Chehalis Basin Strategy: Reducing Flood Damage and Restoring Aquatic Species

For the first time—after over a century of catastrophic floods and hundreds of studies—broad agreement is building on a comprehensive strategy to reduce flood damage, restore salmon populations, and support the prosperity of communities in the Chehalis Basin.



The problems in the Chehalis Basin are real and action is being taken now to protect communities and restore aquatic species.

Frequent Floods Are Getting Worse and Damage Is Increasing. The five largest floods in the Chehalis Basin's history have occurred during the past 30 years, causing massive damage to private property, livestock, farms, public buildings, roads, and bridges. Each of the recent floods closed I-5 for days. Climate change models from the University of Washington predict significant increases in peak flood levels over the next century, and a recent benefit-cost evaluation estimates that the costs of future floods will exceed \$3.5 billion in the next 100 years if no action is taken.



Salmon Populations Are Seriously Degraded and Continue to

Decline. The natural resources of the Chehalis Basin have supported Native Americans for centuries and continue to provide value to both the tribal and non-tribal people of the Basin. The Chehalis Basin supports five species of salmon and numerous other aquatic species, including the most diverse collection of amphibians in Washington State. All of these species are significantly degraded, with salmon populations at 15%-25% of their historic levels. It is very possible that the current trajectory, coupled with the potential impacts of climate change, would lead to Endangered Species Act listings and

great economic and cultural losses for tribal, commercial, and recreational fishers, including the complete loss of Spring-run Chinook from the Basin.

Changing the History of Inaction. For almost 100 years, there has been a failure to meaningfully address the dual problems of catastrophic flooding and significant degradation of aquatic species in the Chehalis Basin. Over 830 studies of potential actions to address flood damage have been conducted, with no real change...until now. The Chehalis River Basin Flood Authority has facilitated a number of construction projects to reduce flood damage and more are on the way.

Implementing a Comprehensive, Integrated Approach for Fish and Floods. After intensive evaluation of the potential benefits, technical feasibility, and costs of numerous flood-damage reduction ideas, in November 2014 the Governor's Chehalis Basin Work Group—with the support of Governor Inslee, state agencies, and the Chehalis River Basin Flood Authority—created a shared vision and set of recommendations for an integrated package of flood-damage reduction and aquatic species restoration. These recommendations include:

- A concrete flood retention dam on the upper Chehalis River, paired with improvements to the Chehalis-Centralia Municipal Airport Levee.
- Restoration of over 100 miles of Spring Chinook spawning and rearing habitat, removal of priority fish passage barriers, restoration of off-channel habitat for aquatic species, and a comprehensive strategy to address bank erosion.
- **Investment in high-priority, smaller-scale flood-damage reduction projects**, with an emphasis on projects with multiple benefits.
- Local government land use management actions to protect remaining floodplain function, alongside raising homes, and floodproofing businesses and public structures to provide additional protection for residents and structures that are already located in harm's way.

Over the next two years, the Washington State Department of Ecology – in consultation with the Work Group, Governor's office, and other agencies and stakeholders – will evaluate and vet the timing and cost of the recommended package of flood-damage reduction and aquatic species restoration actions through preparation of a Programmatic State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The programmatic EIS will analyze the potential environmental, social, and economic impacts associated with the recommended package of flood-damage reduction and aquatic species restoration actions as well as a "no action" alternative for the Basin.

There will be several opportunities for public engagement on the programmatic EIS:

- October 2015: public meeting and formal public comment period on scoping notice
- August 2016: public meeting and formal public comment period on the draft EIS document
- A number of other regular opportunities for public involvement in all aspects of the work will be provided over the next two years.

The development of a programmatic EIS will provide tribes, agencies, stakeholders, and other interested parties with a formal and systematic forum in which to evaluate the alternatives to meet flood-damage reduction and restoration goals in the Basin. The EIS will also inform the Work Group as they make their next set of recommendations to the Governor, including whether to move into permitting for specific projects, such as a flood retention dam or major habitat restoration program.

