

# LONG-TERM STRATEGY STATUS AND NEXT STEPS

Chehalis Basin Board Meeting  
Presentation

March 4, 2021



# PRESENTATION OBJECTIVES AND STRUCTURE

## Objectives

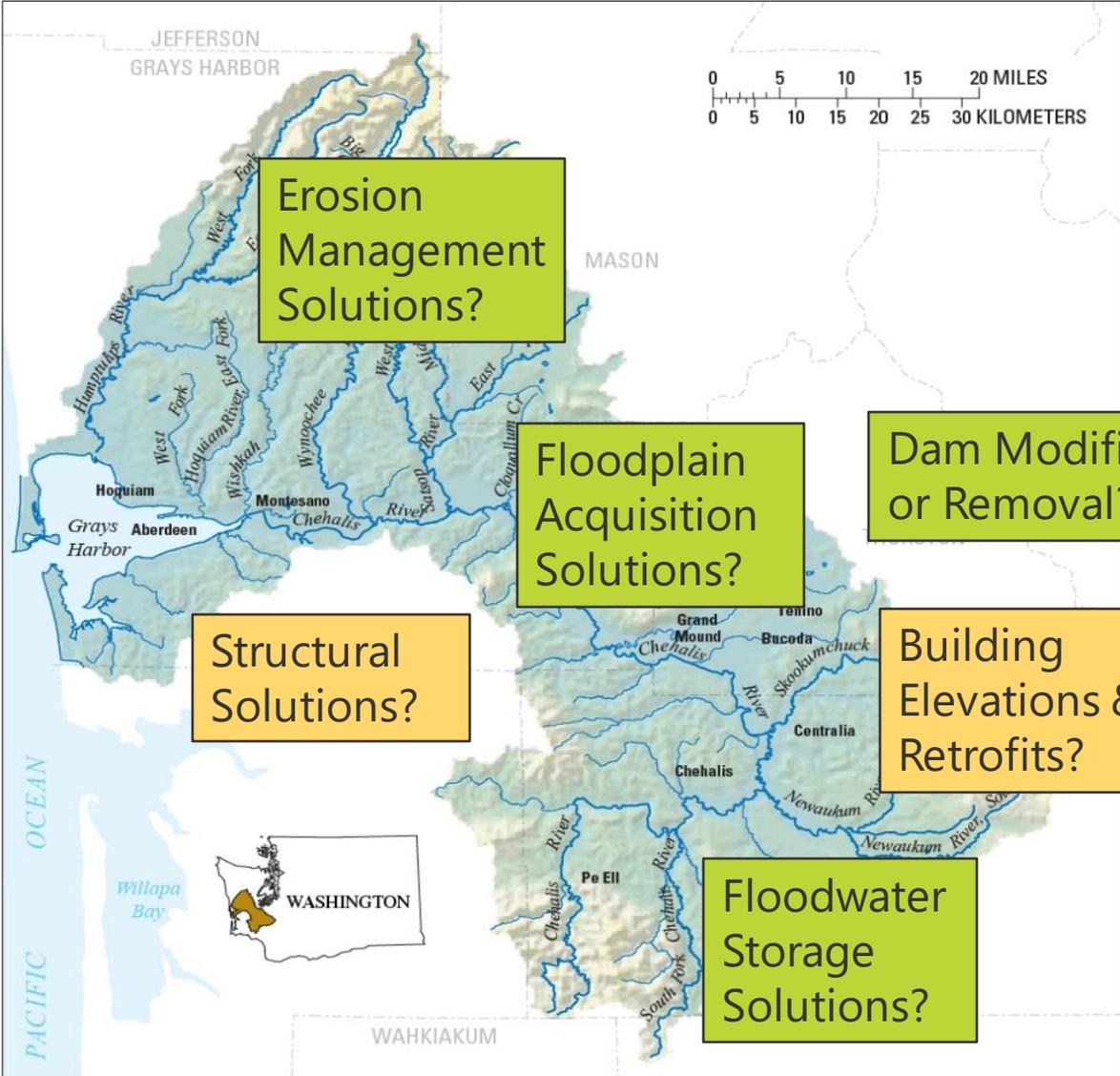
- Provide the Board with staff recommended pathways for 2021-23 biennium budget and work plan
- Receive Board direction for staff work over next three months to prepare for Board decision on 2021-2023 biennium budget and work plan and implications for the long-term strategy

## Issues to be discussed

- Support for Governor's proposed \$70M biennium budget
- Current status for determining what flood damage reduction actions can meet the Board's outcomes
- Support for recommending 2021-23 funding allocations and project lists by June 3, 2021
- Which projects and program elements need additional information for the Board to determine a more detailed funding allocation for the 2021-23 biennium and beyond?

# APPROVED MEASURABLE FLOOD DAMAGE REDUCTION OUTCOMES

1. Valuable structures protected from mainstem, catastrophic flooding
2. Homes & businesses protected from seasonal urban flooding
3. Lower basin properties & businesses protected from coastal storm surges
4. Farmland and rural structures protected
5. Critical facilities protected
6. Transportation routes protected
7. Environmental justice advanced
8. Prevent new at-risk development



# ANALYSIS OF FLOOD DAMAGE REDUCTION ACTIONS

Current level of analyses and need for additional information to determine long-term actions for flood damage reduction

- Information is not sufficient at this time to determine if suite of actions, with or without a dam, can meet the Board outcomes
- Additional information is needed over the next biennium to provide the information needed by the Board

# GOVERNOR' PROPOSED 2021-23 BUDGET

**\$70,000,000**

*“(1) \$33,050,000 of the appropriation in this section is for **board-approved** projects to protect and restore aquatic species habitat...”*

*“(2) \$33,050,000 of the appropriation in this section is for **board-approved** projects to reduce flood damage...”*

*“(3) \$3,900,000 of the appropriation in this section is for the operations of the office of Chehalis Basin and Chehalis Basin board...”*

*“(4) **The Chehalis Basin Board has the discretion to reallocate the funding between subsections (1), (2), and (3) of this section if needed to meet the objectives of this appropriation and approved by at least six of seven voting members of the board. However, \$3,900,000 is the maximum amount the department may expend for the purposes in subsection (3) of this section.**”*

# BOARD GUIDANCE

- Support for Governor's proposed \$70M 2021-2023 biennium budget
- Agree that additional information is needed to determine what combination of actions can meet the Board's outcomes for flood damage reduction
- Support the process to recommend 2021-2023 funding allocations and project lists by June 3, 2021

(Board questions and discussion)

## ***Crosscutting/Integrated Work (Projects and Analyses Advancing the Integration of Flood Damage Reduction & Habitat Restoration Objectives)***

- Skookumchuck Dam Analysis
- Erosion Management Guidance & Pilot Project Development
- Floodplain Acquisition Program Design
- Floodplain Mapping and Modeling
- Land Use Recommendations & Guidance
- Community Outreach/Engagement

### ***Aquatic Species Habitat Restoration***

- Restoration projects
  - Reach-scale project design/construction
  - Non reach-scale project design/construction (amphibian focused, barriers)
  - Ramp-up capacity (project development efforts)
- High quality/unique habitat acquisition projects
- Implementation support
  - Sourcing project materials
  - Ramp-up capacity (Local implementation teams and project design review)
  - Monitoring and adaptive management

### ***Flood Damage Reduction***

- Flood Control Zone District Flood Damage Reduction Project
- Flood Authority Projects
- North Shore Levee Project
- Other Structural Flood Protection Evaluations
- Community Flood Assistance & Resilience (CFAR)
  - Technical and financial assistance to local governments, tribes & landowners

# CROSSCUTTING/INTEGRATED WORK

*Projects and Analyses Advancing the Integration of Flood Damage Reduction & Habitat Restoration Objectives*

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- Erosion Management Guidance & Pilot Project Development
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# FLOOD DAMAGE REDUCTION

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- Flood Authority Projects
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- Other Structural Flood Protection Evaluations
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  - Technical and financial assistance to local governments, tribes & landowners

# AQUATIC SPECIES HABITAT RESTORATION

- Restoration projects
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# COMBINING ACTIONS TO MEET BOARD OUTCOMES

Information developed in the 2021-23 biennium from the crosscutting and flood damage reduction categories will be used to determine if a suite of actions, with or without the flood retention facility, can achieve the Board's preferred flood damage reduction outcomes.

PRELIMINARY OCB  
STAFF OPTIONS FOR  
BOARD'S 2021-2023  
BUDGET  
RECOMMENDATIONS  
AND LONG-TERM  
STRATEGY



# CROSSCUTTING/INTEGRATED WORK

*Projects and Analyses Advancing the Integration of Flood Damage Reduction & Habitat Restoration Objectives*

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# EVALUATION OF SKOOKUMCHUCK DAM UNDERSTANDING AND NEXT STEPS

## ***Potential Pathways for 2021-23***

1. Analyses for Long-Term Options
  - A. Existing Dam + Operational Modifications
  - B. Modified Dam + Operational Modifications
  - C. Dam Removal
2. Analyses for Near-term Actions
  - A. Changes to Dam Operations for salmon and flood control
  - B. Acquire Water Right(s)

*Board direction provided on February 18, 2021: OCB staff should develop a 2021-23 work plan and budget for the analyses listed above for the Board's consideration*

# BANK EROSION MANAGEMENT UNDERSTANDING AND POTENTIAL NEXT STEPS

OCB Team is completing assessment in March of historical channel migration for 100 miles of high priority erosion areas.

## ***Potential pathways for 2021-23***

- Develop a pilot technical assistance program for landowners with relative cost and staffing needed for a program
- Complete erosion hazard delineations in high priority areas

***Board direction: Should staff develop a work plan and budget for either or both of the pathways listed above for the Board's consideration to include in the 2021-23 biennium budget?***

# FLOODPLAIN ACQUISITION PROGRAM DESIGN UNDERSTANDING AND POTENTIAL NEXT STEPS

## *Potential pathways for 2021-23*

1. Develop a range of voluntary acquisition options for landowner and community interests to discourage expansion of high-density zoning, maintain low-density zoning and agricultural viability in rural areas, and prevent environmental and economic damage
2. Provide responsive acquisition opportunities with willing landowners, especially in strategic locations or areas that can offer multiple benefits
3. Support ASRP acquisition elements and priorities
4. Conduct initial master planning work in strategic areas with potential relocation receiving opportunities (e.g., Davis Hill in Centralia) in coordination with interested local government(s)

*Board direction: Should staff develop a work plan and budget for any or all of the options listed above for the Board's consideration to include in the 2021-2023 biennium budget?*

# FLOODPLAIN MANAGEMENT AND MODELING UNDERSTANDING AND POTENTIAL NEXT STEPS

## ***Potential pathways for 2021-23***

- Conduct additional analyses to look at flood damage from more frequent events.
- Explore opportunities for additional floodplain storage benefits along tributaries, especially smaller tributaries.
- Identify synergies and align as feasible with ASRP goals and projects.

*Board direction: Should OCB develop options for Board consideration on additional floodplain management & modeling in the 2021-23 biennium and beyond?*

# LAND USE CURRENT UNDERSTANDING AND POTENTIAL NEXT STEPS

## ***Potential pathways for 2021-23***

Refine Land Use Recommendations through work with local governments and tribes:

- Two-pronged approach for using floodplain data:
  - Use the flood of record or modeled current 100-year floodplain (whichever is higher) for regulating the floodplain extent and depth
  - Use the 500-year floodplain or the 2080 (100-year) floodplain for planning and outreach purposes (e.g., future zoning, technical assistance and advice to property owners)
- Support continuation of subdivision regulations for rural areas to prevent new lots wholly in floodplain
- Discourage upzones or urban growth area (UGA) expansion into flood-prone areas
- Provide guidance to standardize implementation of zero rise policy and compensatory storage requirements
- Consider implementing the other past floodplain management recommendations (CRBFA 2010 and French and Associates 2016) as appropriate for their jurisdictions.

*Board direction: Should OCB develop options on how to refine and implement recommendations for the Board's consideration to include in the 2021-2023 biennium budget?*

# COMMUNITY OUTREACH AND ENGAGEMENT OPTIONS AND POTENTIAL NEXT STEPS

## ***Potential pathways for 2021-23***

- Conduct targeted outreach in priority areas to determine interest for local actions, and level of flood protection I.
- Solicit input from local jurisdictions on any other potential areas to consider for local flood protection.
- Expand formalized engagement with housing service providers and economic development organizations.
- Develop a more inclusive public involvement strategy tailored to environmental justice communities.
- Develop more cohesive messages, informational materials, and engagement expectations for use by all partners who are funded to interact with landowners and implement different elements of the Chehalis Basin Strategy.

*Board direction: Should OCB develop options for Board consideration on community outreach and engagement strategies in the 2021-23 biennium and beyond?*

# FLOOD DAMAGE REDUCTION

- Flood Control Zone District Flood Damage Reduction Project
- Flood Authority Projects
- North Shore Levee Project
- Other Structural Flood Protection Evaluations
- Community Flood Assistance & Resilience (CFAR)
  - Technical and financial assistance to local governments, tribes & landowners

# FLOOD RETENTION FACILITY OPTIONS AND POTENTIAL NEXT STEPS

## ***Potential pathways for 2021-23***

- Flood Control Zone District develops and refines avoidance, minimization and compensatory mitigation (AMM) analyses in collaborative process with agencies and tribes
- Fund agency cost-reimbursement to finalize SEPA and NEPA EISs to incorporate input from tribal and public comments, new information from Flood Control Zone District, and additional technical studies and analysis determined by Ecology and the US Army Corps of Engineers
- Flood Control Zone District prepares preliminary permit application materials and supporting plans, e.g., finalize draft HPA/Aquatic Species Mitigation Plan for permitting, finalize draft Wetlands Mitigation Plan, develop draft AMM plans for recreation, land use, cultural resources, etc.

***Board direction:*** *Should staff develop a work plan and budget for any or all of the pathways listed above for the Board's consideration to include in the 2021-2023 biennium budget?*

# PRIORITY AREAS FOR STRUCTURAL FLOOD PROTECTION CONSIDERATION

1. Adna
2. Lower Newaukum
3. Airport Levee/Chehalis
4. Centralia
5. West Centralia
6. Military Road
7. Galvin
8. Independence Road and north floodplain
9. Oakville
10. Elma (south and west, Monte-Elma Road)
11. South Aberdeen Levee Area
12. East Aberdeen
13. Bucoda
14. Grand Mound

LOCATION	NUMBER OF STRUCTURES IN SELECTED AREA <sup>1</sup>	MAJOR/CRITICAL INFRASTRUCTURE PRESENT IN MODELED 2080 FLOODPLAIN? <sup>2</sup>	STRUCTURES AFFECTED OUTSIDE PROTECTED AREA	IMPACTS TO NATURAL ENVIRONMENT	RELATIVE BENEFIT PER MILE OF FACILITY	RATING
3. Airport Levee and Chehalis	High (215)	I-5, airport Washington State Patrol	High (>100)	Medium (wetlands, Dillenbaugh Cr.)	High (~4 miles [ $>1$ mile existing])	<b>High</b>
4. Centralia	High (5,527)	Radio stations Valley View Health Center Washington Elementary School Centralia Community College Centralia Police Centralia City Light BPA Power Plant	High (>100)	High (wetlands, Skookumchuck and Salzer riparian)	High (~5 miles)	<b>High</b>
5. West Centralia	642 (High)	Centralia High School	Medium (>25)	Low (agricultural, park)	High (~2 miles)	<b>High</b>
11. South Aberdeen	High (1,203)	Stevens Elementary School	Low (<20)	Low (existing levee raise, pump station)	High (~2 miles existing)	<b>High</b>
13. Bucoda	High (260)	Water supply infrastructure	Low (<20)	Medium (Skookumchuck riparian)	High (~1 mile)	<b>High</b>
1. Adna	Medium (83)	High school Lewis County special education Highway 6	Low (<20)	Medium (Chehalis riparian)	Medium (~1.5 miles)	<b>Medium</b>
7. Galvin	Medium (87)	None identified	Medium (>25)	Low (agricultural, residential)	Medium (~1.5 miles)	<b>Medium</b>
9. Oakville	Medium (172)	None identified	Low (<20)	Low (residential)	Medium (~1 mile)	<b>Medium</b>
10. West Elma	Medium (148)	Highway 8 Elma High School	Low (<20)	Low (highway raise)	Medium (~2 miles)	<b>Medium</b>
12. East Aberdeen	Low (4; all commercial)	Highway 101	Low (<20)	Medium (Estuary shoreline)	Medium (~1 mile)	<b>Medium</b>
14. Grand Mound	Medium (168)	None identified	Low (<20)	High (wetlands, oxbows)	Medium (~2 miles)	<b>Medium</b>
2. Lower Newaukum	Low (20)	None identified	Low (<20)	Low (agricultural, residential)	Low (~1 mile)	<b>Low</b>
6. Military Road	Low (34)	Providence Centralia Hospital Valley View Health Center	Medium (>25)	Low (residential)	Low (~2 miles)	<b>Low</b> 26
8. Independence Road / north floodplain	High (306)	Highway 12	High (>100)	High (wetlands, oxbows)	Medium (~4 miles)	<b>Low</b>

# STRUCTURAL FLOOD PROTECTION (LEVEES) OPTIONS AND POTENTIAL NEXT STEPS

## ***Potential pathways for 2021-23***

- Evaluate frequency of flooding and the sources of flooding at 14 potential priority areas
- Identify the proportion of types of structures in priority areas (residential, commercial, etc.)
- Identify existing and long-range land use, zoning, buildout, economic development and social justice considerations for jurisdictions
- Consider identifying initial levee or other facility alignment possibilities (conceptual design level)
- Conduct additional hydraulic modeling, if interest develops in analyzing further to help determine feasibility and costs

***Board direction:*** *Should staff develop a work plan and budget to implement any or all of the analyses and actions above for the Board's consideration to include in the 2021-2023 biennium budget?*

# COMMUNITY FLOOD ASSISTANCE & RESILIENCE (CFAR)

## ***Potential Pathways for 2021-23***

- Maintain or increase the current level of funding (\$3 million) to continue providing technical support and financial assistance to residents and business owners.
- Provide technical support and financial assistance to local and tribal governments, including support for current and aspiring CRS communities with entering and maintaining the records required under the CRS program for their jurisdiction's property owners/residents to be eligible for reduced flood insurance rates.

*Board direction: Should staff develop a work plan and budget to maintain or expand the CFAR technical & financial assistance program?*

# NORTH SHORE LEVEE OPTIONS AND POTENTIAL NEXT STEPS

## ***Potential Projects for 2021-23***

- The cities of Aberdeen and Hoquiam have requested OCB's 2021-2023 budget recommendations include up to \$10 million for the next phase of the 6.2-mile North Shore Levee project.
- The cities are also seeking an additional \$4 million from the legislature through a separate appropriation to complete the final design and right-of-way acquisition of the West Segment of the North Shore Levee.

*Board direction: What additional information does the Board need to determine the funding levels for the North Shore Levee in the 2021-23 biennium?*

# FLOOD AUTHORITY LOCAL PROJECTS OPTIONS AND POTENTIAL NEXT STEPS

## ***Potential projects for 2021-23***

- The Flood Authority has requested OCB's 2021-2023 budget recommendations include funding for nine prioritized local project proposals totaling \$9M
- The Flood Authority requested the Board consider funding local government stormwater management, maintenance, and capital projects based upon a consistent regional approach

*Board direction: What additional information does the Board need to determine the funding levels for Flood Authority Local Projects in the 2021-23 biennium?*

# AQUATIC SPECIES HABITAT RESTORATION

- Restoration projects
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- High quality/unique habitat acquisition projects
- Implementation support
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# AQUATIC SPECIES HABITAT RESTORATION OPTIONS AND POTENTIAL NEXT STEPS

## *Potential pathways for 2021-2027*

- Shift program focus away from planning and toward implementation of the ASRP
- Consider funding support for ASRP at \$33 million dollars for 2021-23 biennium
- Develop 6-year funding strategy for ASRP based on 3 implementation levels proposed
- Conduct 5-year (2026) program evaluation of ASRP to develop long term funding strategy based on Board goals for ASRP and results of initial ramp up of implementation

*Board direction: What additional information does the Board need to determine the funding levels for the 2021-23 biennium and to provide direction on a 6-year funding strategy and timing for a future program evaluation?*

# MEETING SCHEDULE

## Evening Public Meeting

- March 9 - OCB to receive public input on pathways for 2021-23

## Board Meetings

- March 18 and 25
- April 1
- May 6
- June 3 – Board recommendation on 2021-2023 funding allocations and project lists

# NEXT STEPS IN PROCESS

- Support for Governor's proposed \$70M biennium budget
- Current status for determining what flood damage reduction actions can meet the Board's outcomes
- Support for recommending 2021-2023 funding allocations and project lists by June 3, 2021
- Which projects and program elements need additional information for the Board to determine a more detailed funding allocation for the 2021-23 biennium and beyond?