

**WHATCOM COUNTY
PUBLIC WORKS DEPARTMENT**

**ELIZABETH KOSA
DIRECTOR**



NATURAL RESOURCES

**Lauren Clemens
Climate Action Manager**
322 N Commercial, 2nd Floor
Bellingham, WA 98225
Phone # (360) 778-6241

TO: Whatcom County Council- Committee of the Whole

THROUGH: Mark Personius, Planning and Development Services Director
Elizabeth Kosa, Public Works Director

FROM: Gary Stoyka, Natural Resources Program Manager
Lauren Clemens, Climate Action Manager

DATE: April 24th, 2026

RE: Whatcom County Comprehensive Plan- Chapter 2- Council Amendments (PDS/
PW Staff Comments)

Requested Action: Discussion at the Whatcom County Committee Council of the Whole- April 28th Meeting on Whatcom County Comprehensive Plan Chapter 2 (Land Use)

Council Amendments- Climate Overlay District, Future Floodplains, Flood Development Regulations- New Council Proposed Policies 2DD(E), 2FFF-1, 2FFF-2, 2FFF-3, 2FFF-4, 2GG-4, 2W-1, 2W-2, 2W-3, 2W-4, 2V-1, 2U-7, 2W-3

Whatcom County Council- Committee of the Whole introduced new amendments related to forecasted climate risk on March 10th with additional discussion on March 17th. Outlined below are staff comments regarding the Council proposed amendments. Comments on Council proposed amendments are included in ~~strikeout~~ and highlighted in yellow for Council's consideration. We look forward to continued discussion with Council at the scheduled Committee of the Whole meeting on April 28th.

Recommended Staff Amendments

Implementation of regulatory approaches discussed in the [2025 Future Shorelines: Climate Vulnerability Assessment and Shoreline Management Solutions Report](#) will require additional interjurisdictional coordination, legal analysis, and potential amendment of County Codes Title 17 Flood Damage Prevention, Title 20 Zoning, and Title 23 Shoreline Management Program to define the highest hazard areas, geographic extent, and any required mitigation measures associated new development in areas within in a new Climate Overlay District. Pending rulemaking initiated by Ecology to define a "sea level rise hazard area" in the Shoreline Master Program through draft [WAC 173-26-246](#) may not be consistent with the Climate Overlay District concept, as described in the Council amendments. The following provides a recommendation for Council's consideration for consistency with draft Whatcom County Comprehensive Plan Chapter 12 (Climate) and HB 1181, Climate Planning Law requirements.

Staff comments on Council amendments are as follows:

Policy 2DD-2(E): E. Measures to protect against climate impacted natural hazards 1. Work with partners to adopt **updated regulations** measures to limit development in **areas at highest risk of riverine flooding and sea level rise** current and future floodplains and areas at risk of sea level rise and coastal erosion. **Prioritize climate adaptation recommendations in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report for interjurisdictional implementation.** Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, found in Appendix D, using the report's relocate, avoid, accommodate, protect model to build resilience to coastal and riverine flooding and erosion hazards.

Recommendation to amend: See recommendations in the Future Shorelines: Climate Vulnerability Assessment and Shoreline Management Report (page 62) for additional interjurisdictional coordination and public engagement.

Policy 2FFF-1: **Evaluate new regulatory approaches to address climate change, such as a Climate Overlay District, to reduce risk in areas at highest risk of flood, sea level rise, and wildfire.** Establish and periodically update a Climate Resilience Overlay District that applies special development standards and mitigation measures to protect people, property, ecological systems, and infrastructure from climate impacted natural hazards, including flooding, sea level rise, extreme precipitation, wildfire, heat events, and erosion.

Recommendation to amend: HB 1181 Washington's Climate Planning Law required changes to the Shoreline Master Program to address sea level rise. Contingent on the outcome of the sea level rise rulemaking, the Overlay District may not be the appropriate regulatory approach. Additional analysis through docketed regulatory amendments and public process will be necessary to determine applicability of any new development standards and appropriate mitigation measures within any areas at risk for climate impacts that are not currently regulated. See draft Chapter 12- Climate Element Policies 12.13.6, 12.13.11, 12.21.1, 12.22.8, and 12.22.10 regarding policies for planning and regulatory approaches associated with flooding and sea level rise.

Policy 2W-1: **Coordinate** with Everson to adopt **regulations** measures to limit development in **the FEMA preliminary 100- year floodplain, through amendment and enforcement of critical areas ordinance regulations, flood damage prevention regulations, and building code updates.** current and future floodplains. Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, found in Appendix D **Coordinate with Everson through the Floodplain Integrated Planning process to address increased risk of riverine flooding due to climate change, consistent with Countywide Planning Policy T4.**

Policy 2W-2: **Coordinate** with Nooksack to adopt **regulations** measures to limit development in **the FEMA preliminary 100- year floodplain, through amendment and enforcement of critical areas ordinance regulations, flood damage prevention regulations, and building code updates.** current and future floodplains. Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability

Assessment and Shoreline Management Solutions Report, found in Appendix D **Coordinate with Nooksack through the Floodplain Integrated Planning process to address increased riverine flooding due to climate change, consistent with Countywide Planning Policy T4.**

Policy 2W-3: **Coordinate** with Lynden to adopt **regulations** measures to limit development in **the FEMA preliminary 100- year floodplain, through amendment and enforcement of critical areas ordinance regulations, flood damage prevention regulations, and building code updates.** ~~current and future floodplains. Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, found in Appendix D~~ **Coordinate with Lynden through the Floodplain Integrated Planning process to address increased riverine flooding due to climate change, consistent with Countywide Planning Policy T4.**

Policy 2W-4: **Coordinate** with Ferndale to adopt **regulations** measures to limit development in **the FEMA preliminary 100- year floodplain, through amendment and enforcement of critical areas ordinance regulations, flood damage prevention regulations, and building code updates.** ~~current and future floodplains. Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, found in Appendix D~~ **Coordinate with Ferndale through the Floodplain Integrated Planning process to address increased riverine and compound flooding due to climate change, consistent with Countywide Planning Policy T4.**

Policy 2V-1: **Coordinate** with Blaine to adopt **regulations** measures to limit development in **the FEMA coastal high hazard area, through amendment and enforcement of critical areas ordinance regulations, flood damage prevention regulations, and building code updates.** ~~current and future floodplains. Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, found in Appendix D~~ **Coordinate with Blaine through the City of Blaine's Shoreline Master Program update to address increased coastal flooding and erosion due to climate change, consistent with Countywide Planning Policy T4.**

Policy 2U-7: **Coordinate** with Bellingham to adopt **regulations** measures to limit development in **the FEMA coastal high hazard area, through amendment and enforcement of critical areas ordinance regulations, flood damage prevention regulations, and building code updates.** ~~current and future floodplains. Development that does occur should take mitigative measures outlined in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, found in Appendix D~~ **Coordinate with Bellingham through the City of Bellingham's Sea Level Rise Vulnerability and Risk Assessment planning process to address increased coastal flooding and erosion due to climate change, consistent with Countywide Planning Policy T4.**

Recommendation to amend 2W-1, 2W-2, 2W-3, 2W-4, 2V-1, and 2U-7: As written, "mitigative measures" could be interpreted as a permitting condition for a Floodplain Development Permit. The Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report identified a forecasted scenario for all areas subject to any amount of flood inundation. Next steps include addition of flood water depth and velocity data and working interjurisdictionally to define the highest risk areas within the area predicted to flood. That work will inform any necessary County code modifications including, but not limited to the Shoreline

Master Program amendments and amendments to the Flood Damage Prevention Code. Other jurisdictions, including Bellingham, are developing separate sea level rise vulnerability assessments and adaptation plans which may take a complementary, but not identical approaches.

Policy 2W-3: Continue to utilize ~~Require no net loss of flood storage in floodplain development regulations;~~ best available science and updated flood mapping **in floodplain development regulations**, and consider cumulative impacts on downstream communities.

Recommendation to amend 2W-3: Within the FEMA 100-year floodplain (Zone A or AE where a floodway is not designated), Whatcom County Code Title 17 requires that the cumulative effect of proposed development will not increase the water surface elevation of the base flood more than one foot at any point in the community. Nooksack River Reach 5 (Everson, Nooksack, Sumas and unincorporated Whatcom County) does not drain to Puget Sound and is not subject to the FEMA Biological Opinion, which requires balanced cut/fill or that floodplain storage is addressed and also requires habitat assessments by a biologist. Within Reach 5, Whatcom County may develop a locally administered floodway in this corridor that is compatible with berm construction. Constructing the Everson-Nooksack berms would likely be very challenging if the County is required to balance cut/fill in Reach 5.

HB 1181, the Climate Planning Law, included a provision requiring updates to jurisdiction's Comprehensive Flood Hazard Management Plans to include climate change. The Comprehensive Flood Hazard Management Plan is being updated through the FLIP process. There is also ongoing work through the Floodplain Integrated Planning process to assess consistency of jurisdiction's flood development codes across Whatcom County with Ecology's best available science guidance, as well as developing recommendations to jurisdictions for revisions based on FLIP hydraulic modelling.

Appendix- 2080 Climate Scenario- forecasted extent of 3.3 feet of sea level rise plus the 20-year coastal storm and 1.75 times the magnitude of current 100-year Nooksack River flood and 1.5 times the magnitude of current 100-year Sumas River flood. These riverine scenarios correspond with roughly a 1 percent chance of being met or exceeded by the 2080s, with the likelihood increasing in the following decades. The coastal scenario has a 7 percent chance of being met or exceeded by the 2100s. See Chapter 12- Climate Element Map 12-3, "Whatcom County Roads Forecasted Impacts." ~~Future floodplain- The future floodplain is the 2080s scenario in the Future Shorelines: Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions Report, which projects a potential 75 percent increase in peak Nooksack River flows ("1.75x" the current 100-year flood event). As Whatcom County continues to update this work, the projected peak Nooksack River flows may change.~~

Recommendation to amend definition of future floodplain: The Floodplain Integrated Planning hydraulic model utilized in the Future Shorelines: Climate Vulnerability Assessment (FLIP model 1.2 x 100-year flood and 1.75 x 100-year flood) will require additional flow, depth, and velocity information prior to regulatory application and is not intended for site specific analysis. The 2040 and 2080 climate scenarios for sea level rise, erosion, groundwater impacts, and riverine flooding are mapped in the draft Chapter 12 Climate Element resilience subelement. The proposed definition for the glossary cites the assumptions included in the model run. This definition may be updated through annual climate element amendments. Note that other jurisdictions across Whatcom County may utilize different risk assessment or

adaptation planning approaches throughout any subsequent Comprehensive Plan or regulatory updates.

Recommended Staff Removals:

Policy 2FFF-2: Use best available science and the most current hazard maps and projections within the overlay; use and incorporate adaptive design standards appropriate to the risk level.

Policy 2FFF-3: Prioritize nature-based solutions in the overlay, including green infrastructure, habitat restoration, soil stabilization, and other low impact development techniques that enhance stormwater management, carbon sequestration, and ecological resilience.

Recommendation to remove 2FFF-2 and 2FFF-3: See comments regarding additional public process and code amendments to define and establish a Climate Overlay District prior to determining prescriptive design standards or mitigation measures.

Policy 2FFF-4: Subject high-intensity or heavy industrial uses proposed within areas of elevated climate hazard to heightened review to prevent increased public safety risk, infrastructure strain, or environmental contamination during hazard events.

Recommendation to remove 2FFF-4: See comments regarding additional public process and code amendments to define and establish Climate Overlay District prior to defining “elevated climate hazard” or determining scope of “heightened review.” Defining the geographic area for elevated climate hazard will require additional public process, see 2FFF-1.

Policy 2GG-4: Land in the R10A district may not be rezoned to a rural zone that allows a higher density if it is located in the current flood plain, a likely future flood plain, or a sea level rise inundation zone.

Recommendation to remove 2GG-4: There is no regulatory definition for “likely future floodplain” or “sea level rise inundation zone,” so it is unclear what land in the R10A district this new policy applies to. Defining the geographic area for areas outside FEMA effective or preliminary flood mapping and associated zoning changes will require additional review, see comments regarding 2FFF-1.

Policy 2W-2: Elevation strategies should prioritize structural elevation methods such as pier supported construction, pile foundations, elevated platforms, amphibious or floating design, and other innovative flood-adaptive techniques rather than reliance on imported fill that reduces flood storage capacity.

Recommendation to remove 2W-2: As written, this policy is inconsistent with construction requirements in riverine floodplains. Regarding elevating structures, FEMA requires typical stem wall foundations with flood vents to address hydrostatic pressure. WCC Title-17 (Reaches 1-4) currently does not allow importing fill without mitigation (must have a balanced cut/fill). Reach 5 (Sumas River Watershed) does allow for some filling without mitigation on a smaller scale. Larger volumes must demonstrate that it will not result in adverse impact to base flood elevations and flood flows per hydraulic analysis which may require mitigation for impacts. Developments involving fill are evaluated on a case-by-case basis and a determination is made by the floodplain administrator if the filling would warrant further analysis. Post, pile, and column foundations are already required in coastal velocity zones (FEMA Coastal High Hazard Areas).