

Design Team Infrastructure Projects

1. **Wilson/Trask Spillway:** Flood water drainage is blocked when high water behind berms is not allowed to escape. For added flood water drainage, this project would allow the expeditious exit of flood waters into Tillamook Bay through installation of a spillway and tide gate with mitigator next to the ten tide gates on the Tillamook Bay levee. The property is owned by Tillamook County. Following engineering design and any required modeling, permits are not expected to be an impediment to project completion. Expected cost of the project is \$150,000 to \$250,000.
2. **Tone Road Spillway:** This project shows a positive benefit for farm land where excessive loss of farm animals has occurred in two floods over the last decade. The project will install a second gated spillway to the north of Tone road, to convey flood water into the Tillamook River. The property owner and the Drainage District are endorsing this improvement. The project is not expected to exceed \$350,000 and permits are not expected to pose an impediment for completion.
3. **Dougherty Slough Permanent Structure:** The Dougherty Slough permanent structure project is meant to replace the U.S. Army Corps of Engineers' temporary log jam at the headwaters of the slough in the Wilson River. Without a permanent structure, it is possible that the wooden structure could give way, causing significant flooding in the N. Hwy 101 business district. Permits will be needed and design of the structure must show fish friendly passage and structural integrity. Estimated cost for the structure is approximately \$250,000.
4. **Trask Hook:** A box culvert would be installed to remove hydraulic pressure created by the Trask River Hook Channel. The problem was created when the SR 131 Bridge was constructed over the Tillamook River. The old Trask River channel currently directs flood waters against the flow of the Tillamook River, which creates a head wall of water, increasing flood water levels in the lower Trask Drainage cell. A box culvert would direct high water through a short cut into the Tillamook River. Consultation with ODOT is essential to ensure continued structural integrity of the SR 131 Bridge and to construct the improvements within the State right-of-way. The cost for this improvement is estimated to be approximately \$100,000 based on a previous design. The Trask Drainage District is interested in assisting with this project. The need for several permits is anticipated.

5. **USACE Feasibility Study Hall Slough Project:** This project originally was designed to reconnect an historic slough disconnected in the 1950's, to the Wilson River. Set back levees with riparian plantings were suggested. Flood water would be channeled to avoid flooding in Hwy 101 areas and to open up the passage and disperse the water into Tillamook Bay. The project is meant to provide a relief valve when Wilson River water levels get too high. The initial cost for the project was estimated to be \$ 4-7 million.

6. **Modified Wetland Restoration and Swale Project:** This project was also described in the USACE Feasibility Study. The dominant feature of this project is the construction of a new levee dividing the area roughly in half, east to west, separating a fully tidal area to the north with a flood storage area to the south. The full time saltwater marsh to the north would be reconnected to the Wilson River. To the east of the wetlands acquisition area, a swale to hold run off would be constructed to compensate for the removed capacity created by the salt water marsh area. The estimated cost of this project in 2004 was \$4.5 million.

Project Exodus:

After reviewing the above two projects (Hall & Wetlands Restoration) it has been suggested by the U.S. Army Corps of Engineers and agreed upon by the Project Team that modifications to both projects be explored and possibly merged into a new and more complex project that will dramatically improve flooding conditions as well as improve eco-system restoration in the flood plain.