



September 20, 2017

TO: Flood Authority Members
FROM: Scott Boettcher, Staff
SUBJECT: Chehalis Basin Gages

The purpose of this memo is to update Flood Authority members on activities concerning Chehalis Basin gages. We will discuss this at tomorrow's 9-21-2017 Flood Authority conference call. Please feel free to call or email if you have questions (i.e., 360/480-6600, scottb@sbgh-partners.com).

Replacement of Centralia Gages

1. In March 2017, Flood Authority approved funding for replacement of two NWS gages in Centralia due to their age, unpredictable performance, lack of consistent maintenance, and relative importance (these gages have highest number of gage alert sign-ups). See [here](#).
2. As of today, gages have been replaced, are now functional, and reporting to the Flood Authority's Flood Warning System.
 - See photos [here](#).
 - See new SKOOKUMCHUCK RIVER AT CENTRALIA, WA (GOES) [here](#).
 - See new CHEHALIS RIVER AT CENTRALIA, WA (GOES) [here](#).

Resetting USGS Gages Datums

1. At last Flood Authority meeting (August 17, 2017), Flood Authority approved moving forward with USGS proposal to share in the cost to resurvey and rest gage datums for 16 USGS gages in the Basin (provided Projects Committee determine doing so had merit and Flood Authority staff could find resources to fund Flood Authority's 60% or \$17,100 share of the proposal). See USGS proposal [here](#).
2. USGS proposal was determined to have merit, funding resources were found, and Executive Committee supported moving forward. See approved agreement with USGS [here](#).
3. Resetting USGS datums to NAVD88 has many benefits including bringing elevation measurements into conformity with FEMA maps. [Note: Ecology is currently evaluating resurveying and resetting 6 Ecology gages in the Basin to NAVD88. The Projects Committee will meet to determine best way to encourage/support their doing so.]

9-20-2017 Gages Group Meeting

1. Flood Authority's ad hoc "Gages Group" met 9-20-2017 at the Department of Ecology (Lacey, WA). Representatives of USGS, Ecology, Lewis County, Thurston County, Flood Authority, WSE, WEST, and NOAA attended (or participated via WebEx). Meeting materials can be found [here](#).
2. Outcomes from meeting include universal support for:
 - Bringing gages in the basin into NAVD88, upgrading Centralia gages, and upgrading radio transmitters.
 - Adding select additional precipitation gages (upper basin) and stream gages into the flood warning system.
 - Piloting email gage alerts based on river forecast (in addition to actual levels).
 - Offering webinars (for the public and others) about Flood Warning System, basin gages, and the like. [Note: Scott will work with WEST on an outline and approach for offering an informational webinar on the Flood Warning System and will report back at the October 19, 2017 Flood Authority meeting.]

Gages Master Plan

1. In January 2017, Flood Authority approved funding for WEST to conduct an updated comprehensive inventory of gages in the Basin (since one hadn't been done since 2008/9). See [here](#).
2. Gages Group are reviewing the technical review copy now. See [here](#).
3. Among many findings . . .
 - Currently (based on 2008/9 findings), the Flood Authority's Flood Warning System is reporting information from 139 different sensors located around the Basin.
 - Potentially (based on 2017 findings), the Flood Warning System could report on upwards of 600 sensors located throughout the Basin.
4. Gages Group, Project Committee and WEST are determining which of these additional sensors would be value added to bring into the Flood Warning System. [Note: This may be a topic for the October 19, 2017 Flood Authority meeting.]