

## MEETING 4 SUMMARY

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**Date:** Monday, 01 February 2021 (rescheduled from Wednesday, 13 January 2021)

**Time:** 1:00 PM – 5:00 PM, PST

**Location:** Zoom online meeting

### Purpose of Meeting

- Continue discussion of issues regarding a floodplain acquisition program in the Chehalis Basin;
- Continue discussion on potential options for structural flood protection; and
- Revisit potential implications and actions for floodplain management.

### 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 Schedule and Workplan

Jim Kramer (meeting facilitator) reviewed the meeting agenda and the upcoming IAG meeting schedule and workplan (see table below).

IAG Meeting	Date	Meeting Topics
Meeting 6	Thu., 11 Feb. 2021	<ul style="list-style-type: none"><li>• Follow up discussion on possible floodplain acquisition programs, erosion issues, and implications and feasibility for potential engineered solutions</li><li>• Follow up discussion on land use recommendations</li></ul>
Meeting 7	Mon., 22 Feb. 2021	<ul style="list-style-type: none"><li>• Joint meeting with Technical Advisory Group to discuss information and next steps to be shared on Local Actions Program with the Chehalis Basin Board</li></ul>

### Community Buyout and Relocation Programs

Ken Ghalambor (Ross Strategic) summarized acquisition program (AP) research to date (which includes desk research, practitioner interviews, and the panel discussion from IAG Meeting 3). The presentation included key insights related to two broad types of APs: 1) those with targeted acquisition areas and 2) those with dispersed acquisitions – both with and without relocation components; AP drivers and incentives; outreach, community engagement, and leadership; implementation issues; relocation considerations; and challenges and benefits as they pertain to different types of APs. IAG members briefly discussed APs before splitting into three breakout rooms to discuss the following two questions:

1. *What conditions in the Chehalis Basin are present or not present that increase or decrease the likelihood for a dispersed acquisition program?*
2. *What conditions in the Chehalis Basin are present or not present that increase or decrease the likelihood for a targeted-area acquisition program and/or a relocation program to significantly reduce at-risk structures in strategic locations? Are there locations where the potential is greater?*

Key questions, comments, and topics that came up during the presentation and breakout room discussions included:

- APs do not typically achieve strategic floodplain management goals in and of themselves; they are typically one option included for willing sellers within an overall floodplain management program.
- There are some major considerations, both logistical and human, associated with any AP that the IAG has not yet discussed in detail, including:
  - Infrastructure removal and/or installation and maintenance
  - Land management for acquired properties
  - The strong reaction that many property owners and elected officials in the Basin will likely have to any AP and its potential to negatively impact their communities and/or other CBS projects
  - Economic incentives for property owners, renters, and businesses, which have not been clearly identified and will differ among different types of property owners
- The City of Centralia had considerable challenges using FEMA's buyout program following the 2007 floods. Very few property owners were willing to sell their homes at fair market value, even when they were subject to severe repetitive losses from flooding. Even in the hardest hit areas, people did not want to move.
- The comments on the 2016 Programmatic EIS also indicated that people did not want to relocate.
- Political leaders are not likely to support a program that could lead to a lower tax base. This includes the property tax base, but also local sales tax. Pursuing and buying first right of refusal for key properties in the Basin could be a productive avenue for an acquisition program. This is something the ports and DNR have experience with.
- The fact that there are a lot of rental properties in the floodplain may mean that property owners may be willing to sell. However, this could lead to renter displacement and lost income for landlords. It's difficult to say whether residents would be interested in new housing opportunities, however; past experiences (e.g., flooding in '07) indicate low receptivity overall.
- Property owners' interest in a potential AP can change at any given time, such as after a major flood, with changes in the real estate market, or with major family life events.
- Conditions that are present in the Basin that could support an AP include:
  - County conservation districts have positive relationships with many property owners.
  - A coordinated effort could be led by OCB but would need to support and involvement of local officials and staff.
  - Property owners could benefit from an established AP in the future given the Basin's dynamic nature (flooding and erosion are consistent issues).
- Targeted-area APs typically have more combined benefits than dispersed acquisitions. The latter may be easier to implement in general but less likely to contribute to achieving strategic goals. A dispersed approach within specific target areas might be a compromise between the two types of APs.
- "Opportunistic" is not an appropriate term to use for a dispersed willing seller AP.
- It is important to further define the incentives, opportunities, and benefits for participants in an AP.
  - Whether businesses and residential property owners are interested in participating in an AP and moving out of the floodplain will depend, in part, on what the incentives and benefits are for participating.

- The value of homes outside the floodplain will be greater than for homes in the floodplain, so incentives could include infrastructure, lot subsidies, assistance with finding a new home, etc.

## **Structural Measures for Flood Damage Reduction**

Bart Gernhart (Washington State Department of Transportation) reviewed the recent projects along I-5 from Rush Road to SR 121 that have used \$10M of the approximately \$75M provided for congestion relief in this area through the last major state transportation revenue package (Connecting Washington). The flood-prone area is between Exit 76 and Exit 81 (5-mile section, 13<sup>th</sup> Street to Mellen Street). During a flood event that inundates or threatens to flood I-5, a 20-mile stretch needs to be closed on either side of the flood-prone area to take advantage of available off-ramps and detours. Bart reviewed the alternatives that were previously evaluated by WSDOT, including conceptual designs, proposed operations during flood events, and some of the pros and cons of each approach. The alternatives that considered bypass lanes, a viaduct, or relocating I-5 outside the floodplain faced many technical, environmental, and community obstacles such as:

- Not solving traffic congestion problems and WSDOT's need to widen I-5.
- Creating many new stream crossings that would require expensive new fish passage facilities.
- Significant wetland impacts that would need to be mitigated.
- Cutting off important commercial areas and local roadways adjacent to the freeway that would not be connected to new freeway tie-ins/touch-downs.
- Bifurcating the communities, which WSDOT policy seeks to avoid in all future projects.

Some of the potential issues for Alternative 1 (protect I-5 with flood walls and levees) include:

- Challenges associated I-5 being 8 feet below the existing airport levee grade.
- Uncertainty of acquiring necessary railroad right of way since the railroads have superior rights to state DOTs.
- Existing bridges may not be capable of withstanding the necessary modifications, requiring expensive rebuild/retrofits.
- Some of the mitigation concepts for Alternative 1 included buyouts and raising structures, which may not be eligible for funding from gas tax revenues due to state constitutional restrictions.
- Magnitude of climate change impacts described in the Draft SEPA EIS requires a re-assessment of the alternative. There is a much greater chance for flood waters to overtop or re-infiltrate I-5 infrastructure.

Some of the potential issues for Alternative 2 (raise and widen I-5) due to climate change impacts described in the Draft SEPA EIS:

- With climate change, the bridges would need to be raised even higher. By the time I-5 offramps reconnected with the local roadways, it would be bypassing the city center and would no longer connect to existing local roadways.
- There are also challenges with staging during flooding.

Bart also reviewed the I-5 flood detour options for freight via US 12 and SR 7. It is currently a 2-lane road that may or may not be open due to flooding or erosion (caused during a flood that closes I-5) and can only handle a quarter of the freight. Freight movement during a flood would be based on a permit system addressing priorities such as food or other critical supplies.

These are preliminary issues associated with climate change projections, but a new assessment would be required to understand the full implications. Previous analysis (2014) included a 25% increase in

climate change predictions, which resulted in a 3-foot freeboard above current levels. The following gages were used in the WSDOT analysis: Doty, Grand Mound, Newaukum, and Skookumchuck.

## Floodplain Management Recommendations and Land Use Implications

Jim Kramer reviewed six potential floodplain management recommendations that have surfaced after an initial set of recommendations were prioritized by the IAG based on the Board's goal that no new structures in the Basin are at risk for flood damage and were further narrowed down through conversations the OCB Team had with county planning departments and local governments. The six potential recommendations being explored are:

1. Use a higher standard for flood protection (options include the flood of record, the modeled current 100-year flood, the modeled current 500-year flood, or the 2080 flood prediction)
2. Impose subdivision regulations that prevent new building lots wholly in the floodplain
3. Maintain or expand low-density zoning in rural areas (1 unit per 20 or 40 acres)
4. Reduce the impacts of new developments on the floodplain with zero rise and compensatory storage requirements
5. Require on-site water/sewer infrastructure in rural areas (This is being researched as a strategy for limiting floodplain development and was not discussed at the meeting.)
6. Use incentives such as development rights and acquisitions to limit development in the floodplain

The IAG responded to five questions in Jamboard ([link to floodplain management Jamboard](#)); responses for each question are summarized below:

1. *What additional information or issues should the Chehalis Board consider in deciding to recommend the use of flood of record, modeled current 100-year flood, modeled current 500-year flood, or the 2080 flood prediction?*
  - A Basin-wide (or even state-wide) standard for considering future flood risks would be useful for several reasons, including communication and surveyors who prepare flood elevation certificates.
  - Any new standard may need to align with (or exceed) FEMA mapping and NFIP and we should distinguish between using the standard to plan for future flood conditions versus regulating to future flood predictions.
  - It's important that the standard is easy for people to understand and actionable. The modeled 500-year event may be easier to show the public than the predicted 2080 flood levels.
2. *Do you think more is needed to ensure new lots are not created in rural floodplain areas? If so, what?*
  - This could be difficult to enforce if it's not required by the state. Economic incentives to develop elsewhere would also help.
  - It would be helpful to audit how well this type of regulation (subdivision regulations) has been implemented through time.
3. *Do you think more is needed to ensure low densities (1/20 or 1/40) in rural floodplain areas? If so, what?*
  - Low density zoning already exists throughout the basin in rural areas. However, policy guidance discouraging upzones or urban growth area (UGA) expansion into flood areas

would be helpful to keep people out of harm's way and maintaining resource use properties that are compatible with flooding.

4. *What additional information or issues should the Chehalis Board consider in deciding to recommend use of zero rise and compensatory storage?*
  - Compensatory storage is crucial throughout the Basin along with the development of criteria to control rain events on the property.
  - The UNFI project site is a great example of a compensatory project that worked well.
  - Compensatory storage does not add up to much when compared to the huge volume of water in the floodplain; this should not be focused on as much as other, more substantial solutions.
  - How to measure the cumulative impact of fill in the floodplain? Requiring no rise for one parcel may place an added burden on landowners but the impact of cumulative development should be monitored and managed.
  - Zero rise on an individual project-by-project basis always comes back showing no rise in the floodplain. It would be helpful to have a larger basin-wide analysis.
  - A discussion of the size of a project should be considered (e.g., single family home with venting) versus a large industrial development with lots of fill.
5. *What, if any, other incentives should be considered in addition to an acquisition program?*
  - Density bonus allowance for cluster development, which may be very limited under the Growth Management Act.
  - Incentives for low impact development (LID) and maintaining predevelopment hydrology.
  - Conservation easements could preserve the floodplain but there likely needs to be additional financial incentives.
  - Flood easements where the land could be used for alternative purposes and still owned by the owner with the realization damage or lack of use could occur periodically.
  - A mitigation fee (paid by floodplain developers) could provide more funding for programs.
  - Multi-year funding streams for local governments to acquiring development rights.
  - Make CBS funding for flood damage reduction infrastructure projects dependent on local governments adopting higher standards.
  - Block grants to cities and counties that implement the increased regulatory requirements or support acquisition programs that reduce annual property tax income.
  - Use acquired properties for compensatory storage mitigation as an added benefit/incentive.
  - Assistance with raising structures as a "stay in place" alternative to acquisition where feasible.
  - Development of floodplain adaptation best management practices and education/outreach to get them into the community.

## Next Steps and Summary of Follow-Up Actions

The next Implementation Advisory Group meeting is scheduled for Thursday, 11 February 2021, from 1:00 PM to 5:00 PM, PST.

*Follow up actions:*

- IAG members are invited to add more comments to the floodplain management recommendation Jamboard (link provided above) prior to the next IAG meeting.