



May 17, 2017

TO: Flood Authority Members
FROM: Scott Boettcher, Staff
SUBJECT: Stream Gage Upgrades

The purpose of this memo is to provide Flood Authority members with an update and recommendation on purchasing upgrades for Flood Authority stream gages. We will review and discuss this at tomorrow's 5-18-2017 Flood Authority conference call. Please feel free to call or email if you have questions (i.e., 360/480-6600, scottb@sbgh-partners.com).

A. Background

1. At the March 16, 2017 Flood Authority meeting (conference call) staff identified for Flood Authority members that:
 - a. the radio transmitters used in Flood Authority owned and operated stream gages are Version 1.0 radio transmitters;
 - b. Version 1.0 transmitters were no longer sold after May 2012 and will no longer be supported after May 2022; and
 - c. gage owners across the nation are being faced with the need to upgrade existing radio transmitters (Version 1.0) to a new Version 2.0 (dual channel) radio transmitter by 2022. [Note: Upgrade requirement applies for example to USGS, Ecology, USFS, NOAA tide stations, Flood Authority, etc.]

See staff memo here https://www.ezview.wa.gov/Portals/_1492/images/Staff%20memo%20--%20Haywire%20gage%20repair%20%20--%203162017.pdf.

2. WEST Consultants provided a quote to upgrade Version 1.0 radio transmitters to Version 2.0 radio transmitters in Flood Authority owned stream gages. The cost is \$22,244.53 (see Attachment A).
3. Fully-functional Flood Authority stream gages are essential for a fully-functioning Flood Warning System.
4. Flood Authority staff have spoken with OFM Capital Budget staff about using unspent 2015-17 State Capital Budget savings to make a one-time purchase of Version 2 radio transmitters. While logical, OFM Capital Budget staff want to wait until other OFM staff with more history in the Chehalis Basin can weigh in. This will occur later in May (or possible very early in June).

B. Recommended Next Steps

Due to limited time remaining in the biennium, staff recommends taking the following steps now to be in a position to act immediately should OFM determine purchase of the Version 2 upgrades is an eligible State Capital Budget expenditure:

1. Flood Authority authorize purchase of Version 2.0 replacement radio transmitters using unspent project savings from City of Chehalis' Dillenbaugh Project (\$1,000) and Lewis County Conservation District's Boistfort Project (\$21,244.53) **provided that** Flood Authority staff receive the necessary determination from OFM.
2. Flood Authority authorize Flood Authority staff to work with Lewis County and RCO to first prepare and execute, when necessary, a \$22,244.53 cost increase to Lewis County's overall Flood Authority budget for purposes of purchasing Version 2.0 transmitter upgrades.
3. Flood Authority authorize Flood Authority staff to work with Lewis County to second prepare and execute, when necessary, a \$22,244.53 cost increase with WEST Consultants to make the above described purchase.
4. Flood Authority staff report back at June 15, 2017 Flood Authority meeting.

Attachment A

WEST Consultant's Quote (5-11-2017)

Chehalis Flood Warning GOES Upgrade Paid with One Time Capital Budget Purchase							
Site	Logger	Radio	Parts	Labor	Shipping	Tax (7.8%)	Total
Beeville	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Chehalis blw Thrash	H350XL	H2221	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Brooklyn	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
WF Satsop	H500XL	H2221	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Cedar Creek	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Haywire	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Newaukum	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Riverside	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Rock	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Skookumchuck	H522+	H2221 internal	\$1,500.00	\$150.00	\$60.00	\$133.38	\$1,843.38
Spare Nile 502 Radar	None	None	\$3,500.00	\$0.00	\$35.00	\$275.73	\$3,810.73
							\$22,244.53