

January 10, 2019

TO: Chehalis Basin Board

FROM: Scott Boettcher, Staff (360/480-6600, scottb@sbgh-partners.com)

SUBJECT: Chehalis Basin Flood Warning and Response

Following identifies <u>key flood warning and response actions</u> taken since the December 2007 and January 2009 catastrophic flood events that we'll discuss at today's CBB meeting:						
1.	More, Gages, Better Gages	2010 to present	 Installed 12 gages where we didn't have them. Replaced 2 NWS gages with modern, low maintenance gages. Resurveyed 27 gages improving consistency, reporting, modelling. Installing 3 webcams to monitor, real-time flood conditions. 			
2.	Flood Warning, Alert Systems	2011 to present	Flood Authority System (www.chehalisriverflood.com): Basin-wide real-time tracking, monitoring, alert system that syncs NWS, USGS, Ecology, Flood Authority gages/data sources. Enables early action by citizens, emergency responders. Adding 12 additional Thurston County gages. 165% increase in alert sign-ups since 2014 (https://data.wa.gov/dataset/Chehalis-Basin-Gage-Alert-Sign-Ups/f4wb-hxgz). Lewis County System (http://rivers.lewiscountywa.gov/#/): County-wide real-time tracking, monitoring, alert system. Draws from same synced gages/data sources.			
3.	Doppler Radar	2011	o New NWS radar fills "coastal coverage" gap for coastal storms (https://www.atmos.washington.edu/cliff/Langleyradar.html).			
4.	New Airport Pump	2017	 Replaced WWII era pump that failed during 2007 event. Enables airfield to stay flood free for emergency responders. 			

5. Public Information Program	2018	0 0	Identifies key messages and ready-to-go flood response projects for Lewis County, Centralia, and Chehalis. Jurisdictions gain CRS credit for implementing the program.
6. Flood Warning, Response Plan (Future)	2019-21 Future	0	Documents flood hazard reduction best practices across the basin. Will be a multi-jurisdictional living document, updated/improved after significant flood events. Jurisdictions gain CRS credit for adopting, implementing the plan. Plan is essential to avoid knowledge flight.

KEY MESSAGE

Today, <u>we are substantially more aware, better prepared for catastrophic flooding than ever before</u>.

We've moved from reactive (2007) to proactive (2019). Citizens, property owners, emergency managers, first responders, and the communities of the basin all gain.

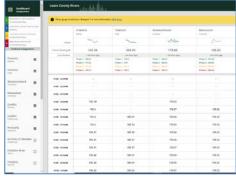
- ✓ No surprises.
- ✓ Better awareness, preparedness.
- ✓ More time.
- ✓ More structured, orderly emergency response.



Flood Authority Flood Warning System Website



83 Gage Locations, 225 Sensors



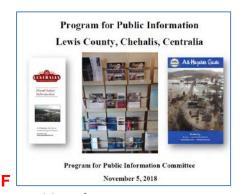
Lewis County Flood Warning System Website



Modern Bridge Mount Radar Gage



National Weather Service Doppler Radar, Langley Hill



Public Information Program



Chehalis-Centralia Airport Pump



Translating Numbers to Visuals