



## Part I – What Are Local Projects?

December 7, 2017  
2:15-3:00 p.m.

**Chehalis River Basin Flood Authority - Local Flood Damage Reduction Project List Development and Criteria**  
Briefing from Scott Boettcher (Staff, Flood Authority) on the Flood Authority's process to identify and select local flood damage reduction projects each biennium.

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1. ~2-3 years to design, permit, construct.
2. Protect people, property, infrastructure.
3. Improve readiness, response, resiliency.
4. Examples:
  - ✓ Drinking Water (Boistfort, Bucoda).
  - ✓ Wastewater (Montesano, Pe Ell).
  - ✓ Emergency Response (Grays Harbor County, Chehalis-Centralia Airport).
  - ✓ Regional Economic Infrastructure (Montesano).
  - ✓ Community Protection (Adna, Bucoda, Centralia, Chehalis, Chehalis Tribe, Oakville).
  - ✓ Flood Warning Infrastructure (Basin-wide).
5. Typical cost = \$250K to \$2-3M.

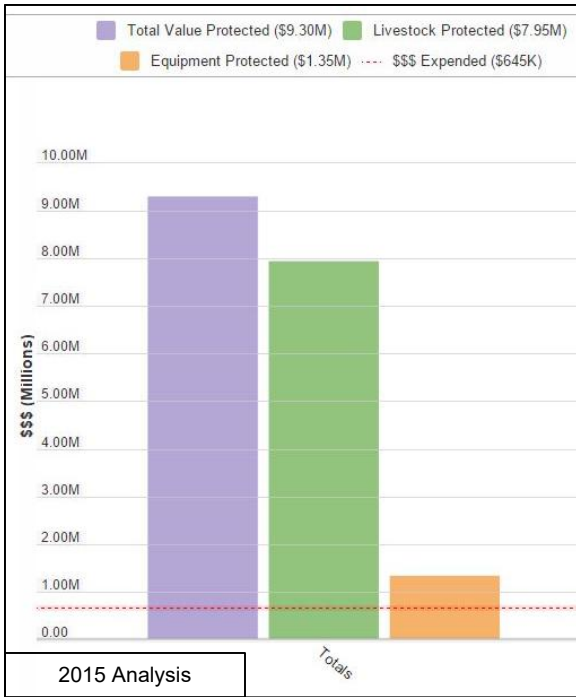
[www.ezview.wa.gov/chehalisbasinlocalfloodreliefprojects](http://www.ezview.wa.gov/chehalisbasinlocalfloodreliefprojects)

- Construction, Complete
- Construction, Incomplete
- Plan/Study/Tool, Complete
- Plan/Study/Tool, Incomplete

# Local Projects (2012-17)

[www.ezview.wa.gov/chehalisfloodauthority](http://www.ezview.wa.gov/chehalisfloodauthority)





*"local solutions to local problems"*

**THURSTON CONSERVATION DISTRICT**

**Grays Harbor Conservation District**  
Est. 1941

**Lewis County Conservation District**

1. Save lives, livelihoods.
2. Protects people, animals, equipment.
3. 25 locations throughout Basin.
4. <2 years to design, permit, construct.
5. 14:1 return-on-investment.
6. Benefit whole basin.
7. Reusable.
8. Testimonials → <http://arcg.is/2b632Ai>.

**Animal/Equipment Now Protected:**

• Beef	4
• Bulls	3
• Calves	210
• Cows	2,480
• Goats	118
• Heifers	645
• Horses	77
• Sheep	165
• Yearlings	9
• -----	-----
• Tractors	36
• Pieces	42

★ → Complete  
 ☆ → Underway

## Farm Pads, Evacuation Routes (2012-17)



[www.ezview.wa.gov/chehalisfloodauthority](http://www.ezview.wa.gov/chehalisfloodauthority)



1. Foundation vents (right) will not protect against floods; foundation flood openings (below) will.
2. Bucoda pilot installed proper foundation flood openings in 11 homes, and provided new Elevation Certificates to homeowners to lower flood insurance payments.



**ELEVATION CERTIFICATE**

SECTION A - PROPERTY IDENTIFICATION

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

SECTION C - BUILDING ELEVATION INFORMATION (SUVEY REQUIRED)

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

*(Note: This is a detailed form with multiple sections for property identification, flood map information, building elevation data, and professional certification.)*



# 2015-16 Local Floodproofing Pilot "Bucoda Foundation Flood Opening Retrofits"

[www.ezview.wa.gov/bucodafloodrelief](http://www.ezview.wa.gov/bucodafloodrelief)



Home [www.chehalisriverflood.com](http://www.chehalisriverflood.com)

National Weather Service  
Seattle, WA

# 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

### Flood Inundation Maps

Select a gage location:

- Chehalis River at Centralia
- Shookamuck River at Centralia
- Chehalis River at Doty
- Shookamuck River at Bucoda
- Nevadum River near Chehalis
- Chehalis River near Grand Mound
- Chehalis River at Potter

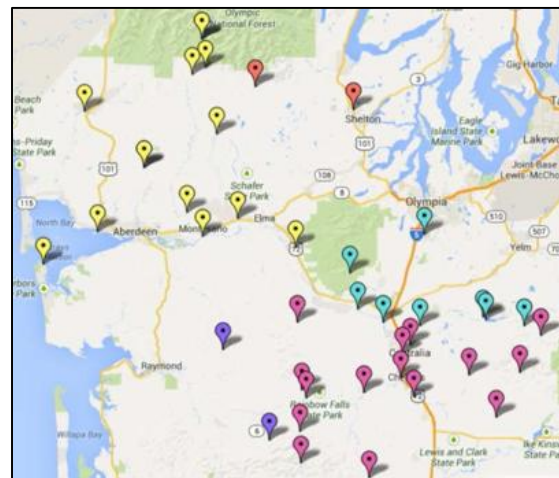
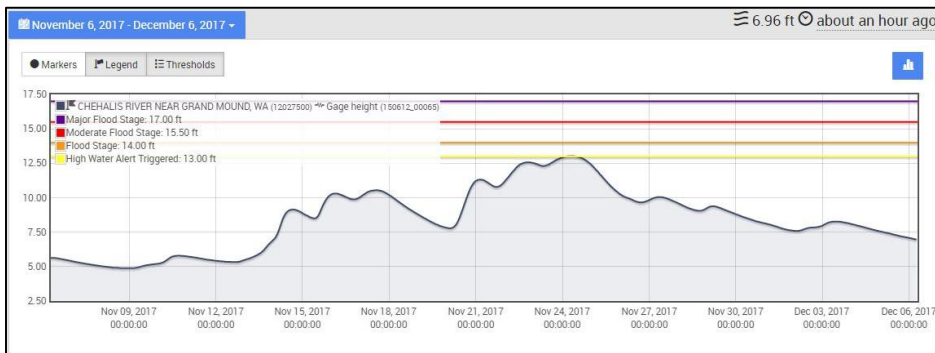
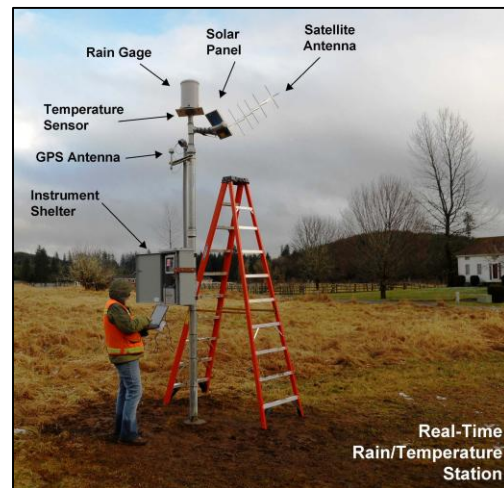
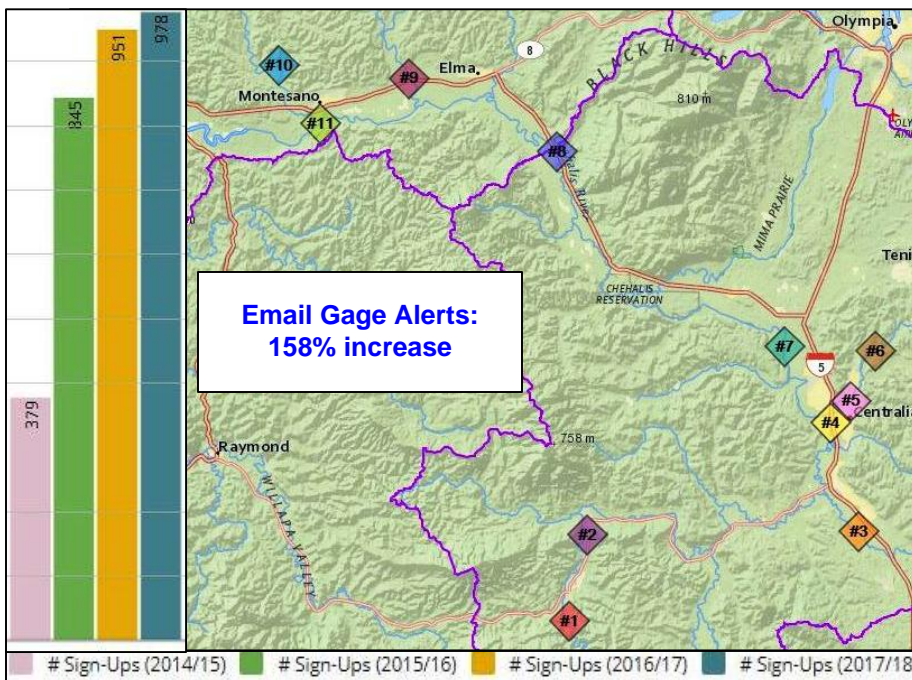
**Chehalis River near Grand Mound, WA**

Current NWS Forecast: 8.17 ft

14:20:46:00:00 (PST)  
Collected: 12/07/2017

River Stage (ft)  
River stage one error stage is from corresponding bank map.

11.7
12.2
13.6
14.0
14.6
15.2
16.6
17.6
18.6
19.6
20.6
21.6



**Chehalis River Basin - Flood Warning System**  
[www.chehalisriverflood.com](http://www.chehalisriverflood.com)

# Chehalis Basin Flood Warning & Alert System

[www.chehalisriverflood.com](http://www.chehalisriverflood.com)

**CHEHALIS RIVER BASIN FLOOD AUTHORITY**

**2015-17 Local Projects (\$16,459,964)  
Complete / Incomplete**

**NOTE:** "Complete" means (1) functionally complete or functionally & administratively complete, and (2) provides current flood hazard reduction benefit.

ID	Project	2015				2016				2017				2018				2019
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1	Aberdeen -- Southside Levee				\$ 37,463													
2	Bucoda -- Flood Openings (CleanSpace)	\$ 96,557																<-- 12/05/2017
3	Bucoda -- Flood Openings (McCann)	\$ 255																
4	Chehalis-Centralia Airport Pump				\$ 1,146,000													
5	Cosmopolis -- Mill Creek				\$ 3,632,000													
6	Elma -- WWTP Outfall Stabilization								\$ 367,900									
7	GHC -- Wishkah Road Flood Levee					\$ 5,700,000												
8	Hoquiam -- Raymer Street Pump Station								\$ 1,300,000									
9	Lewis County -- Airport Road Structure Demolition																\$ 129,000	
10	Lewis County (Flood Authority) -- Replace NWS Gages																\$ 61,595	
11	Lewis County (Flood Authority) -- Replace Transmitters (Ver 2.0)																\$ 22,245	
12	Lewis County CD -- Boistfort Valley Water								\$ 307,350									
13	Montesano -- West McBryde Culvert Replacement																\$ 107,045	
14	Thurston County -- Home Elevations Pilot																\$ 300,000	
15	WCC -- Farm Pads & Evacuation Routes								\$ 378,690									
16	Centralia -- China Creek								\$ 203,000									
17	Lewis County (Flood Authority) -- USGS Gage Datums																\$ 17,100	
18	Thurston CD -- Innovative Farm Pads																\$ 15,000	
19	Aberdeen -- North Shore Levee								\$ 988,000									
20	Bucoda -- Main Street Regrade (BNSF ROW Evacuation Route)								\$ 118,117									
21	Chehalis -- Dillenbaugh Creek Study																\$ 109,000	
22	Chehalis -- Flood Hazard Reduction Master Plan and Storage																\$ 25,000	
23	Chehalis -- WWTP Demo																\$ 12,479	
24	GHC -- Wishkah Road Flood Study								\$ 360,147									
25	Lewis County (Flood Authority) -- Gages Inventory																\$ 97,810	
26	Montesano -- WWTP Protection Study								\$ 193,252									
27	Napavine -- Kirkland Road Study								\$ 40,000									
28	Oakville -- Flood Relief Study																\$ 55,000	
29	WCSSF -- Habitat Work Schedule Pilot Project																\$ 85,000	
30	WDFW -- Lower Satsop Design								\$ 134,949									
31	WDFW -- Lower Satsop Relic Channel								\$ 10									
32	Aberdeen -- Fry Creek Restoration																\$ 420,000	
33	Grays Harbor CD -- LiDAR Coordination																\$ -	