

**WHATCOM COUNTY  
PUBLIC WORKS DEPARTMENT**

**Elizabeth Kosa  
Director**



**NATURAL RESOURCES**

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**MEMORANDUM**

**TO:** The Honorable Satpal Singh Sidhu, County Executive and the Whatcom County Council

**THROUGH:** Elizabeth Kosa, Public Works Director *ek*  
Gary Stoyka, Natural Resources Manager *gs*

**FROM:** Chris Elder, Senior Planner

**DATE:** July 8, 2025

**RE:** Future Shorelines Project final report

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**Requested Action**

Review and discuss the vulnerability assessment, adaptation strategies, and land use policy options for projected future sea level rise, coastal flooding and erosion, and riverine flooding impacts developed by the Whatcom Climate Vulnerability Assessment and Shoreline Management Solutions project, also referred to as the Future Shorelines Project.

**Background and Purpose**

Whatcom County was awarded two grants to support two phases of planning to identify vulnerability and recommend potential actions to address sea level rise, coastal flooding, riverine flooding, and compound flooding (coastal and riverine flooding combined). Phase 1 funding was provided by the Washington Department of Ecology Shorelands SMP Competitive Grant Program in 2022 in the amount of \$100,000. Phase 2 funding was provided by the Washington Department of Ecology Shorelands Shoreline Planning Competitive Grant Program in 2024 in the amount of \$250,000.

Phase 1 identified coastal and riverine areas on the Nooksack River downstream of the Slater Road bridge, focusing on the Sandy Point and Birch Bay areas, which are most vulnerable to extreme climate change-driven sea-level rise impacts and changing rainfall patterns and identified strategies that may be applicable for addressing these risks. Following that work, Whatcom County contracted with Herrera and Western Washington University for a Phase 2 study that examined all areas of the County and conducted marine and riverine vulnerability assessments based on projected future climate scenarios, including an expanded bluff erosion model, developed adaptation planning strategies to apply across impacted areas, and developed a pilot adaptation plan for Birch Bay. Phase 2 also included an analysis of the Shoreline Management Program, Comprehensive Plan, and other land use codes to develop policy options to address projected future climate impacts.

Staff and the consultant team would like to present the outcomes of this work to the Council and be available to answer questions.

Please contact Chris Elder at extension 6225, if you have any questions.

Encl.

Future Shorelines Project final report