sure how that would work. If you filled a ditch, what the mitigation would be for that, would you have to create another ditch? I'm not sure how that would work. If Public Works was to create a new ditch for a new road they'd be creating a new critical area, putting a new buffer on someone's property. Additionally, most all of the ditch-</p>	These comments were considered by the P/C in their deliberations and final recommendation on the definition and regulation of ditches.

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					es in Whatcom County that have these buffers are located in County right-of-way, so it just seems from a practical standpoint it's not even doable. Aside from the fact that they don't appear to be waters of the state by state definition.	
TSF09	Diani Taylor, Taylor Shellfish Farms	4/22/21			P/C Public Hearing Testimony: I am a 5 th generation shellfish farmer with my family business, Taylor Shellfish Farms. We have been farming shellfish here in the state since 1890 and grow a variety of oysters, mussels, clams and geoduck today. Our company is vertically integrated where we farm-to-table, so we include everything from hatcheries and nurseries to farms, processing facilities, and retail and restaurants. I wanted to introduce myself after we submitted comments on the most recent draft of the SMP document. We really appreciate regulations, especially in the Shoreline Master program, that are so important to protect our environmental resources, including water quality and shoreline and our shoreline ecosystem, which is important and critical for our farms. Our comments are intended to just ensure that the regulations around aquaculture are based on the most current scientific and technical information and align with the state guidelines.	Comment noted. These comments were considered by the P/C in their deliberations and final recommendation. Please see staff responses to TSF's written comments addressing their issues.
RES25	Karlee Deatherage, RE Sources	4/22/21			P/C Public Hearing Testimony: The current version of the SMP is an improvement for protecting our shorelines. However, there are 3 areas to further strengthen. We submitted a letter on April 12 asking the P/C to make changes with respect to reasonable use, sea level rise, and include the use of Department of Fish and Wildlife new riparian buffer guidance in the critical areas ordinance. The science is clear when it comes to sea level rise. We have been and continue to witness the impacts of rising seas. With storm surges impacting property, we will see the loss of critical shoreline habitats for salmon and forage fish through a phenomenon called coastal squeeze if we don't act now to prevent the construction of buildings or infrastructure in harm's way. Suggested code for amending 23.30 under general regulations that the new section was included in our letter, please restore the staff proposed language for 16.16.270 (Reasonable Use	These comments were considered by the P/C in their deliberations and final recommendation. Please see staff responses to these previously raised issues.

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					<p>Exceptions) and improvements over the current code to require the Hearing Examiner approval for reasonable use exceptions. However, 4,000 square feet of impact area is excessive, especially when some lots could be 6,000 square feet.</p> <p>Lastly, WDSW release guidance on riparian buffers in July and also in December 2020. We hope the P/C will incorporate best available science from WDW that calls for a one hundred foot buffers known as the "200-year site potential tree height" from the edge of the 100-year floodplain or channel migration zone. This could be applied as a new section to 16.16.420 (General Standards) for frequently flooded areas or a new entry in the table for 16.16.740 (Habitat Conservation Area Buffers).</p>	
PG01	Andrew Gamble, PetroGas	4/22/21			<p>P/C Public Hearing Testimony: We do have a few concerns, questions, and clarifications about the update.</p> <ul style="list-style-type: none"> • First of all, we've noticed that there are some overlapping regulations, and we just want to point out that where there's already existing regulation in place and that the SMP need not be layered on and may not actually be necessary. • Another thing that we're looking at is that there's a potential for a maximum height requirement. We don't think that should apply to the Cherry Point UGA. • And then there's maintenance dredging. We think that should probably be a permitted and conditional use, and I think I read somewhere that it was to be prohibited and conditional. That should just be for the maintenance dredging. And then dredge material disposal management actually is already in place, so it doesn't need to be managed again. • And then some clarification on no net loss. We were looking for a bit of an explanation on the baseline condition. Is that the same as it was outlined in, I think it was a 2007 staff report, on a previous update? • And as for mitigation, is that still achieved through voluntary and incentives, or is that going to be permit required mitigation? Could that be applied to legacy or historical problems and not part of a new project proposal? 	<p>These comments were considered by the P/C in their deliberations and final recommendation. But briefly:</p> <ul style="list-style-type: none"> • Staff doesn't believe there are overlapping regulations. • There does need to be height limitations so as to protect the shoreline, especially in terms of protecting views. • Maintenance dredging is proposed to be a Permitted Use. • The baseline condition was set by the 2007 SMP Update and it's corresponding background documents. • Some mitigation may be required for impacts from project proposals, but the County does not require applicants to "fix" existing issues, though applicants are always welcome to do so through voluntary mitigation. • No, Shoreline CUPs already existed in the County's SMP. • Currently only SLR policies are being considered, which would not create

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					<ul style="list-style-type: none"> And does this SMP Update establish a shoreline conditional use permit? Then finally, we were looking for some clarification on the sea level rise policies. I heard Mr. Hansen talk about that as well. It's kind of scattered throughout. And we were looking to see if this is going to create new responsibilities for permit applicants. 	new responsibilities for permit applicants. However, we expect that in the not too distant future there may be regulations requiring applicants to address it in their permit analyses.
P6613	Tim Johnson, Phillips 66	4/22/21			<p>P/C Public Hearing Testimony: I would refer you to the Phillips 66, April 12th written comments as well as some supplemental comments that were submitted today via email. But I would like to highlight a few comments tonight, specifically in Exhibit C, Chapter 8.</p> <p>Regarding Policy 8T -1 we would request some clarification of the methods by which the County will coordinate with landowners to protect marine resource lands</p> <p>In policy 8 U-2 we request some clarification of the types of non-regulatory programs and options and incentives that owners of marine resource lands can employ to meet or exceed the County environmental goals.</p> <p>In Exhibit D, Title 23, the general provisions indicate that shoreline development must be consistent with Shoreline Management Act of 1971, the County Shoreline Regulations, and other County land use regulations. Chapter 23 then references certain requirements for existing legal fossil fuel refinery operations, existing legal transshipment facilities, expansions of those facilities, and new or expansions of renewable fuel refineries or transshipment facilities. And is related definitions also provided on page 241 on expansions of existing fuel, fossil fuel, and renewable fuel facilities that says they are required to obtain conditional shoreline permits. As the planning department is aware, industry, labor, and environmental organization stakeholders have been working together to develop recommendations and changes to the County Council's October 2019 proposed Comprehensive Plan amendments. There's been considerable progress made by the stakeholders, and those have been present-</p>	These comments were considered by the P/C in their deliberations and final recommendation. Please see the staff responses to Phillips 66's written comments on these same issues.

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
					ed to the County Council for their consideration, and we request that this SMP draft be delayed until the final work from the stakeholder effort is accepted or rejected and the final definitions and framework for conditional use permit is finalized. And then finally, I would just like to note that we would request an additional opportunity to review and provide input and further revisions made by the staff before the shoreline amendments are finalized.	
WH02	Wendy Harris	4/22/21			<p>P/C Public Hearing Testimony: I support the comments that have been submitted by the environmental community; they are well founded.</p> <p>But I want to express my outrage that the P/C majority is using their position to reduce environmental protections for their own interests, ignoring what is best for the public and the planet. This is being done at a time when scientists have issued three distress letters about how we are not doing enough fast enough at the risk of biosphere collapse and extinction of most forms of life, including our own. There are many members of the public who share my views. If you are here for yourself, you're here for the wrong reason.</p> <p>I'm also appalled at the lack of science I failed to hear being discussed. I heard agenda based changes being proposed and I heard nothing regarding the science that supports this. This must have resulted in staff using science as if they were drafting a legal brief to support their argument. Why wasn't the science presented front and center to the topic being discussed? This is troubling. I understand that this round of the SMP update does not require a new review of the foundational elements necessary to determine no net loss. However, DOE indicated that there was an exception for a substantial change in Shoreline function. I believe that applies here and is very relevant since the County still lacks baseline standards, means of quantification, and monitoring protocols. In other words, we have no means of determining no net loss, which leads to the following statement in all but the largest SEPA reviews, which is in regards to species of wildlife present: "none known to the best of</p>	These comments were considered by the P/C in their deliberations and final recommendation.

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
					my knowledge." And by that everybody escapes having to care about or mitigate for wildlife impacts or whatever other kind of impacts are around. Other changes in events approved or pending are going to reshape the shoreline in the County jurisdiction in a manner that will make it unrecognizable from its current condition. We've lost one of the most important shoreline key-stone species since the last SMP. The sea star numbers established how the loss of even a small number of stars had a significant impact on our healthy shoreline function. There is the Birch Bay berm. There's the Cherry Point update that's allowing expansion of use and of size, and that's going to bring in more tankers which have led to the killer hornets that are here in Blaine, and they're believed to arrive via Cherry Point tanker. And so these are vectors for aquatic invasive disease. Taken as a whole, this is enormous change and it's a loss in shorelines of statewide significance that does not follow the prioritized shoreline use preference so that we estimate one sentence. I asked that the DOE require the County at least provide a concrete example of how the no net loss would work.	
BIAWC20	Roger Almskaar, BIAWC	4/22/21			<p>P/C Public Hearing Testimony: We submitted our 2nd round of testimony by email. It was late today. Did you see our letter come in a 4-page letter and some attachments? OK, good, thank you. So that's in the record. So I'll move along here.</p> <p>Let's see, I want to say thank you to Cliff Strong for his good work on the staff report, and the synopsis just made our work a lot easier in figuring out what's going on with this extremely complicated project.</p> <p>Most of the impacts on building that we're concerned about are coming from critical area rules, not shoreline rules. We just don't get into the shoreline areas very much anymore.</p> <p>I want to give you something about my background, though I think most of you don't know this. I'm a land use consultant right now, but I got into planning in 1971, being hired by Whatcom County to do the first SMP, which goes back a long time. Our final product adopted in 1976 was about 170 pages. Lots of</p>	These comments were considered by the P/C in their deliberations and final recommendation. Please see the staff responses to the BIAWC's written comments on the proposed reasonable use process.

Comment #	Commenter	Date	Exhibit	Section	Comment (Abbreviated; please see original correspondence for exact language, supporting arguments, and/or supporting material citations.)	Staff Response
					<p>definitions that I had to write. At that time the state guidelines from Ecology were a booklet of about 25 pages. I don't know if Cliff has ever seen that one. Let me move on here.</p> <p>I think the most important thing for me to say tonight is we're very concerned about the reasonable use process. And I've been surprised in the last few months to learn that that process has become a major part of the workload of many of the local wetland scientists. That was not true a few years ago, and I've been doing short plats for a long time and just hadn't heard that. So my most important thing to say tonight is that we are really concerned about the staff's new proposal to have three layers of permit processing to get a reasonable use exception. The first layer would be the staff of (mini?) variance, second would be a variance through the H/E, and the third would be a reasonable use through the H/E. So you'd be going there twice, paying the same amount of money, twice fees and everything. And so our proposal is to eliminate the middle level, the variance that would go to the H/E. And if you're not satisfied with what you are able to negotiate with a staff, with your wetland scientist, work out a deal based on science, not arbitrary numbers, it's politics. But then you can go to the H/E. So we're agreeing to support that. It's still going to be expensive for people, but at least it's not double the cost as it is. But please look at that in detail as quite a bit in our paper on that.</p>	

Total # of comments: 277

TECHNICAL MEMORANDUM



Date: December 31, 2020
To: Cliff Strong, Ryan Ericson
From: Dan Nickel, Mark Daniel, Devin Melville
Project Name: Whatcom County SMP

Subject: Whatcom County SMP Periodic Update - No Net Loss Statement

Introduction

Whatcom County (County) is conducting a periodic review of its Shoreline Master Program (SMP). While the majority of amendments are to comply with current State law and address recent legislative updates, to clarify prior interpretations, and reorganize the SMP to improve usability for both applicants and staff), several amendments are substantive in nature and merit additional documentation to ensure that implementation of the updated SMP and future development will not result in a net loss of shoreline ecological functions.

The Shoreline Management Act guidelines (Guidelines) require local shoreline master programs to regulate new development to “achieve no net loss of ecological function.” The County’s 2007 comprehensive SMP update was approved under this benchmark based on the analyses performed then¹. This memorandum builds on those analyses and addresses the amendments proposed for this year’s periodic review and specifically identifies amendments that are more substantive in nature.

The following areas of the SMP have amendments that warrant evaluation:

- Pier and dock standards
- Common line setback evaluation
- Trail location standards
- Nonconforming residential development
- Buffer reduction mechanisms
- Residential accessory structures

¹ See <https://www.whatcomcounty.us/3119/SMP-Update-2020-Documents>

The purpose of this memo is to describe these amendments and evaluate their potential effects on shoreline ecological functions to ensure the County will continue to meet the Washington State Department of Ecology no net loss criteria.

No Net Loss Evaluation

Pier and Dock Standards

Amendment Description: WCC 23.40.150(B) (Moorage Structures) (formerly titled Docks, Piers, and Mooring Buoys) contain revised dimensional standards, including overall square footage, for both freshwater and marine moorage (overwater) structures.

NNL Evaluation: The amended pier and dock standards in WCC 23.40.150(B), subsections 1 and 2, are extrapolated from the U.S. Army Corps of Engineers (Corps) Regional General Permit 6 and consistent with the Washington Department of Fish and Wildlife standards provided in the hydraulic code rules (WAC 220-660-140 and -380). These state and federal requirements contain provisions to allow overwater structures while ensuring implementation of impact reduction mechanisms to protect aquatic habitats. Furthermore, moorage structures are required to be constructed of materials that will not adversely affect water quality or aquatic plants or animals over the long term (WCC 23.40.150(C)).

While the proposed amendments to the Whatcom County SMP do not explicitly limit the number of future overwater structures, the proposed amendments minimize impacts by regulating overall footprint and dimensional standards, which are known to have a direct correlation to habitats and species. In general, the updated pier and dock standards allow for reduced square footage of overwater structures and a reduction in the total number of docks by prioritizing shared docks over single-user docks. The proposed amendments also avoid future impacts by prohibiting such moorage structures in key shoreline habitat areas (WCC 23.40.150(A)(6)).

Common-Line Setback

Amendment Description: To protect views of the shoreline from existing structures when new development is proposed, WCC 23.30.040 (Views and Aesthetics) of the updated SMP includes a new subsection (B) that now allows setbacks in Urban, Shoreline Residential and Rural environments to be modified pursuant to WCC 23.40.020(D) (Shoreline Bulk Provisions, Setbacks, Common-Line Setback for Single-Family Residences). That section (incorporated from former Appendix F, where it had only applied to nonconforming lots) allows for setbacks to be

reduced or increased, depending on how existing adjacent homes are situated, to provide the greatest view opportunities for both the existing and new development. Furthermore, WCC 23.30.040 (Views and Aesthetics) new subsection (L) precludes new uses or development from substantially obscuring shoreline views within shoreline view areas or from existing residences on adjacent property.

NNL Evaluation: When the use of a common-line setback is allowed, compliance with buffer width reduction and mitigation sequencing pursuant to WCC 23.30.010 (Ecological Protection) shall be required. WCC 23.30.010 (B) states that development, use, and activities within the shoreline jurisdiction shall avoid and minimize adverse impacts, and any unavoidable impacts shall be mitigated to meet no net loss of ecological function and ecosystem-wide processes pursuant to WAC 173-26-186, Governing Principles of the Guidelines. Furthermore, WCC 23.30.010 (C) has been added to specifically to add flexibility in buffer modification when approaches include “increased protection of shoreline ecological function and processes.” To minimize impacts to views from the water, a new subsection (C) was added to WCC 23.30.040 (Views and Aesthetics), that now allows the Director to require the planting of vegetation to mitigate the impacts.

Trail Location Standards

Amendment Description:

WCC 16.16.620 (Wetlands – Use and Modification), Subsection (H) (Recreation) has been amended to allow public trails to include viewing platforms to be closer than the outer 25% of the buffer “when necessary to provide wetland educational opportunities or for public health and safety,” and to be wider than the standard widths when necessary to meet ADA requirements. Corresponding amendments have also been made to WCC 16.16.720(G)(1) (Habitat Conservation Areas – Use and Modification).

NNL Evaluation: This allowance is permissible provided that all criteria in WCC 23.40.160(A)(6) (Recreation) are met; this amendment adopts by reference the requirements of WCC Chapter 16.16 (Critical Areas), which contains the standards for trails in critical areas. WCC 16.16.620(H) criteria for passive recreation facilities that are part of a non-motorized trail system or environmental education program, including walkways, wildlife viewing structures, or public education trails, states the trail must minimize erosion and sedimentation, hydrologic alteration, and disruption of natural processes such as wood recruitment and natural wildlife movement patterns. Such trails must be made of pervious material or elevated where feasible,

be designed to avoid removal of significant trees, and be constructed in a manner that minimizes disturbance of the buffer and associated critical areas.

Nonconforming Residential Development

Amendment Description: Standards for addressing the enlargement or expansion of single-family residences non-conforming to the shoreline buffer have been clarified in WCC 23.50.020 (Nonconforming Structures), subsection (F). Expansion of a nonconforming single-family structure may be approved when the expansion does not extend waterward of the existing primary structure's building footprint or the when the expansion is consistent with the constrained lot provisions in WCC 23.40.170.

NNL Evaluation: Approved expansion of single-family residences non-conforming to the shoreline buffer is not anticipated to have further impacts to the shoreline under the clarified standards provided in WCC 23.50.020 (F). Subsection (2) includes the following specific restrictions to ensure protection of existing ecological functions and mitigate for impacts. The expansion of nonconforming single-family residences or normal appurtenances greater than the constrained lot provisions of WCC 23.40.170 may be approved once during the life of the structure (100 years), with a total building footprint expansion of no more than 500 square feet. Additionally, the expansion must be landward or lateral of the existing footprint, shall occur on a previously impacted impervious surface, shall not occur waterward of the common line setback, and shall be accompanied by enhancement of an area equivalent to the expansion if the total building footprint increases by more than 250 square feet.

Buffer Reduction Mechanisms

Amendment Description: WCC 16.16.745 and 16.16.640 address buffer modifications within wetlands and habitat conservation areas, including buffer width averaging, buffer width reductions, and buffer width variances. Buffer averaging allows limited reductions of buffer width in specified locations, while requiring increases in others. In such cases, the width of buffers may be averaged if it will improve the protection of functions and the applicant can demonstrate that all specified criteria are met. Buffer width reduction may be approved by the Director on a case-by-case basis, provided that the general standard for alternatives analysis and mitigation sequencing per WCC 16.16.260 have been applied and the applicant demonstrates to the satisfaction of the Director that all of the specified criteria have been met. Standard buffer widths may be reduced more than 25% though a variance pursuant to WCC 16.16.273, provided that buffer averaging beyond the limits allowed by the variance is prohibited.

NNL Evaluation: The updated SMP adopts the CAO by reference, allowing for limited buffer reduction mechanisms provided specified criteria are met. For buffer averaging proposals, both WCC 16.16.745 (B)(2) and WCC 16.16.640 (B)(2) state the Director may require enhancement to the remaining buffer to ensure no net loss of ecological function, services, or value in the specified locations where a buffer has been reduced to achieve averaging. For buffer reduction proposals, both WCC 16.16.745 (C) and WCC 16.16.640 (C) allow the Director to require retention of existing native vegetation on other portions of the site to offset habitat loss from buffer reduction. Additionally, all buffer reduction impacts are required to be mitigated with the result being equal or greater protection of functions and values. In all circumstances where a substantial portion of the remaining buffer is degraded, buffer reduction plans shall include replanting with native vegetation in the degraded portions of the remaining buffer area to further ensure the no net loss standard is achieved.

Residential Accessory Structures

Amendment Description: WCC 16.16.720(G)(4), Accessory Uses, allows for water-oriented accessory structures associated with a residential use to be located in habitat conservation area buffers. Such structures would be limited in area to either 10 percent of the buffer area or 500 square feet, whichever is less. Additionally, no more than 20 percent of the linear length of shoreline could be occupied by such a structure. Per this section, such recreation-oriented applications would only be allowed when all reasonable measures have been taken to avoid adverse effects on species and habitats, including applying recommendations from the Washington Department of Fish and Wildlife, providing mitigation for all adverse impacts that cannot be avoided, and limiting the amount and degree of the alteration to the minimum needed to accomplish the project purpose. As required mitigation for the development, the shoreline must be planted with native vegetation extending at least 15 feet landward from the ordinary high water mark for at least 75 percent of the shoreline length.

NNL Evaluation: This allowance for small water-oriented residential accessory structures is intended to offer flexibility to waterfront landowners who would like to enhance their water enjoyment opportunities, typically for viewing or direct water access. To balance these direct impacts to HCA buffers, the County has proposed a planting requirement immediately adjacent to the shoreline. Native vegetation in these locations are known to provide a variety of positive ecological benefits including habitat, water quality, and vegetation functions. Assuming an average waterfront lot width of 100 feet, such a requirement would require a minimum planting area of 1,125 square feet (100 feet long x 15 feet wide x 0.75). This planting area represents over a 2:1 mitigation ratio to the maximum potential impact area of 500 square feet. Even a small lot width of 50 feet would result in approximately 562.5 square feet of native shoreline planting.

Implementation of this provision is expected to improve habitat, water quality, and vegetative conditions as vegetation matures over time.

Restoration Plan Implementation

The Shoreline Restoration Plan prepared as part of the Comprehensive SMP update in 2007 serves as a valuable resource for the County and its restoration partners to improve impaired ecological functions on the County's shorelines. The plan provides a framework for restoration on all County shorelines outside of incorporated areas.

The plan focuses on restoration projects that are reasonably likely to occur in the foreseeable future. This list has been updated during the periodic SMP update process². Potential restoration opportunities were identified based on recommendations in existing restoration planning documents, as well as input from County staff and restoration partners. The plan lists restoration and protection strategies, including opportunities for specific projects, for each of the County's watersheds.

The plan provides an implementation framework by identifying existing and ongoing plans and programs as well as potential restoration partners at the federal, state, regional, and local levels. The framework builds on local and regional planning coordination among these programs and partners, identifying mechanisms for implementation including development incentives for restoration; landowner outreach and engagement; maximizing mitigation outcomes; and monitoring the effectiveness of restoration actions.

Restoration projects which have been completed or are in progress since 2007 include:

- Removing groins and bulkheads along Birch Bay Drive (ongoing)
- Removal of a failed solid fill pier, large rock groin, concrete debris and derelict piles in the western portion of Legoe Bay (ongoing)
- Lummi Island Quarry Restoration (ongoing)
- Bulkhead removal along Gooseberry Point (ongoing)
- Little Squalicum Creek mouth/estuary debris removal (ongoing)
- Debris removal and restoration of the armored shore at Mount Baker Plywood (ongoing)
- Point Roberts, Lighthouse Park structure removal (complete)
- Lummi View Drive Relocated (complete)

² Restoration Plan Addendum, March 31, 2020

- West Beach, Lummi Peninsula bulkhead removal (ongoing)

Cumulative Impacts

The Cumulative Impacts Analysis during the 2007 comprehensive SMP update evaluated the effects of foreseeable development under the SMP and demonstrated that the goals, policies, and regulations, combined with recommendations in the Shoreline Restoration Plan, would prevent degradation of ecological functions relative to baseline conditions.

The Cumulative Impacts Analysis determined that the proposed SMP provides a high level of protection to shoreline ecological functions. The report indicated that on its own, the proposed SMP, which includes the Shoreline Restoration Plan, is expected to protect and improve shorelines within Whatcom County while accommodating foreseeable future shoreline development, resulting in no net loss of shoreline ecological function.

Emphasis is placed on achieving no net loss of ecological function throughout the SMP, with all uses and modifications subject to general and/or specific standards addressing the preservation of water quality, water quantity, and habitat function in the shoreline, as well as basin-wide ecological processes. The following are some of the key features that protect and enhance shoreline ecological functions to ensure that the no net loss standard is met.

- Shoreline environment designations are assigned to shorelines to minimize use conflicts and designate appropriate areas for specific uses and modifications.
- The SMP contains general policies and regulations designed to provide the basis for achieving no net loss of shoreline ecological functions, such as mitigation sequencing, critical areas and flood hazard regulations, and vegetation conservation standards.
- The critical area protection standards ensure that vegetated buffers are retained on wetlands, fish and wildlife habitat conservation areas, and geologically hazardous areas.
- More shoreline uses and modifications are permitted in areas with higher levels of existing disturbance, and allowed uses and modifications are more limited in areas with lower levels of disturbance. Regulations prohibit uses that are incompatible with the existing land use and ecological conditions and emphasize appropriate location and design of various uses.
- The Shoreline Restoration Plan identifies a number of project-specific opportunities for restoration inside and outside of shoreline jurisdiction, and also identifies ongoing

county programs and activities, restoration partners, and recommended strategies and actions consistent with a variety of watershed-level planning efforts.

Conclusion

The proposed amendments to the SMP described above are not anticipated to have adverse effects on shoreline ecological functions at the planning level. Further, the updated SMP includes a variety of other amendments that are either insignificant when it comes to evaluating impacts to ecological functions or anticipated to strengthen the shoreline ecological protections provided by the SMP. Therefore, the proposed amendments to the SMP are not anticipated to result in a net loss of ecological functions when implemented in tandem with the Shoreline Restoration Plan. Monitoring key indicators is an effective way to ensure the standard of no net loss is being achieved. This can best be implemented by requiring the submission of short-term and long-term monitoring reports as part of permit approvals for development applications and maintaining consistency throughout the permitting process in evaluating mitigation sequencing. Additionally, ongoing efforts by state agencies to monitor land cover change detection, specifically work generated by the Washington Department of Fish and Wildlife, will continue to offer a valuable resource to ensure compliance with no net loss standards.

TECHNICAL MEMORANDUM



Date: March 31, 2020
To: Whatcom County
From: Dan Nickel, The Watershed Company
Jonathan Waggoner, Herrera Environmental
Project Name: Whatcom County SMP Periodic Update
Project Number: 181232

Subject: Whatcom County Shoreline Restoration Plan Addendum

The purpose of this memorandum is to update the previous Shoreline Restoration Plan adopted by Whatcom County in 2007. The Shoreline Restoration Plan is meant to help identify restoration or enhancement projects and areas of the shoreline for improvement. Generally, uses and developments within shorelines cannot always be fully mitigated, which may result in incremental and unavoidable degradation to the baseline conditions of the shoreline. The Restoration Plan aims to counter these incremental degradations by identifying areas and projects for enhancement and restoration which can improve degraded baseline conditions along the shoreline over time.

This addendum references projects listed in the Shoreline Restoration Plan containing enhancement and restoration project proposals and updates them based on information received by the County, agencies, tribes and stakeholder organizations (Table 1). New projects which have been completed or are planned for construction are included in Table 2.

Table 1. Project updates for restoration actions

Project Location / Identifier	Environmental component(s)	Status (2020)	Proponent	Notes
Drayton Harbor	The large platform and foundation could be removed to restore the beach and fringing marsh	No change		
Drayton Harbor	Remove bulkheads in two separate locations that protrude into the intertidal	No change		
Drayton Harbor	Remove dilapidated dock	No change		
Birch Bay	Birch Bay Drive & Pedestrian Facility Project – Remove groins and bulkheads along Birch Bay Drive to restore upper beach and backshore habitats	Under construction	Whatcom County	Phase I under construction. Completion expected in 2021. Will restore 7,500 linear feet of shoreline.

Project Location / Identifier	Environmental component(s)	Status (2020)	Proponent	Notes
Pt Whitehorn	Remove bulkheads along these bluffs, which are the sole sediment source for accretionary shoreforms and valuable habitat in Birch Bay and State Park reaches	No change		
Cherry Pt	Remove dumped debris from bluff face and beach	No change		
Conoco Phillips	Sediment would be excavated from landward of the berm and bypassed to the south side of the pier fill area in stages. This would free up impounded sediment to southern shores and create a saltmarsh or estuary in the backshore	No change		
Sandy Pt	Marsh Restoration – Reduce intertidal slope and impervious surfaces and create riparian buffer/dune habitat to aid with flood control issues in the basin. Portions of the undeveloped (filled) uplands could be restored to marsh	No change		
Lummi River Delta	Tidal Connectivity – Restoration opportunities include removing extensive dikes and tide gates across the Red River Delta to restore tidal inundation and greatly increase fish habitat	No change		
Lummi Island, Pt Migley	Remove Bulkheads – Bulkheads could be scaled back or moved landward where possible and picnic structures over what would be active beach should be removed	No change		
Lummi Island, Village Pt	Remove Structures – Remove relict structures in backshore/marsh environments with marsh restoration	No change		
Lummi Island, Village Pt	Remove pier, groin, debris – Removal of a failed solid fill pier, large rock groin, concrete debris and derelict piles in the western portion of Legoe Bay would benefit the nearshore	In early design		Goal is to restore ~150 linear feet
Lummi Island, Village Pt	Remove derelict piles which are likely creosote	No change		
Lummi Island, Smugglers Cove	Lummi Island Quarry Restoration – The shore that is not in use could be restored through removal of fill and riparian restoration to resemble the rocky shore prior to mining operations	In early design	Northwest Straits Foundation	Goal is to restore ~600 linear feet
Eliza Island	Remove derelict piles which are likely creosote in two locations	No change		
Gooseberry Pt	Remove bulkheads	Ongoing	Lummi Tribe	Likely saving as mitigation – goal is to restore ~160 linear feet

Project Location / Identifier	Environmental component(s)	Status (2020)	Proponent	Notes
Gooseberry Pt	Remove bulkheads	No change		
Lummi Shore Rd	Beach monitoring – Conduct beach monitoring to ensure the beach nourishment is continued, as begun under the USACE-constructed revetment	Ongoing	Lummi Tribe	
Lummi Shore Rd	Remove derelict drift nets, debris, and other foreign material from the Lummi Shore Road beaches	No change		
Cliffside Community Beach	Remove abundant wood debris smothering nearshore sediments along the Cliffside community beach	Complete	WDOE	Study complete, removal not recommended
Squalicum Creek	Debris removal and exotic species removal and revegetation with native plants at Little Squalicum Creek mouth/estuary	Permits acquired	City of Bellingham	Funding sources still being sought
Mt Baker Plywood	Debris removal and restoration of the armored shore around the west side of the Mount Baker Plywood area would provide habitat improvements	Design in process	Port of Bellingham	Preliminary design near completion
Chuckanut Bay	Beach Nourishment	No change		
Pt Roberts, Boundary Bluff	Removal of rock bulkheads in the southern and central portion of the reach, where erosion does not appear to be substantial	No change		
Pt Roberts, Boundary Bluff	Remove abandoned pilings north of Lighthouse Park (including by the west end of Gulf Road)	No change		
Pt Roberts, Lighthouse Park	Remove the old telephone building and associated shore defense structures, this includes a soldier pile bulkhead and boulder and debris revetment	Complete	Whatcom County	250 linear feet restored
Pt Roberts, Lilly Pt	A row of houses/cabins with revetments cause bluff sediment impoundment; restore marine riparian vegetation	No change		
Pt Roberts, Lilly Pt	Remove old cannery – Old Cannery - Pilings, slag piles, and various debris such as concrete pieces could be cleaned up from the intertidal and backshore	No change		
Pt Roberts, Maple Beach	The Elm St outfall structure, short groin, and the old pilings could be at least partially removed to free up beach area and remove the foreign material	No change		

Table 2. Completed or planned projects not Included in the previous Shoreline Restoration Plan.

Project Location	Project Description	Status (2020)	Proponent	Notes
Lummi Peninsula	Lummi View Drive Relocated	Complete	Lummi Tribe	The southern end of Lummi View Drive was moved landward to avoid erosion
West Beach, Lummi Peninsula	Bulkhead Removal	In Process	Lummi Commercial Corp	2751 Haxton Way, Restoration design complete
Waypoint Park	Waypoint Park	Complete	City of Bellingham	New beach included in park
Boulevard Park Beach	Boulevard Park Beach	Complete	City of Bellingham	Phase 1 complete, phase 2 to be part of overwater walkway
Post Point Lagoon	Post Point Lagoon	Complete	City of Bellingham	Lagoon shoreline restoration
Chuckanut Bay Shorelands	Chuckanut Bay Shorelands	Complete	City of Bellingham	Beach restoration and fish passage improvements in Mud Bay