# **Chehalis Basin Strategy**

March 15, 2017 Agriculture & Natural Resources Committee Work Session

### **Presentation Overview**

- Background on fish and flood issues
- 2015-2017 biennium work effort highlights

Laces

2017-2019 budget recommendations

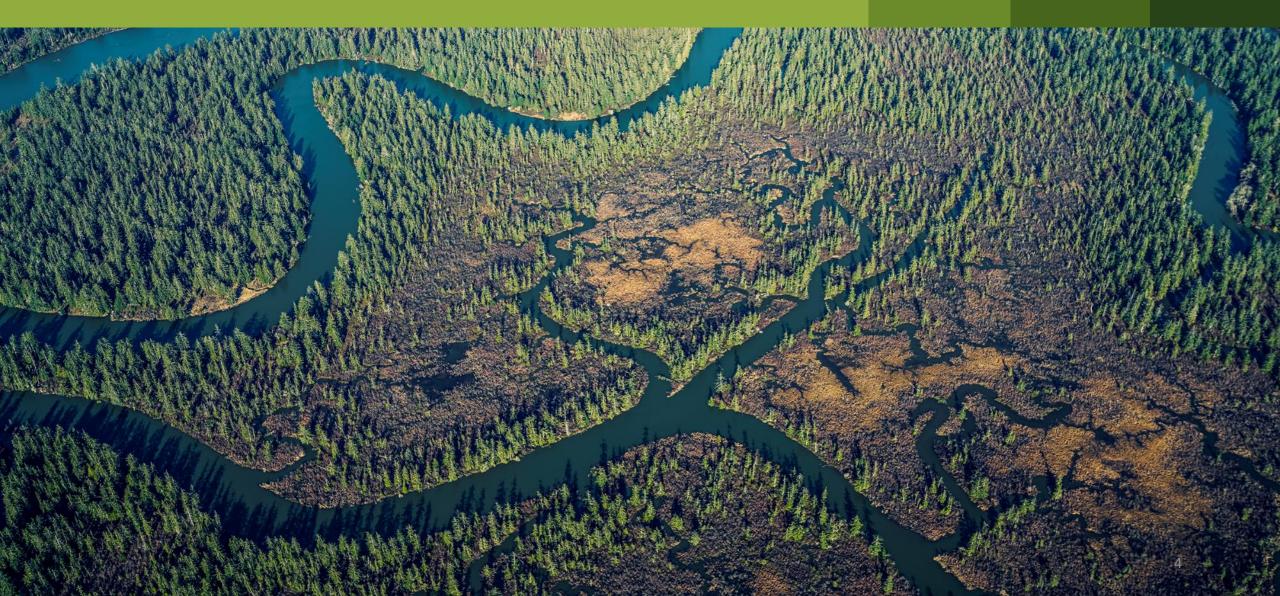


Raymond

### The Chehalis Basin



### An Abundant River Basin



### Aquatic Species Are Struggling

Harvest has been limited by poor runs over the last 30 years
Habitat productivity has been degraded by up to 80 percent

### Climate Change

	Aberdeen Montesano Elma Olympia Lacey			/
Westport	Species	Current	Climate Change (Number of Fish and Percent)	
	Coho salmon	40,642	-22,390   -55%	
	Fall-run Chinook salmon	25,844	-6,969   -27%	
	Winter/fall-run chum salmon	190,550	-8,270   -4%	
	Spring-run Chinook salmon	2,146	-1,869   -87%	T
	Winter-run steelhead	6,800	-3,741   -55%	
Long Bei	w A S H I N G T	FON STATE	Cowlinz River	

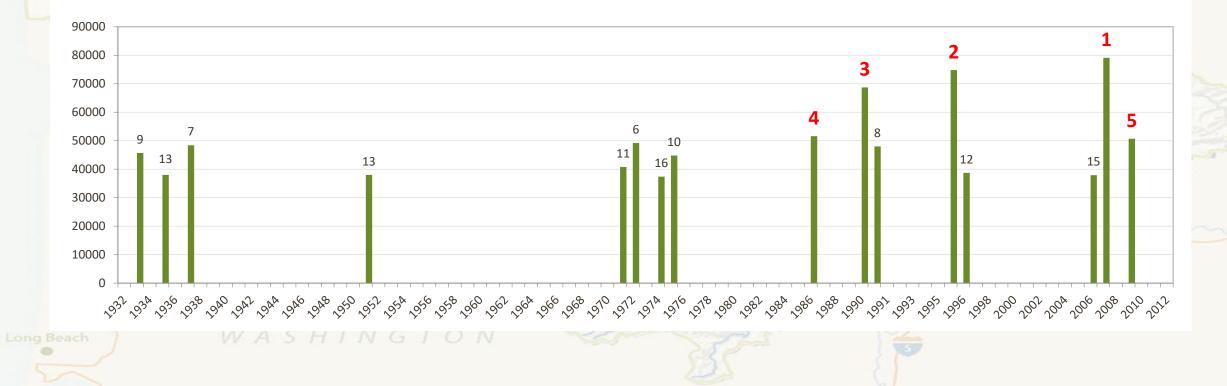
## Extreme Flooding



### The Floods Are Getting Worse

#### • I-5 closed in 1990, 1996, 2007, 2009

Five largest flood events have occurred since 1986



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### **No Action Consequences**

• \$3.5 Billion damage over 100 years under current conditions; potentially more with climate change

- Extreme floods more frequent and larger causing greater damage
- Loss of aquatic species
- Potential listing under Endangered Species Act

### A Strategy Is in the Works...



### ...Chehalis Basin Strategy

### Governor's Chehalis Basin Work Group

Tasked by Governor to recommend long-term strategy and budget for 2017-2019 biennium:

- Rob Duff (Governor's Natural Resource Advisor)
- Jay Gordon (Washington Dairy Federation and Chehalis Farmer)
- Steve Malloch (Western Water Futures)
- Dr. Gary Morishima (Quinault Indian Nation)
- Vickie Raines (Grays Harbor County Commissioner, Chair Flood Authority)
- Don Secena, (Chairman, Confederated Tribes of the Chehalis Reservation)
- Karen Valenzuela (former Thurston County Commissioner)
- J. Vander Stoep (Private Attorney, Pe Ell Alternate Flood Authority)

Process managed and facilitated by William D. Ruckelshaus Center.

### Action Is Happening Now

- Aquatic Species Restoration Projects
- Local Flood Damage Reduction Projects
- Programmatic EIS
- Office of Chehalis Basin

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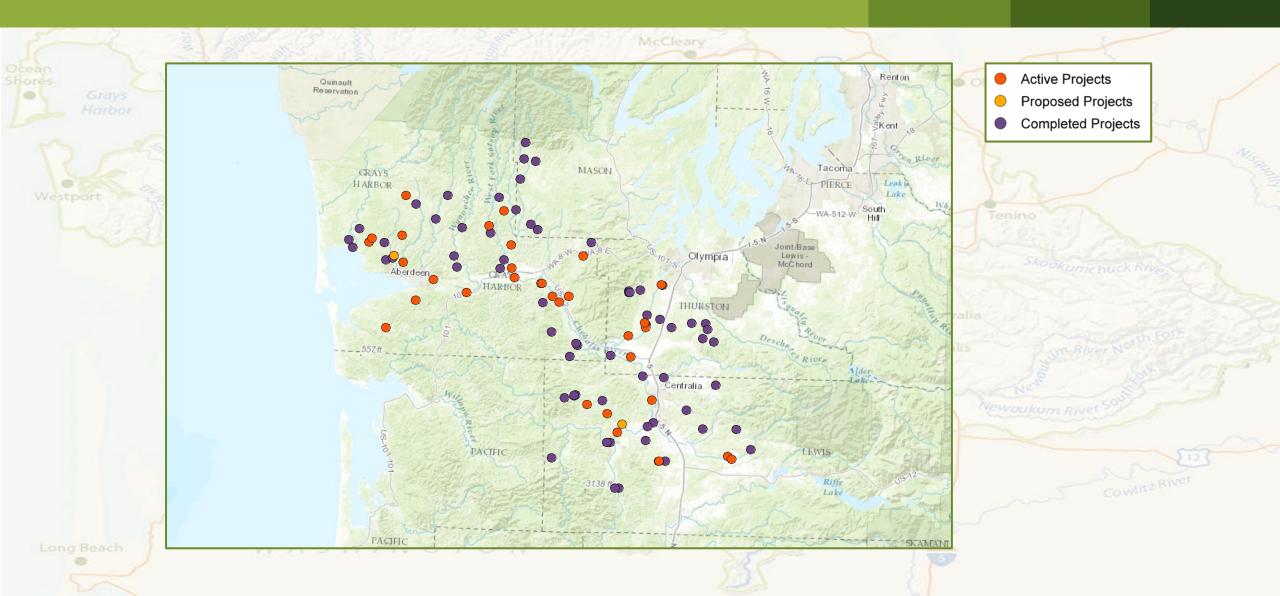
#### **Aquatic Species Restoration Projects**

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#### \$6.9M investment in 2015-2017 resulted in:

- 27 fish passage barriers corrected or removed
  - 135 miles of stream habitat opened
  - 13 barrier correction/removal designs
  - 30 miles of stream surveyed
  - 50 local construction jobs
  - 33 acres of wetlands restored

### Habitat Restoration Projects



### Local Flood Damage Reduction Projects

• Averaging \$12M/biennium in state funding since 2012 and additional \$4M annually contributed by local communities

- 27 local projects actively underway
- 19 local projects completed
- Protect key infrastructure like roads and wastewater treatment plants from flood damage and restore floodplain areas.

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### Farm Pads & Evacuation Routes

- 26 pads/evacuation routes constructed or under construction throughout the Basin
- Risk to livestock and farm equipment significantly reduced
- 14:1 benefit to cost



### Programmatic EIS

• Draft PEIS was released in September 2016

 Evaluated effects of different combinations of actions for reducing flood damage and restoring aquatic species habitat

• Final PEIS will be released in mid 2017

ewaukum River

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### Office of Chehalis Basin

 Office created by 2016 Legislature, will be initiated by funding in 2017-19 biennium.

- "aggressively pursue ... long-term flood damage reduction and aquatic species restoration..."
- Established a Board to provide oversight for implementation of the Chehalis Basin Strategy
- "...provide a more unified, efficient, and consistent structure for policies and projects, especially for larger projects as they advance".

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### 2017-2019 Budget Recommendations

- \$60M budget in Governor's proposed budget for 2017-2019 biennium:
- \$30.4 million to advance long-term strategy and determine preferred option for flood projects and habitat restoration
- \$20 million for construction of habitat restoration projects (\$10 million State, \$10 million federal)
- \$9.6 million for construction of local flood damage reduction projects

## Advancing the Long-Term Strategy

- Completion of the Aquatic Species Restoration Plan
- Project level environmental review and initial permit applications for potential dam
- Detailed modeling and pre-permit design for one priority sub-basin for restorative flood protection
- Design and initial permit applications the Aberdeen/Hoquiam North Shore Levee project
- Continued public involvement and outreach to stakeholders
- Assessment of land use management and recommended improvements

### Local Flood Reduction Projects

 Construct first tier of local flood damage reduction projects developed by the Chehalis River Basin Flood Authority.

- Continue working with local governments to ensure that new floodplain development does not impact floodplain ecological function or cause additional harm for residents and structures in the floodplain.
- Initiate a basin-wide floodproofing program with an early focus likely in Centralia and Thurston County, for elevation, acquisition, and other structure retrofit projects.

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### **Aquatic Species Restoration**

 Continued data collection, research, and analyses for salmonids and other aquatic species

- On-the-ground construction of high-priority projects:
  - Barrier removal
  - Floodplain and channel restoration
  - Acquisition of critical habitats

Vewaukum River

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### Questions/Discussion

