



July 16, 2014

TO: Flood Authority Members
FROM: Scott Boettcher, Staff
SUBJECT: 2015 Flood Warning System Costs

The purpose of this memo is to discuss and set allocation of 2015 annual maintenance costs for the Flood Warning System (www.chehalisriverflood.com). Below please find (1) breakdown of 2015 costs, (2) recap of 2014 allocation approach, and (3) staff recommendation. Please feel free to call or email if you have any questions (i.e., 360/480-6600, scottb@sbgh-partners.com).

I. Breakdown of 2015 Costs

Breakdown of Annual O&M Costs			
Who:	What:	2014 Cost:	2015 Cost:
WEST	Gages -- 10 gages (including 1 stream gage)	\$38,438	\$38,438
WEST	Operational support -- On-going support for website monitoring and updates for both routine operations and during potential flood events.	\$11,336	\$11,336
WEST	Parts Inventory	\$6,000	\$1,000
OneRain	Website -- Contrail annual subscription (120 total sensors in and near Chehalis River Basin)	\$3,811	\$3,811
Lewis County	Billing and Processing	\$900	\$900
Total →		\$60,485	\$55,485
Note: 2015 costs are about 8% less than last year due to having sufficient spare parts inventory on hand.			

II. Recap of 2014 Allocation Approach

Annual maintenance costs for 2014 were allocated among the three counties on the Flood Authority as follows:

- Grays Harbor -- \$13,306.70 (22%).
- Lewis -- \$38,710.40 (64%).
- Thurston -- \$8,467.90 (14%).



The method behind the allocation was as follows:

- 50% of the allocation was based on populations of communities prone to flooding, and
- 50% was based on historic FEMA flood insurance payments.

This allocation approach was unanimously supported by Flood Authority members. See:

- Staff memo prepared for 8/15/2013 Flood Authority meeting [here](#).
- Conclusions from 8/15/2013 Flood Authority meeting [here](#).
- 2014 payment schedule [here](#).

III. Staff Recommendation

Flood Authority members agree to use same allocation approach as last year on the basis that relatively speaking not a lot has changed in the Basin in terms of population shifts and exposure to flood risk, i.e., Lewis County still has largest population and exposure risk in the Basin.

Staff computes 2015 costs as follows:

- Grays Harbor -- \$12,206.70 (22%).
- Lewis -- \$35,510.40 (64%).
- Thurston -- \$7,767.90 (14%).

Staff prepare payment schedule with 1st half due 3/29/2015 and 2nd half due 7/31/2015.

IV. Other News

- a. Inundation maps (seven of them) have now all been prepared and installed in the Flood Warning System. See [here](#).
- b. National Hydrologic Warning Council will be hosting a two-day advanced flood warning system workshop (10/21-22/2-14) at the Great Wolf Lodge. See [here](#).
- c. USGS has agreed to fully fund the following gages with NSIP funding starting October 1, 2014 that Lewis County has historically cost-shared with USGS:
 - Chehalis River near Doty ([12020000](#)).
 - Newaukum River near Chehalis ([12025000](#)).

Fully funding these gages with NSIP funding reduces cost-share for Lewis County by about \$16,200. USGS would like to see Lewis County reinvest some of its savings to upgrade the Chehalis River Near Adna gage ([12021800](#)) from a seasonal stage-only gage to an all-year discharge gage. This proposal is being considered by Lewis County. Click [here](#) to see 9/16/2013 Flood Authority gage cost-share analysis.