

## Satsop River Floodplain Restoration Project

### Status Update

WSE has completed the following project tasks:

- WSE coordinated and attended a project kickoff stakeholder meeting with Grays Harbor County, landowners, Port of Grays Harbor, and others on January 10, 2013. The scope of the project was presented and WSE requested additional data and information from stakeholders.
- WSE developed an SRH-2D hydraulic model of the Satsop River study reach from SR 12 to the confluence with the Chehalis River. The model includes portions of the Chehalis River approximately 1 mile upstream and downstream of the Chehalis River confluence. Topographic data for the model were developed by combining May 2012 LiDAR terrain data and cross sections surveyed in November 2011 to create a seamless topographic and bathymetric surface. Model parameters, including hydraulic roughness values and boundary conditions data were prepared based on examination of aerial photographs, field investigations, and engineering judgment.
- WSE coordinated with WDFW staff (Michele Cramer) and USACE staff (Amy Reese) to obtain background information related to the Satsop River Restoration Project.
- WSE visited the project site to collect additional background information for refinement of the hydraulic model and analyses and to investigate key features along the river. Ms. Terry Willis assisted with WSE's field investigations and walked most of the study reach with WSE staff.
- WSE refined and calibrated the hydraulic model to the November 2012 and January 2009 events.
- WSE develop hydrologic data for the Satsop River and Chehalis River from USGS gaging records.
- WSE finalized the baseline hydraulic model and prepared summary information for presentation to Gray's Harbor County via a teleconference on 3/20/2013. WSE also coordinated with other members of the project team to familiarize them with the modeling and analysis and begin discussions of project alternatives.
- WSE and GeoEngineers met in Montesano with project stakeholders to present the results of the calibrated baseline hydraulic model and initiate the development of project alternatives.
- Based on feedback from stakeholders at the meeting and review of earlier WDFW and USACE work, WSE developed a preliminary matrix of alternatives and circulated it to the landowners, Port, County, Flood Authority and WDFW.
- WSE followed up with WDFW staff to begin discussions of project alternatives and gain WDFW's input into the projects. WSE staff will meet with WDFW staff in late May to discuss the alternatives. In addition to their involvement from a regulatory perspective, WDFW is also a

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significant landowner along the project reach and thus is central to the development and evaluation of successful project alternatives.

- Because potential project alternatives identified for the lower Satsop River include elements that are much more comprehensive than were envisioned in the original project scope, WSE, Grays Harbor County, and Scott Boettcher held a conference call on 5/10/2013 to discuss the alternatives and decide how best to proceed. The consensus was that WSE should continue to evaluate alternatives related to the rip-rap removal project (the original scope) to ensure that the current study can provide conclusions related to the potential benefits and risks of rip-rap removal, allowing Grays Harbor County to make decisions about whether to pursue or not.

In the coming weeks WSE will complete the following tasks:

- WSE will prepare summary documentation describing potential rip-rap removal options.
- WSE will prepare information discussing additional work that will need to be done to evaluate reach scale alternatives to address flood and erosion threats and improve habitat conditions along the lower Satsop.
- WSE will attend a Technical Share/Exchange Session with key basin regulatory agencies on 5/15/2013 in Olympia. With regard to the Satsop, the goal of this meeting is to begin a dialogue with federal and state regulatory agencies to ensure that project alternatives and options reflect regulatory considerations to the greatest extent possible.

#### **Budget Status**

- Billed to OFM to date: \$26,697
- Total expended to date: \$35,813
- Total OFM budget allowance: \$50,000
- Total project budget: \$55,053