



REDUCING FLOOD DAMAGE IN THE CHEHALIS BASIN

Over the past century, major floods in the Chehalis River Basin have occurred about twice each decade, causing loss of human life and livestock, and damage to homes, businesses, farms, roads and railways. The worst floods on record have happened recently, with major, “100-year” floods in 1990, 1996, 2007 and 2009. The economic damages of the 2007 flood alone were estimated at more than \$900 million, with one-third of that damage coming from disruption and damage to the transportation system, including Interstate 5, other state highways and rail lines.



Despite the frequency of major floods, agreement on how to reduce flood damage has eluded basin leaders for decades. The Chehalis is a large basin, and effective basin-wide solutions can be costly. Minimizing flood damage in one part of the basin must be done in a way that doesn’t make flooding worse downstream. The basin is also of high value to salmon — any solutions must address both flood damage and fish habitat. After the 2007 flood, the Chehalis River Basin Flood Authority was created to focus on these challenges.

In August 2012, Governor Gregoire tasked a small work group to develop recommendations for flood damage reduction projects. The group reached consensus and developed recommendations that other basin leaders and the Governor could consider for endorsement and action. The Governor is grateful for the work of this group, the Chehalis Basin Flood Authority and a host of local organizations, many of which have been instrumental over the past five years in identifying projects to reduce flood damage and initiating \$5 million in construction projects.

Governor Gregoire’s proposed 2013–15 budget directs \$28.2 million in capital funds to activities that offer a basin-wide approach to reducing flood damage. Money is appropriated to the Office of Financial Management to complete preliminary feasibility studies of large-scale projects and construct smaller projects that address flooding, fish ecosystems and land use. These important investments will lead to a reduction in flood damage, healthier ecosystems and more reliable transportation routes for future generations.

The activities recommended for funding in the capital budget are those that accomplish the following goals:

Design alternatives for large-scale capital projects (\$9.2 million)

Preliminary feasibility studies on a large, upstream water retention structure have been done. The next steps are to refine the engineering designs, further evaluate dam safety, identify more specifically the implications for water quality and quantity and for fish, and complete an economic benefit assessment. Even with an upstream water retention structure, I-5 would still require major flood protection investments in Chehalis and Centralia. As the evaluation of a large, upstream water retention facility is completed, there also is a need to complete evaluation of I-5 protection alternatives.



Construct smaller-scale local projects (\$10.7 million)

Prioritized projects will be constructed to protect key infrastructure throughout the basin to deliver a measurable reduction in damages from major floods. Examples of projects include protection for the Pe Ell and Montesano wastewater treatment plants and the Bucoda drinking water well, for shorelines and roads for Mary's River lumber and Satsop Business Park, and for homes and businesses in Cosmopolis and Aberdeen.

Construct multipurpose projects that both reduce flood damage and benefit fish (\$4.3 million)

Priority projects that provide benefits for both flood damage reduction and fish habitat enhancement will also be constructed. A coordinated, basin-wide salmon restoration and enhancement program will be developed to identify and prioritize future flood plain projects. Examples of projects include flood plain restoration activities that increase flood water storage and provide fish habitat.

Reduce residential damage (\$1.8 million)

To reduce recurring damage to structures affected by floods, funding is provided to implement a program of buyouts and flood proofing of these facilities, and to help local communities better manage their flood plains.

Ensure successful implementation (\$2.2 million)

Active project management, ongoing government-to-government coordination, and technical and permit assistance from state agencies will ensure that all projects and programs related to the Chehalis Flood Basin are successfully coordinated and implemented.