

Chehalis River Basin

*Reducing Flood Damage and
Restoring Aquatic Species*

9:30 a.m.

April 4, 2017

City of Napavine

Today's Presentation . . .

- Provide update, encourage discussion.

- Key messages . . .

1. **Broad agreement** -- For first time in a century there is progress across the Basin on next steps to reduce flood damage and enhance salmon, aquatic species.

2. **Basin-wide strategy** -- An action-oriented, multi-phased Basin-wide strategy is needed to protect communities along the river and to enhance aquatic species.

3. **Collaboration is key** -- WA Legislature, Governor's Office, Governor's Chehalis Basin Work Group, Chehalis River Basin Flood Authority, and WA Agencies all working together = Action!

4. **Fundamental principle** -- Solving one's problems doesn't increase another's.



Action . . .



↑
Photo Source: THE CHRONICLE →

April 2017

“Chehalis River Basin Flood Authority”

- **Formed in 2008**

- **Formal body focused on:** (1) flood hazard mitigation throughout the Basin; and (2) decision-making that is . . .
 - informed by science.
 - protective of Basin residents/communities.
 - environmentally appropriate.



- **Basin jurisdictions represented**

- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">▶ Grays Harbor County<ul style="list-style-type: none">○ City of Aberdeen○ City of Cosmopolis○ City of Hoquiam○ City of Montesano○ City of Oakville | <ul style="list-style-type: none">▶ Lewis County<ul style="list-style-type: none">○ City of Centralia○ City of Chehalis○ City of Napavine○ Town of Pe Ell | <ul style="list-style-type: none">▶ Thurston County<ul style="list-style-type: none">○ Town of Bucoda |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|

April 2017

"Governor's Chehalis Basin Work Group"

- **Appointed by Gov. Gregoire (2012); Re-confirmed by Gov. Inslee (2013).**
- **Role = Develop/oversee Basin-wide strategy, funding authorizations (2017-19).**
 - Flood Retention Dam paired with Airport Levee Improvements.
 - Basin-wide Aquatic Species Restoration.
 - High-priority, small-scale Local Flood Damage Reduction Projects.
 - Local Land Use Management and Local Floodproofing.
- **Members are:**
 - 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)

Background . . .

- 2007 Storm -- \$938M Basin-wide damage, \$300M lost economic activity (WA).



Exit 77 (I-5) in Chehalis
STEVE RINGMAN / SEATTLE TIMES



City of Centralia
STEVE RINGMAN / SEATTLE TIMES



← Photos Source: LEWIS COUNTY,
DIVISION OF EMERGENCY
MANAGEMENT

**State Route 6,
West of Adna**
MIKE
SALSBURY /
AP



Background . . .

- 2007 Flood -- I-5 and Hwy 507 Interchange looking South.

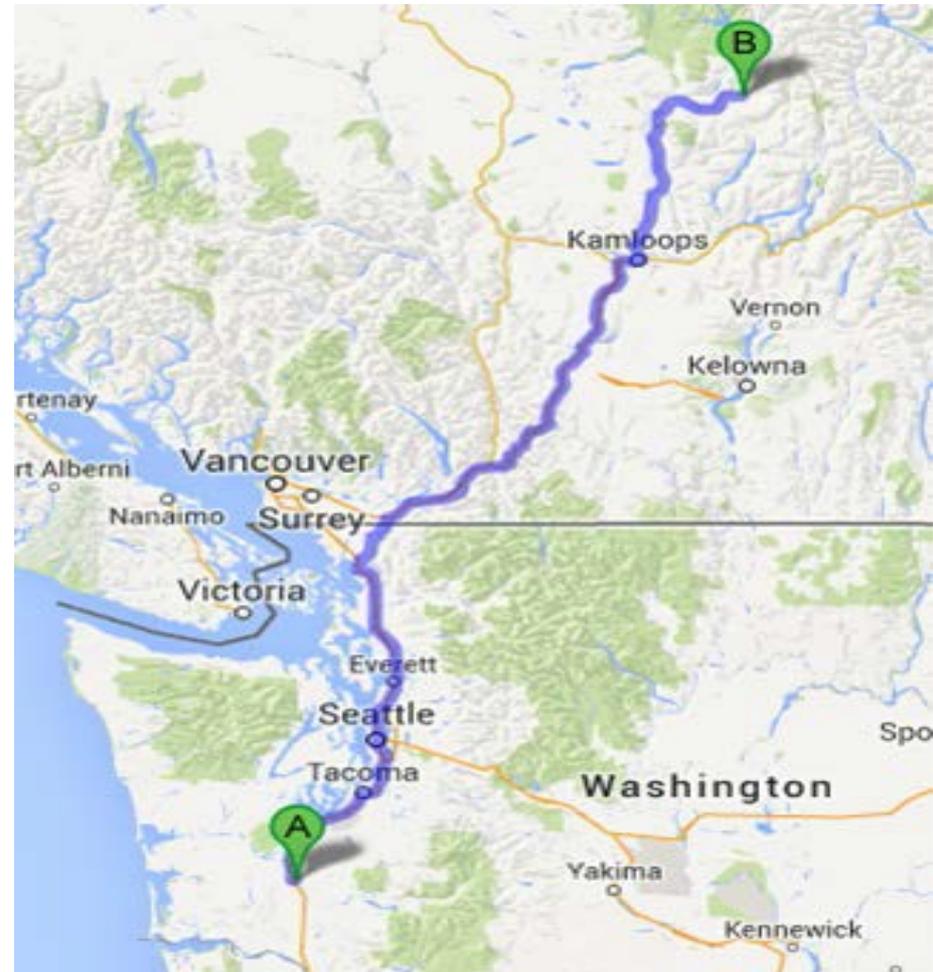


City of Centralia and I-5
STEVE RINGMAN /
SEATTLE TIMES

April 2017

Background . . .

- 289,983 acre feet of measured water (12/03-08/2007).
- Equivalent to covering roadway between Chehalis and North of Kamloops with 1 foot of water 1-mile wide or covering . . .
 - 80% of Kitsap County.
 - 69% of Clark County.
 - 59% of Thurston County.

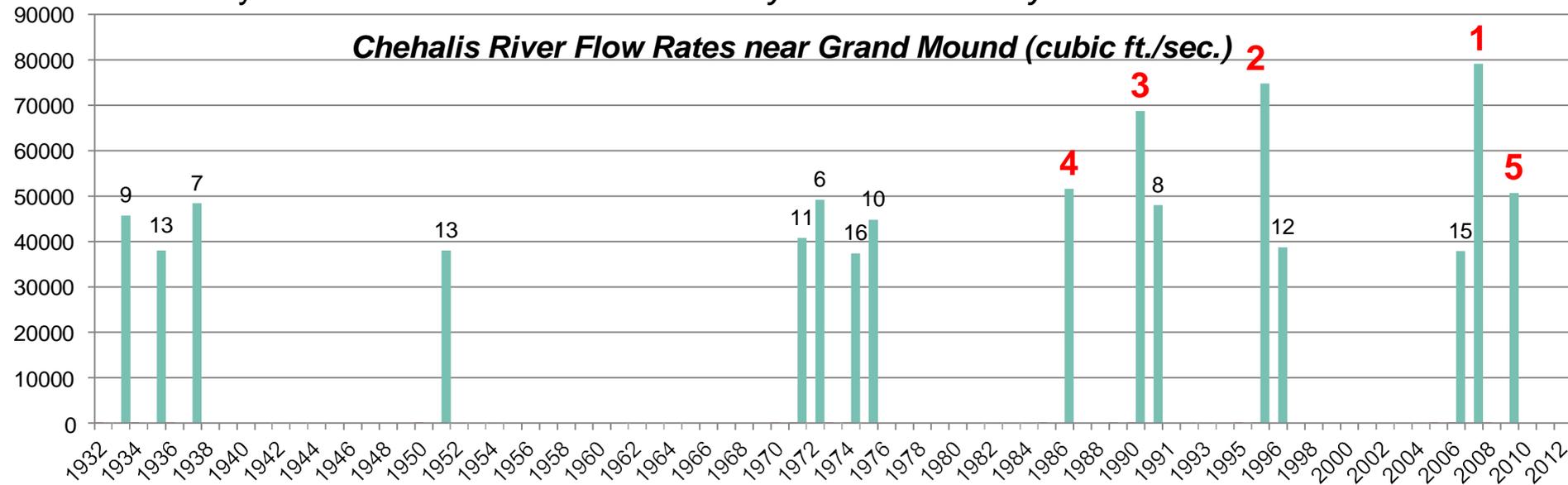


Background . . .

■ Ranked high flow events (1932 - 2012) . . .

- I-5 closed 1990, 1996, 2007, 2009.
- Five largest events since 1986 -- *Frequent floods are getting worse and damage is increasing . . .*
- 100 year flood estimate -- *Increased by 33% in last 30 years.*

Chehalis River Flow Rates near Grand Mound (cubic ft./sec.)



Background . . .

- Chehalis is the second largest river basin in the state, rich in natural resources . . .
- Salmon populations are 15-25% of historic levels.
- TMDL for the basin (<http://www.ecy.wa.gov/programs/wq/tmdl/ChehalisRvrTMDLSummary.html>).



Upper Chehalis (5/31/2010)
 JAMES E. WILCOX / WILD GAME FISH
 CONSERVATION INTERNATIONAL

CHEHALIS BASIN SALMON & TROUT

OCEAN PHASE		SPAWNING PHASE
<p>Chinook Coho Coho Steelhead Bull trout Cutthroat</p>	<p>The salmonid lifecycle involves adults maturing in the ocean, migrating back to their home streams and spawning, embryos incubating, fry emerging, juveniles growing, and smolts migrating to the estuary to acclimate to saltwater and moving out into the ocean</p> <p>WHAT SALMON NEED IN FRESHWATER HABITAT</p> <p>Cool, clean water</p> <p>Appropriate water depth, quantity and flow velocities</p> <p>Upland and riparian (stream bank) vegetation to stabilize soil & provide shade</p> <p>Clean gravel for spawning and egg-rearing</p> <p>Large woody debris to provide resting and hiding places</p> <p>Adequate food</p> <p>Varied channel forms</p>	<p>Chinook Coho Coho Steelhead Bull trout Cutthroat</p>

www.chehalisbasinpartnership.org

Background . . .

Salmon-habitat potential

Species	Current Spawner	Habitat Degradation
Spring Chinook Salmon	2,300	78%
Fall Chinook Salmon	24,317	45%
Coho Salmon	42,000	69%
Winter-run Steelhead	8,700	44%

Source: Chehalis Basin Strategy: Reducing Flood Damage and Restoring Aquatic Species; Pe Ell Public Meeting; 10/14/2014; Page 13.

Solution = Basin-wide Approach

Action-oriented, Multi-phased Approach

1. Basin-Wide Relationships
2. Hydraulic Understanding
3. Master Strategy (Game Plan)
4. Large Capitol Projects
5. Small-Scale Local Projects
6. Land Use, Floodplain Management
7. Restore Salmon and Aquatic Species
8. Early Flood Warning
9. Outreach, Education and Communication

Chehalis Basin Strategy: Reducing Flood Damage and Restoring Aquatic Species

For the first time—after over a century of catastrophic floods and hundreds of studies—Inland agreement is building on a comprehensive strategy to reduce flood damage, restore salmon populations, and support the prosperity of communities in the Chehalis Basin.



The problems in the Chehalis Basin are real and action is being taken now to protect communities and restore aquatic species.

Frequent Floods Are Getting Worse and Damage is Increasing. The five largest floods in the Chehalis Basin's history were caused by big, wet and cold storms, causing unprecedented damage to homes, property, businesses, roads, and bridges. Each of the worst floods struck in the days of a large charge outside from the thousands of acres of small agricultural cropland. These floods have been the most costly, and caused several hundred million dollars in damage. The cost of future floods will exceed \$1.5 billion in the next 20 years if no action is taken.



Salmon Populations Are Seriously Degraded and Continue to Decline. The natural resources of the Chehalis Basin have experienced historic declines for centuries and continue to decline due to both existing and new threats, including climate change. The Chehalis Basin supports the world's largest salmon population of steelhead trout, and the Chehalis River is the largest steelhead trout population in the world. The Chehalis River's steelhead trout population is degraded, with salmon populations at 15% of their historic levels. It is very probable that the current trajectory, coupled with the potential impacts of climate change, would lead to the complete loss of steelhead trout and other salmonids in the Chehalis Basin.

Changing the History of Inaction. For a long time, there has been a failure to meaningfully address the real problems of catastrophic flooding and significant degraded and degraded resources in the Chehalis Basin. Over 200 years of potential actions to address flood damage have been considered, with no real change in action. The Chehalis Basin Flood Action Plan is the first in a series of actions that will reduce flood damage and restore the basin.

7/2/2015

Implementing a Comprehensive, Integrated Approach for Fish and Floods. An extensive evaluation of the potential social, technical, financial, and ecological impacts of flood damage reduction ideas. In November 2014, the Governor's Chehalis Basin Work Group issued the Integrated Chehalis Basin Flood Action Plan. The Chehalis Basin Flood Action Plan is a comprehensive strategy to reduce flood damage, restore salmon populations, and support the prosperity of communities in the Chehalis Basin. The plan includes a list of actions to be taken to address flood damage and restore the basin.

- A concrete flood retention dam on the upper Chehalis River, paired with investments to the Chehalis Central Mainstem Restoration.
- Restoration of over 200 miles of Spring Chinook spawning and rearing habitat, removal of priority fish passage barriers, restoration of Chehalis to all its aquatic species, and a comprehensive strategy to address river restoration.
- Investments in high-priority, low-cost flood damage reduction projects, with a specific emphasis on low-cost solutions.
- Local government land use management actions to protect existing floodplain functions, to provide for homes and floodproofing businesses and public structures to provide additional protection for residents and structures that are already located in floodways.

Over the next two years, the Washington State Department of Ecology—in consultation with the Work Group, Governor's office, and other agencies and stakeholders—will set an agenda and set the terms and cost of the recommended packages of flood damage reduction and aquatic species restoration actions through implementation of the Chehalis Basin Flood Action Plan (CBFAP). The Governor's Chehalis Basin Work Group will continue to provide leadership and support for the plan's implementation and will continue to provide leadership and support for the plan's implementation.

There is a special opportunity for public input on this programmatic plan:

- October 2015: public meeting and formal public comment period on the draft plan document
- August 2016: public meeting and formal public comment period on the draft plan document
- November 2016: public meeting and formal public comment period on the draft plan document

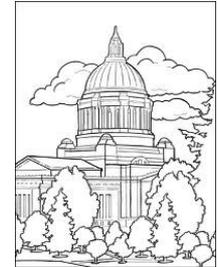
The development of a programmatic plan is a process that involves agencies, stakeholders, and other interested parties. The plan is a comprehensive strategy to reduce flood damage, restore salmon populations, and support the prosperity of communities in the Chehalis Basin. The plan includes a list of actions to be taken to address flood damage and restore the basin.



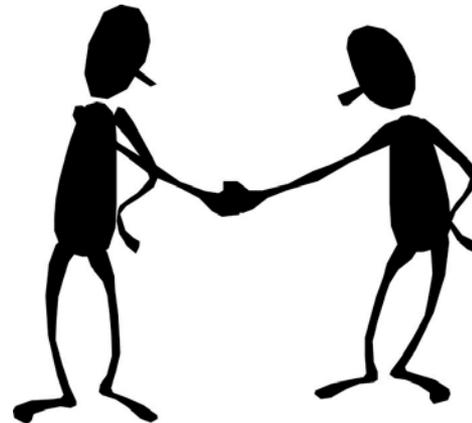
We are happy to answer questions or provide further information about the work in the Chehalis Basin. We can be reached through Facebook, Twitter or by phone at (360) 844-2245 or chehalis@ecology.wa.gov.

7/2/2015

1. Basin-Wide Relationships



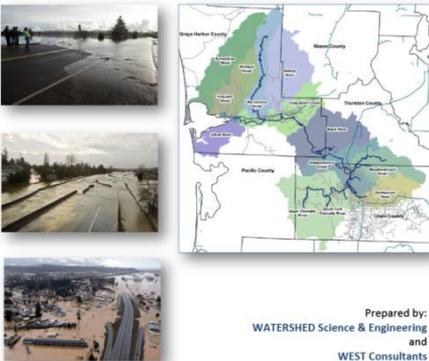
TOWN of BUCODA



2. Hydraulic Understanding

- **Science-based model** -- To inform decision-makers on hydraulic effects of potential flood relief options (at basin-wide and localized scales).
- **108 miles** -- Mouth of Chehalis River upstream to Pe Ell (108 miles).

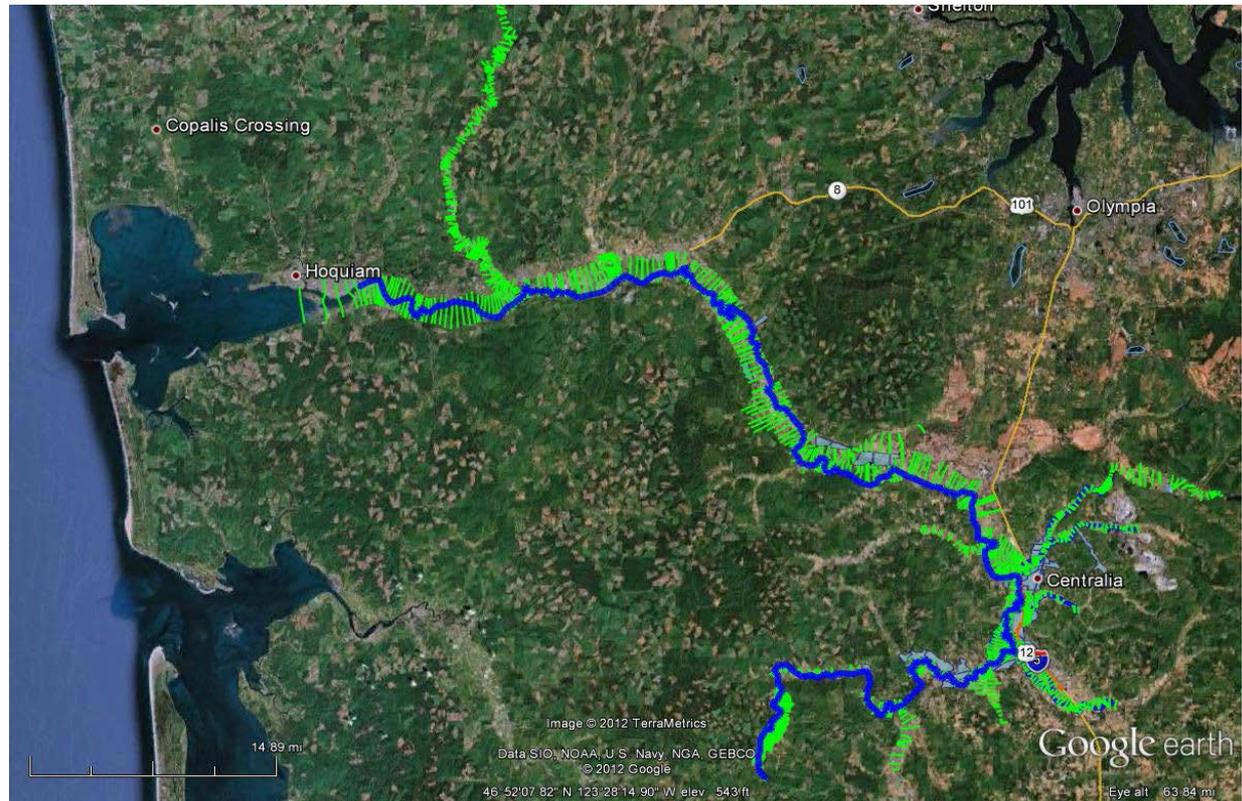
Draft Report - Chehalis River
Hydraulic Model Development Project



Prepared by:
WATERSHED Science & Engineering
and
WEST Consultants

Prepared for:
Chehalis River Basin Flood Authority

July 23, 2012



April 2017

2. Hydraulic Understanding

- **Example: Basin-wide effects analysis**
(Governor's Chehalis Basin Workgroup, 2014 Recommendations Report, 11/25/2014)

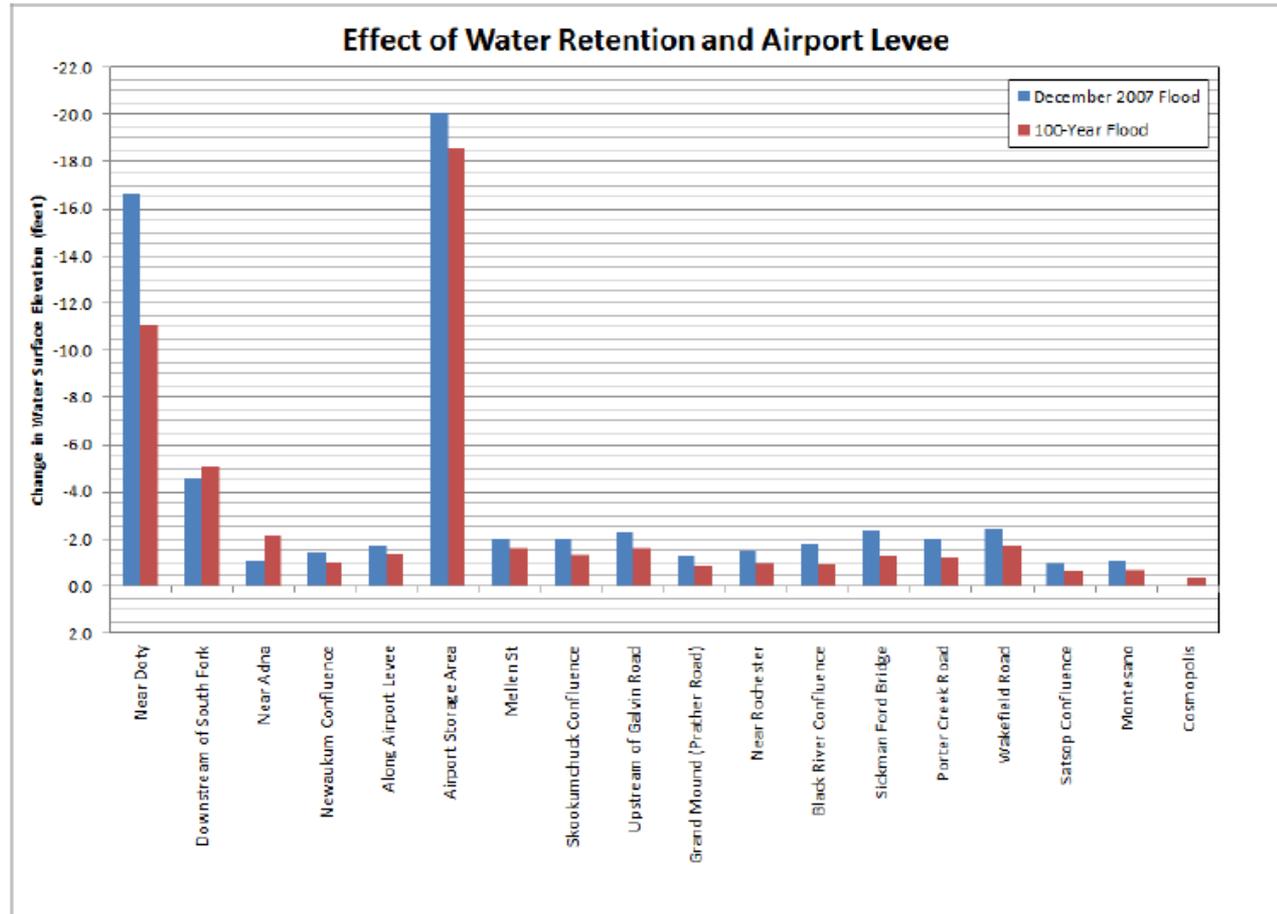


Figure 2: Predicted Changes in Water Surface Elevations from Water Retention and Airport Levee

For 80 years, little has come from efforts to reduce flood damage in the Chehalis Basin. Now, for the first time, there is a broadly-supported, Basin-wide process that is implementing long-sought local projects and leading to a comprehensive strategy to address flooding, while at the same time enhancing aquatic species across the Chehalis Basin.

The 2013 legislature funded a \$28 million program of



3. Master Strategy (Game Plan)

2012, 2013-15 – Framework and Recommendations.

Key elements:

1. Concrete Flood Retention Dam on upper Chehalis River.
2. Chehalis-Centralia Municipal Airport Levee Improvements.
3. Basin-wide Aquatic Species Restoration (100+ miles spawning/rearing habitat).
4. Local Flood-damage Reduction Projects, including raising homes, floodproofing businesses and public structures.
5. Local actions to Protect Floodplain Functions, ensure development doesn't exacerbate harm.
6. Cost = \$500-600M; Benefit = \$720M (100 yrs.); No Action = \$3.5B (100 yrs.).

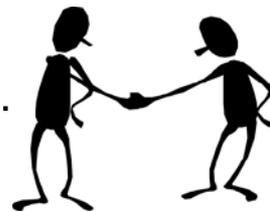


CHEHALIS BASIN STRATEGY

Governor's Chehalis Basin
Work Group

2014 Recommendation Report

Final November 25, 2014



2015-17 – Implementation (\$50M for formal environmental review, local early-action projects, floodproofing, habitat, etc.).

4. Large Capitol Projects

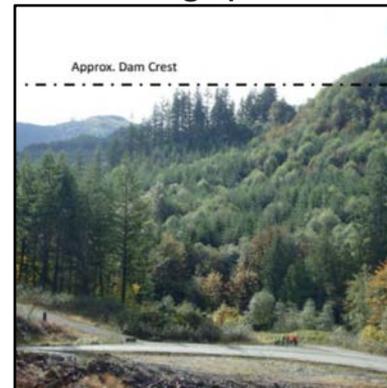
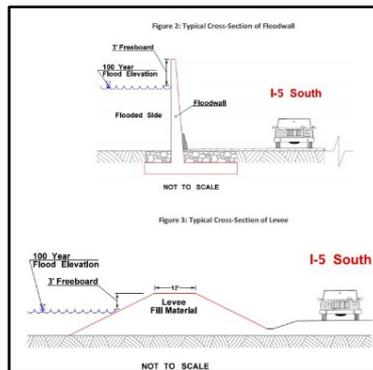


2013-15:

- ❑ Technical team developed baseline knowledge on safety, feasibility of Flood Retention Dam alternatives -- field visits, site and design considerations, world-wide research, etc.
 - Permanent reservoir (w/ fish passage) or Run-of-the-river (no permanent reservoir).
 - Roller compact concrete or Earthen fill.
 - Flood-control only or Multi-purpose.
- ❑ WSDOT evaluated I-5 Protection alternatives -- levees, walls, raise road, etc.

2015-17:

- ❑ Formal environmental review (Programmatic EIS) was conducted to evaluate alternatives and inform Governor's Workgroup on next steps – funding, permitting, etc.



← Photo source:
ANCHOR QEA



**Pe Ell Wastewater Treatment Plant
Flood Protection Dike**

**Aberdeen Proposed Northside
Dike/Levee**



5. Small-Scale Local Projects

2012 Supplemental Capital Budget:

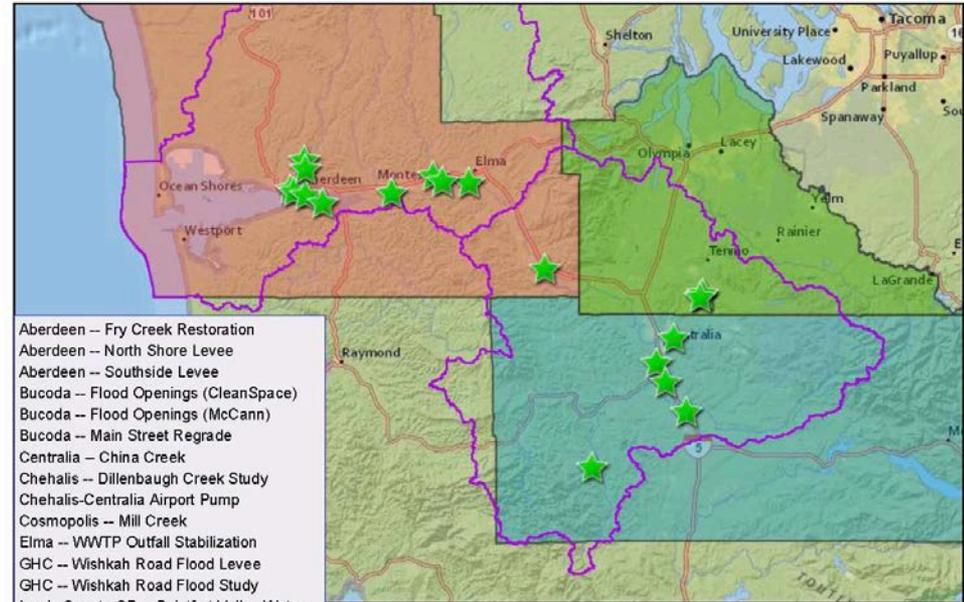
- \$5.0M -- Local projects.

2013-15 Capital Budget:

- \$15.1M -- Local projects, aquatic species enhancement.

2015-17 Capital Budget:

- \$23.2M -- Local projects, habitat restoration.



- Aberdeen -- Fry Creek Restoration
- Aberdeen -- North Shore Levee
- Aberdeen -- Southside Levee
- Bucoda -- Flood Openings (CleanSpace)
- Bucoda -- Flood Openings (McCann)
- Bucoda -- Main Street Regrade
- Centralia -- China Creek
- Chehalis -- Dillenbaugh Creek Study
- Chehalis-Centralia Airport Pump
- Cosmopolis -- Mill Creek
- Elma -- WWTP Outfall Stabilization
- GHC -- Wishkah Road Flood Levee
- GHC -- Wishkah Road Flood Study
- Lewis County CD -- Boistfort Valley Water
- Montesano -- WWTP Protection Study
- Napavine -- Kirkland Road Study
- Oakville -- Flood Relief Study
- WCC -- Farm Pads & Evacuation Routes
- WDFW -- Lower Satsop Relic Channel

**2015-17 Underway Local Capital
Construction Projects**
www.ezview.wa.gov/chehalisfloodauthority



Another Chehalis Basin Flood Protection Project
Wastewater Treatment Plant Flood Prevention Dike

Schedule → February 2014 to April 2014
Budget → \$511,153
Benefit → Protecting essential public infrastructure for all Basin residents

www.ezview.wa.gov

STELLAR 3
An American owned company
Parametrix



5. Small-Scale Local Projects

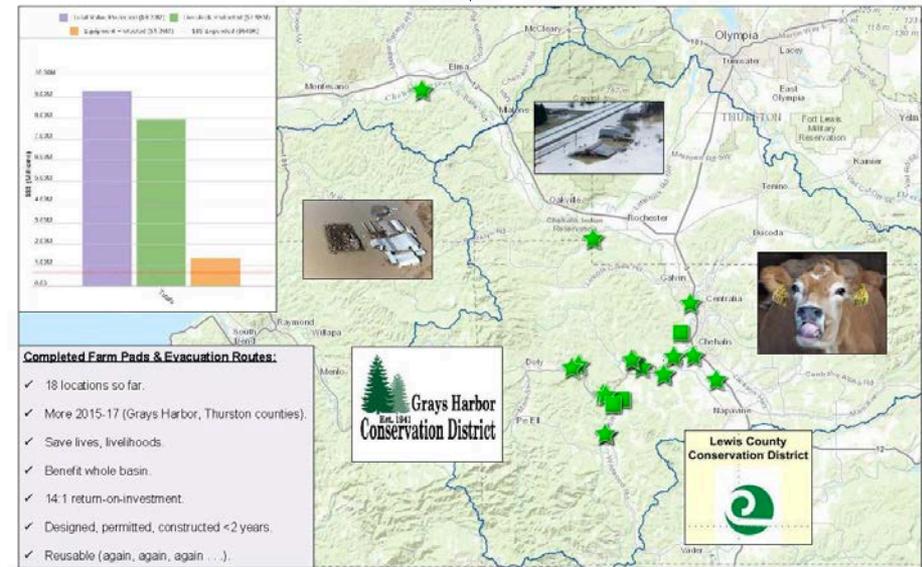


- 27 local projects actively underway
- 19 local projects completed
- Funding since 2012 -- \$6.3M/yr (state), \$4M/yr (local)

Farm Pads/Evacuation Routes

- 26 completed, underway
- 14:1 return-on-investment
- Web-story --

<http://lewiswa.maps.arcgis.com/apps/MapSeries/index.html?appid=884ac0632897430298bdb82f559b52c5>



7. Restore Salmon and Aquatic Species

Salmon:

- At 15-25% historic levels.
- Habitat substantially degraded.

2013-15:

- Collected data (aquatic species, water quality, hydrologic, etc.).
- Analyzed/modelled data to understand relationships (fish, wildlife, water quality, sediment, streamflow, flooding, etc.).
- Developed “Aquatic Species Enhancement Plan“ (8/29/2014).

2015-17:

- Convened broad group to identify early actions (barriers to fish passage, off-channel habitat restoration, bank erosion, etc.).
- Results so far . . .
 - 27 fish passage barriers corrected or removed
 - 135 miles of stream habitat opened
 - 33 acres of wetlands restored
 - 50 local construction jobs

Chinook Salmon
- Learn more -



Coho Salmon
- Learn more -



Steelhead
- Learn more -



Snorkel Surveys



Seine Collections

7. Restore Salmon and Aquatic Species

Other Fish and Aquatic Species



8. Early Flood Warning

- www.chehalisriverflood.com

- Front-facing website.

- Data collection, data synchronization.

- Improved forecasting, early-warning.



Home <http://www.chehalisriverflood.com>

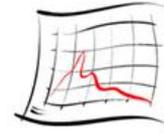
Chehalis River Basin Flood Authority



Weather Forecast



Rainfall Forecast



River Forecast



Flood Maps



Gage Data Graphs



Gage Data Maps



Flood Authority News



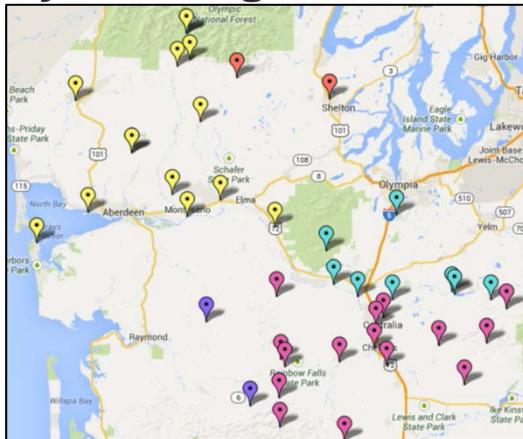
Road Conditions



USGS Gages



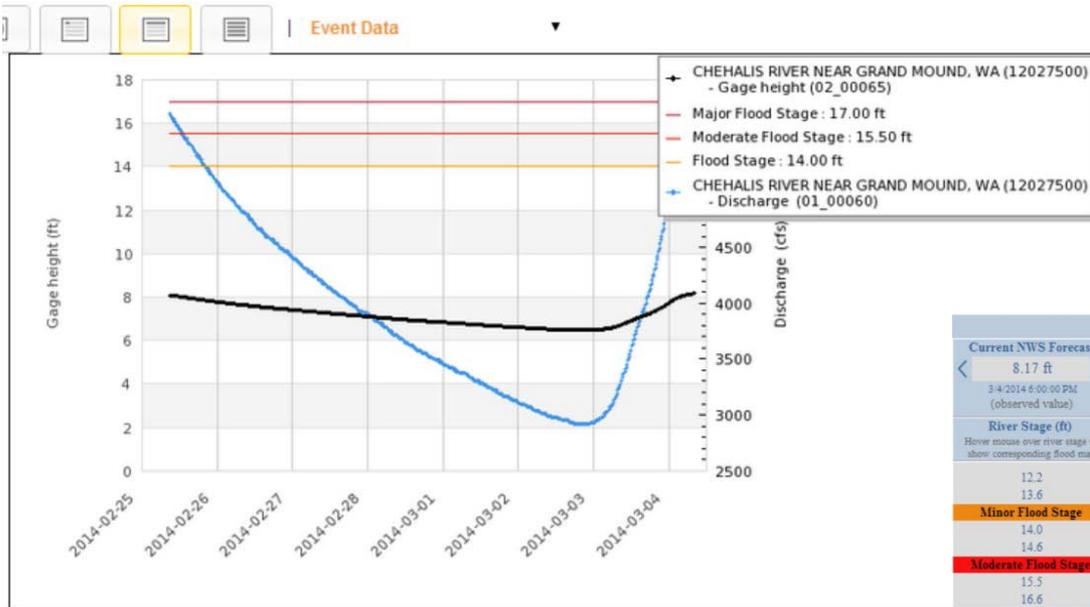
Help



April 2017

8. Early Flood Warning

Localized tracking, forecasting . . .



Daily discharge, cubic feet per second -- statistics for Mar 4 based on 84 years of record [more](#)

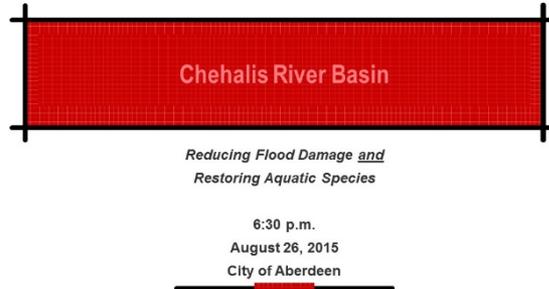
Min (2005)	25th percentile	Median	Mean	Most Recent Instantaneous Value Mar 4	75th percentile	Max (1987)
903	2340	3260	4670	5830	6340	22700

9. Outreach, Education and Communication

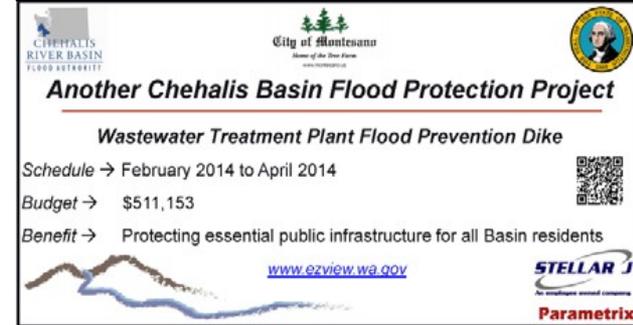
Website



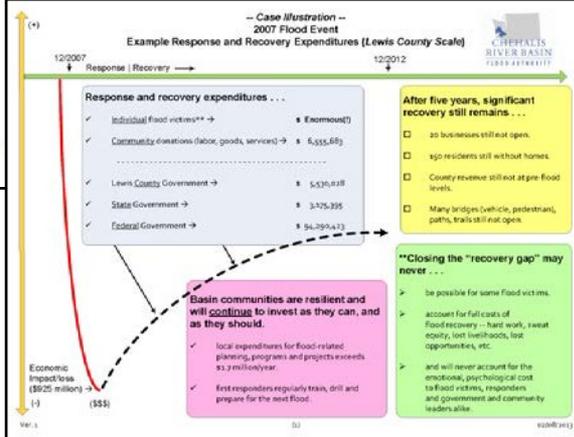
Outreach Visits



Project Signs



Informational Analyses



Chehalis Basin Flood Stories

Chehalis Basin Flood Stories

- [Farm Pads & Evacuation Routes](#)
- [Flood Warning System](#)
- [Local Capital Construction Projects](#)



9. Outreach, Education and Communication

<http://ruckelshauscenter.wsu.edu/projects/current-projects/chehalisfloodingfish/du/ChehalisFlooding.html>

WASHINGTON STATE UNIVERSITY

THE WILLIAM D. RUCKELSHAUS CENTER

UNIVERSITY OF WASHINGTON

Chehalis Basin Strategy

Chehalis Basin Work Group Recommendations Report

The Chehalis Basin Work Group has released its [2014 Recommendations Report](#), along with the [Technical Reports](#) referenced in the Work Group's 2014 Recommendations Report.

Read the [press release](#).

Read the [endorsement](#).

Project Description

The Chehalis River Basin has experienced significant degradation and a failure to address the

[Documents and Resources](#)

[Group Recommendations](#)

www.chehalisbasinstrategy.com

Chehalis Basin Strategy
Reducing Flood Damage and Restoring Aquatic Species

HOME STRATEGY ENVIRONMENTAL REVIEW GET INVOLVED CURRENT ACTIONS RESOURCES

Watch this short presentation on the Chehalis Basin Strategy

Draft EIS Available for Review
To submit comments on the EIS, click here

Chehalis Basin Strategy
Challenges and Opportunities

0:00 / 3:58

www.ezview.wa.gov/chehalisfloodauthority

CHEHALIS RIVER BASIN FLOOD AUTHORITY

EZview

Project: Chehalis River Basin Flood Authority
LIFT#: 1492

Search Documents Message

Home Local Projects Meetings Capital Budget 2013-15 Outreach & Education Gages & Stations Documents Contacts Library FAQs

ANNOUNCEMENTS!!
(Click for latest news)

GIVE US YOUR FEEDBACK
(Click icon to provide feedback)

THE CHEHALIS BASIN STRATEGY
Reducing Flood Damage and Restoring Aquatic Species
(Click icon for 2014 strategy)

Current Flood Forecast
(Click icon for current river forecast)

CHEHALIS RIVER BASIN FLOOD AUTHORITY

CRBFA Governing Documents

www.chehalisriverflood.com

Home

Information

Flood inundation maps for the Nooksack River near Chehalis are now available.
Chehalis - 01/09/2014 @ 09:31:00
Click on the Flood Maps icon to see new flood inundation maps for the Centralia, Chehalis, Orly, and Skookum areas. Maps for Grand Mound and Puyallup will be available soon.

Links

WWSU Interactive River Site Map
NRF: Flood Authority Projects
NRF: Chehalis River Basin Flood Authority Website
NRF: LWF Strategic Plan
Wash. Inland Empire, Regent, Skagitum County, Eastern, Pacific
Linnik County America - Pacific
Chehalis Basin Resiliency
CRBFA Chehalis Basin

Weather Forecast
Basin Forecast
River Forecast
Flood Maps
Open Data Location

Open Data Maps
Flood Authority News
Road Conditions
EIS/IS
Help

Closing – 2007 Flood Damage . . .



Chehalis
River near
Doty
USGS

Closing – 2007 Flood Damage . . .



**Clearing Mud in
Curtis, WA**
STEVE RINGMAN /
SEATTLE TIMES

April 2017

Closing – 2007 Flood Damage . . .



**Curtis, WA, Aftermath
of 7 Feet of Water**
STEVE RINGMAN /
SEATTLE TIMES

Closing – 2007 Flood Damage . . .



**Chandler Road Bridge
near Doty, WA**
STEVE RINGMAN /
SEATTLE TIMES

April 2017

Closing – 2007 Flood Damage . . .



April 2017

Closing – 2007 Flood Damage . . .



April 2017

Closing – 2007 Flood Damage . . .

I-5 Under Water
BRUCE ELY /
OREGONIAN



April 2017

Closing – 2007 Flood Damage . . .

Chehalis, WA
STEVE RINGMAN /
SEATTLE TIMES



April 2017

Closing – 2007 Flood Damage . . .



April 2017

Closing – 2007 Flood Damage . . .

**Jackson Street,
Centralia, WA**
STEVE RINGMAN /
SEATTLE TIMES



April 2017

Closing – 2007 Flood Damage . . .



I-5 Under Water
BRUCE ELY / OREGONIAN

Closing – 2007 Flood Damage . . .



Photos Source:
WSDOT

April 2017

Closing – 2007 Flood Damage . . .



April 2017

Closing – 2007 Flood Damage . . .



Closing – 2007 Flood Damage . . .



**Wakefield Road,
Elma, WA**
GREG GILBERT /
SEATTLE TIMES

April 2017

What's Next – 2017-19 . . .

Office of Chehalis Basin

- Created by 2016 Legislature
- Will be initiated with 2017-19 funding
- Charge = “aggressively pursue ... long-term flood damage reduction and aquatic species restoration...”
- Establishes a Board to provide oversight for implementation of Chehalis Basin Strategy
- Goal = “...provide a more unified, efficient, and consistent structure for policies and projects, especially for larger projects as they advance”

2017-19 Budget

Governor's budget = \$60M

- \$30.4M to advance long-term strategy and determine preferred option for flood projects and habitat restoration
- \$20M for construction of habitat restoration projects (\$10M State, \$10M federal)
- \$9.6M for construction of local flood damage reduction projects

REMEMBER: 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

For Further Information . . .

Vickie Raines, *Grays Harbor County Representative*

Chair, Chehalis River Basin Flood Authority
Member, Governor's Chehalis Basin Work Group
360/249-3731
vraines@co.grays-harbor.wa.us

Edna Fund, *Lewis County Representative*

Chehalis River Basin Flood Authority
Vice-Chair, Chehalis River Basin Flood Authority
360/740-1283
Edna.Fund@lewiscountywa.gov

Jim Kramer, *Facilitator*

Chehalis River Basin Flood Authority
Governor's Chehalis Basin Work Group
206/841-2145
jkramer.consulting@gmail.com

Scott Boettcher, *Staff*

Chehalis River Basin Flood Authority
360/480-6600
scottb@sbgh-partners.com

Key Links . . .

1. Chehalis River Basin Flood Authority -- www.ezview.wa.gov/chehalisfloodauthority

- Flood Warning System -- www.chehalisriverflood.com
- Sign-Up for Email Gage Alerts -- https://www.ezview.wa.gov/Portals/_1492/images/Print50%20--%20HANDOUT%20--%20Gage%20Alerts%20Sign-Up%2008102016.pdf
- Local Projects -- https://www.ezview.wa.gov/site/alias__1492/34489/local_projects.aspx

2. Chehalis Basin Strategy -- www.chehalisbasinstrategy.com

- Department of Ecology -- <http://www.ecy.wa.gov/programs/sea/sepa/chehalisbasin.html>
- Ruckelshaus Center -- <http://ruckelshauscenter.wsu.edu/projects/current-projects/chehalisfloodingfish/du/ChehalisFlooding.html>

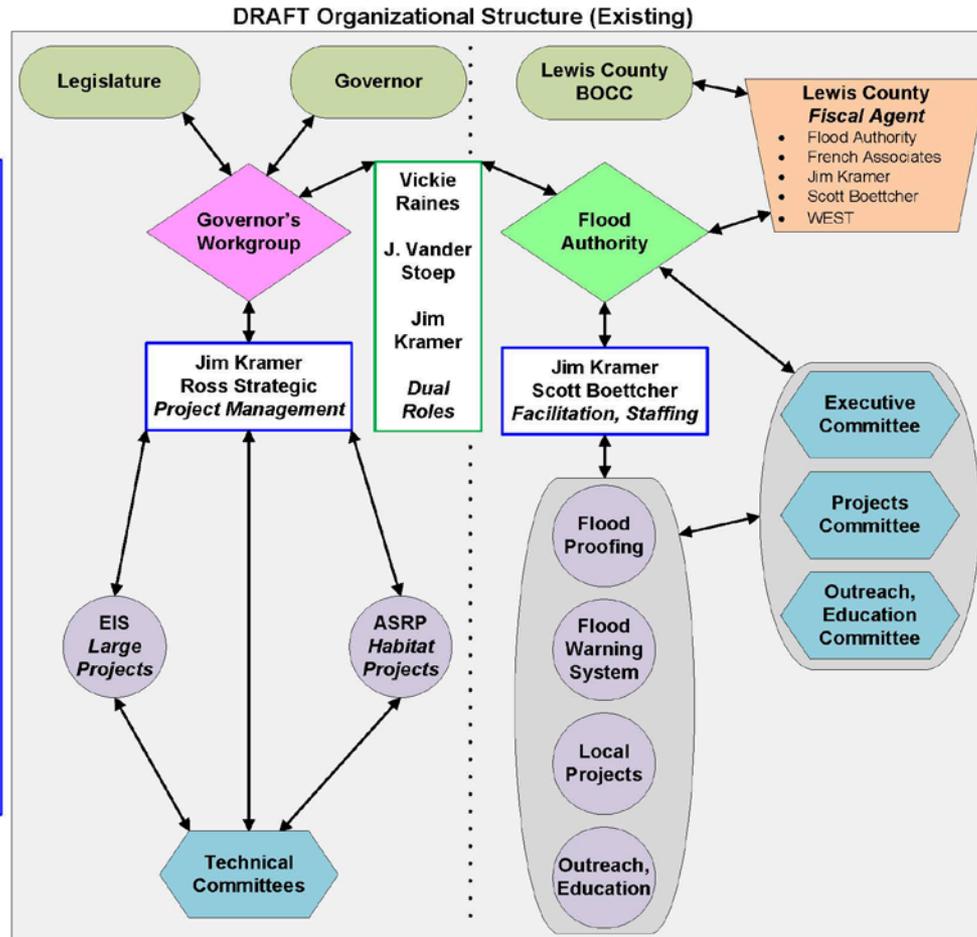
3. Office of Chehalis Basin – https://www.ezview.wa.gov/site/alias__1492/37030/Default.aspx

Organizational Structure . . .

RCO Contracting Agent

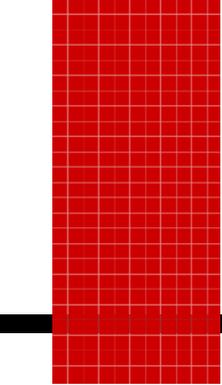
- 64 Contracts
- \$51.6M Total
- 29 Contract Entities

- Contract Entities:**
- Anchor QEA, LLC
 - Capitol Land Trust
 - Chehalis Basin FTF
 - Chehalis Confederated Tribes
 - City of Aberdeen
 - City of Centralia
 - City of Chehalis
 - City of Cosmopolis
 - City of Elma
 - City of Montesano
 - City of Napavine
 - Clean Space Northwest
 - Conservation Commission
 - Dept of Commerce
 - Dept of Ecology
 - Dept of Fish & Wildlife
 - Dept of Natural Resources
 - Grays Harbor County
 - Lewis County Community Development
 - Lewis County Conservation District
 - Lewis County Public Works
 - McCann Construction LLC
 - Quinault Indian Nation
 - Sylvan Terrace Owners Assoc
 - Town of Bucoda
 - Town of Oakville
 - WA Coast Sustainable Salmon Coalition
 - Washington State University
 - Wild Fish Conservancy



9-15-2016

April 2017



Thank You . . .

Thank You!

Note:

This Presentation is Available at
“Chehalis River Basin Flood Authority” Website
at www.ezview.wa.gov/chehalisfloodauthority.

Email Distribution List

Pat Anderson

Pat.Anderson@lewiscountywa.gov

April 2017

46
