

WETLANDS AND VEGETATION FACT SHEET



Boistfort Valley

Photo Credit: Jeffrey Seldomridge

CHEHALIS BASIN STRATEGY PROGRAMMATIC EIS

This programmatic Environmental Impact Statement (EIS) evaluates options to reduce flood damage and restore aquatic species habitat in the Chehalis River Basin.

These options are made up of actions, grouped into programs called alternatives.

The basin has experienced both major flooding and wide-spread degradation of aquatic species habitat. These problems have continued for almost 100 years without a coordinated response.

The Chehalis Basin Strategy will need to provide a long-term, integrated approach to positively effect change in the Chehalis Basin.

Special accommodations

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Programmatic EIS: How it's different

A programmatic State Environmental Policy Act (SEPA) review considers the effects of a broad proposal or planning-level decisions. The impact assessment in a programmatic EIS is more qualitative than a project-specific environmental review. Mitigation measures are also more general and focus on actions that could be implemented or might be required.

Why are vegetation and wetlands analyzed?

There are many different kinds of natural habitats within the Chehalis Basin. These are characterized by a mix of plants and trees; some of which are threatened, endangered or rare plant species.

Wetlands are transition areas between land and water systems that provide a number of important ecosystem functions. The Chehalis Basin is ripe with many complex wetlands. Many of these wetlands are remnants of systems which were once much more widespread in the Chehalis Basin, but have been modified or disturbed by human practices.

The draft EIS looks at how both the individual actions and the combined alternatives evaluated for the Chehalis Basin Strategy would affect wetlands and vegetation, and the ecological functions they provide. Examples of these ecological functions include fish and wildlife habitat, carbon storage, water quality improvement, flood water retention and release rates, and others.

What impacts are analyzed?

In the draft EIS, Ecology identifies and studies both short- and long-term impacts, whether they are beneficial or adverse. Potential negative impacts are explained and determined to be minor, moderate or significant.

Minor impacts are usually small, and easily mitigated. Moderate impacts are adverse, affect a relatively small area within the Chehalis Basin, and are not likely to exceed regulatory limits or criteria. Significant impacts affect larger areas and are more severe. Impacts that are considered significant are more likely to exceed regulatory limits or criteria and are difficult to mitigate.

Chehalis River Surge Plain Natural Area Preserve



Photo credit: Rollingbay Works

Boistfort Valley Landscape, showing vegetation communities that are common in much of the middle and upper Chehalis Basin.



Photo credit: Rollin Geppert

Upper Chehalis Basin Landscape



Photo credit: Anchor QEA

EIS action element impacts: vegetation and wetlands

Impacts to vegetation and wetlands from the action elements in the EIS range from beneficial to adverse and significant.

Aquatic Species Habitat actions would restore both vegetation and wetland ecosystems to improve and protect habitat, so these actions would be a benefit. Local-Scale Flood Damage Reduction actions are likely to result in minor adverse impacts to wetlands and vegetation by directly impacting them, or disconnecting them from rivers.

Some Large-Scale Flood Damage Reduction actions would benefit wetlands and vegetation, while some would have an adverse impact on these resources and the ecological functions they provide. Adverse impacts may include short-term impacts from construction and long-term impacts from permanent changes to rivers and streams.

Combined alternative impacts: vegetation and wetlands

Alternative 1 includes a dam and either a permanent or temporary reservoir, raising the Chehalis-Centralia Airport levee, and building a levee around low-lying portions of Aberdeen and Hoquiam. Adverse impacts on vegetation under Alternative 1 would be more significant than those anticipated for Alternatives 2 and 4, and much more significant than those anticipated under Alternative 3. This is primarily due to the permanent loss of forest land required to construct and operate a dam and reservoir.

Alternative 4 is likely to have the most benefit to vegetation over the long-term because of its combined Aquatic Species Habitat action elements and Restorative Flood Protection treatment actions.

Of all of the action alternatives, Alternative 1 would result in the most adverse impacts to wetlands. This is due to the permanent loss of wetlands required to construct and operate a dam and reservoir. Alternative 2, which includes walls and levees along Interstate 5, would still have permanent, adverse impacts on wetlands, but not to the same extent as Alternative 1. Alternative 3 does not include any Large-Scale Flood Damage Reduction actions, but may result minor adverse impacts to wetlands from actions like shoreline stabilization.

Alternative 4 could potentially benefit wetlands in the floodplain if it raises surface and ground water levels where projects are put into place. This would contribute to an increase in floodplain wetlands where the water table remains higher throughout more of the year. Long-term adverse impacts on wetlands in Alternative 4 would primarily be due to the conversion of upland wetlands as land uses are moved out of the floodplain.

This fact sheet provides a very general overview for public outreach purposes. This summary does not include all aspects of the analysis. The detailed analysis, data and findings available in the draft EIS, Chapters 4 and 5, online at <http://chehalisbasinstrategy.com/eis-library/>.