

FLOOD PLANNING



Skagit River Flood Feasibility Study

The U.S. Army Corps of Engineers has identified the Skagit River as one of the highest risk rivers on the West Coast for potential devastation due to flooding. Risk of loss in a 100-year magnitude flood increases yearly as the local population crowds a levee system that can only sustain a 35-year magnitude flood. A 100-year flood has not occurred in the basin since the turn of the last century. A team of skilled engineers has been assembled from the U.S. Army Corps of Engineers and Skagit County to evaluate alternatives for reducing the damage risk to the local populations. To support the evaluations, a hydraulic model is being developed. The survey data necessary for completion of the model was collected in 1999. Also, in consideration of public involvement, an international leader in consensus building has been added to the team. A work group is currently developing options that may include setback levees, structural improvements, and property buy-outs.

Benefits

- Reduces flood damages in the Skagit River basin.
- Provides/restores habitat for salmon and other wildlife.
- Generates citizen and agency support for the project.

Skagit River “A Disaster Waiting to Happen?”

Salmon habitat has been lost, the flood plain has undergone development, and the risk of disaster looms from flood events that exceed the limits of the current levee system. In 1990 and 1995, devastating floods swept through the Skagit Valley. In the fall of 1990, two separate floods occurred within a two-week period and caused over \$36 million in public and private damages. In 1995, public damage estimates totaled over \$13.5 million. Private damages included: more than 25 homes destroyed, 308 homes damaged, over 15,000 acres in crop damages, and more than 40 farm buildings damaged.

Both the 1990 and 1995 events were classified within the range of 25 and 35-year flood events. One cubic foot of water per second (c.f.s.) is equal to 7.5 gallons of water. During the November 24, 1990 flood, the Skagit River was carrying approximately 1,140,000 gallons of water PER SECOND (roughly 150,000 c.f.s.). The Skagit River 100-year flood will be carrying 1,800,000 gallons of water per second (roughly 235,000 c.f.s.). The area has not experienced a flood of a 100-year magnitude since 1909.

The time for change is now. With the prospect of one of the Northwest's most valuable salmon resources on the brink of extinction and the false sense of security held by some cities and communities located directly behind the levees, it is imperative to inform the public and create a plan for minimizing this potential disaster.

The Skagit County Public Works Department and the U.S. Army Corps of Engineers have worked to prepare a study that addresses these problems. The study concentrates on reducing the flood threat by strategically moving levees to increase flow conveyance, thereby creating much needed habitat for the diminishing salmon. To implement the final plan, it will need the support of federal and state agencies.

Watershed:

Skagit River (WRIA 03)

Cost

\$3,900,000

Revenue

17%	Washington Department of Ecology - Shorelines Management
50%	U.S. Army Corps of Engineers
33%	Skagit County

Partners

Skagit County
Washington Department of Ecology
U.S. Army Corps of Engineers



Skagit River between Mount Vernon and Burlington

*Only two-thirds of a
100-year flood can fit through
the dikes and bridges between
Burlington and Mount Vernon.
That leaves 75,000 cubic feet
per second to go through town.*