

Chehalis River Basin Flood Authority 2025 NE Kresky Avenue Chehalis, WA 98532

Re: Flood Warning System (FWS) Update

Chehalis River Basin Flood Authority Board,

Here's a quick update of our activities for the winter season to date.

Routine Maintenance Activities

- 1. All installed sites have been visited, cleaned, and maintained as needed during the fall and winter periods.
- 2. The Contrail website is monitored continuously with alarms established to provide email alerts for high river levels, rainfall rates, or if data traffic from any site is interrupted. As a reminder, here's the website access information.

Website: contrail.onerain.com (Remember, don't type www.)

Username: public Password: public

Folsom, CA 95630-4726

11440 W. Bernardo Ct.

San Diego, CA 92127-1644

916-932-7402 916-932-7408 FAX

Oregon

California

858-487-9378

858-487-9448 FAX

101 Parkshore Dr.

Suite 360

2601 25th Street SE Suite 450 Salem, OR 97302-1286

> 503-485-5490 503-485-5491 FAX

10300 SW Greenburg Road Suite 470 Portland, OR 97223

> 503-946-8536 503-946-8537FAX

Washington

12509 Bel-Red Road Suite 100 Bellevue, WA 98005-2525

> 425-646-8806 425-646-0570 FAX

Arizona 8950 S 52nd St. Suite 210 Tempe, AZ 85284-1137

> 480-345-2155 480-345-2156 FAX

River Measurement A Division of WEST Consultants 811 NE 154th Street

811 NE 154th Street Vancouver, WA 98685

360.571.2290 360.571.2291 Fax

Maintenance and Operations

- 1. The Haywire rain/temperature gage went off-line in late January which required an unscheduled site visit. Technicians got within 1/4 mile of site then hiked through snow and around downed trees to get to the gage location. The satellite antenna was twisted out of alignment due to high winds/snow. Site electronics were reset and, after technicians checked all of the equipment, the site was returned to operation.
- 2. Numerous flood updates on the home page of the Contrail website during the heavy rain event during the week of 2/24

Upgrades

- 1. OneRain, the vendor for Contrail, is finalizing a new map interface. A link was posted on the FWS homepage for people to test the new map system. (2/22)
- 2. The NWS in Portland and Seattle have integrated data from the new gages and the Skookumchuck Reservoir elevations into their forecast operations.
- 3. The NWS upgraded their river forecast pages to use Google Maps. A note about the new NWS pages was posted on the FWS home page (3/4).

Outreach

- 1. An article on the Chehalis FWS written by Lara Fowler was published in the National Hydrologic Warning Council Newsletter on 3/10. Go to http://www.hydrologicwarning.org/ and check out the latest newsletter.
- A technical paper, A Comprehensive Flood Warning System in West Central Washington, prepared by David Curtis and Lara Fowler, was accepted for presentation at the Environment and Water Resource Institute's World Environmental & Water Resources Congress to be held in Albuquerque, New Mexico, May 20 - 24, 2012

Planned Future Activities

- 1. Routine monitoring and maintenance.
- 2. Install remaining gages upon approval for site permits.

www.westconsultants.com

If you have any questions, do not hesitate to contact me directly.

Respectfully submitted,

David C. Curtis, Ph.D. Vice President

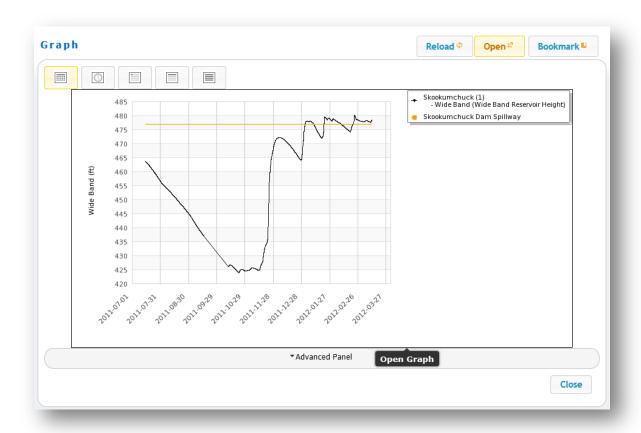


Figure 1: Skookumchuck Reservoir elevations since July 15. Note that the current reservoir levels are nearly 80 feet higher than during the Board's visit last November. The reservoir nearly filled due to the Thanksgiving 2011 storm runoff. A series of storms through the winter has caused the reservoir level to rise to where it is now in its third episode of flowing over the spillway this winter.

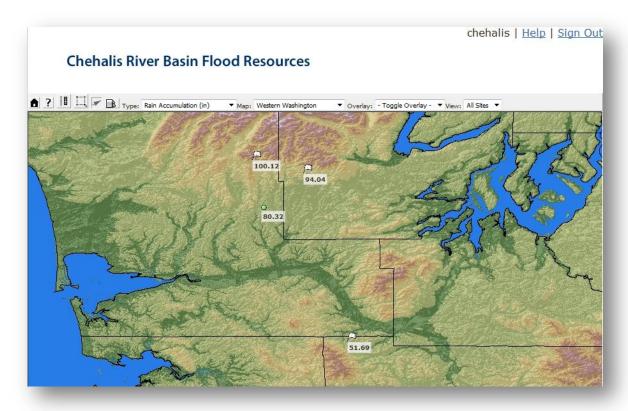


Figure 2: Rainfall totals at new gages sites since last July. Over 100 inches of rain has fallen on the Haywire gage.