

## The Southern Flow Corridor Flood Reduction and Habitat Restoration Project

Tillamook County, OR – The Port of Tillamook Bay (POTB) sustained damage to its facilities including a railroad line. The POTB Commissioners determined that the public would not be best served by repairing the damaged railroad and requested funding to develop several alternate projects. One of the alternate projects developed, the Southern Flow Corridor, addresses significant flood losses in Tillamook County. The alternate project is designed to reduce damage from repetitive floods, as well as restore significant floodplain and estuarine habitat within the Tillamook Bay watershed. This multi-year, multi-agency project is also receiving funds from the National Oceanic and Atmospheric Administration (NOAA), the United States Fish and Wildlife Service (USFWS), Oregon Watershed Enhancement Board, State Lottery Funds, and other funding at the local level. FEMA is currently in the process of completing an Environmental Impact Statement (EIS) that evaluates three action alternatives.

Flooding in Tillamook County can be attributed to several factors. Fires occurring in the North Oregon Coast Range from the 1930s through 1950s, and associated vegetation loss, allowed a greater proportion of precipitation (approximately 120 inches annually in the Coast Range) to be delivered directly to the streams and rivers. Without native vegetation, the denuded soils allowed sediments to enter the stream channels which were then transported downstream by five major rivers to the delta in Tillamook Bay. In addition, channel gradients are low in the delta and estuarine areas which frequently allow the lower portions of the rivers overflow their banks. Channel capacity is inadequate to handle heavy flows during severe rainstorms, particularly when combined with high tides. Other factors that contribute to flooding include the historic clearing, diking, ditching, draining and filling lowland wetland, estuarine and riverine habitats of the Tillamook Bay watershed.

One of the biggest challenges for the project has been accurately modeling (H&H analysis) the anticipated flood benefits for the different action alternatives in such a complex delta. Climate change, subsidence, changing upstream land-use, proposed changes to the current levee systems, and heavy riverine sediment loads all affect the ability to accurately model predicted changes, as do the limitations of the one-dimensional hydrologic modeling being used.

The proposed action would restore a significant amount of lost and impacted estuarine tidal wetland habitat in Tillamook Bay, and benefit a variety of fish and wildlife species. Primary focus of the restoration is the Oregon Coast coho salmon, which is listed as threatened under the Endangered Species Act (ESA). Coho salmon numbers in the Bay are estimated to be one percent of historic levels, due largely to the loss and degradation of estuarine habitats. The proposed action would remove approximately 6.9 miles of levees, modify 2.9 miles and construct 1.4 miles of new setback levees, and restore tidal wetlands on 522 acres.

The EIS has been published and is available to download from the [FEMA Resource and Document Library](#). To download click on [Final Environmental Impact Statement Southern Flow Corridor Project DR-1733-OR Tillamook County, Oregon](#), October 2015.