

# CHEHALIS BASIN STRATEGY: LOCAL ACTIONS PROGRAM TECHNICAL ADVISORY GROUP

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The Office of Chehalis Basin (OCB) is forming a Technical Advisory Group to review and provide input on the technical work that will be used by the Chehalis Basin Board to develop and evaluate the potential of a “Local Actions Program” to reduce flood damage in each sub-basin and basin-wide. A separate Implementation Advisory Group is also being formed to provide input on policy and implementation feasibility.

The Local Actions Program evaluation is being completed at the request of Governor Inslee, who tasked the Board and OCB with completing a preliminary feasibility evaluation of a Local Actions Program by March 30, 2021. Potential elements of a Local Actions Program for flood damage reduction will include actions like home elevations and relocation, reducing floodplain erosion rates that pose a high risk for structure damage, increasing floodplain water storage through natural or constructed infrastructure, and prevention of new at-risk development. Many of these elements have been investigated in the past but the Governor and Chehalis Basin Board are interested in reviewing what has been considered in the past as well as a fresh look at some of the potential actions.

The Board’s goal is to substantially reduce flood damage caused by catastrophic floods taking into account the predicted increased frequency and magnitude of these floods caused by climate change over time. The damage has caused loss of residential and commercial content and structures, destruction of agricultural crops and livestock, closure of transportation systems, and impaired critical facilities. The Board has approved a set of eight measurable outcomes (see attached) to guide the work of the advisory groups and the Board in conducting the preliminary feasibility evaluation.

## Technical Issues

The Technical Advisory Group will provide important input for OCB and the Board’s consideration over an approximately three-month timeframe during the first half of the Board’s six-month process (Oct-Dec 2020). The following topics will be the focus for the Technical Advisory Group:

1. How existing models and other information have been used to predict the cause and extent of flooding, and whether additional modeling or other analysis would be practical and useful during this timeframe as well as in future phases of the Chehalis Basin Strategy.
2. How climate change predictions have been used to predict future flood conditions and whether additional climate change scenarios should be considered. In addition, it is important to have

technical input into how the model predictions for future flooding translate into the potential increases in flood depths in the mainstem and tributary floodplains.

3. Whether there are additional locations to increase flood storage either through restoration of natural conditions or removal of infrastructure such as existing levees, roads/bridges/railroads, natural features, or other features that currently prevent or inhibit floodwaters from filling the floodplain during extreme flood events.
4. Whether there are additional approaches to protect high value structures and critical infrastructure such as improving or building new levees, floodwalls, or pump stations.
5. In certain parts of the basin accelerated floodplain erosion is causing damage to valuable structures and agricultural operations. There is a need to identify where this is most acute and the best techniques to address the causes and damage.
6. Additional technical issues may be added as the Board deliberates during the six-month process.

## Technical Advisory Group Role

For each of the issues listed above, OCB and its consultants will provide the Group with a technical memorandum summarizing the previous work and potential options for additional consideration. Group members will receive the memoranda in advance of meetings to discuss the material. The Group meetings will be facilitated to get feedback on the conclusions of the past work and additional work that could be performed during the six-month process.

The Group will work directly with OCB staff and state consultants from October 2020 through approximately February 2021, including participation in up to seven approximately 4-hour technical advisory group meetings and have the opportunity to attend up to three public workshops.

Technical Advisory Group members will be asked to review and provide input on various products developed by OCB staff and state consultants related to the Local Actions Program, including approaches and schedules for technical work, technical assumptions, evaluations of research and initial conclusions, and memoranda developed for Board decision-making with summaries of technical agreement/differences and recommendations. Technical Advisory Group members will not be asked to make formal decisions on any aspect of the Local Actions Program or be expected to complete any new analyses or evaluations.

## Technical Advisory Group Expertise and Membership

OCB is seeking Technical Advisory Group members with technical expertise on topics including hydraulic and hydrologic models and other methods for predicting flood damage including the effects of climate change on flows, duration and aerial extent, erosion hazard analysis and protection, and/or potential for additional flood storage and structural facilities.

OCB is seeking experts from state agencies, tribes, and local public works agencies. The membership will be limited for efficiency but interested parties will be allowed to observe the work of the Group as well as participate in public workshops.

## **Participation Needs/Requirements**

### **October – November 2020**

Participate in up to four (approximately 4-hour) Technical Advisory Group meetings and one public workshop to:

1. Evaluate and determine improvements to climate change assumptions and future flood predictions to understand the geographic extent and severity of potential future flooding
2. Consider applicability and effectiveness of past and current programs to meet the Board approved Local Actions Program outcomes to reduce flood damage through local actions
3. Refine understanding of causes and extent of flood damage at basin and sub-basin scales
4. Identify and evaluate technical effectiveness of potential actions for addressing flood and erosion damage at basin and sub-basin scales

### **November 2020 – February 2021**

Participate in up to three (approximately 4-hour) Technical Advisory Group meetings to:

1. Evaluate magnitude of different potential actions identified by Technical Advisory Group in October – November 2020 necessary to significantly reduce flood damage and meet the Board's approved Local Actions Program outcomes
2. Determine technical issues that must be addressed for success of individual and combinations of potential actions
3. Determine additional information needed (short-term and long-term) for Board deliberations on next steps related to development of Local Actions Program