



**ESB 5127-Jobs Now Act Section 313-Chehalis River Basin Flood Relief Projects
Review and Approval Form**

(Prepared for Flood Authority Action on 10/17/2013)

Proposed Project: Lower Satsop River Floodplain Restoration Project (Phase II).

Lead Agency: Washington State Department of Fish and Wildlife, Habitat Program.

Budget: \$450,000.

Description: The goal of the Lower Satsop River Floodplain Restoration Project is to restore physical and natural fluvial processes to reduce soil and bank erosion, improve habitat complexity, and improve floodplain connectivity. The project will build on the recently completed Phase I Satsop River Riprap Removal Restoration Project which developed background information and identified a range of conceptual project alternatives (25+ alternatives). See work at:

- Phase I project website -- https://www.ezview.wa.gov/site/alias_1746/overview/34377-overview.aspx.
- Phase I final report -- https://www.ezview.wa.gov/pr/DesktopModules/Documents2_View.aspx?tabID=34380&alias=1746&mid=64550&ItemID=1628&wversion=Staging.

The benefits, impacts, and potential future evolution of the most promising alternatives from that Phase I final report will be evaluated using the SRH-2D hydraulic model developed for the previous project and by conducting in-depth hydrologic and geomorphic analyses. Together with project stakeholders a preferred alternative will be selected based on the results of the modeling and analysis. A basis of design report, 60% design plans, and permit documents will be prepared for the selected alternative.

Potential Flood Hazard Reduction Benefits: The intended benefit is to restore natural fluvial processes and floodplain connectivity to reduce soil and bank erosion, preserve agricultural soils, and improve fish and wildlife habitat.

Adverse Impacts/Effects: The Satsop River Riprap Removal Restoration Project analyzed one alternative, riprap revetment removal, for flood hazard reduction. The project concluded that removal of the riprap revetment could substantially increase lateral erosion risks to infrastructure and property along the study reach; therefore, the project identified a broad range of other potential project alternatives to examine. This phase (Phase II) of the project will evaluate those alternatives, select a preferred alternative and develop engineering designs and permit documents. No known adverse impacts or effects are anticipated.

Project Feasibility: Project feasibility is unknown at this time. Feasibility will be determined as part of the alternatives analysis conducted by WDFW habitat engineering staff and a consultant with expertise in hydrologic and hydraulic modeling and analysis, geomorphology, and the design of flood and erosion hazard reduction and habitat restoration projects.

Timeline: By January 1, 2014, contract with an engineering firm with expertise in hydraulics/fluvial processes and knowledge of the lower Satsop River project reach. By January 1, 2015, consultant will work closely with WDFW



Habitat engineers, regional staff, local landowners, and key stakeholder organizations (e.g., local Conservation District) to refine and analyze alternatives. Stakeholder involvement is essential and local landowners will be invited to participate on the design review team. In addition, the local Conservation District will also be invited to provide their expertise on preserving agricultural lands and working with agricultural landowners. Design and permit documents will be complete by June 30, 2015. Future funds will be needed to construct the project.

Authority: Section 313, ESB5127 (2012).

Jobs Supported: 1.88 FTEs.

Studies Completed: Recent key studies include:

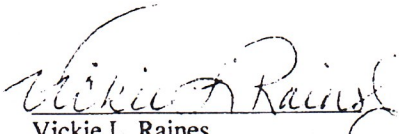
- Satsop River Riprap Removal Restoration Project Report (WSE, 2013). See <https://www.ezview.wa.gov/pr/DesktopModules/Documents2/View.aspx?tabID=34380&alias=1746&mid=64550&ItemID=1628&wversion=Staging>.
- Satsop River Floodplain Restoration Report and Addendum (WEST Consultants, 2004). See <https://www.ezview.wa.gov/DesktopModules/Documents2/View.aspx?tabID=34380&alias=1746&mid=64550&ItemID=2037>.

Further Studies Needed: This project will be the last of the feasibility and alternative analysis studies. The next phase (Phase III) will entail final design and construction.

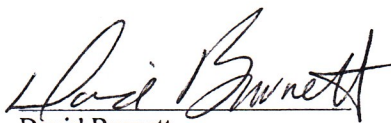
Current Project Status: ESB5127 §313(6) appropriated \$500,000 for a project on the Satsop River. Under authority from ESB5127 §313(6) the Chehalis River Basin Flood Authority on 10/02/2012 approved \$50,000 for the initial phase of this project which was contracted through Grays Harbor County. For Phase II the Lead Agency will change to Washington State Department of Fish and Wildlife (Habitat Program) since Grays Harbor County declined Lead Agency status for this phase and the project area includes substantial lands owned by WDFW.

By signing this review and approval form, we hereby agree to the following:

- We have received information from the project proponent and had the opportunity to ask questions or seek additional information.
- We understand that the proposed project fits the authorization allowed under ESB 5127, and will help provide or lead to a project to provide flooding relief within the Chehalis Basin while also providing jobs.
- We recommend that OFM allot funds to the project proponent.


Vickie L. Raines
Chair, Flood Authority

10/21/13
Date


David Burnett
Chair, Chehalis Tribe

11/22/13
Date