Chehalis Basin Small Project Scenario

Overview and Process

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EDITED VERSION

PROVIDED 10-21-2013 BY THE CHEHALIS BASIN PROJECTS COMMITTEE TO BETH PETERSON (HDR)

As part of the evaluation of projects to reduce flood damages, the Work Group and the Anchor consultant team, with the support of the Flood Authority and state and local agencies will explore the potential benefits and potential adverse impacts of a combination of smaller local projects across the Basin, focused on protecting key infrastructure, reducing shoreline erosion, and improving flow conveyance and drainage at key points in the Basin. Potential projects will be explored in both "with a dam" and "without a dam" scenarios. A program of smaller projects aimed at protecting key infrastructure and priority areas throughout the Basin may provide a measureable reduction in damages from major floods. Further analysis of such a program needs to determine how much damage reduction is possible, and at what cost, and provide additional context for considering large-scale projects. The Anchor consultant team will work with the Flood Authority, local governments, conservation districts and other interested parties to identify flood damage reduction projects and assess the potential benefits and potential adverse impacts of a suite of small projects with and without a water retention structure and alternatives to protect I-5.

The following criteria and process is supported by the Governor's Chehalis Basin Work Group. They request review and revisions by the Project Subcommittee of the Chehalis Basin Flood Authority.

What type of projects should be considered? Projects that:

- 1. Have already been started so they can be completed.
- 2. Have cost-sharing resources available to them.
- 3. Reduce flood elevations, reduce shoreline erosion, reduce velocity where needed, improve conveyance, elevate or flood proof structures.
- 4. Protect multiple properties.
- 5. Protect public infrastructure.
- 6. Are affected by mainstem flooding.
- 7. Are affected by flooding from any tributary to the mainstem?
- 8. Do not include major projects like long levees along mainstem, dredging or other projects that have been assessed before and not proposed for further study.
- 9. Direct flood waters to willing landowners, historic locations, tributaries and natural systems where practical and feasible.
- 10. Reduce flood insurance premiums for homeowners and rate-payers.
- 11. Reduce capital losses to farmers and ranchers.

The process to identify and analyze small projects will include:

- 1. Review the project list and previous process conducted by the Flood Authority and SBGH consulting to determine how the previous work can be used.
- 2. Develop screening criteria for the type of projects that should be identified and the criteria for how the projects will be evaluated.
- 3. Meet with local cities and counties, conservation districts and others to expand and/or refine the list of potential projects
- 4. Determine the suite of projects that need to be included in a small project scenario for comparison with and without a dam and alternatives for I-5.
- 5. Assess the benefits, costs and potential impacts of the suite of small projects.
- 6. Work with the Work Group and Flood Authority to determine which projects should be further assessed for potential inclusion into the next biennium capital budget (consultant resources are available to develop conceptual designs for up to 10 projects).
- Utilize as appropriate the Flood Authority's "Future Small-Scale Local Flood Hazard Reduction Projects (beyond 2013-15)" webpage at https://www.ezview.wa.gov/site/alias 1492/34489/local projects.aspx to facilitate ease of information transfer, broader stakeholder awareness, overall enhance transparency.

Draft Criteria to Evaluate Projects

- 1. Ability to affect a broader area (not just a local area, i.e. does the project provide basin wide flood reduction and provide downstream benefits?)
- 2. Value and size of the area/infrastructure the proposed project will protect (Estimated flood damage reduction benefits).
- 3. Is the project permitable?
- 4. Is the project implementable?
- 5. Is the project appropriately resourced to cover "beyond construction" costs (e.g., operations, maintenance, repair, inspections, etc.)?
- 6. Ability to provide environmental benefits.
- 7. Population/value of structure at risk.
- 8. Adaptability (can the project be adaptable to provide benefits under various scenarios (i.e. climate change, with or without other projects, etc.).