#### Whatcom County Rural Land Study 2019 Update:

A Collaborative Report Identifying Rural Areas of Agricultural Significance and Tracking Changes Over Time



An Updated Report Presented to the Whatcom County Council, Citizens and Landowners of Whatcom County, Washington





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#### **CONTRIBUTORS**

#### **Whatcom County Staff:**

Chris Elder, PDS Sarah Watts, PDS

#### **Agricultural Advisory Committee:**

Larry Davis, Chair
Matthew McDermott, Vice-Chair
Dave Buys
Jagjiwan Brar
Robin Fay
Barb Hento
Melodie Kirk
Anna Martin
Jeff Rainey
Lydia Strand
Dakota Stranik

#### **MEMORANDUM**

**TO:** Whatcom County Council

**FROM:** Larry Davis, Chair, Agriculture Advisory Committee Chair

**DATE:** September 9, 2019 **SUBJECT:** Rural Land Study

The attached update to the Whatcom County Rural Land Study reflects a collaborative effort of the Agricultural Advisory Committee (AAC) and County Planning and Development Services. The original Rural Land Study was presented to the County Council on March 13, 2007. The updated report will be presented to the County Council on September 24, 2019.

The initial goal for the AAC during its 2018-19 calendar year workplan was to begin examining the Immediate Priority recommendations embodied in the updated County Agricultural Strategic Plan that the Council approved in August 2018. We realized that the committee and Council would benefit from reviewing the Rural Land Study of 2007 (a designated 'Short-term Priority). We accomplished the review and will be primed for the 2019-2020 workplan year to settle on and forward to the Council recommendations for changes to the Rural Land Study.

The primary objective of reviewing the Rural Land Study was to identify and map areas within Rural 5 and 10 zones that are of agricultural significance and may require additional protection to ensure long-term agriculture viability (important toward supporting "...a minimum 100,000 acres of land are available for agricultural use to maintain the necessary land base to support an economically viable agricultural industry.")

The areas recognized in this update include the 2007 Rural Study Areas, which incorporated the Purchase of Development Rights program's original twelve target areas, and adds additional areas identified by the AAC. The Rural Land Study is a research document. It is meant to provide guidance in the development of heightened agricultural protection measures for the areas identified, and supports priorities listed in the Agricultural Strategic Plan. This report includes a map for each of the proposed areas identified in the study.

If you have any questions prior to the Council meeting, please do not hesitate to contact Chris Elder, the AAC's Planning and Development Services staff contact, at 360-778-5932.

Respectfully submitted:

Larry Davis, Chair Agricultural Advisory Committee

Signed on behalf of the other Agricultural Advisory Committee Members:

Anna Martin Jeff Rainey Dave Buys Jagjiwan Brar Melodie Kirk Barb Hento Dakota Stranik Robin Fay Lydia Strand Matthew McDermott

#### RURAL LAND STUDY UPDATE

September 10, 2019

#### Introduction:

Rapid residential development of agricultural and forest lands continues to highlight the urgent need for greater protection efforts by the community. The Whatcom County Council included the Agricultural Strategic Plan Implementation in the 2019 Annual Comprehensive Plan Docket, which addresses heightened protection of agricultural lands and support of the agricultural industry (Exhibit A-2018 Agricultural Strategic Plan).

Of primary significance in the update of the Agricultural Strategic Plan are the programs and policies contained therein that strive to 1) reduce development density, 2) reduce conversion and fragmentation of farmland, 3) preserve agricultural neighborhoods and 4) protect open space from fragmentation.

This update to the initial 2007 Rural Land Study report provides a detailed summary of the impacts of development on identified 'Rural Study Areas' from 2000 to 2018. Additionally this report provides an assessment of Agricultural zoned lands as well so as to provide comparable data and take advantage of the land assessment and review exercise.

#### Background:

The Whatcom County Council designated agricultural lands of long-term commercial significance in 1991 as required by the Growth Management Act, (RCW 36.70A.170). Land designated as agricultural was subsequently zoned Agriculture. Rural zoned lands do not include designated long-term, commercially significant agricultural land but do contain many working farms and prime agricultural soils. During the Comprehensive Plan adoption process, Whatcom County established 100,000 acres as the minimum quantity of land necessary to ensure the on-going viability of agriculture in Whatcom County. In an effort to meet the "critical mass" protection goal, Whatcom County adopted the Agricultural Protection Overlay (APO) as part of the 1997 development regulations.

Changes have occurred to the APO Chapter text since its 1997 adoption. Changes occurred in the following years: 1) 1998 – Ordinance 98-083; 2) 2001 – Ordinance 2001- 016; 3) 2002 – Ordinance 2002-060. Central to the APO ordinance is the reliance on site-specific criteria to determine whether or not APO provisions are required. APO determinations are largely dependent on whether a majority of the property is comprised of APO soils (as listed in WCC 20.38.040) or if the majority of the property is enrolled in Agricultural Open Space tax program. APO protections and requirements are initiated at the time of property subdivision. Therefore, under this approach agricultural protection is random and highly scattered.

It has been estimated that APO protection could be applied to 28,000 acres of Rural zoned land. While the County goal is to protect 100,000 acres of farmland, it is unclear as to whether the APO "protected parcels" will be in proximity to areas that are currently in agricultural uses. The usefulness of land for agricultural purposes is dependent on many factors including the quality of soils and the size of the protected parcel. Additionally, convenience and proximity to other agricultural land is important, particularly in developing areas where increasing traffic volume is making the use of farm vehicles more and more impractical and dangerous.

In response to criticisms about the "scattered" nature of protection provided by the current APO, and in response to the County Council's Comprehensive Plan Docketed items, the Agricultural Advisory Committee met over the summer of 2006 to identify areas in Rural 5 and 10 acre zones that are most important to maintaining the agricultural sector of Whatcom County. The current Agricultural Advisory Committee reviewed these previously identified Rural Study Areas and looked at other areas in Rural 5 and 10 acre zones to re-evaluate areas that are most important to maintaining the agricultural sector of Whatcom County.

#### Project Objective:

The primary objective of the rural land study was to identify and map areas within the Rural 5 and 10 Zones that are of agricultural significance and may require additional protection to ensure long-term agricultural viability. The areas identified in this study are in addition to and incorporate the Purchase of Development Rights program's original target areas, which were recognized as areas of significant agricultural importance and thusly have required additional protection.

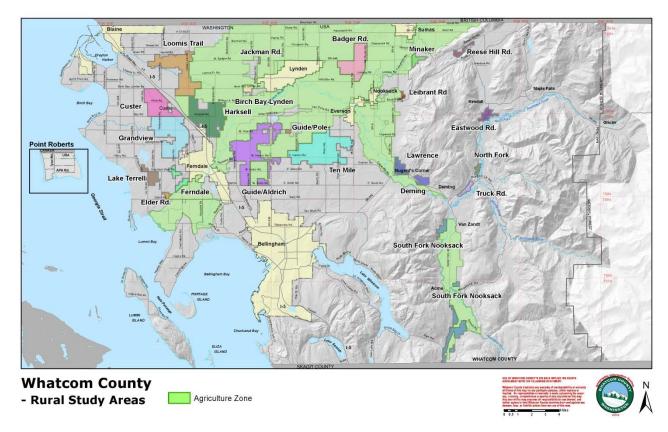
Staff used the following data to provide an assessment to the Agricultural Advisory Committee for consideration.

#### Project Data and Analysis:

- 1. Geographic Information System (GIS) Analysis and mapping
  - a. 2004 digital air photos
  - b. 2016 digital air photos (higher resolution)
  - c. NRCS SSURGO Soils layer
    - APO Soils layer
  - d. 2017 WSDA Crop distribution data layer
  - e. 2019 FEMA Flood layer
  - f. 2017 Critical Area habitat conservation area layers, Whatcom County
  - g. 2005 County Assessor data, Whatcom County
  - h. 2018 County Assessor data, Whatcom County
  - i. 2019 Zoning layer, Whatcom County
  - j. 2000 2018 Whatcom County PDS permit data
  - k. 2007 Rural Study Areas layer
  - 1. 2018 Rural Study Areas layer

#### **Area Selection Process:**

The Agricultural Advisory Committee, in conjunction with PDS staff, has identified 22 rural areas comprising approximately 28,449 acres that have high agricultural value. This represents an increase in acreage from the original Rural Study Area report. The 22 identified areas are shown on Map 1 below.



Map 1: 2019 Agricultural Advisory Committee Approved Rural Study Areas

The criteria for establishing these areas include a consideration of:

- 1. Proximity to active agricultural areas:
  - a. Adjacent to Agriculture District
  - b. In or adjacent to a PDR Target Area or previously identified Rural Study Area
  - c. Inclusion of area provides buffer between Ag zone and more intensive uses
- 2. Current land use characterized by agriculture visual analysis
- 3. High percentage of APO and prime soils
- 4. Parcelization of the area:
  - a. Acreage totals by parcel size
    - i. Total acreage by parcel size is used to determine the percent of area still in large (10+ acre) parcels
  - b. Number of parcels by given size
    - i. Breakdown by parcel size indicates character of land use in the area
- 5. Land use as identified on Assessors records (Agricultural Open Space)
- 6. Evaluation of forested areas for potential ecological benefits adjacent to agricultural use.

A summary of total acreage and potential additional development units (development rights) by area is included below in Table 1.

#### **Area Summaries:**

Summaries are included for each identified rural study area with the majority of data provided on the two maps created for each area as provided in Exhibit G. Exhibit G contains maps and graphs detailing specific characteristics of each area. Exhibit D provides a table of each area's change in land use from 2004 - 2016 and Exhibit E provides a table of the parcel size breakdown and identifies the number of existing and potential development units.

Exhibit H contains maps and graphs detailing specific characteristics of the Agriculture Zone. The Ag Zone was broken up into 6 regions to allow for a closer look at different areas of the Ag Zone. Additional data for these Ag Zone areas are included in the other exhibits as well.

#### Final Review and Conclusions:

This update to the Rural Land Study involved an in-depth analysis of County Rural 5 and 10 acres zoned lands, in addition to Agricultural zoned lands. The western portion of the County was depicted on maps that included the combination of air-photo, parcel layer, soils layer and other data sets referenced above. Each area of the County was carefully reviewed by the AAC and specific areas were identified as possible "keepers" or as not likely to provide significant benefit to overall agricultural productivity within the County.

The eastern boundary of the agricultural area has historically been the foothills, although there are exceptions – South Fork Valley, Minaker Road area, North Fork Road, Truck Road, and along South Pass Road that were included in this update due their continued agricultural use.

Area	Total Acres	Potential Additional Development Unit
Birch Bay-Lynden	249	19
Custer	2,058	114
Deming	318	46
East Badger	2,098	105
Eastwood Road	406	22
Elder Road	113	20
Ferndale	518	72
Grandview	3,682	319
Guide Aldrich	4,596	267
Guide/Pole	72	15
Harksell	2,992	236
Jackman Road	35	4
Lake Terrell	555	77
Lawrence	492	52
Leibrant	98	5
Loomis Trail	3,142	246
Minaker	282	22
North Fork	128	8
Reese Hill Road	258	17
South Fork	1,497	95
Ten Mile	4,633	320
Truck Road	227	11
Total Acreage	28,449	2,092

Table 1: 2018 Rural Study Areas

#### **Conclusions:**

The areas identified in this update comprise some of the best soils in close proximity to the heart of actively farmed land within Whatcom County and are experiencing significant development pressure and conversion to non-agricultural uses. The project's determination of proposed areas should not be viewed as a basis to foreclose agricultural activities in other areas of the County. Rather the focus of this study is identify those lands that are critically important for the reasons noted previously in the report – quality of soils, current land use, proximity to intensively farmed areas of the County, development pressure, ecological benefits, and agricultural neighborhoods.

#### **Recommendation:**

The Agricultural Advisory Committee wanted to present its findings to the Whatcom County Council and recommends that Whatcom County adopt heightened agricultural protection measures for the rural areas identified by this study. Existing programs, such as the Purchase of Development Rights Program and Open Space Farm and Agriculture Current Use Assessment program, are known to be effective tools to provide heightened agricultural protection measures. The Agricultural Advisory Committee will develop and recommend additional heightened agricultural protection measures during its 2019-2020 committee season.

#### **Exhibit A**

# Whatcom County Agricultural Strategic Plan





Recommended by the Agricultural Advisory Committee
Approved by Whatcom County Council on August 8, 2018
Resolution 2018-027

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#### **Overview**

Whatcom County Council approved **Resolution 2009-040** on July 7th, 2009 declaring the County Council's goals for Farmland Preservation, its priorities for consideration and adoption of policies to further farmland preservation, and requesting the County Administration to allocate staff support to accommodate this important policy initiative.

The Agriculture Strategic Plan was originally created to support the goals of this resolution and help direct Whatcom County Planning and Development Services, as well as other County Departments, in achieving the goals and supporting agricultural efforts throughout Whatcom County. This update continues those efforts.

This update of the Agricultural Strategic Plan coordinates and integrates the efforts underway through the:

- Purchase of Development Rights Oversight Committee
- Agricultural Advisory Committee
- Transfer of Development Rights/Purchase of Development Rights Workgroup
- Planning Commission
- County Council

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#### Whatcom County Agricultural Advisory Committee

May 29, 2018

Whatcom County Executive Whatcom County Courthouse, Suite 108 311 Grand Avenue Bellingham, Washington 98225 Whatcom County Courthouse, Suite 105 311 Grand Avenue Bellingham, WA 98225

Executive Louws and Council Members,

It has been seven years since the last update of the County Agricultural Strategic Plan. Actions have been taken and implemented on the plan adopted by the Council in June 2011. The primary work goal of the Agricultural Advisory Committee (AAC) this year was to complete a review of the 2011 strategic plan, identify updates, and submit our recommendations to the Council by the conclusion of our May meeting. We have met our goal by submittal of the accompanying report and recommendations therein.

One of the objectives identified in the 2011 plan was/is, "To ensure a minimum of **100,000 acres of land area available for agricultural use** to maintain the necessary land base to support an economically viable agricultural industry." The AAC recommends reaffirmation of this objective. We further recommend that this objective be made a standing goal or policy of the Council.

While this objective is certainly important to the maintenance of an economically viable agriculture industry in Whatcom County, the associated county policy framework/infrastructure must be aligned to complement that goal. Toward that end, the AAC recommends asking three filtering questions when considering ordinance changes that bear upon the agricultural strategic plan:

- 1. "Will this policy proposal support or hinder the implementation of the ag strategic plan?"
- 2. "Will this policy proposal support or hinder the maintenance of an economically viable ag sector in the county?"
- 3. "Will this policy proposal advance a careful balance between an economically viable ag sector and environmental objectives in the county?"

Chris Elder is an outstanding member of the county's professional staff. His support to the AAC has been exemplary, even knowing he has other assigned responsibilities within PDS. Staffing support for the AAC is critical to the importance of the County Agricultural Strategic Plan. The AAC advocates for additional staff support to assure timely attention to and completion of the elements of the agricultural strategic plan that have yet to be fulfilled (see Page 4 of the report). Such an investment on the part of the Council would underscore its commitment to sustaining an economically viable agriculture sector.

We stand ready to respond to any questions the Council may have regarding the report and recommendations. As indicated by letter early this year, we also stand ready to work with the Council and truly be a working, advisory committee.

Respectfully submitted:

Larry Davis, Chair

Agricultural Advisory Committee

Dave Buys, Vice Chair

Agricultural Advisory Committee

#### Signed on behalf of other Agricultural Advisory Committee members:

Lesa Boxx, Barb Hento, Anna Martin, Jeff Rainey, Kristi Roberts, Jagjiwan Brar, Mike Hawley, Melodie Kirk, Matthew McDermott Page 3 Agricultural Strategic Plan

**Purpose:** To describe the role Whatcom County Planning and Development Services will play in implementing an agricultural program consistent with County Council Resolution <u>2009-040</u> and Comprehensive Plan goals.

The **overall objectives** of Whatcom County Council as enacted by Planning and Development Services' agricultural program are:

- 1. To ensure a minimum of 100,000 acres of land are available for agricultural use to maintain the necessary land base to support an economically viable agricultural industry;
- 2. To advocate for policies and programs which support local solutions and balanced approaches that protect agricultural and natural resource needs in an effort to ensure economic viability;
- 3. To support agricultural planning efforts and production techniques that ensure local agricultural producers engage in strategic conversations about the connections between economic viability and local, state, and federal regulations, continuing to use the Agricultural Advisory Committee, the Purchase of Development Rights Oversight Committee, as well as other local agricultural groups;
- 4. To create and maintain strong, clear, concise, and effective land and water programs and regulations that benefit the agricultural industry and are in compliance with federal and state law;
- 5. To address policy and infrastructure shortcomings that impact local agricultural producers and businesses, such as farmworker housing;
- 6. To ensure sufficient physical and intellectual infrastructure, such as research and community education remain available to support the agricultural industry;
- 7. To support new and beginning farmers in acquiring farmland and support effective transition of farmland to the next generation of farmers; and
- 8. To effectively measure progress toward these objectives and communicate this with the population of Whatcom County.



#### Strong and Clear Agricultural Programs and Regulations

The overarching highest priority is the **continuance and maintenance of the "Agriculture Program" within the county government**. Continuing or additional staff support (a minimum of 1.0 FTE) is necessary in order to achieve momentum and continuity in pursuit of the agriculture program objectives. The amount and professional level of support available will determine both the timing and quantity of work achieved. Maintaining support for the AAC is a key part of an effective agricultural program, as well as the other subtasks below. Programs and priorities listed below were developed by the Agricultural Advisory Committee and reflect current ongoing programs and a prioritized list of efforts that the Agricultural Advisory Committee believes should be addressed to ensure the future of agriculture in Whatcom County.

#### **Immediate Priorities:**

- Designating Agricultural Lands of Long-term Commercial Significance
- Review Agriculture Zoning Code to ensure uses support and do not interfere with overall agricultural use of property and neighboring properties

#### Short-term Priorities (over the next 1 to 3 years):

- Review Rural Study Areas for additional protective measures
- Development of flexible policy framework that allows variable development actions that provide for protection of the best agricultural areas while supporting development at zoned densities

#### Medium-term Priorities (2 - 5 years):

Natural Resource Marketplace

#### Long-term Priorities (3 to 10 years):

- Right to Farm Enforcement
- Water system planning & agricultural planning coordination
- Mitigation for the loss of agricultural land
- Improved coordination with partner agencies to support improved agricultural permit review

#### **Ongoing Programs:**

- Purchase of Development Rights (PDR)
   Program
- Current Use Assessment through Open Space Taxation Act



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#### **Ongoing Programs:**

Responding to the loss of County farmland, Whatcom County Executive initiated the development of a Purchase of Development Rights
Program in September of 2001. A PDR Advisory Committee comprised of farmers, citizens and conservation organizations was instructed to

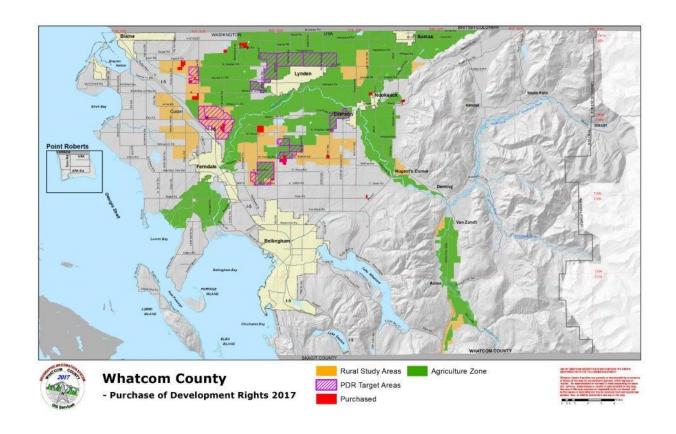


PURCHASE OF DEVELOPMENT RIGHTS PROGRAM

assist County staff in developing a proposal for County Council consideration. The PDR Program offers a voluntary tool for the preservation of productive agricultural land in the County that will:

- Provide farmers with the market based economic value for agricultural land without selling the land.
- Support and promote ongoing agricultural activity by offering an attractive option for farmers and landowners.

All applicants for the PDR Program must be within an Agriculture or Rural zoning designation. Valid applications are reviewed to determine if the acquisition of development rights will promote the PDR program's goals and priorities. Selection criteria have been developed to guide, but not control, the review and assessment of eligible properties. Applications are scored based on factors such as soil type and classification, size of parcel (s), number of development rights offered, proximity to other conserved lands, percent farmed, water rights availability, as well as conservation and historical significance.



#### **Ongoing Programs:**

#### Current Use Tax Assessment under Open Space Taxation Act as defined in Chapter 84.34 RCW

- Open Space Farm and Agricultural Land
- Open Space Land Farm and Agriculture Conservation

The Open Space Taxation Act, enacted in 1970, allows property owners to have their open space, farm and agricultural, and timber lands valued at their current use rather than at their highest and best use. The Act states that it is in the best interest of the state to maintain, preserve, conserve, and otherwise continue in existence adequate open space lands for the production of food, fiber, and forest crops and to assure the use and enjoyment of natural resources and scenic beauty for the economic and social well-being of the state and it citizens.

#### Open Space Farm & Agricultural Land (OSAG)

Farm and Agricultural land is defined as either:

- Any parcel of land that is 20 or more acres or multiple parcels of land that are contiguous and total 20 or more acres and are:
  - a. Devoted primarily to the production of livestock or agriculture commodities for commercial purposes
  - Enrolled in the federal conservation reserve program or its successor administered by the United States department of agriculture
  - c. Other similar commercial activities as may be established by chapter 458-30 WAC.
- 2. Any parcel of land that is five acres or more but less than twenty acres, is devoted primarily to agricultural uses, which has produced a gross income from agricultural uses equivalent to:
  - a. Prior to January 1, 1993, \$100 or more per acre per year for three of the five calendar years preceding the date of application for classification.
  - b. On or after January 1, 1993, \$200 or more per acre per year for three of the five calendar years preceding the date of application for classification.
- 3. Any parcel of land that is five acres or more but less than 20 acres, is devoted primarily to agricultural uses, and has standing crops with an expectation of harvest within:
  - a. Seven years and a demonstrable investment in the production of those crops equivalent to \$100 or more per acre in the current or previous calendar year.
  - b. Fifteen years for short rotation hardwoods and a demonstrable investment in the production of those crops equivalent to \$100 or more per acre in the current or previous calendar year.
- 4. For parcels of land five acres or more but less that 20 acres, "gross income from agricultural uses" includes, but is not limited to, the wholesale value of agricultural products donated to nonprofit food banks or feeding programs.
- 5. Any parcel of land less than five acres devoted primarily to agricultural uses and has produced a gross income of:
  - a. Incidental uses compatible with agricultural purposes, including wetland preservation, provided such use does not exceed 20 percent of the classified land.
  - b. Land on which appurtenances necessary for production, preparation, or sale of agricultural products exist in conjunction with the lands producing such products

## THIS PROPERTY IS DESIGNATED OPEN SPACE

PURSUANT TO THE PROVISIONS OF RCW. 84.34, PUBLIC ACCESS IS PERMITTED FOR RECREATIONAL PURPOSES SUBJECT TO THE TERMS AND CONDITIONS OF WHATCOM COUNTY OPEN SPACE AGREEMENT No.

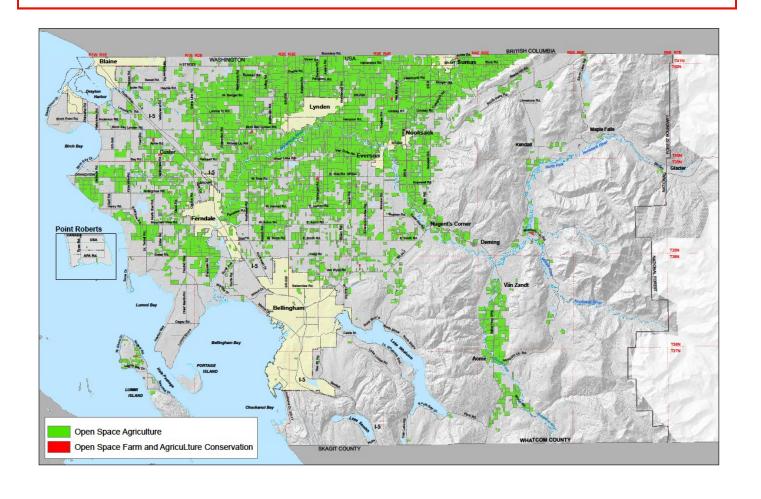
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- c. Any non-contiguous parcel one to five acres, that is an integral part of the farming operation.
- d. Land on which housing for employees or the principal place of residence of the farm operator or owner is sited provided the use of the housing or residence is integral to the use of the classified land for agricultural purposes, the housing or residence is on or contiguous to the classified land, and the classified land is 20 or more acres.
- e. Land that is used primarily for equestrian-related activities for which a charge is made, including, but not limited to, stabling, training, riding, clinics, schooling, shows, or grazing for feed. Depending on the number of classified acres, the land may be subject to gross income requirements.
- f. Land that is primarily used for commercial horticultural purposes, including growing seedlings, trees, shrubs, vines, fruits, vegetables, flowers, herbs, and other plants in containers, whether under a structure or not. For additional criteria regarding this use, please refer to RCW 84.34.020(2)(h).

#### Open Space Land Farm and Agriculture Conservation (OSFACL)

Farm and Agriculture Conservation Land is defined as any land meeting the definition of "farm and agricultural conservation land," which means either:

- a. Land previously classified under the farm and agricultural classification that no longer meets the criteria and is reclassified under open space land; or
- b. "Traditional farmland," not classified, that has not been irrevocably devoted to a use inconsistent with agricultural use, and that has a high potential for returning to commercial agriculture.



#### **Immediate Priorities:**

#### Designating Agricultural Lands of Long-term Commercial Significance

As part of the 2016 Comprehensive Plan Update process, additional language was added to Policy 8A-3.

- Policy 8A-3 states that the criteria for designating or de-designating lands under the Agriculture land use designation shall be considered on an area-wide basis. When applying the following criteria, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term, and to retain agricultural support businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities. One of the criteria was updated to better reflect language from the Washington State Growth Management Act and the updated language is contained below.
- 3. The land has long term commercial significance for agriculture. In determining this factor, consider the following nonexclusive criteria:
  - a. The majority of the area contains Prime Farmland Soils as determined by the Natural Resource Conservation Service (NRCS).
  - b. The area may contain 100-year floodplains as delineated by the Federal Emergency Management Agency (FEMA).
  - c. Land use settlement patterns, the intensity of nearby uses, and the history of approved land development permits are generally compatible with agricultural practices.
  - d. A majority of the area is composed of agricultural operations that were historically in agriculture prior to 1985.
  - e. The predominate parcel size in the area is large enough to adequately maintain agricultural operations.
  - f. The availability of public services.
  - g. The availability of public facilities such as roads used to transport agricultural products.
  - h. Special purpose districts that are oriented to enhancing agricultural operations such as drainage improvement, watershed improvement, and flood control exist.
  - i. The area has a pattern of landowner capital investment in agricultural operations improvements including irrigation, drainage, manure storage, the presence of barns and support buildings, enhanced livestock feeding techniques, agricultural worker housing, etc.
  - j. The area contains a predominance of parcels that have current use tax assessment derived from the Open Space Taxation Act.
  - k. The area's proximity to urban growth areas.
  - I. The area's proximity to agricultural markets.
  - m. Land value under alternative uses.

The Agricultural Advisory Committee will review lands in Whatcom County to determine if the designation of agricultural lands of long-term commercial significance is accurate based on these updated criteria.

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#### **Immediate Priorities:**

Review Agriculture Zoning Code to ensure uses support and do not interfere with overall agricultural use of property and neighboring properties.

There are many uses currently allowed within the Agriculture District through permitted, accessory, administrative approval, and conditional use permits. The AAC would like to review these uses to determine whether uses support and do not interfere with agricultural activities in this zone. The Agriculture District zoning code can be found in Chapter 20.40 of the Whatcom County Code.



#### Short-term Priorities (over the next 1 to 3 years):

#### Review Rural Study Areas for additional protective measures

Work with the AAC and greater community to identify if any new or changed zoning designations are needed, building on the direction outlined in Resolution 2009-040. Once identified clearly and in accordance with RCW 36.70A.170, implement – write draft ordinance to change development regulation language, zoning maps, and/or Comprehensive Plan language.

#### Flexible Policy Framework

The AAC believes there needs to be a flexible policy framework that allows variable development actions that provide for the protection of the best agricultural areas while supporting development at zoned densities. The AAC supports continued examination of a parcel reconfiguration tool as one development action option.

#### Medium-term Priorities (2 - 5 years):

#### **Natural Resource Marketplace**

Work with the AAC and other relevant groups on water issues, density credit program development, and other planning-related incentive programs that have the potential to use the marketplace to compensate farmers for the services they provide. This effort was initiated primarily due to farmers' comments that they would be willing to trade off their ability to develop their land in exchange for obtaining the legal right to water.

#### Long-term Priorities (3 to 10 years):

#### **Right to Farm Enforcements**

The AAC recommendation is to review the Right to Farm ordinance to make it more effective at the farm level. Work items under this task include looking at strengthening farmers' recourse against those who bring failed lawsuits against them, coordination with law enforcement with regard to complaints from nearby non-farming neighbors and to require title companies and real estate professionals to effectively communicate this ordinance with land purchasers.

#### Water system planning & agricultural planning coordination

The County should pursue a comprehensive water supply plan that includes out-of-stream uses including irrigation and other agricultural water needs. Agriculture program staff need to coordinate to ensure the water needs of the agricultural community are incorporated into future water planning efforts.

#### Mitigation for the loss of Agricultural land

The AAC has expressed the desire to explore agricultural mitigation options and potential regulations. Currently there is the perception that critical area concerns override agricultural concerns. Agricultural lands are lost due to conversions of the land to development, critical areas banking, and other types of conversions. The agricultural mitigation task would entail the development of policy recommendations to govern all conversions away from agricultural land.

#### Improved Coordination with partner agencies to support agricultural permit review

Project implementation for agricultural projects can be challenging for producers when multiple agency review is required. The AAC recommends continued coordination with the multiple partner agencies to improve agricultural permit review processes.



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#### Public Outreach, Input and Education

Public committees are an invaluable resource for county staff and policy makers. The agricultural community sees potential changes to county agricultural policies and regulations continuing to go through the Agricultural Advisory Committee for recommendations, and Purchase of Development Rights policy and transaction recommendations continuing to go through the PDR Oversight Committee. State Growth Management law requires early and continuous public involvement, and these committees are an important way to engage the farming community (and others interested) on a regular basis in planning-related agricultural issues.

When it comes time to engage a broader audience in programs or regulatory discussions, farmers recommend outreach and publication in their news outlets, and when possible, in-person discussions at meetings already attended by those in the farming community. Outreach should provide opportunities for farmers to talk with other farmers about their experiences related to county programs.

Maintaining these committees also provides the broader public outside the agricultural community to engage in discussions related to agricultural programs, policies, and regulations. They are welcomed and accommodated through open public meetings of both advisory committees, as well as the formal public processes that occur as changes make their way through the Planning Commission and County Council.

#### Tasks

- Maintain regular meetings of Agricultural Advisory Committee
- Maintain regular meetings of PDR Oversight Committee
- Publish and distribute the Natural Resource Newsletter at least twice per year
- Support outreach discussions with agricultural groups and the community at large

#### **Whatcom County Comprehensive Plan**

In August of 2016, Whatcom County Council adopted the updated Comprehensive Plan. In Chapter 8, Resource Lands, goals related to Agriculture include:

- **Goal 8A:** Conserve and enhance Whatcom County's agricultural land base for the continued production of food and fiber.
- **Goal 8B:** Maintain and enhance Whatcom County's agricultural product industry as a long-term and sustainable industry.
- Goal 8C: Preserve and enhance the cultural heritage that is related to agriculture.
- Goal 8D: Reduce land use conflicts between Whatcom County's agriculture and non-agricultural landowners.
- **Goal 8E:** Work with agricultural land users to find efficient and effective cooperative ways to protect and improve habitat of threatened and endangered species through education and incentive programs.
- Goal 8F: Strive to ensure adequate water supplies to support a thriving agricultural sector.

Each Comprehensive Plan goal provides direction to County staff and residents as to the priorities of Whatcom County. Policies listed under each goal provide additional guidance as to how to meet each goal. Look at Appendix B for the complete Agricultural Resource Land excerpt from the 2016 Whatcom County Comprehensive Plan.

#### Land Available for Agricultural Use

Whatcom County has identified the minimum of agricultural land necessary to be available for agricultural use as 100,000 acres, in order to keep the agricultural industry – and those businesses that support it – economically viable.

According to the 2012 AgCensus, there are: (See Page 20-21 for additional 2012 AgCensus information)

- 1,702 farms in Whatcom County
- growing crops on 115,831 acres
- contributing to an overall farmgate value of \$357 million dollars.

These statistics place Whatcom County as one of the top 10 agricultural economies in Washington State and one of the top 3 agricultural economies in the Puget Sound region.

In order to address the 100,000 acre goal, an understanding of terms relating to agriculture must be described.

#### What is agriculture?

Agriculture is defined as the science or practice of farming, including growing crops and raising animals for the production of food, fiber, fuel and other products. Agriculture in Whatcom County consists of a diversity of crop types including dairy, raspberry, blueberry, seed potatoes, mixed vegetables, beef, tree fruits, and several other crop types.

#### What does it mean for land to be "available for agricultural use"?

Land is generally characterized as being available for agricultural use if the land could be farmed. This indicates that streams, forests, wetlands, and non-farm related homes and businesses would be unavailable for agricultural use.

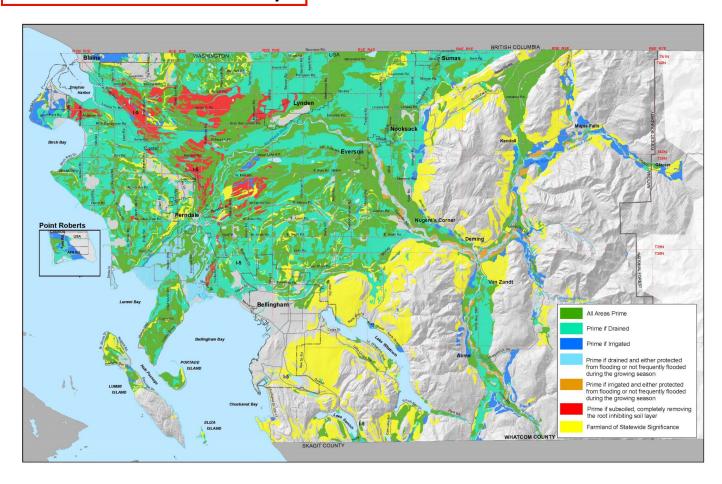
#### According to the US Department of Agriculture:

A **Farmer/Rancher** is an owner and/or operator who has a vested interest in the operation of the farm or ranch.

#### A **beginning farmer** is defined as one who:

- Has not operated a farm or ranch for more than 10 years
- Does not own a farm or ranch greater that 30 percent of the average size farm in the county as determined by the most current Census for Agriculture

#### **Prime Soils in Whatcom County**



Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland (Soil Survey of Whatcom County Area, Washington, USDA, Soil Conservation Service, 1992).

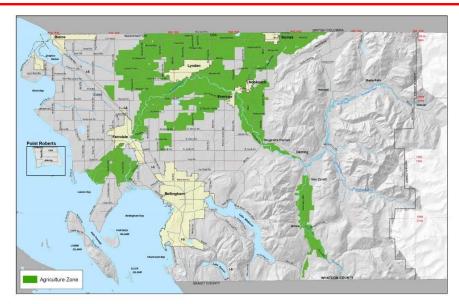
Natural Resource Conservation Service (NRCS) policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No.21, January 31, 1978, p.4030 through p. 4033. This document states that prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed, including water management, according to acceptable farming methods. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.

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#### Agriculture Zone

The **Agriculture Zone** consists of **87,353 acres** as of May, 2018. This is down from 87,525 acres in 2011, when the Agriculture Strategic Plan was originally adopted. This loss in acreage is due to expansion of small cities located adjacent to the Agriculture Zone. The purpose and allowed uses within the Agriculture Zone are described in Whatcom County Code Chapter 20.40. The primary purposes of this district are to implement the agricultural designation of the Comprehensive Plan, established pursuant to RCW 36.70A.170, preserve, enhance and support the production of food and fiber in Whatcom County, to maintain a sufficiently large agricultural land base to ensure a viable agriculture industry and to maintain the economic feasibility of supporting services.

Policy 8A-3: The criteria for designating or de-designating lands under the Agriculture land use designation shall be considered on an area-wide basis. When applying the following criteria, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term, and to retain agricultural support businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities. The criteria are as follows:



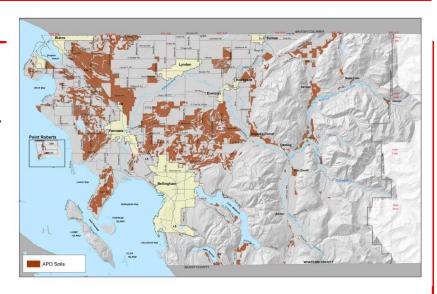
- 1. The land is not already characterized by urban growth. In determining this factor, the County should consider WAC 365-196-310 and RCW 36.70A.030(19).
- 2. The land is used or capable of being used for agricultural production. In making this determination, the County shall use the land-capability classification system of the U.S. Department of Agriculture Natural Resources Conservation Service. These eight classes are incorporated into map units and are based on the growing capacity, productivity, and soil composition of the land.
- 3. The land has long term commercial significance for agriculture. In determining this factor, consider the following nonexclusive criteria:
  - a. The majority of the area contains Prime Farmland Soils as determined by the Natural Resource Conservation Service (NRCS).
  - b. The area may contain 100-year floodplains as delineated by the Federal Emergency Management Agency (FEMA).
  - c. Land use settlement patterns, the intensity of nearby uses, and the history of approved land development permits are generally compatible with agricultural practices.
  - d. A majority of the area is composed of agricultural operations that were historically in agriculture prior

to 1985.

- e. The predominate parcel size in the area is large enough to adequately maintain agricultural operations.
- f. The availability of public services.
- g. The availability of public facilities such as roads used to transport agricultural products.
- h. Special purpose districts that are oriented to enhancing agricultural operations such as drainage improvement, watershed improvement, and flood control exist.
- i. The area has a pattern of landowner capital investment in agricultural operations improvements including irrigation, drainage, manure storage, the presence of barns and support buildings, enhanced livestock feeding techniques, agricultural worker housing, etc.
- j. The area contains a predominance of parcels that have current use tax assessment derived from the Open Space Taxation Act.

#### **Agriculture Protection Overlay**

The purpose of the Agriculture Protection Overlay (APO), fully defined in Whatcom County Code Chapter 20.38, is to maintain and enhance commercial agricultural activity and further protect open space resources within Whatcom County; further the county's efforts in meeting long-term agricultural needs; provide a reasonable mix of uses and activities which may enhance the economic resources available to the farm; and provide for a variety of uses within the rural areas which are not inconsistent with or in-



compatible with the use of lands within the area for agricultural activities.



The Agriculture Protection Overlay applies to parcels:

- Located within any Rural 5 or 10 zone
- larger than 20 acres
- containing more than 50% APO soils

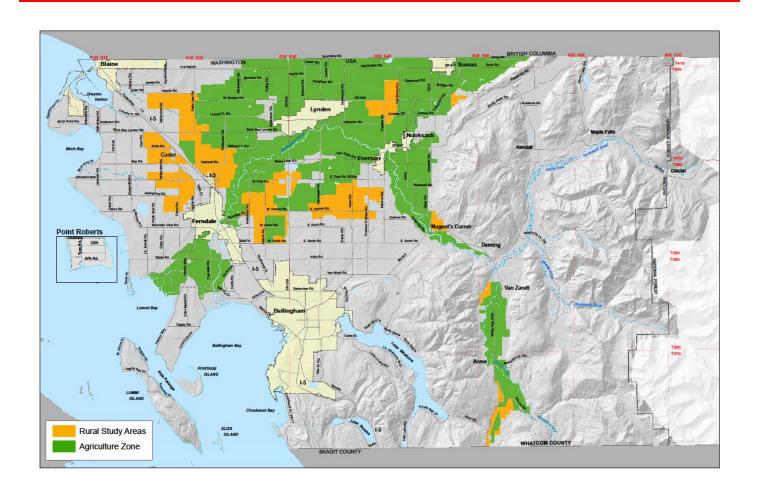
Parcels meeting the above criteria wishing to subdivide are required to cluster densities and maintain a large agricultural reserve tract, consisting of at least 75% of the original parent parcel. The intent of this code was to maintain a large agricultural area while allowing for development at the density allowed by the zoning code.

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#### **Rural Study Areas**

The Whatcom County Rural Land Study: A Collaborative Report Identifying Rural Areas of Agricultural Significance was completed in 2007. The primary objective of the rural land study was to identify and map areas within the Rural 5 and 10 Zones that are of agricultural significance and may require additional protection to ensure long-term agricultural viability. Project data was collected that included air photos, APO Soils, Critical Areas, Assessor data, Purchase of Development Rights Target Areas, and NOAA Coastal Change Analysis Program (2004) data based on Landsat Images (2000). The Agricultural Advisory Committee, in conjunction with PDS staff, identified 9 rural areas comprising over 21,000 acres that have high agricultural value. In 2012, the rural study areas were re-evaluated and a total 10 rural areas were identified representing 25,407 acres. The criteria for establishing these areas includes a consideration of:

- Proximity to active agricultural areas
- Current land use characterized by Agriculture
- High percentage of APO soils
- Parcelization of the area
- Land use as identified on Assessors records
- Evaluation of forested areas for potential agricultural use



#### **Measurements toward Progress**

By tracking basic information related to agriculture and reporting results on a regular basis, Whatcom County can provide a valuable service to the agricultural community. There is no known source of compiled multiagency data on agricultural issues in Whatcom County, yet data is a critical component to measuring progress. The county could compile data from other sources and make it available in a user friendly way to the broader community. Periodically, the county could add new data gleaned from staff GIS analysis. The information would relate back to the Agriculture program objectives in order to know whether programs and policies are achieving the intended results.

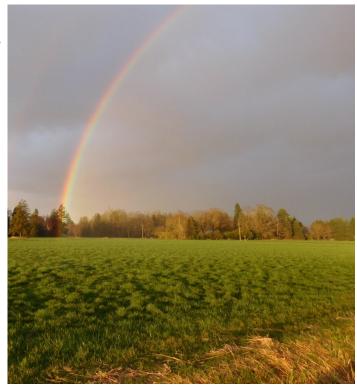
Some of the indicators useful for providing an agricultural status report include:

- 1. Mapping of land currently in agricultural use Methods used would be consistent with land characterization effort underway by Planning and Development Services described in Appendix F; reported as new aerial photos become available
- 2. Permits Agricultural building permits and new single family residential permits in Agriculture Zone and Rural Study Areas, available on an annual basis
- 3. New irrigation water rights issued, available through the Department of Ecology
- 4. Exempt wells installed for domestic and agricultural use
- 5. Market value of agricultural products sold US Agricultural Census
- Number of Agricultural Advisory Committee meetings held, Purchase of Development Rights Oversight
  Committee meetings held, and other opportunities for public participation related to the agricultural program
- 7. Area of farms enrolled with WA Dept. of Agriculture, Farm Service Agency or Whatcom Conservation District in a farm planning program
- Incentive program participation including Open Space Farm and Agriculture current use taxation, Purchase of Development Rights program, and others
- Acreage and changes in acreage of various cropping types

Tasks associated with performing this assessment include:

- Mapping agricultural lands based on Whatcom County aerial photos
- Compiling data and publishing an agricultural status report

The Agricultural Status Report for the years 2000 through 2017 has been completed and included as part of this 2018 Agriculture Strategic Plan (Pages 19 - 25).



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#### 2018 Agricultural Status Report (pages 18 - 26)

The following pages contain the 2018 Agriculture Status Report using indicators and measurements identified during the Agriculture Strategic Plan development process. Throughout this report, AG Zone refers to the Agriculture Zone and RSA refers to Rural Study Areas.

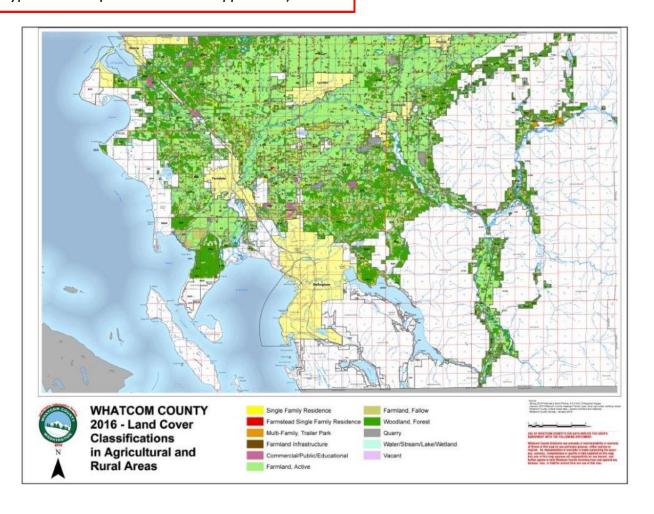
1. Mapping of land currently in agricultural use — Methods of land characterization effort by Planning and Development Services described below; new aerial photos are higher resolution and increase accuracy as compared to previous years.

Data used for the land characterization effort include:

- Pictometry aerial photos, oblique and 4-6 inch orthocorrected images
- NAIP aerial imagery, 1 meter—very little detail
- Whatcom County Assessor Parcel Layer, land use codes, building values
- Whatcom County Critical Areas data—stream corridors and wetlands
- Whatcom County Zoning
- 2000 Land Cover Designations, LandSat

(Item type and description contained in Appendix C)

Land Cover	(acres)	(acres)
AG Zone	2012	2017
Active	82,426	82,852
Fallow	4,809	4,639
Infrastructure	3,835	3,907
Farmstead Home	2,939	2,979
RSA	2012	2017
Active	13,641	13,559
Fallow	522	489
Infrastructure	712	718
Farmstead Home	816	836

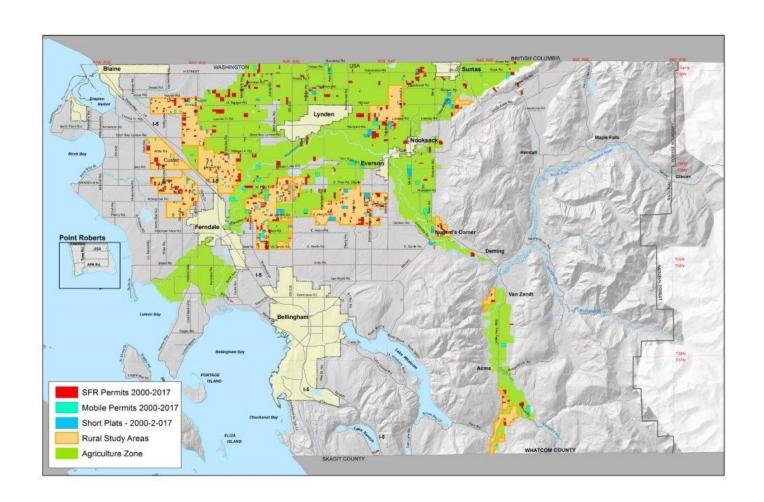


#### 2. Permits - Agricultural building permits and new single family residential permits in the Agriculture zone and Rural Study Areas, available on an annual basis.

Whatcom County Code Title 20 Zoning is intended to further the goals and policies of the Whatcom County Comprehensive Plan by providing the authority for and procedures to be followed in regulating the physical development of Whatcom County, through coordinating the execution of both public and private projects with respect to all subject matters utilized for developing and servicing land.

The table presented depicts the number SFR (single family residences), Mobile (mobile homes), and Short Plat (land divisions of up to 5 new lots). For the purposes of this Ag Strategic Plan, permits approved have been grouped by the time period before the original Ag Strategic Plan (2000—2009) and between the original and this updated Ag Strategic Plan (2010—2017). For future Agricultural Status Reports, every year will be tracked independently. It should also be taken into account that the Ag Zone represents approximately 87,353 acres and the Rural Study Areas represent 25,407 acres, therefore the number of permits issued have different relative impacts on the overall agricultural neighborhood.

Permits Issued	(# of permits)	(# of permits)						
AG Zone	2000 - 2009	2010 - 2017						
SFR	132	42						
Mobile	49	14						
AG Short Plat	1	16						
RSA	2000 - 2009	2010 - 2017						
SFR	249	127						
Mobile	90	26						
Short Plat	36	7						
	= =							



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#### 2018 Agricultural Status Report

#### 3. New irrigation water rights issued, available through the Department of Ecology.

It is the understanding of staff that no new permanent irrigation water rights have been issued by the Washington State Department of Ecology since before the last Agricultural Strategic Plan was completed.

#### 4. Exempt wells installed for domestic and agricultural use

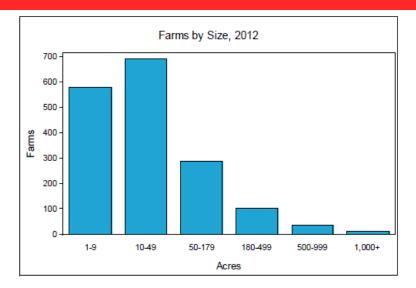
A comprehensive assessment of exempt wells installed for domestic and agricultural use has not yet been completed. Once a more comprehensive assessment has been completed this information will be included in future Agriculture Status Reports.

#### 5. Agricultural Census Data of Whatcom County {2012 & 2007, USDA}

#### (including Skagit, Snohomish, King Counties for context)

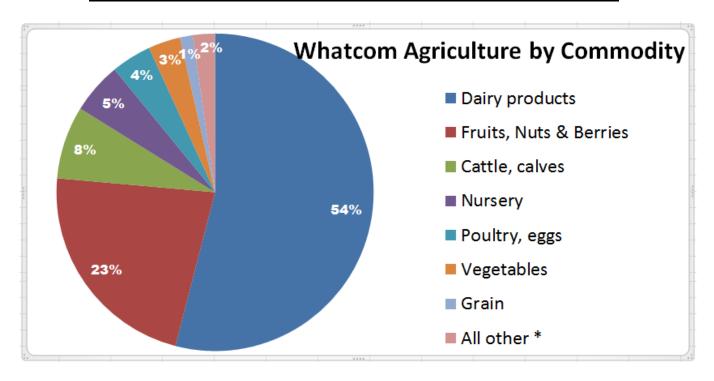
Whatcom County leads in both increases in the total number of farms and acres farmed among these Puget Sound Counties.

	T		T		1
ltem	Year	Whatcom	Skagit	Snohomish	King
Number of Farms	2012	1,702	1,074	1,438	1,837
Number of Farms	2007	1,483	1,215	1,670	1,790
% change in Number of Farms	2012 to 2007	+ 15 %	- 12 %	- 14%	+ 3 %
Land in Farms	2012	115,831	106,538	70,863 acres	46,717 acres
Land in Farms	2007	102,584	108,541	76,837 acres	49,285 acres
% change in Land in Farms	2012 to 2007	+ 13 %	- 2 %	- 8 %	- 5 %
Average Size of Farms	2012	68 acres	99 acres	49 acres	25 acres
Average Size of Farms	2007	69 acres	89 acres	46 acres	28 acres
% change in Average Farm Size	2012 to 2007	- 1 %	+ 11 %	+ 7 %	- 11 %
Market Value of Products Sold	2012	\$357,312,000	\$272,275,000	\$139,486,000	\$120,749,000
Market Value of Products Sold	2007	\$326,450,000	\$256,248,000	\$125,619,000	\$127,269,000
% change in Market Value	2012 to 2007	+9%	+ 6 %	+ 11 %	- 5 %
Crop Sales	2012	\$119,816,000	\$201,007,000	\$63,216,000	\$44,012,000
Livestock Sales	2012	\$237,496,000	\$71,268,000	\$76,270,000	\$76,737,000
Average Sales per farm	2012	\$209,937	\$253,515	\$97,000	\$65,732
Average Sales per farm	2007	\$220,128	\$210,904	\$75,221	\$71,100
Average age of principal operator	2012	57.4	58.4	58.5	57.1
Principal operators by primary occu	pation (2012)				
Farming		773	515	511	814
Other		929	559	927	1023



Farms by size:	Number
2012	of Farms
1 to 9 acres	578
10 to 49 acres	693
50 to 179 acres	287
180 to 499 acres	101
500 to 999 acres	33
1,000 acres or more	10

Commodity	# Farms	N	Market Value (2012)	<u>Percent</u>
Dairy products	114	\$	193,042,000	54%
Fruits, Nuts & Berries	252	\$	79,978,000	22%
Cattle, calves	520	\$	26,535,000	7%
Nursery	40	\$	18,697,000	5%
Poultry, eggs	201	\$	14,641,000	4%
Vegetables	101	\$	11,693,000	3%
Grain	71	\$	4,687,000	1%
All other *	403	\$	8,039,000	2%
Total	1,702	\$	357,312,000	100%



### 6. Number of Agricultural Advisory Committee meetings held, Purchase of Development Rights Oversight Committee meetings held, and other opportunities for public participation related to the agricultural program

- The Agricultural Advisory Committee has a scheduled 7 meetings annually
- The Purchase of Development Rights Oversight Committee has a scheduled 11 meetings annually
- The Transfer of Development Rights/Purchase of Development Rights Workgroup met 14 times between March 2017 and June 2018
- 7. Area/Number of farms enrolled with Washington Department of Agriculture(WSDA), Whatcom Conservation District or Whatcom County in a farm planning program (As of May 2018)
- WSDA reports 98 licensed dairies have certified farm plans on 32,800 acres
- WCD reports that 89 farm plans were completed in 2017
- Whatcom County reports 149 farms have participated in the Conservation Program on Agricultural Lands
- 8. Incentive program participation:
  - A. Current use taxation

2017 Current Use Assessment En (acres)	ollment
Open Space Farm and Agricultural Land	106,258
Open Space Farm and Agriculture Conservation Land	244

B. Incentive program participation: Purchase of Development Rights program, and others.

The PDR Program has completed 19 agricultural conservation easements representing the protection of 919 acres extinguishing 130 development rights. The PDR Program is currently working with an additional 18 PDR applicants representing an additional 943 acres. Whatcom County Council has approved staff to move forward towards completion of 7 of these applications.

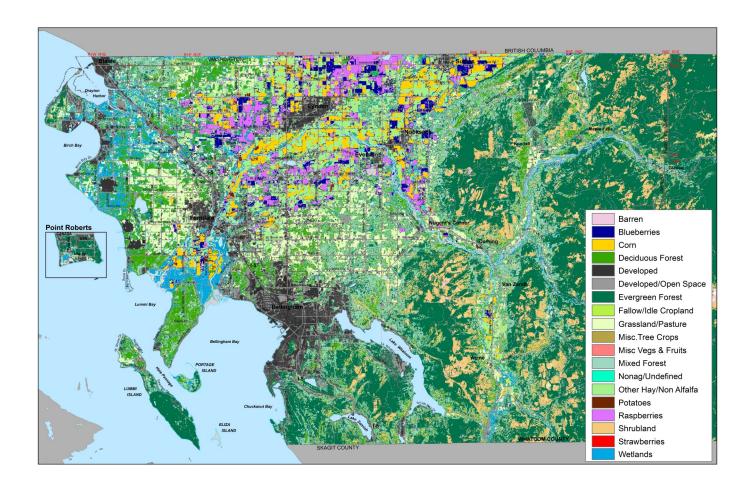


# PDR Program Progress To-Date

Closing	Zoning	Closing Zoning Water Rights?	Protected Acres	# of Dev Rights	Cost of Purchase	Match Committed \$	Match Source	Conservation Futures Committed \$	Additional Expenses (Closing, Monitoring, Appraisal)	Avg Cost/Ac	Avg Cost to County/Ac (inc. closing, monitoring,	Avg Cost/ DR
4-Aug	R5A	Z	39.62	7	\$480,000.00	\$240,000.00	USDA	\$240,000.00	\$31,724.91	\$6,057.55	\$6,858.28	\$34,285.71
5-Feb	R5A	Z	39.4	7	\$230,200.00	\$115,100.00	NGSDA	\$115,100.00	\$18,389.31	\$2,921.32	\$3,388.05	\$16,442.86
5-Dec	R5A	Z	157	31	\$710,000.00	\$355,000.00	NGSDA	\$355,000.00	\$35,336.06	\$2,261.15	\$2,486.22	\$11,451.61
un[-9	R5A	Partial	16	18	\$1,065,000.00	\$532,500.00	NGSDA	\$532,500.00	\$50,488.69	\$5,851.65	\$6,406.47	\$29,583.33
7-Jun	R10A	Z	39.88	3	\$170,000.00	\$85,000.00	USDA	\$85,000.00	\$15,387.74	\$2,131.39	\$2,517.25	\$28,333.33
7-Sep	AG	Ν	39.18	2	\$315,000.00	\$157,500.00	$\Omega$ SDA	\$157,500.00	\$22,072.60	\$4,019.91	\$4,583.27	\$78,750.00
7-Sep	AG	Ν	124.74	2	\$325,000.00	\$162,500.00	$\Omega$ SDA	\$162,500.00	\$23,176.53	\$1,302.71	\$1,488.51	\$81,250.00
8-Jan	R5A	Ā	40.38	8	\$255,000.00	\$127,500.00	NGSDA	\$127,500.00	\$19,265.21	\$3,157.50	\$3,634.60	\$15,937.50
8-Oct	R5A	Z	19.7	3	\$185,000.00	\$92,500.00	NGSDA	\$92,500.00	\$16,727.71	\$4,695.43	\$5,544.55	\$30,833.33
8-Oct	AG	N	39.1	2	\$260,000.00	\$130,000.00	USDA	\$130,000.00	\$14,883.90	\$3,324.81	\$3,705.47	\$65,000.00
8-Oct	R5A	Ν	10.7	1	\$115,000.00	\$57,500.00	$\Omega$ SDA	\$57,500.00	\$12,521.54	\$5,373.83	\$6,544.07	\$57,500.00
9-Nov	R5A	Y	30.5	5	\$310,000.00	\$155,000.00	RCO	\$155,000.00	\$21,769.32	\$5,081.97	\$5,795.72	\$31,000.00
2011	R5A	Ā	107	21	\$680,000.00	\$340,000.00	$\Omega$	\$340,000.00	\$36,128.60	\$3,177.57	\$3,515.22	\$16,190.48
2013	R5A	Ā	36.93	9	\$150,000.00	\$75,000.00	$\Omega$	\$75,000.00	\$12,877.21	\$2,030.87	\$2,379.56	\$12,500.00
2013	R5A	Y	11.25	2	\$70,000.00	\$35,000.00	USDA	\$35,000.00	\$10,325.03	\$3,111.11	\$4,028.89	\$17,500.00
2014	R5A	Y	39.17	7	\$135,000.00	\$67,500.00	USDA	\$67,500.00	\$9,898.47	\$1,723.26	\$1,975.96	\$9,642.86
2017	AG	Z	19.4	1	\$80,000.00	\$40,000.00	SWF	\$40,000.00	\$20,528.29	\$2,061.86	\$3,120.01	\$40,000.00
2017	AG	Z	14.5	1	\$85,000.00	\$42,500.00	AMS	\$42,500.00	\$20,537.35	\$2,931.03	\$4,347.40	\$42,500.00
2018	R5A	Y	19.7	3	\$100,000.00	\$100,000.00	USDA/ RCO	\$0.00	\$23,232.11	\$6,255.44	\$1,179.29	\$41,077.37
	TOI	TOTALS:	616	130	\$5,720,200	\$2,910,100		\$2,810,100	\$392.038.47	\$3,124.24		\$22,480.80

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#### 9. Acreage and changes in acreage of various cropping types (2017) (turn landscape)



Washington Cropland Data Layer, also known as CropScape, has been developed by the United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS), Research and Development Division (RDD), Geospatial Information Branch (GIB), Spatial Analysis Research Section (SARS). Additional information can be found at www.nass.usda.gov. The purpose of the Cropland Data Layer Program is to use satellite imagery to (1) provide planted acreage estimates to the Agricultural Statistics Board for the state's major commodities and (2) produce digital, crop-specific, categorized geo-referenced output products.

\*When reviewing the table on the next page, please note that the acreages are estimates based on satellite imagery as described above and is not intended to be used as exact figures.

	2008 AG	2014 AG	2017 AG	2008	2014	2017
	Zone	Zone	Zone	RSA	RSA	RSA
Alfalfa	16	65	8		2	1
Apples		44	32		3	2
Barley	266	36	12	1	1	
Barren	466	499	838	8	46	112
Blueberries **			9,433			1,156
Blueberries/Raspberries*	11,949	15,638		1,633	1,921	
Clover/Wildflower		50			1	
Corn	11,467	16,418	13,906	580	852	602
Cranberries	159	6		25	1	
Developed - Open Space	1,813	1,536	1,594	1,731	1,702	1,713
Developed - Low Intensity	2,909	3,056	3,070	1,526	1,569	1,597
Developed - Med. Intensity	473	500	578	148	160	177
Developed - High Intensity	228	229	260	68	68	75
Fallow/Idle	3	2,208	102		54	9
Forest, Deciduous	2,797	3,969	3,599	1,966	3,053	2,898
Forest, Evergreen	1,792	1,194	1,320	1,309	891	856
Mixed Forest	2,930	2,222	2,463	1,651	1,597	1,702
Grasses/Pasture+	28,714	21,747	5,663	11,049	11,475	6,481
Hay - non alfalfa+	11,126	10,574	22,046	718	473	3,111
Herbaceous Wetlands	3,086	963	3,043	420	193	821
Other Crops	34	48	120		10	3
Other Tree Crops		181	81		4	20
Peas	50		3	2		
Potatoes	878	1,314	659	23	22	36
Raspberries**			11,519			1,624
Shrubland	1,549	1,151	1,941	582	664	797
Sod/Grass	7	97	111			6
Sorghum	66		29	1		14
Strawberries	2	302	15	9	60	2
Water	755	1,027	961	18	20	23
Winterwheat	107	20	23	1	1	
Woody Wetlands	3,645	2,148	3,754	 2,437	1,057	2,048
Xmas Trees	1	46	105		6	20

<sup>+</sup> Grasses/Pasture and Other Hay - non alfalfa categorized differently in 2017

<sup>\* 2008/2014 -</sup> blueberries and raspberries combined

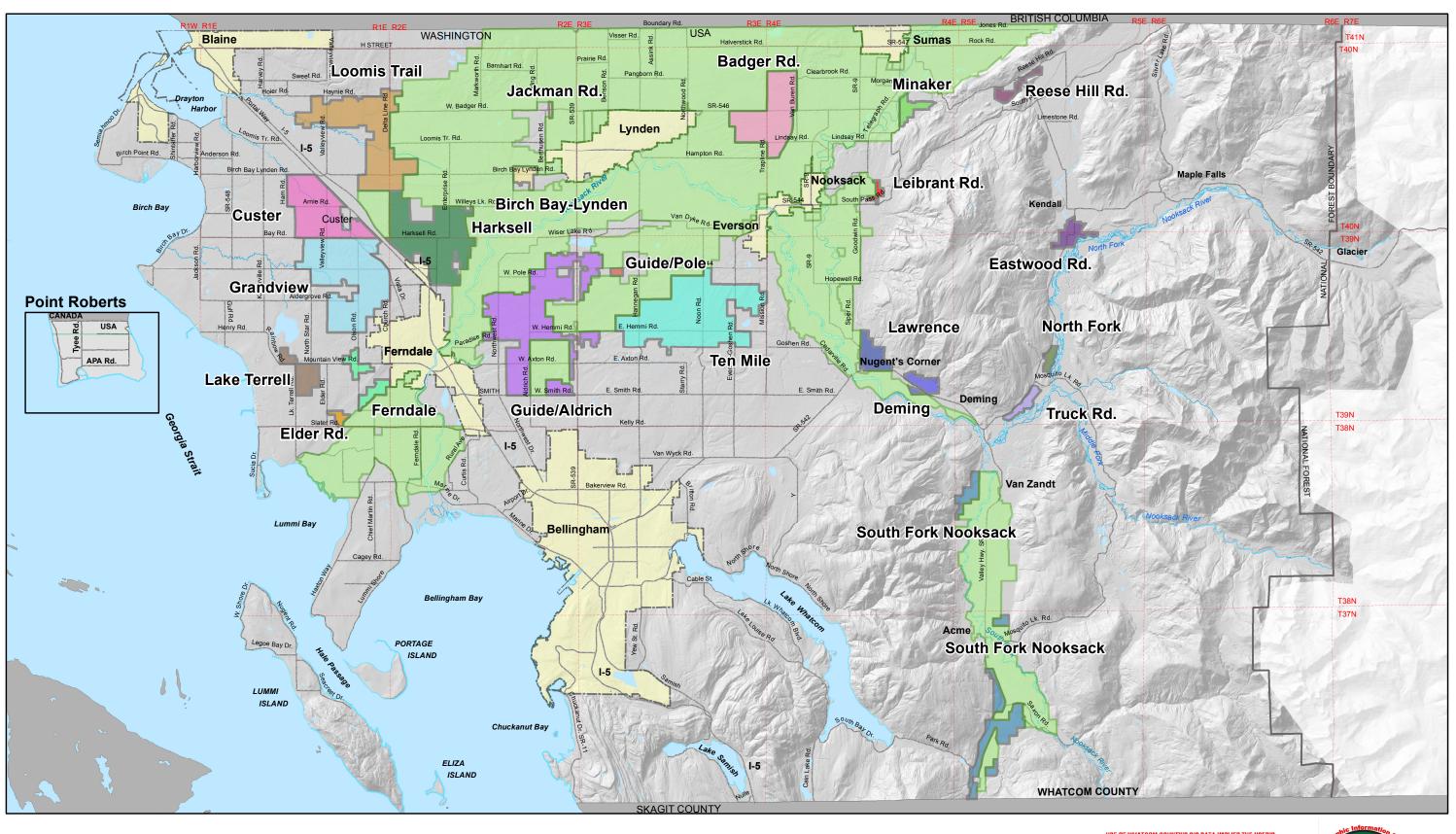
<sup>\*\* 2017 -</sup> blueberries and raspberries counted separately



# Whatcom County Agricultural Strategic Plan 2018



**Exhibit B - Rural Study Areas Map** 



**Whatcom County** 

- Rural Study Areas

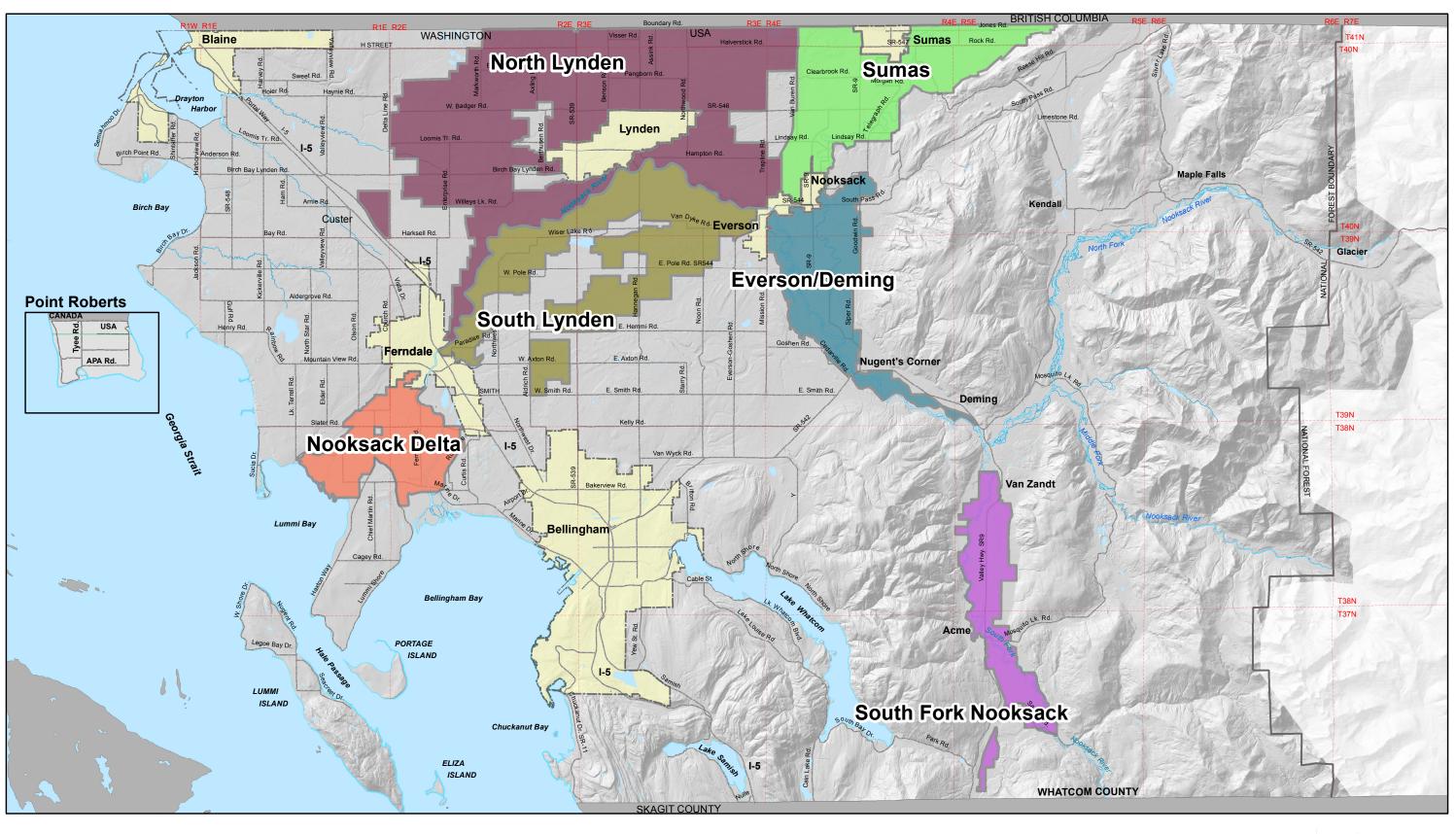
Agriculture Zone

USE OF WHATCOM COUNTY'S GIS DATA IMPLIES THE USER'S AGREEMENT WITH THE FOLLOWING STATEMENT:

Whatcom County disclaims any warranty of merchantability or warra 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 held Whatcom Gounty harmless from and against a damage. loss, or liability arising from any use of this map.



**Exhibit C - Agriculture Zone Areas Map** 



#### **Whatcom County**

- Agricultural Zoning Areas





#### Exhibit D - Land Cover Change 2004 - 2016

					C/U,	/T/P		Fallow			Farmlan	d		FI			Farmste	ad SFR		SFR			Multi/	Mobile	HVaca	ent		Quarr	·v		Forest		
Agriculture Zone	F			% APO Soils		2004	Change	2016	2004	Change	2016	2004	Change	2016	2004	Change	2016	2004	Change	2016	2004	Change		2004 Change	16		Change	2016	2004	Change	2016	2004	Change
Everson/Deming	7,874	12	71%	85%	42	42	0	59	64	(5)	4,693	4,718	(25)	234	250	(16)	161	161	0	98	100	(2)	0	0	0 45	5 42	3	272	272	0	1,975	1,928	47
Nooksack Delta	6,717	0	43%	29%	21	18	3	1,387	1,391	(4)	3,981	4,006	(25)	75	74	1	28	28	0	34	34	0	0	0	22	2 22	0	0	0	0	697	668	29
North Lynden	35,503	89	87%	91%	120	110	10	317	335	(18)	28,280	28,284	(4)	1,391	1,326	65	597	579	18	396	378	18	8	8	0 114	4 67	47	29	29	0	3,672	3,798	(126)
South Fork	5,937	3	66%	87%	22	22	0	11	20	(9)	3,312	3,436	(124)	124	117	7	68	68	0	72	70	2	0	0	75	5 18	57	0	0	0	2,034	1,970	64
South Lynden	15,351	30	90%	92%	54	43	11	166	133	33	12,330	12,572	(242)	570	550	20	260	251	9	239	215	24	10	10	3 46	6 47	(1)	60	60	0	1,209	1,062	147
Sumas	12,316	21	91%	94%	64	63	1	55	58	(3)	10,134	10,193	(59)	522	506	16	228	218	10		60	5	5	5	0 16	5 14	2	22	22	0	861	836	25
Total	83,698				323	3 298	25	1,995	2,001	(6)	62,730	63,209	(479)	2,916	2,823	93	1,342	1,305	37	904	857	47	23	23	318	3 210	108	383	383	0	10,448	10,262	186
RSA																																	
Birch Bay Lynden	249	0	59%	100%	3	3	0	6	6	0	170	174	(4)	12	8	4	7	7	0	11	11	0	1	1 0	:	1 1	0	0	0	0	28	28	0
Custer	2,058	16	51%	49%	4	4	0	38	36	2	1,258	1,264	(6)	47	45	2	46	46	0	36	34	2	0	0 0	9	9	0	0	0	0	558	558	0
Deming	318	0	97%	62%	1	1	0	0	0	0	194	199	(5)	7	6	1	11	8	3	7	6	1	0	0 0	(	0 0	0	0	0	0	86	86	0
E. Badger	2,098	11	71%	68%	6	6	0	64	64	0	1,036	1,056	(20)	47	43	4	45	45	0	34	34	0	0	0 0		8	0	207	207	0	590	574	16
Eastwood Rd.	406	0	41%	61%	C	0	0	1	1	0	272	274	(2)	16	14	2	12	12	0	13	13	0	0	0 0	(	0 0	0	0	0	0	89	89	0
Elder Rd.	113	0	97%	83%	C	0	0	0	0	0	93	93	0	2	2	0	1	1	0	0	0	0	0	0 0	1	1 1	0	0	0	0	16	16	0
Ferndale	518	0	91%	74%	C	0	0	19	19	0	370	377	(7)	5	5	0	14	14	0	2	2	0	0	0 0	15	5 15	0	0	0	0	82	75	7
Grandview	3,682	74	83%	30%	64	61	3	111	111	0	1,959	1,987	(28)	73	73	0	100	94	6	194	175	19	0	0 0	13	3 13	0	0	0	0	1,098	1,098	0
Guide/Aldrich	4,596	93	60%	84%	67	54	13	65	65	0	2,862	2,957	(95)	157	154	3	222	212	10	360	293	67	13	13 0	72	2 67	5	0	0	0	698	701	(3)
Guide/Pole	72	0	63%	73%	C	0	0	2	2	0	52	55	(3)	3	2	1	2	2	0	10	7	3	0	0 0	(	0 0	0	0	0	0	3	4	(1)
Harksell	2,992	31	45%	98%	21	15	6	73	75	(2)	1,624	1,646	(22)	120	113	7	105	102	3	274	265	9	11	11 C	40	39	1	0	0	0	681	683	(2)
Jackman Rd.	35	0	91%	100%	C	0	0	0	0	0	30	30	0	1	1	0	3	3	0	0	0	0	0	0 0	(	0 0	0	0	0	0	1	1	0
Lake Terrell	555	0	96%	81%	C	0	0	8	8	0	454	455	(1)	6	6	0	5	5	0	1	1	0	0	0 0	1	3	0	0	0	0	46	45	1
Lawrence	492	9	60%	88%	16	16	0	4	4	0	293	299	(6)	13	13	0	17	17	0	28	22	6	0	0 0	3	3	0	0	0	0	108	108	0
Leibrant	98	0	98%	68%	C	0	0	0	0	0	47	50	(3)	4	1	3	2	2	0	7	7	0	0	0 0	(	0 0	0	0	0	0	34	34	0
Loomis Trail	3,142	39	51%	88%	10	9	1	53	52	1	1,428	1,480	(52)	78	78	0	96	94	2	258	196	62	5	5 0	17	7 14	3	0	0	0	1,133	1,150	(17)
Minaker	282	3	99%	66%	2	2 2	0	0	0	0	209	209	0	14	14	0	16	16	0	4	4	0	0	0 0	(	0 0	0	0	0	0	23	23	0
North Fork	128	0	64%	71%	C	0	0	1	1	0	60	70	(10)	2	2	0	5	1	4	2	2	0	0	0 0	1	3 2	1	0	0	0	54	50	4
Reese Hill Rd.	258	0	93%	65%	C	0	0	4	4	0	164	164	0	2	2	0	4	4	0	4	4	0	0	0 0	(	0 0	0	0	0	0	80	80	0
South Fork	1,497	8	24%	24%	11	11	0	19	19	0	437	429	8	35	35	0	35	35	0	84	82	2	0	0 0	20	8	12	34	20	14	758	794	(36)
Ten Mile	4,633	55	68%	77%	80	75	5	58	58	0	2,723	2,779	(56)	138	126	12	140	128	12	243	204	39	2	2 0	13	1 11	0	55	55	0	1,082	1,094	(12)
Truck Rd.	227	0	35%	77%	10	9	1	1	1	0	117	117	0	3	3	0	4	4	0	13	13	0	0	0 0	_,	5 5	0	0	0	0	72	60	12
Total	28,449				295	266	29	527	526	1	15,852	16,164	(312)	785	746	39	892	852	40	1,585	1,375	210	32	32	223	1 199	22	296	282	14	7,320	7,351	(31)

					Parcel Size Breakdown 2018									ildout
Agriculture Zone	Acres	Total Parcels	Avg. Parcel Size	<5 Ac.	# Parcels	5-10 Ac.	# Parcels	10-20 Ac.	# Parcels	>20 Ac.	# Parcels		Exist. DU	Pot. Add. DU
Everson/Deming	7,874	507		418	205	620	88	1090	79	5618	135		323	228
Nooksack Delta	6,717	326		167	91	420	62	962	65	5069	108		48	82
North Lynden	35,503	1869		1585	736	1647	232	4260	270	27845	635		1097	821
South Fork	5,937	280		197	96	323	45	797	53	4412	90		121	117
South Lynden	15,351	848		646	316	947	129	1980	133	11706	272		542	398
Sumas	12,316	669		516	245	752	99	1907	127	8991	209		375	287

83,698

	Parcel Size Breakdown 2018											Buildout		
RSA	Total Acres	Total Parcels	Avg. Parcel Size	<5 Ac.	# Parcels	5-10 Ac.	# Parcels	10-20 Ac.	# Parcels	>20 Ac.	# Parcels	Exist. DU	Pot. Add. DU	
Birch Bay Lynden	249	34	7.3	44	16	53	9	107	8	40	1	32	19	
Custer	2,058	141	14.6	122	44	396	46	364	26	1,169	25	92	114	
Deming	318	30	10.6	26	10	64	11	30	2	195	7	17	46	
East Badger	2,098	133	15.8	67	26	257	31	671	46	1,096	30	72	105	
Eastwood Road	406	32	12.7	19	6	70	10	174	12	125	4	25	22	
Elder Road	113	6	18.8	9	2	5	1	14	1	81	2	2	20	
Ferndale	518	30	17.3	13	6	56	7	103	7	342	10	14	72	
Grandview	3,682	432	8.5	765	244	608	98	730	48	1,559	42	309	319	
Guide Aldrich	4,596	641	7.2	902	347	1,233	176	1,002	77	1,447	41	598	267	
Guide/Pole	72	13	5.5	21	10	13	2	0	0	27	1	7	15	
Harksell	2,992	532	5.6	816	346	801	125	470	33	889	28	484	236	
Jackman Road	35	8	4.4	10	5	11	2	12	1	0	0	4	4	
Lake Terrell	555	22	25.2	12	7	7	1	106	6	426	8	6	77	
Lawrence	492	72	6.8	104	47	95	14	89	6	201	5	56	52	
Leibrant	98	8	12.3	9	2	23	3	22	2	42	1	5	5	
Loomis Trail	3,142	457	6.9	690	295	577	85	574	39	1,189	38	347	246	
Minaker	282	22	12.8	20	10	20	4	12	1	227	7	15	22	
North Fork	128	12	10.7	8	3	37	6	0	0	81	3	5	8	
Reese Hill Road	258	16	16.1	8	4	19	2	98	6	128	4	10	17	
South Fork	1,497	191	7.8	204	90	374	52	492	36	371	13	113	95	
Ten Mile	4,633	397	11.7	606	185	998	149	778	57	2,223	63	329	320	
Truck Road	227	20	11.4	23	7	54	8	0	0	135	5	16	11	

28,449

#### **Exhibit F - Rural Study Area Assessment**

NRCS Prime Soil Classification (Acres)\*

Agriculture Zone	Total Acres	Zone	Adjacent AG?	%Floodplain (Area)	%OSAG (Area)	1	2	4	5	7	8	% Prime
Everson/Deming	7,874	Agriculture		57.33%	70.89%	3,826	2,688	528		735		99%
Nooksack Delta	6,717	Agriculture		98.51%	42.61%	1,873	254	2	4,507		22	99%
North Lynden	35,503	Agriculture		19.71%	86.93%	14,229	16,741	193		34	3,783	99%
South Fork	5,937	Agriculture		70.78%	65.79%	2,009	3,493	91		324		100%
South Lynden	15,351	Agriculture		38.79%	90.30%	7,102	7,335	279		17	497	99%
Sumas	12,316	Agriculture		47.56%	90.81%	3,539	8,127	75				95%

NRCS Prime Soil Classification (Acres)\*

					-Ci C3)							
	Total		Adjacent	%Floodplain	%OSAG							
RSA	Acres	Zone	AG?	(Area)	(Area)	1	2	4	5	7	8	% Prime
Birch Bay Lynden	249	R5A	YES	0.00%	59.04%	213	5				22	96%
Custer	2,058	R10A	NO	0.87%	51.12%	398	1,406				177	96%
Deming	318	R5A	YES	9.43%	97.17%	77	114	84				86%
East Badger	2,098	R10A	YES	1.05%	71.31%	323	1,644					94%
Eastwood Road	406	R10A/R5A	NO	19.70%	40.89%	186	79	84		27		93%
Elder Road	113	R5A	YES	0.00%	97.35%	49	40					79%
Ferndale	518	R5A	YES	2.32%	91.31%	162	288	31	4			94%
Grandview	3,682	R5A	NO	0.00%	82.89%	996	1,288					62%
Guide Aldrich	4,596	R5A/R10A	YES	1.07%	60.36%	1,886	926	87			977	84%
Guide/Pole	72	5A/R2A	YES	0.00%	62.50%	62	2					89%
Harksell	2,992	R5A	YES	6.22%	45.32%	1,415	505				1,038	99%
Jackman Road	35	R5A	YES	0.00%	91.43%	34						97%
Lake Terrell	555	R5A	NO	0.00%	96.22%	261	268					95%
Lawrence	492	R5A	YES	41.46%	59.76%	308	118	31				93%
Leibrant	98	R5A	YES	10.20%	97.96%		62	6				69%
Loomis Trail	3,142	R5A	YES	2.86%	50.70%	1,418	611	27			794	91%
Minaker	282	R10A	YES	0.00%	98.94%	187	6					68%
North Fork	128	R10A/R5A	NO	48.44%	64.06%	89		4		18		87%
Reese Hill Road	258	R10A/R5A	NO	0.00%	93.02%	164	43					80%
South Fork	1,497	R5A/R10A/RF	YES	10.22%	24.45%	289	374	313				65%
Ten Mile	4,633	R5A/R10A	YES	0.00%	67.71%	3,014	1,168	23				91%
Truck Road	227	R10A/R5A	NO	7.93%	34.80%	152	6			17		77%

<sup>0</sup>  $^{\sim}$  Not prime farmland

<sup>1 ~</sup> All areas prime farmland

<sup>2 ~</sup> Prime if drained

<sup>4 ~</sup> Prime if irrigated

<sup>5 ~</sup> Prime if drained and either protected from flooding or not frequently flooded during the growing season

<sup>7 ~</sup> Prime if irrigated and either protected from flooding or not frequently flooded during the growing season

<sup>8 ~</sup> Prime if subsoiled, completely removing the root inhibiting soil layer

<sup>30 ~</sup> Farmland of Statewide Importance\*