

What actions have the Flood Authority taken?

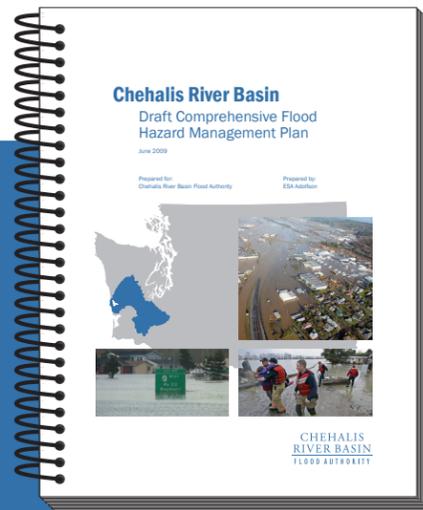
Since its formation in spring 2008, the Flood Authority has undertaken several important steps towards the goal of developing a basin-wide package of actions and projects to reduce flood damage.

The Authority completed the first draft of a **basin-wide Comprehensive Flood Hazard Management Plan** in June 2009. This plan:

- Gathers information on Chehalis Basin watershed and river characteristics
- Summarizes information about flooding in the basin
- Identifies studies needed to analyze and mitigate flooding problems
- Identifies potential projects to reduce flood damages

Since many of the efforts currently underway and the larger goals of the Authority will take a few years to implement, the Authority has undertaken some efforts that will have an immediate benefit. These efforts will provide more information for future projects or are projects that can be undertaken now without interfering with future projects.

Draft Comprehensive Flood Hazard Management Plan

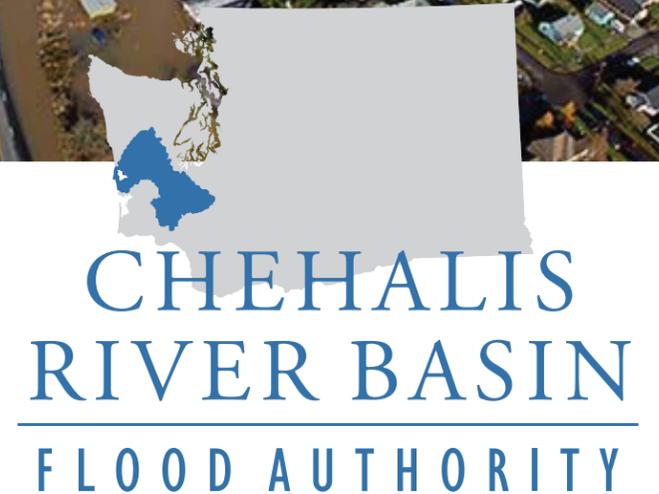


The Authority has conducted an **inventory of stream and rain gauges** in the basin, working with the National Weather Service and USGS (U.S. Geologic Survey). Then they assisted Lewis and Thurston County in upgrading several existing stream and rain gauges.

Information gathered in the gauge project will be used in an **early warning system** project that the Authority is now undertaking. Working with the emergency management staff of local jurisdictions, the Flood Authority will design and implement a system to successfully warn citizens in advance of an anticipated flood event.

Another program that will provide short-term benefit to residents of the basin is an **evaluation of land use regulations across the basin**. The Flood Authority is developing information to consider and will put forward possible changes to regulations throughout the basin that would help reduce flood damage.

The Authority has many partners in these studies and projects, including the U.S. Army Corps of Engineers, the Lewis County PUD, the State of Washington, the Chehalis Basin Partnership, the United States Geologic Survey, Trans Alta, and others.



The Authority is currently conducting studies and developing models to evaluate different actions to reduce flood damage in the basin. Some of the studies are related to specific on-the-ground projects the Authority may choose to pursue. The studies include:

- The Flood Authority has provided funding to assist Lewis County PUD evaluation of water storage facilities on the upper Chehalis River. The storage facilities are predicted to reduce flooding downstream and improve summer flows.
- Develop a **LiDAR digital elevation model** for the entire Chehalis Basin. These data would provide consistent topographical information to support modeling and analysis of future projects.
- Develop a **hydraulic model** for the basin below Grand Mound to provide consistent information for the entire basin and, in combination with the existing model for the upper basin, would be used to evaluate the benefits of flood mitigation projects.
- Support the USGS in developing a **Decision Support Tool** that would accurately predict runoff based on predicted rainfall patterns. The Decision Support Tool could be used to evaluate alternatives for flood mitigation in the future projects.
- Conduct an **economic analysis** to evaluate flood protection and other ecosystem services in the basin. This analysis will help the Flood Authority select alternatives for flood mitigation.
- Conduct a feasibility study of **modifications to Skookumchuck Dam** to determine if modifying the discharge pipe can allow for faster drawdown of the reservoir during flood events.

What does Success look like?

Success is finding cost-effective, long-term and environmentally responsible methods to protect natural resources, commercial industries, private property and human life during flood events in the Chehalis Basin.

This will be accomplished by having a Flood Authority that is focused on drafting and implementing a flood plan that is dynamic, that is updated on a regular basis, and that guides basin-wide activities now and into the future.

Success means having a way to organize across jurisdictions and raise money so that projects can be coordinated, implemented and funded across the basin in the future.

With a governance and finance structure in place, success will be agreeing upon and implementing a basin-wide package of projects that help mitigate flood damage. This basin-wide package will have small and large project proposals as well as regulatory and non-structural actions that work together and build on each other to provide cumulative reduction of flood damage.





Our Basin, Our Future

Since its formation, the Flood Authority has become an important forum for jurisdictions in the Chehalis River Basin to discuss flooding and seek common solutions to flood related problems.

What is the Flood Authority?

Major flood events on the Chehalis River have repeatedly affected communities throughout Lewis, Thurston, and Grays Harbor Counties as well as the Chehalis Reservation, especially in 2007 and 2009. The Chehalis River Basin Flood Authority was formed in response to the 2007 flooding event. Washington State's Legislature funded the Flood Authority to evaluate flooding issues throughout the Basin. The Legislature also provided funding to serve as local match for a basin-wide solution to be agreed to by the Flood Authority.

The Flood Authority consists of eleven jurisdictions:

- Grays Harbor County
- Lewis County
- Thurston County
- The Confederated Tribes of the Chehalis Reservation
- Aberdeen
- Bucoda
- Centralia
- Chehalis
- Montesano
- Oakville
- Pe Ell

Why do we have a Flood Authority?

The purpose of the Flood Authority is to develop a basin-wide package of cost-effective, long-term and environmentally responsible methods to protect natural resources, commercial industries, private property and human life during flood events in the Chehalis Basin.

What has been done to reduce damages?

Before the Flood Authority was formed, member jurisdictions independently undertook and are continuing a number of actions to protect their citizens from flood damage, including:

- Preparing flood plans
- Participating in the National Flood Insurance Program
- Adopting floodplain regulations
- Elevating homes
- Improving their emergency response programs, and
- Designing and building structural projects to protect properties in the floodplain