CHEHALIS BASIN STRATEGY

Reducing flood damage and restoring aquatic species

Winter 2018

The Chehalis Basin fishery is in decline and major floods have been getting bigger. For the first time – in more than a century of failed attempts to address both of these problems – progress is being made. Take a look at the information that follows to learn the latest.

Fortunately, there is broad agreement in the basin that more can and will be done to reduce damages from large floods and protect and restore aquatic species habitat.



No single action alone will address the challenges in the Chehalis Basin – a combination of actions is needed. A lot has been accomplished already but an ambitious collection of potential actions is also being evaluated for the Chehalis Basin Strategy. The State of Washington, tribal, and local leaders are working to develop and implement a basin-wide strategy with near-term and long-term actions, including small and large scale projects. All projects will require environmental review. The goal is to make the basin a safer place for families and communities impacted by flooding, and to improve and restore aquatic species now and for future generations.





Why do we need the Chehalis Basin Strategy?

- Five of the largest floods in the basin's history have occurred in the last 30 years. Summers are becoming drier as well.
- Not taking action could cost \$3.5 billion in damage to families and communities over the next 100 years – more with climate change.
- Salmon habitat has been degraded. The survival of Spring-run Chinook populations is severely threatened.
- The Chehalis Basin today has no ESA listed salmon but if the decline continues listings could occur with serious consequences.

Aquatic Species Restoration Plan

Tribal and state officials are developing an unprecedented, basin-wide Aquatic Species Restoration Plan (ASRP) to protect and restore potentially several hundred miles of riverside habitat. The ASRP will:

- Protect and preserve important habitats
- Restore degraded ecosystems

- Create self-maintaining environments
- · Create flood and climate resilient systems

Comprehensive data collection in the basin on salmon and other species began four years ago. Continued data collection, research, and analyses for salmonids and other aquatic species in 2017-2019 will develop a more robust and science-based understanding of the habitat and aquatic species here, and support development of the basin-wide ASRP.

In 2015-2017, the Washington Department of Fish and Wildlife (WDFW) and the Chehalis Basin Lead Entity's Habitat Work Group are identifying restoration projects to provide direct benefits to fish and other species, and value to local communities that can be implemented quickly and cost-effectively. Projects are selected for funding by biologists, engineers, and habitat restoration professionals from WDFW, the U.S. Fish and Wildlife Service, Quinault Indian Nation, and a representative of the Lead Entity's citizen advisory committee.

The Governor's 2017-2019 budget, approved by the legislature, includes \$20,00,000 (\$10M State and \$10M Federal) in funding for construction of priority aquatic species habitat restoration projects, including barrier removal, early action reach restoration projects (such as floodplain and channel restoration and side channel reconnections), and acquisition of critical habitats.







Habitat Projects Underway Now

\$6 million investment resulted in:

- 27 fish passage barriers corrected or removed
- 135 miles of stream habitat opened
- 13 barrier correction/removal designs
- 30 miles of stream surveyed
- 50 local construction jobs

Local Flood Damage Reduction Projects

Many local projects have been completed and others are underway in communities across the basin to protect key infrastructure like roads and wastewater treatment plants from flood damage and others to restore individual floodplain areas. These local projects are: (a) capable of being completed within the funding cycle, (b) supported by the jurisdiction effected and (c) vetted and advanced through the Chehalis River Basin Flood Authority's Chehalis Basin Projects Committee. The State Capital Budget has been the primary funding source for local projects, averaging \$6.3M/year since 2012. See current local projects at

University Place Aberdeen -- Fry Creek Restoration Aberdeen -- North Shore Levee Aberdeen -- Southside Levee Bucoda -- Flood Openings (CleanSpace) Bucoda -- Flood Openings (McCann) Bucoda -- Main Street Regrade Centralia -- China Creek Chehalis -- Dillenbaugh Creek Study Chehalis -- Flood Storage Master Plan Chehalis -- Chehalis-Centralia Airport Pump Cosmopolis -- Mill Creek Elma - WWTP Outfall Stabilization GHC -- Wishkah Road Flood Levee GHC -- Wishkah Road Flood Study Hoquiam -- Raymer Pump Station Lewis County -- Airport Road Structure Demolition Lewis County CD -- Boistfort Valley Water Montesano -- WWTP Protection Study Napavine -- Kirkland Road Study Local Projects Completed or Oakville -- Flood Relief Study Underway in 2017-19 Thurston County -- Home Elevations WSCC -- Farm Pads & Evacuation Routes www.ezview.wa.gov/chehalisbasinlocalfloodreliefprojects WDFW -- Lower Satsop Relic Channel

www.ezview.wa.gov/chehalisbasinlocalfloodreliefprojects.

The Governor's 2017-2019 budget, approved by the legislature, includes \$9.2M in funding for the next group of local flood damage reduction projects developed by the Flood Authority.

Local Community Contributions

Local governments have also contributed to flood reduction efforts using their own funds, with over \$4M contributed annually since 2007.



Local Projects Snapshot

- 35 local projects completed (2012-2018)
- 15 local projects underway (2017-2019)
- ~2-3 years to design, permit, construct
- Typical cost = \$250K to \$2-3M
- Benefits include:
 - » Substantially lower flood insurance premiums (for individuals and communities alike)
 - » Preserve critical infrastructure essential for post-event flood recovery—roads, water supplies, sewer, wastewater treatment, etc.
 - » Early-warning, real-time access to rising flood waters (via handhelds, tablets, laptops, and desktops)
 - » Protection of residential, business and community assets
 - » Protection of farms, farm stock, equipment, and agricultural livelihoods

Continued Progress and a Path Moving Forward

We can see progress for the people, communities, and natural resources in the Chehalis Basin. But big decisions are still ahead of us.

Office of Chehalis Basin

In 2016, House Bill 2856 was passed to establish the Office of Chehalis Basin in Ecology. The office is created to aggressively pursue implementation of an integrated Strategy for long-term flood damage reduction and aquatic species restoration in the Chehalis River Basin. The Office will administer funding provided by the Legislature to implement the Chehalis Basin Strategy. The Office officially launched in July 2017.

Chehalis Basin Board

The Chehalis Basin Board is created to oversee implementation of the Chehalis Basin Strategy. The Board will build on the previous work of the Governor's Chehalis Basin Work Group. The Chehalis Basin Board consists of seven voting members: two members appointed by the Governor; one each appointed by the Confederated Tribes of the Chehalis Reservation and the Quinault Indian Nation; and three members appointed by the Chehalis River Basin Flood Authority. Five State agency directors will serve as ex-officio members.

Voting Members

- Dave Burnett, Confederated Tribes of the Chehalis Reservation
- · Edna Fund, Chehalis River Basin Flood Authority
- · Jay Gordon, Chehalis River Basin Flood Authority
- Tyson Johnston, Quinault Indian Nation
- Steve Malloch, Office of the Governor
- Vickie Raines, Chair, Chehalis River Basin Flood Authority
- J. Vander Stoep, Office of the Governor



Governor's 2017-2019 Budget Approved by Legislature

The Governor recommended a \$60 million budget appropriation, which the State Legislature included in the 2017-2019 Capital Budget. The recommendations include:

- Completion of the Aquatic Species Restoration plan.
- Project-level environmental review for the dams being considered on the mainstem Chehalis River to address questions raised during public review of the draft PEIS and determine the feasibility to mitigate the impacts of the proposed dam. This budget recommendation is opposed by the Chehalis Tribe.
- Detailed modeling and pre-permit design for one priority sub-basin for restorative flood protection.
- Design and initial permit applications to evaluate the environmental impacts and determine the feasibility for the Aberdeen/ Hoquiam North Shore Levee project.
- Implementing a public involvement and outreach strategy for all the actions and activities within the Chehalis Basin Strategy.