January 14, 2025

TO: Flood Authority Members

FROM: Scott Boettcher, Staff

SUBJECT: Flood Warning System and Gages

Purpose of this memo is to provide update on Flood Warning System and gages. Contact Scott (360/480-6600, scottb@sbgh-partners.com) with questions.

1. **Gage Alert Sign-Ups** – We are at 4,527 of 5,000 (this year's goal). See Attachment A.

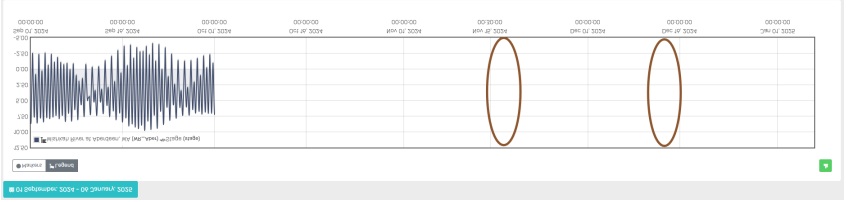
2. **New Gages –** Projects Committee has identified high-priority, immediate gage needs at **~$195K**.

   a. ***Wishkah River at Aberdeen –*** This City of Aberdeen stream gage has been out since 10/01/2024 with no date for when it will be back online (see here). This gage is part of flood alert system and integral to Flood Authority and National Weather Service's effort to establish lower basin river forecasts. Replacement cost is **~ $55K**. This gage was out during preceding two king tide/atmospheric river events and did not generate alarms, to the frustration of users.

   b. ***Bucoda –*** With the new Skookumchuck gage at Trans Alta, the National Weather Service is now providing accurate upstream Skookumchuck river forecasts. The next step is to develop inundation maps for Bucoda like have been done in Chehalis and Centralia (per Flood Authority's 2023 Gage Master Plan page 67 of 117 here). An additional gage south of Bucoda (Tono Bridge over Skookumchuck River) would be very helpful in developing, calibrating, and expediting the inundation maps. To keep costs low, WEST Consultants has come up with a less robust gage option that still meets the needs for this purpose at **~$37K** (versus ~$55K).

   c. ***Dillenbaugh –*** City of Chehalis and Port of Chehalis are involved in an investment planning project. One significant deficiency they've found is they do not have an accurate understanding of flow regimes out of the Dillenbaugh that inundate the Port. A rain gage and stream gage is needed to support the planning effort at **~$102K**.

3. **Lower Basin River Forecasts** – CBB funded one tide gage, three rain gages on 12/05/2024. These gages will provide essential information to develop lower basin river forecasts. These forecasts are complicated by down river flow, upriver tidal pressure, and overland flow from significant rain events. Wishkah gage was out and failed to capture recent King Tide events.



Attachment A
Flood Warning System Alert Sign-Ups