



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:	9/09/2014
2. Project Name:	Relic Channel Bypass / SR107 Protection Project (3.b. -- Design and Permitting)
3. Project Location -- Please identify the location of the project as precisely as possible, preferable with latitude/longitude coordinates.	<p><u>River Mile:</u></p> <ul style="list-style-type: none"> Chehalis River Mile 13.88. <p><u>Latitude & Longitude:</u></p> <ul style="list-style-type: none"> Latitude 46.965276 Longitude -123.595625 <p><u>Township/Range/Section:</u></p> <ul style="list-style-type: none"> T17 R07 Sec 07 <p><u>Map:</u></p> <ul style="list-style-type: none"> See Figure 1 See also https://www.google.com/maps/@46.9643653,-123.5955082,16z



4. Project Contact -- Please identify who will be responsible for overseeing and managing the project (i.e., name, email, telephone number, etc.).	Casey Kramer 360-705-7262 kramerc@wsdot.wa.gov
5. Lead Organization -- Please identify the lead organization, agency, entity, etc. responsible for this project.	WSDOT (lead for stage 3.a.). Note: Lead for stages 3.b. and 3.c. will need to be determined later and in conjunction with Grays Harbor County and City of Montesano.
<div style="text-align: center;">Part II Description, Timing and Cost</div>	
6. Project Description -- Please describe the project, what it is intended to accomplish, and the benefits that will accrue and to whom.	<p>The City of Montesano was funded \$6,000,000 in September 2013 to complete a multi-phased project consisting of the following primary elements:</p> <ul style="list-style-type: none"> • Element 1 – Permit, construct and install a flood protection dike around the City’s wastewater treatment plant. • Element 2 – Permit, construct and install a sheet pile wall to protect the City’s primary industrial property occupied by Mary’s River Lumber Company. • Element 3 – Design, permit and construct a high flow bypass through fill removal, wetland restoration and relic channel reopening along the south end of the existing meander bend at Chehalis River mile 13.88 (removal of existing fill placed in the 1920’s is predicted to allow high flows to enter the existing relic channel and bypass the meander bend). <p>See https://www.ezview.wa.gov/montesanofloodrelief.</p> <p>Element 1 has been completed. Element 2 will be completed October 2014. Element 3 has been delayed due to unforeseen complexities, including:</p> <ul style="list-style-type: none"> • WSDOT’s need for (i) bathymetric surveys, (ii) development of a 2D hydrodynamic model of the Chehalis River extending from upstream of the meander bend to the confluence of the Chehalis and Wynoochee Rivers, and (iii) simulations of a number of river morphological configurations to evaluate potential future hydraulic conditions at the SR107 bridge. • Montesano and Parametrix’s inability to locate the US Army Corps of Engineers permit authorizing the original wetland fill in the 1920s. • Need for an entity other than Montesano to lead Element 3 as Montesano doesn’t have jurisdiction over where the relic channel is physically located (it is in Grays Harbor County).

	<ul style="list-style-type: none"> • Need for coordination between City of Montesano, Grays Harbor County and WSDOT. <p>None of the \$422,187.50 allocated for Element 3 has been spent to date.</p> <p>Element 3 consists of the following sequential stages:</p> <p>3.a. – SR107 hydraulic assessment funded by WSDOT.</p> <p>3.b. – Design and permitting of high flow bypass (through fill removal, wetland restoration and relic channel reopening) funded by State Capital Budget.</p> <p>3.c. – Construction of high-flow bypass funded by State Capital Budget.</p> <p>Element 3 is further described here https://www.ezview.wa.gov/DesktopModules/Documents2/View.aspx?tabID=34430&alias=1751&mid=64620&ItemID=2094</p> <p style="text-align: center;"><u>Further Background</u></p> <p>The State Route 107 Bridge crosses the Chehalis River just downstream of the City of Montesano, in Grays Harbor County. Currently, the Chehalis River takes a very sharp bend to the right (viewed downstream) just upstream of the bridge. While the hydraulics of the Chehalis River currently pose a threat to the SR107 Bridge and its south approach, the river is relatively stable and the bridge is inspected after major flood events.</p> <p>The City of Montesano recently completed a study to evaluate measures to mitigate the flood erosion threat at the Mary's River Lumber mill site upstream of the SR107 Bridge. Just upstream of the mill, a meander bend threatens to cut off, and the Chehalis River flow could potentially be directed at the mill site. The flood erosion protection will consist of installing a deep sheet-pile wall along over about 1,000 feet of the Chehalis River at the mill site. The sheet-pile wall will be installed during the Fall of 2014 landward of the ordinary high water line of the river.</p> <p>WSDOT is concerned that, if the meander bend cuts off and flow is directed at the mill site exposing the sheet pile wall, this could worsen the hydraulic conditions at the SR107 crossing, and increase the scour potential at this bridge.</p>
<p>7. Project Timeline -- Please describe the overall timeline for completion of the project</p>	<p>Element 3 consists of the following sequential stages:</p> <p>3.a. – SR107 hydraulic assessment (Fall 2014 – Winter 2015).</p>



as well any interim stages or phases.	3.b. – Design and permitting of high flow bypass -- through fill removal, wetland restoration and relic channel reopening (Winter 2015 – Spring 2016) 3.c. – Construction of high-flow bypass (Summer-Fall 2016).
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?	None of the \$422,187.50 allocated for Element 3 has been spent to date. Project funding request here is to re-appropriate the monies to the 2015-17 Capital Budget for 3.b. (design and permitting of high flow bypass). Restoration of the relic channel is expected to become a self-supporting system not requiring public works maintenance. In fact, by removing the existing fill placed in the 1920's it is predicted that high flows will enter the existing relic channel and bypass the meander bend. The effect of this would be a better (more advantages) flow toward SR 107 and ultimately less flood related maintenance (and cost) on the SR107 Bridge for WSDOT.
9. Other Funding -- Please explain the extent to which other funding sources or funding partners are available.	WSDOT has contributed funding and staff time thus far for element 3.a. WSDOT funds and staff are not available at this time for 3.b. and 3.c.. \$422,187.50 of originally allocated 2013-15 Capital Budget monies are still available for the project.
Part III (**) Completion and Doability by June 30, 2017	
10. Project Completion -- Does the funding requested complete (or substantially complete) a project that has already been started? If so, please explain.	Funding for 3.b. would be considered after the feasibility of the proposed project is assessed during stage 3.a.. Funding for stage 3.c. will be sought separately once construction costs are known.
11. Project Doable -- Can this project or the stage/phase for which funding is sought be completed by June 30, 2017?	Yes.
12. Project Impacts -- Please identify how any project impacts will be mitigated and if that mitigation will be accomplished by June 30, 2017?	Project at this stage (stage 3.b.) will not have any impacts. Project impacts associated at stage 3.c. (construction stage) will be identified and mitigated through regulatory review and permitting.
Part IV (**) Benefits Stated and Quantified	
13. Emergency Response -- Please explain how this project enhances our ability to respond	In 2011, WSDOT calculated that between 2,300 and 5,800 vehicles per day used the SR 107 highway



in a flood emergency (e.g., does it keep critical access roads, transportation facilities, etc. open and functional.)	(http://en.wikipedia.org/wiki/Washington_State_Route_107#cite_note-ATR-10). The SR 107 bridge is integral to the 7.9 mile highway. If the bridge is closed due to damage, travel between Cosmopolis and Montesano is substantially compromised, including emergency vehicles and first responders.
14. Essential Infrastructure Protection -- Please explain how this project protects essential infrastructure (as well the risks or consequences of not acting this funding cycle).	Project protects SR 107 bridge which is itself integral to the SR 107 highway that carries 2,300 and 5,800 vehicles per day. Opening the relic channel to accommodate high flows could have the effect of lessening WSDOT's maintenance costs on the bridge and the jeopardy posed to the bridge by the present flow dynamics.
15. Public Health, Safety and Welfare -- Please explain how this project protects public health, safety and welfare.	Keeping SR107 open benefits communities in the greater Cosmopolis/Montesano area with a major route open for commerce, employment, emergency response and tourism.
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.).	Wetland creation and fill removal may allow the river to create a new channel along this course fully bypassing the Mary's River site and protecting that important point of economic commerce for the greater Montesano vicinity.
17. Other Project Impacts -- Please explain how this project impacts or is potentially impacted by another project.	n/a
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.	n/a

Figure 1

