



2015-17 Small Projects Recruitment Form

Chehalis River Basin Flood Relief

What are small projects? -- In general, small projects are those projects that provide predominantly localized benefit, are capable of being completed within the funding cycle, are supported by the jurisdiction within which the project is proposed, and are vetted and advanced through the Chehalis River Basin Flood Authority's Chehalis Basin Projects Committee.

Instructions:

- a. Please submit project requests (via this form) to Scott Boettcher (scottb@sbgh-partners.com) no later than 5:00 p.m. September 10, 2014.
- b. Please submit individual project request forms for each project in your jurisdiction, even those projects previously or partially funded in the past.
- c. Note: Parts III and IV below [marked by "(**)"] will be scored as part of the Chehalis Basin Projects Committee's review and evaluation. Part I and II will not be scored.

Part I General	
1. Date:	September 9, 2014
2. Project Name:	Grays Harbor County — Wishkah Road Floodwall Project
3. Project Location -- Please identify the location of the project as precisely as possible, preferable with latitude/longitude coordinates.	47.006376, -123.814067 Wishkah Road, milepost 2.2 to 2.7
4. Project Contact -- Please identify who will be responsible for overseeing and managing the project (i.e., name, email, telephone number, etc.).	Kevin Varness Director of Utilities & Development Division Grays Harbor County 100 West Broadway, Suite 31 Montesano, WA 98563-3614 (360) 581-5093 kvarness@co.grays-harbor.wa.us
5. Lead Organization -- Please identify the lead organization, agency, entity, etc. responsible for this project.	Grays Harbor County
Part II Description, Timing and Cost	



<p>6. Project Description -- Please describe the project, what it is intended to accomplish, and the benefits that will accrue and to whom.</p>	<p>A section of Wishkah Road approximately 2,700 feet long, between milepost 2.2 and 2.7, floods repeatedly during high river and/or high tide levels. A similar low-lying and flood-prone stretch of Wishkah Road exists farther to the north. When both sections flood, more than 80 homes located between these two sections of Wishkah Road are inaccessible to emergency vehicles. The Grays Harbor County — Wishkah Road Floodwall Project will reduce flooding on Wishkah Road between milepost 2.2 and 2.7 and allow the road to remain road open for emergency vehicle response and normal traffic during high-water events. The project will mostly benefit residents of Grays Harbor County, particularly those who reside or travel north of Aberdeen on Wishkah Road.</p>
<p>7. Project Timeline -- Please describe the overall timeline for completion of the project as well any interim stages or phases.</p>	<p>The feasibility phase was completed in June 2013. Field investigations and surveying were completed in Summer 2014, and 30% design will be finalized in September 2014. The design and permit phase is scheduled to be completed by the end of April 2015. If construction funding is approved for the 2015-2017 biennium, the project would go to construction late in the Summer of 2015, assuming timely construction permit approvals and construction funding. Any delay in permit approvals or in the execution of a contract for the funds would result in construction during the summer of 2016.</p>
<p>8. Project Cost and Funding -- What is the cost of this project? What are the on-going maintenance and operation requirements? Is it clear who will be responsible for on-going maintenance and operations costs?</p>	<p>The engineer's opinion of probable construction cost is \$4.78 million at a 2015 cost level (see Table 1). Grays Harbor County and its consultant recognize that the state budget process for the upcoming biennium will be challenging, due in large part to mandates that will likely be part of the education and transportation budgets. As we proceed further into the design process, we will consider ways to reduce the cost to implement the project, ideally without compromising the project benefits. Given that the project involves construction of a long continuous floodwall, it does not appear practical to implement the project in more than one phase.</p> <p>Very little ongoing maintenance and operation will be required by Grays Harbor County. The tide gates, which represent the only moving parts in the design, will be designed to be nearly maintenance free over their design life. Grays Harbor County Public Works personnel will need to periodically inspect the condition of the floodwall and tide gates to check for signs that they appear ready to protect the road during a high-water event, and make any necessary adjustments or repairs.</p>



<p>9. Other Funding -- Please explain the extent to which other funding sources or funding partners are available.</p>	<p>No other funding sources are available or have been sought to fund the construction phase of the project. No other partners exist for this project, though Grays Harbor County is likely to eventually establish a partnership with another entity to manage the property on the river side of the floodwall for the benefit of fish and wildlife.</p>
<p>Part III (**) Completion and Doability by June 30, 2017</p>	
<p>10. Project Completion -- Does the funding requested complete (or substantially complete) a project that has already been started? If so, please explain.</p>	<p>Yes, the requested funding would bring this project to completion. The first phase was completed in 2013, and the design and permit phase is scheduled to be completed in April 2015 using funds in the amount of \$540,000 provided through the Flood Authority.</p>
<p>11. Project Doable -- Can this project or the stage/phase for which funding is sought be completed by June 30, 2017?</p>	<p>Yes. The project construction can be completed by June 30, 2017, with the allocation of construction funding.</p>
<p>12. Project Impacts -- Please identify how any project impacts will be mitigated and if that mitigation will be accomplished by June 30, 2017?</p>	<p>The project will include wetland and fish habitat mitigation, which are all planned to be in place by June 30, 2017. Native vegetation plantings are likely to be installed in the winter following completion of construction and would be established by March 1, 2017.</p>
<p>Part IV (**) Benefits Stated and Quantified</p>	
<p>13. Emergency Response -- Please explain how this project enhances our ability to respond in a flood emergency (e.g., does it keep critical access roads, transportation facilities, etc. open and functional.)</p>	<p>This floodwall's primary purpose is to provide more reliable flood emergency access and keep Wishkah Road open for emergency response to Wishkah Valley School and more than 200 homes along Wishkah Road, which currently become inaccessible during flood events. Wishkah Road is the primary access route between Wishkah Valley School and the nearest medical facilities located in Aberdeen, WA.</p>
<p>14. Essential Infrastructure Protection -- Please explain how this project protects essential infrastructure (as well the risks or consequences of not acting this funding cycle).</p>	<p>This project protects a utility corridor along Wishkah Road that includes power, communication, natural gas, and water lines. The natural gas line provides the natural gas supply into Aberdeen. Without the floodwall, a large flood could disable these utilities and would prevent access to these utilities within and north of the project site.</p>
<p>15. Public Health, Safety and Welfare -- Please explain how this project protects public health, safety and welfare.</p>	<p>The project involves the purchase of two parcels, each with dwellings located on the river side of the proposed floodwall. One parcel has two small areas of lead-contaminated soils that will be remediated, thereby preventing contamination of the adjacent Wishkah River. Removing the structures and decommissioning the septic systems will provide additional</p>



	<p>water quality benefits. Flood protection of the homes in the immediate area will also reduce the introduction of deleterious materials into the river during a flood, which will reduce the threat to humans and the environment. The floodwall will also improve access to routine and emergency services during floods.</p>
<p>16. Residential, Commercial and/or Agricultural Protection -- Please explain how this project protects residential, commercial and/or agricultural interests and communities and the benefits of acting (or consequences of not acting) this funding cycle. Consider factors like number of structures at risk, number of people at risk, historic frequency of flood damage, magnitude of benefit to be gained for the cost, etc.).</p>	<p>Severe flooding of the project area has been documented four times within the last 10 years by photographs and other anecdotal information (see examples in Figure 1). Multiple residences (25) located in the flood-prone area west of the project area will be directly protected by this project, approximately 86 homes are isolated when Wishkah River floods Wishkah Road at this site and farther up the road at Long Swamps, and access to approximately 228 residences along Wishkah Road between the project area and the next intersection to the north will also be protected (see Figure 2). Direct access to an area of approximately 8,700 acres is protected by this project, which includes mostly forestry uses, but also agricultural uses that we have not quantified. The alternatives analysis phase of the project determined that the proposed floodwall is the most feasible option. Options that were rejected due to cost or feasibility included re-aligning the road, raising the road, and constructing an earthen levee.</p>
<p>17. Other Project Impacts -- Please explain how this project impacts or is potentially impacted by another project.</p>	<p>We know of no impacts to or from another Flood Authority project.</p>
<p>18. Anything Else -- Please feel free to offer any additional information (e.g., photos, maps, drawings, etc.) that would be helpful to better understand the scope, timeline and benefits of this project.</p>	<p>The budget is attached as Table 1. Figure 1 shows a few of the available flood photos of Wishkah Road and homes in the project area. Figure 2 shows the locations of homes that would be protected by the floodwall and the homes whose primary access would be protected by the floodwall.</p>

TABLE 1: ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST
Grays Harbor County - Wishkah Road Floodwall Project
Aberdeen, Washington

Item No.	Item Description	Qty.	Unit	Unit Price (Thousands)	Total Price (Thousands)
1	Mobilization for Construction	1	LS	\$120	\$120
2	Temporary Erosion and Sediment Control	1	LS	\$25	\$25
3	Site Preparation	1	LS	\$10	\$10
4	Floodwall	68	1,000 SF	\$40	\$2,700
5	Regulated Flap Gates, 48"x48" with Drainage Modifications	3	EA	\$60	\$180
6	Site Stabilization & Vegetation	1	LS	\$15	\$15
7	Habitat Mitigation	1	LS	\$395	\$395
8	Construction Management	1	LS	\$170	\$170
9	Soil Remediation Design, Permits, and Implementation	1	LS	\$60	\$60

Construction Subtotal	\$3,675
Tax (8.4%)	\$309
Construction Subtotal w/Tax	\$3,984
Contingency (20%)	\$797
Total (2015 dollars)	\$4,780

11/1/07



BARITICIT FLATS

Looking north down Wishkah Road. Proposed floodwall would be on the right side of the road in this photo.

11/1/07



GARAGE SIDE ENTRY DOOR - off deck

2 - ... house

11/1/07



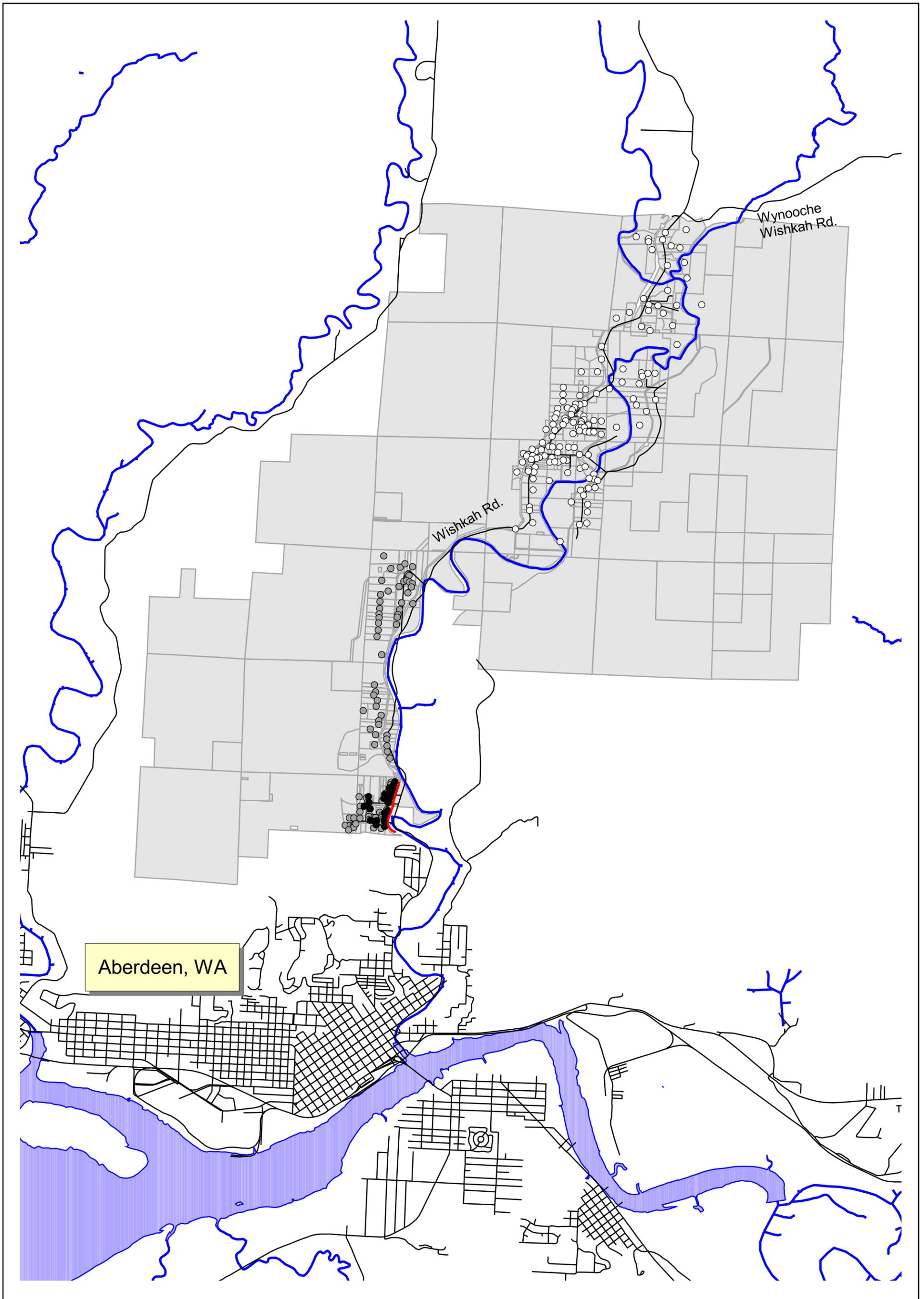
EAST FACE - WATER UP TO FRONT DOOR

11/1/07



Looking N.E.

Figure 1. Typical Flood Photos of Wishkah Road and Adjacent Homes



Map Date: September 9, 2014

3000 0 3000 Feet



-  Proposed Floodwall
-  Homes Subject to Flooding
-  Homes Isolated During Floods
-  Homes With Access Impacted During Floods
-  Roads
-  Rivers
-  Grays Harbor
-  Parcels Within Area of Interest

Kersh-Wishkah Floodwall

Figure 2

Homes Directly Benefitted

