

April 9, 2018

Mr. Layton Lowe
Ms. Melinda Didier
Mr. Mike Vincent
Mr. Claude Pierret
Mr. Mike Corrales
Mr. Brent Stenson
1016 N. 4th Ave
Pasco, WA 99301

Subject: Comments on the Economic Development Element draft and Natural Element draft for the Franklin County Comprehensive Plan Update.

Sent via email to: planninginquiry@co.franklin.wa.us and nstickney@ahbl.com.

Dear Franklin County Planning Commissioners:

Thank you for the opportunity to comment on the Franklin County periodic update of its Comprehensive Plan including the Economic Development Element and Natural Element drafts. Futurewise works throughout Washington State to support land-use policies that encourage healthy, equitable and opportunity-rich communities, and that protect our most valuable farmlands, forests and water resources. We have members across Washington State including Franklin County. We strongly support the comprehensive plan update. We are pleased to provide the following comments on this portion of the plan.

I. Comments on Economic Development Element

Including this Economic Development element and the integration of the Franklin County Economic Development Plan with considerations of U.S. and global markets, population growth and commodity pricing, will help the County maintain a “strong and vibrant economy” and maintain agriculture as a “cornerstone” of economic vitality. Futurewise supports this draft of the element.

II. Comments on Natural Element

a. Geology, Page N-3, Geographically Hazardous Areas

- According to the State of Washington Department of Natural Resources, “Washington is one of the most landslide-prone states in the country, with hundreds to thousands of events each year.” The direct costs of landslides include damage to roads, property, and the loss of life. Indirect costs include reduced property values, reduced tax revenues, and environmental impacts such “as the degradation of water quality, [which] can exceed direct costs. The Washington Department of Transportation routinely budgets \$15 million a year for cleanup of landslides on

highways. Nationally, landslides exceed \$2 billion in loss each year and result in an estimated 25 – 50 deaths (1996 estimate).¹

- Washington State has experienced deadly landslides over the years, including the Oso landslide in Snohomish County which was the deadliest landslide ever in the United States.²
- Landslides are a statewide problem.³
- Homeowners insurance does not cover the damage from landslides. None of the Oso victims' homes were insured for landslide hazards. And that is common when homes are damaged by landslides. For example, in 2011, a landslide damaged a home near Edmonds, Washington. Because their homeowners insurance did not cover landslides, the owners lost their home. The loss of what may be a family's largest financial asset frequently occurs when homes are damaged or destroyed by landslides or other geological hazards. Preventing development in geologically hazardous areas is just plain ordinary consumer protection.
- As the Rattlesnake Hills Landslide in Yakima County shows, landslides and other natural hazards can disproportionately burden disadvantaged populations. The families living at the base of the hill who were asked to evacuate are low-income and lack other options on where to live. For landslide hazards along Puget Sound and lakes, much of the housing is occupied by higher income families.
- Landslide hazards may expose government agencies to financial liability. The State of Washington paid \$50 million to settle lawsuits brought by victims of the Oso tragedy and their families. A timber company agreed to pay another \$10 million. A judge's order dismissing Snohomish County from the lawsuit is currently under appeal. Island County paid \$1.5 million to settle a lawsuit over another landslide.
- Geological hazards, such as landslides, however, are capable of damaging property outside the hazard itself. The 2014 Oso slide ran out for over a mile (5,500 feet) even through the slope height was 600 feet.⁴ A 2006 landslide at Oso traveled over 300 feet.⁵ Recent research shows that long runout landslides are more common than had been realized.⁶ This research documents that

¹ State of Washington Department of Natural Resources, "Landslides" webpage at: <https://www.dnr.wa.gov/programs-and-services/geology/geologic-hazards/landslides>

² State of Washington Department of Natural Resources, *Significant Deep-Seated Landslides in Washington State – 1984 to 2014 & Widespread Shallow Landslide and Debris Flow Events in Washington State – 1984 to 2014* pp. 1 – 5 of 5 (2/10/2015) at: https://www.dnr.wa.gov/publications/ger_list_large_landslides.pdf?npckb23; Jeffrey R. Keaton, Joseph Wartman, Scott Anderson, Jean Benoît, John deLaChapelle, Robert Gilbert, David R. Montgomery, *The 22 March 2014 Oso Landslide, Snohomish County, Washington* p. 1 (Geotechnical Extreme Events Reconnaissance (GEER): July 22, 2014) at: http://www.geerassociation.org/index.php/component/geer_reports/?view=geerreports&layout=build&id=30 and enclosed with the paper original of this letter.

³ State of Washington Department of Natural Resources, *Significant Deep-Seated Landslides in Washington State – 1984 to 2014 & Widespread Shallow Landslide and Debris Flow Events in Washington State – 1984 to 2014* pp. 1 – 5 of 5 (2/10/2015).

⁴ Jeffrey R. Keaton, Joseph Wartman, Scott Anderson, Jean Benoît, John deLaChapelle, Robert Gilbert, David R. Montgomery, *The 22 March 2014 Oso Landslide, Snohomish County, Washington* p. 56 & p. 144 (Geotechnical Extreme Events Reconnaissance (GEER): July 22, 2014).

⁵ *Id.* at p. 1.

⁶ Sean R. LaHusen, Alison R. Duvall, Adam M. Booth, and David R. Montgomery, *Surface roughness dating of long-runout landslides near Oso, Washington (USA), reveals persistent postglacial hillslope instability* GEOLOGY pp. *2 – 3, published online on 22 December 2015 as doi:10.1130/G37267.1; Geological Society of America (GSA) Data Repository 2016029, *Data repository for: Surface roughness dating of long-runout landslides near Oso, WA reveals persistent postglacial hillslope instability* p. 4 both

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.⁷ The landslides ran out from 787 feet to the 2,000 feet of the 2014 landslide.⁸ The Nile Valley Landslide, in Yakima County, extended more than 5,500 feet from the toe of the slope onto the valley floor.⁹

To address these serious hazards, we recommend adoption of the following policies.

i. Designate all landslide hazards

The State of Washington Department of Commerce (Commerce) is required to adopt minimum guidelines for critical areas regulations. Commerce's minimum guidelines, in WAC 365-190-120(6), identify the types of landslide hazards that should be designated. County and city critical areas regulations should designate all of the landslide hazards identified in WAC 365-190-120(6) that occur within the community.

ii. Require consideration of all landslides with the potential to adversely impact a proposed development

Many critical areas policies and regulations only require consideration of landslide hazards within 300 or 200 feet of a proposed building site. Some require that the hazard must be on the site in order to be analyzed. Landslide hazards, however, are capable of damaging property much farther away than these distances. The 2014 Oso slide ran out for over a mile (5,500 feet). A 2006 landslide at Oso traveled over 300 feet. The Nile Valley Landslide, in Yakima County, extended more than 5,500 feet from the toe of the slope onto the valley floor. The 2013 Ledgeswood-Bonair Landslide on Whidbey Island extended approximately 300 feet into Puget Sound. Jurisdictions should follow the example of Pierce County and designate as critical areas landslide runout areas and other areas such as the tops of slopes and side slopes that may fail during a landslide and require that they be considered when determining if a landslide may affect a proposed development.

enclosed with Futurewise's Jan. 23, 2018, letter transmitting supporting materials. *Geology* is a peer-reviewed scientific journal. *Geology* – Prep webpage accessed on Jan. 23, 2018 at:

<http://www.geosociety.org/GSA/Publications/Journals/Geology/GSA/Pubs/geology/home.aspx#overview> and all three documents enclosed with the paper original of this letter.

⁷ Sean R. LaHusen, Alison R. Duvall, Adam M. Booth, and David R. Montgomery, *Surface roughness dating of long-runout landslides near Oso, Washington (USA), reveals persistent postglacial hillslope instability* *GEOLOGY* p. *2, published online on 22 December 2015 as doi:10.1130/G37267.1.

⁸ Geological Society of America (GSA) Data Repository 2016029, *Data repository for: Surface roughness dating of long-runout landslides near Oso, WA reveals persistent postglacial hillslope instability* p. 4.

⁹ Washington State Department of Transportation, *Nile Valley Landslide: Geotechnical Report* p. 17 (May 2010) accessed on <http://www.wsdot.wa.gov/NR/rdonlyres/F78951A8-765B-4170-824E-46686B4E6A66/0/NileValleyLandslidegeotechnicalreport.pdf> and excerpts enclosed with the paper original of this letter. This report was peer-reviewed, see the cover page.

iii. Require the identification of landslide runout areas and buffers based site-specific studies

As was noted above, landslide hazards can be damaging at significant distances. After the Oso landslide, Washington State and Snohomish County created a commission to identify the lessons learned from Oso landslide and recovery effort. This commission, the Joint SR 530 Landslide Commission, recommends identifying “[c]ritical area buffer widths based on site specific geotechnical studies” as an “innovative development regulation[]” that counties and cities should adopt.¹⁰

iv. Prohibit development of dangerous geologically hazardous areas

Do not allow construction on landslides, landslide run-out areas, top of slope and side slope areas subject to sliding, and their buffers even if that means that a lot is unbuildable. As the \$120 million spent on Oso landslide remediation shows,¹¹ allowing construction in these areas results in the creation of nuisances and so counties and cities are not legally obligated to allow construction on these areas.¹² For most landslide hazards it is not possible to overcome the hazard by landslide resistant design and construction, it is only possible to avoid the hazard.¹³ In the *Bayfield Resources Co. v. Western Washington Growth Management Hearings Board* decision, the State of Washington Court of Appeals upheld against a substantive due process challenge and other challenges a rural zoning district that required the deduction of landslide hazard areas and certain other critical areas from the land used to calculate the allowed number of housing units.¹⁴ The Court of Appeals agreed that landslide hazard areas are not to be built on.

v. State and local governments should provide public education on the dangers posed by natural hazards and risks from landslides, debris flows, flooding, volcanic eruptions, and earthquakes and measures that can be taken to reduce these hazards

The SR 530 Commission recommended that once landslide hazards are mapped, counties and cities should inform property owners and the public of these hazards.¹⁵ Recording notices on the title of properties and posting signs on landslide hazards are effective measures of notifying the public of these hazards.

¹⁰ The SR 530 Landslide Commission, *Final Report* p. 31 (Dec. 15, 2014) accessed on March 6, 2018 at: https://www.governor.wa.gov/sites/default/files/documents/SR530LC_Final_Report.pdf

¹¹ David K. Norman, LHG, LEG, Washington State Geologist, *Division of Geology and Earth Resources Response to the SR 530 Landslide* p. *5 (Sept. 30, 2014) accessed on March 6, 2018 at: http://www.governor.wa.gov/sites/default/files/documents/SR530LC_20140930_Pres_DNR_Norman.pdf

¹² *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1029 (1992) accessed on March 6, 2018 at: <http://www.supremecourt.gov/opinions/boundvolumes/505bv.pdf>

¹³ Lynn M. Highland and Peter Bobrowsky, *The Landslide Handbook—A Guide to Understanding Landslides* pp. 14 – 24 (U.S. Geological Survey Circular 1325, Reston, Virginia: 2008).

¹⁴ *Bayfield Resources Co. v. Western Washington Growth Management Hearings Bd.*, 158 Wn. App. 866, 883, 244 P.3d 412, 420 (2010).

¹⁵ *SR 530 Landslide Commission Final Report* p. v (Dec. 15, 2014).

While avoiding development in landslide hazards and buying out buildings and properties are often the most effective strategies, as part of its landslide hazard and risk studies the Oregon Department of Geology and Mineral Industries recommends that residents in landslide hazard areas should participate in a neighborhood risk reduction program to help reduce the overall risk.¹⁶ The department recommended risk reduction measures include:

- minimizing irrigation on slopes;
- avoiding removing material from the base of slopes;
- avoiding adding material or excess water to top of slopes;
- draining water from surface runoff, down-spouts; and driveways well away from slope[s] and into storm drains or natural drainages; and
- consult[] an expert to conduct a site-specific evaluation if considering major construction.¹⁷

b. Water Resources, Pages N-6 and N-7

We appreciate the helpful discussion of water resources. Franklin County is in three Water Resource Inventory Areas (WRIAs): Esquatzel Coulee Watershed, WRIA 36, the Lower Snake Watershed, WRIA 32, and a small area in the Palouse Watershed, WRIA 34. According to the State of Washington Department of Ecology (Ecology):

The Esquatzel Coulee watershed has administrative restrictions known as Surface Water Source Limitations (SWSL), which limit most water sources in the watershed. Groundwater connected to the surface sources are also subject to SWSL restrictions. These restrictions indicate that most water has been appropriated within the watershed.¹⁸

Ecology also reports that:

The Lower Snake Watershed has administrative restrictions known as Surface Water Source Limitations (SWSLs), which limit water sources in the watershed. Groundwater connected to the surface sources are also subject to SWSL restrictions. These restrictions, along with those specified in WAC 173-564 (Water Resources

¹⁶ William J. Burns, Katherine A. Mickelson, Cullen B. Jones, Sean G. Pickner, Kaleena L. B. Hughes, and Rachel Sleeter, *Landslide Hazard and Risk Study of Northwestern Clackamas County, Oregon* p. 36 (Oregon Department of Geology and Mineral Industries Open-File Report O-13-08: 2013) accessed on March 6, 2018 at: <http://www.arcgis.com/home/item.html?id=e718d541693246598dbd51aff1652e0d>

¹⁷ *Id.*

¹⁸ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Esquatzel Coulee Watershed, WRIA 36* p. 2 (Publication Number: 11-11-040: Feb. 2015) accessed on April 5, 2018 at: <https://fortress.wa.gov/ecy/publications/summarypages/1111040.html> and enclosed with the paper original of this letter.

Management Program for the Main Stem of the Snake River), indicate that most water has been appropriated within the watershed.¹⁹

The Palouse watershed [also] has administrative restrictions known as Surface Water Source Limitations (SWSL), which limit most water sources in the watershed. Groundwater connected to the surface sources are also subject to SWSL restrictions.²⁰

In the Lower Snake, “water levels are declining and/or water is not legally available, so it is unlikely any water is available for new consumptive appropriation in most areas.”²¹ In the Esquatzel Coulee watershed “surface and groundwater levels are declining and/or water is not legally available in most areas.”²² So water is not physically or legally available for new wells and surface withdrawals (other than the Columbia Basin project water rights), including permit-exempt wells. We recommend that the discussion state that water is not physically or legally available for new wells and surface withdrawals (other than the Columbia Basin project water rights), including permit-exempt wells.

As was documented above, research indicates that all of the water resources in Franklin County are already allocated.²³ Water conservation and focusing growth into existing cities and towns can stretch water supplies and accommodate growth and it is important to reserve water for agriculture and value-added agricultural processing and manufacturing to maintain and enhance the county economy. So, we recommend that a policy be added to the water policies to reserve sufficient water for agriculture and its related industries. We recommend a new policy like the following:

Reserve sufficient water to maintain the agricultural industry and agricultural processing and value-added manufacturing.

The Growth Management Act requires counties and cities to designate, and protect areas with a critical recharging effect on aquifers used for potable water.²⁴ These areas are defined as “areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the

¹⁹ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Lower Snake Watershed*, WRLA 33 p. 2 (Publication Number: 11-11-037: June 2013) accessed on April 5, 2018 at: <https://fortress.wa.gov/ecy/publications/summarypages/1111037.html> and enclosed with the paper original of this letter.

²⁰ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Palouse Watershed*, WRLA 34 p. 2 (Publication Number: 11-11-038: August 2012) accessed on April 5, 2018 at: <https://fortress.wa.gov/ecy/publications/summarypages/1111038.html> and enclosed with the paper original of this letter.

²¹ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Lower Snake Watershed*, WRIA 33 p. 2 (Publication Number: 11-11-037: June 2013).

²² State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Esquatzel Coulee Watershed*, WRLA 36 p. 4 (Publication Number: 11-11-040: Feb. 2015).

²³ State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Esquatzel Coulee Watershed*, WRLA 36 pp. 2 – 4 (Publication Number: 11-11-040: Feb. 2015); State of Washington Department of Ecology Water Resources Program, *Focus on Water Availability Lower Snake Watershed*, WRLA 33 p. 2 (Publication Number: 11-11-037: June 2013)

²⁴ RCW 36.70A.170; RCW 36.70A.060(2); RCW 36.70A.030(5).

water, or is susceptible to reduced recharge.”²⁵ Critical aquifer recharge areas are not limited to areas used by community water systems. RCW 36.70A.030(5) fines as a “critical area” “areas with a critical recharging effect on aquifers used for potable water ...” If an are recharges an aquifer used for potable water, even if only a few private water systems withdraw water from it, it meets the criteria for an aquifer recharge area. So we recommend that the paragraph before “soils” on page N-7 be modified to read as follows with our deletions double struck through:

Aquifer recharge areas that have an effect on, or are associated with, aquifers used for potable water ~~in community water systems~~ are considered Critical Aquifer Recharge Areas. These areas are ~~often near irrigated lands close to municipal water supplies and~~ are classified and designated by Franklin County.

To protect this limited, but critical resource, we recommend that Franklin County adopt the following policies for aquifer recharge areas:

- Identify and map the location of groundwater resources used for potable water supplies.
- Classify the relative vulnerability of various aquifers to contamination.
- Direct uses and activities with the potential to contaminate aquifers away from vulnerable aquifers.
- Protect aquifers from pollution by minimizing activities and conditions that pose contamination risks.
- Require contamination prevention plans and best management practices for uses and activities with the potential to contaminate aquifers and ensure the plans and best management practices are followed.
- Limit impervious surfaces to maintain ground water recharge.
- Require the infiltration of clean and treated storm water into the ground where feasible.
- Manage groundwater withdrawals to maintain the availability of ground water for drinking water sources, businesses, and irrigation and to maintain instream flows from ground water that support fish and wildlife habitat and human instream uses.
- Require water conservation in new and existing buildings and activities to prevent the overuse of aquifers.
- Include ground water protections in Voluntary Stewardship Programs.

²⁵ WAC 365-190-030(3).

- Work with state and federal officials, facility operators, and land owners to clean up polluted ground water.

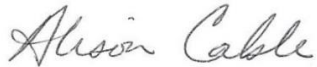
The proposed policies above are based on the *Critical Aquifer Recharge Areas Guidance Document*.²⁶

c. Habitats and Species on pages N-12 to N-15

We support the designation and conservation of priority habitats and species. Wildlife protection policies are important to county residents who hunt, fish, and view wildlife. They are also important to the tourism economy of Washington State and Franklin County since birding, hunting, fishing, and boating are important economic draws and sustain many businesses. Outdoor recreation is estimated to contribute \$81,959,000 to the Franklin County economy, generating 1,114 jobs and paying \$5,942,000 in state and local taxes.²⁷ Protecting fish and wildlife habitats and rivers and streams will help maintain the economic benefits of outdoor recreation for Franklin County.

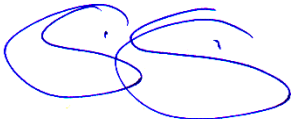
Thank you for considering our comments. If you require additional information, please contact Alison Cable at telephone (503) 807-2415 and email: alison@futurewise.org or Tim Trohimovich at telephone (206) 343-0681 Ext. 118 and email: tim@futurewise.org.

Very Truly Yours,



Alison Cable

Tri-Cities Program Manager



Tim Trohimovich, AICP

Director of Planning & Law

Enclosures

²⁶ Laurie Morgan, *Critical Aquifer Recharge Areas Guidance Document* pp. 9 – 10 (Washington State Department of Ecology, Water Quality Program Publication Number 05-10-028: Jan. 2005) accessed on April 5, 2018 at: <https://fortress.wa.gov/ecy/publications/documents/0510028.pdf> and enclosed with the paper original of this letter.

²⁷ Tania Briceno & Greg Schundler, *Economic Analysis of Outdoor Recreation in Washington State* p. 83 (Earth Economics: 2015) accessed on April 5, 2018 at: <https://www.rco.wa.gov/documents/ORTF/EconomicAnalysisOutdoorRec.pdf>