

Chehalis Basin Local Actions Program • Implementation Advisory Group

MEETING 5 SUMMARY

Date: Thursday, January 21, 2021

Time: 1:00 PM – 5:00 PM, PST

Location: Zoom online meeting

Purpose of Meeting

- Continue discussion of regional/national programs using structure relocation, acquisition, and retrofits for flood damage reduction and feasibility of implementing a program in the Chehalis Basin
- Preview information and criteria from Technical Advisory Group (TAG) to-date on structural approaches to flood damage reduction
- Present feedback from TAG and Chehalis Basin Board (Board) on the opportunities and approaches for increasing floodplain storage
- Presentation on agricultural stay-in-place assistance

Meeting Notes

These meeting notes are intended to be a public record of key points, questions, and discussion topics raised during the meeting. They are not intended to be transcripts. The meeting was recorded on Zoom.

IAG Meeting 3 Summary and Upcoming Schedule

Jim Kramer (meeting facilitator) and

IAG Meeting	Date	Meeting Topics
Meeting 4 RESCHEDULED	Mon., Feb. 1, 2021	<ul style="list-style-type: none">• Follow up discussion on possible floodplain acquisition programs• Preview information from TAG, including structural approaches and implications, erosion issues, and floodplain storage
Meeting 6	Thu., Feb. 11, 2021	<ul style="list-style-type: none">• Follow up discussion on possible floodplain acquisition programs, erosion issues, and implications and feasibility for potential engineered solutions• Follow up discussion on land use recommendations
Meeting 7	Mon., Feb. 22, 2021	<ul style="list-style-type: none">• IAG information and the Chehalis Basin Board
Meeting 8 (may be with the TAG)	TBD in March 2021	<ul style="list-style-type: none">• Report back on the Board's discussions and next steps

Floodplain Acquisition Program

Jim Kramer summarized IAG members' initial responses to designing and implementing a floodplain acquisition program (FPAP) in the Basin from IAG Meeting 3, including key elements that need to be considered. The IAG continued to discuss this topic in breakout rooms with two guiding questions:

- 1) *What are your initial impressions of the feasibility of initiating and implementing a floodplain acquisition program as one of several flood damage reduction options in the Basin?*
- 2) *What additional information would be helpful to inform your thinking on feasibility?*

The IAG regrouped after 25 minutes to share key comments, questions, and discussion topics from breakout groups:

- There are big differences between smaller, jurisdiction-wide FPAPs and a comprehensive, Basin-wide FPAP. It's difficult to determine the feasibility and implications of a program until its scale is known.
- The master planning process should be led by local governments to better develop nuanced approaches for different areas in the Basin (e.g., how to address undeveloped property or businesses, determining criteria for participation, or allowing flood-friendly land use to continue). Knowing that local government capacity and willingness will vary, it would be helpful if OCB provides guidelines, funding, public communication and outreach support, training, etc. A master planning process could take anywhere from six months to a year or longer, depending on community engagement, the support offered by the state/OCB, and how concrete relocation options are.
- Currently there is not a clear sense of where sellers might relocate or security in the fact it will be an improvement to their current situation. The state or OCB may be better suited to spearhead relocation efforts in terms of identifying relocation options with local jurisdictions, expediting development, providing resources to front-line and receiving communities, engaging local communities, prioritizing environmental justice issues, and managing shifts in tax bases.
- Ongoing land management after it's acquired is a challenge that will vary depending on when and where people want to sell.
- It would be valuable to have a FPAP in place prior to the next major flooding event to help communicate how water levels will change in the future and affect property values, and to accommodate willing sellers who may want to be proactive.
- A FPAP should be one option in the suite of options for landowners to reduce flood damage in the future. Depending on the property location, the FPAP can also benefit ecological health and help meet ASRP goals.

Follow up actions:

The OCB Team will share IAG discussion topics on FPAPs with the Board on Thursday, 04 February, collect questions and areas of interest from the Board, and circle back with IAG at subsequent meetings.

Structural Measures for Flood Damage Reduction

Merri Martz (Anchor QEA) presented an overview of structural approaches to flood damage reduction, priority areas in the Basin, and technical input from the TAG on criteria to rank priority areas. The TAG's six ranking elements are:

- 1) How many structures could potentially be protected by a local facility?
- 2) Is there any major infrastructure or critical infrastructure present in the priority area?
- 3) What are the relative number of structures that might need floodproofing or relocation outside of the priority area with a local facility (high, medium, low)?
- 4) Is there a high likelihood of adverse direct impacts to wetlands, waterbodies, or other natural habitats from a local facility (e.g., if filling in a wetland were required)?
- 5) What is the relative number of structures protected per mile of facility such as a levee?
- 6) What else could be affected upstream of downstream from actions taken in this reach?

IAG members worked in Jamboard ([link to Jamboard on structural measures for flood damage reduction](#)) to answer the following question: *Are there programmatic or policy criteria that should be*

considered for rating areas for potential structural approaches to flood damage reduction in addition to the technical criteria developed by the TAG?

Key comments and questions on this topic included:

- The priority areas were identified via GIS; extensive analysis has not yet been conducted.
- Projects that should rank higher might include those with multiple benefits and/or those that can preserve floodplain/wetlands.
- There needs to be an environmental justice metric in the ranking criteria. This could help identify if there are disadvantaged communities that could be prioritized and determine economic drivers and/or programs that could assist them.

Floodplain Storage

Merri Martz summarized previous studies conducted to assess floodplain storage in the Basin and five TAG conclusions on opportunities to increase floodplain storage in the Basin:

1. The opportunity for additional floodplain storage along the mainstem Chehalis River in a 100-year flood events is limited. This is because flooding during a large event is, in most cases, already valley wall to valley wall.
2. Past and recent analyses show that available additional storage along the mainstem Chehalis River and in the South and North forks of the Newaukum River would not provide any beneficial reduction in large flood flows or flood damage in modeled current and modeled future 100-year flood events.
3. However, there are potentially significant benefits along tributaries, especially smaller tributaries, or for lower flood events.
4. Adding floodplain storage should continue to be considered in addressing flood damage in tributaries as one of the several potential solutions for reducing localized flooding problems.
5. Additionally, there is potential for a multi-benefit synergy when combining additional floodplain storage with habitat restoration. Although combining flood storage with a habitat project is not likely to have a noticeable effect on flooding during large flood events, it can provide localized benefits and enhance the value of the habitat project.

Agricultural Stay-in-Place Assistance

Tim Abbe (Natural Systems Design) presented findings from the Restorative Flood Protection Advanced Feasibility Evaluation which examined strategies to assist agricultural landowners in reducing flood damage. The Evaluation identifies two main elements of restorative flood protection in agricultural areas: 1) adaptation and 2) managed retreat out of hazard areas and expand upland agriculture. The Evaluation describes resilient agricultural systems and techniques for flood-prone areas, including agroforestry, silvo-pasture, and alley cropping; presents economic considerations for managed retreat; describes the risk-benefit tradeoffs of expanding agriculture to upland areas; and provides examples of opportunities to expand agriculture in Lewis County.

IAG members discussed the agricultural stay-in-place information and worked in Jamboard ([link to agricultural stay-in-place Jamboard](#)) to answer the following two questions:

- 1) *Which opportunities seem most promising for reducing ag-related damages from catastrophic flood events?*
- 2) *What are the biggest challenges to implementing these opportunities?*

Key comments and questions on this topic included:

- Many farms in the Basin are already well equipped to deal with flooding because it's been an ongoing issue for generations. However, because the severity of flood events will continue to increase due to climate change, landowners may be motivated to engage conversations about solutions again.
- Concerns about expanding agriculture to upland areas relate to lack of nutrient refurbishment, erosion, water rights, and potential tradeoffs with forest land and water quality impacts.

Next Steps and Summary of Follow-Up Actions

The next Implementation Advisory Group meeting is scheduled for Monday, 01 February 2021, at 1:00 PM PST. This meeting was scheduled to replace the fourth IAG meeting that was cancelled in mid-January due to weather events.

Below is a summary of follow-up actions identified during the meeting:

- The OCB Team will share IAG discussion topics on FPAPs with the Board on Thursday, 04 February, collect questions and areas of interest from the Board, and circle back with IAG at subsequent meetings.
- The OCB Team will update the IAG on future TAG discussions about structural measures.