



December 14, 2017

TO: Flood Authority Executive Committee Members
FROM: Scott Boettcher, Staff
SUBJECT: 2018 Flood Warning System Budget and County Shares

Purpose of this memo is to allocate 2018 Flood Warning System annual costs (www.chehalisriverflood.com). We will discuss this later today. Please feel free to contact me with questions (360/480-6600, scottb@sbgh-partners.com).

Breakdown of 2018 Costs

Breakdown of 2018 Annual O & M Costs		2014	2015	2016	2017	2018	Difference 2017-2018
WEST Consultants	Gage maintenance -- 10 gages (including 2 stream gages) located across Chehalis Basin.	\$38,438	\$38,438	\$38,438	\$38,438	\$39,207	\$769 ^(a)
	Gage maintenance -- 2 new Centralia stream gages funded under previous contract.	\$0	\$0	\$0	\$0	\$0	\$0
WEST Consultants	Operational support – Includes: Website monitoring; Updates for routine operations; Updates for potential flood events; Etc.	\$11,336	\$11,336	\$11,336	\$11,336	\$11,563	\$227 ^(b)
WEST Consultants	Spare parts inventory -- Extra parts in the event of broken or malfunctioning gages.	\$0	\$6,000	\$2,000	\$2,000	\$2,000	\$0
OneRain	Website -- One-rain annual subscription (225 sensors in and near Chehalis Basin).	\$3,811	\$3,811	\$5,261	\$5,261	\$5,877	\$616 ^(c)
Lewis County	Billing and processing.	\$0	\$900	\$900	\$900	\$900	\$0
Total -->		\$53,585	\$60,485	\$57,935	\$57,935	\$59,547	\$1,612

Notes:

- (a) 2% cost increase for WEST services/support.
- (b) 2% cost increase for WEST services/support.
- (c) 10% cost increase for an additional 105 sensors. WEST inventory (see [here](#)) recommends adding 67 additional professionally-maintained rain gages, and leaving capacity to add additional gages like new stream gages in lower basin (Grays Harbor County, Aberdeen), ground water monitoring wells (Thurston County, USGS), etc.

Recap of 2014-2017 Allocation Approach

Annual costs for 2014, 2015, 2016, and 2017 were allocated among the three Flood Authority counties as follows:

- Grays Harbor County -- 22%.
- Lewis County -- 64%.
- Thurston County -- 14%.

The method behind the allocation was as follows:

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

This allocation approach was unanimously supported by the Flood Authority beginning in 2014 (see [here](#)).

Staff Recommendation

Flood Authority agrees to use the same allocation approach as last year (see [here](#)) on the basis that relatively not a lot has changed in the Basin in terms of population shifts and/or exposure to flood risk, i.e., Lewis County still has largest population and risk exposure in the Basin.

2018 annual costs are proposed in the same manner as 2017 with Grays Harbor County paying 22% of costs, Lewis County paying 64% of costs, and Thurston County paying 14% of costs. Costs for 2017 2018 are as follows:

	2017:	2018:	Difference:
Grays Harbor County (22%)	\$12,745.70	\$13,100.34	\$354.64
Lewis County (64%)	\$37,078.40	\$38,110.08	\$1,031.68
Thurston County (14%)	\$8,110.90	\$8,336.58	\$225.68

Staff will work with Lewis County to prepare payment schedule (1st half due 3/31/2018; 2nd half due 7/31/2018).