

From: [Kris Koski](#)
To: [Scott Boettcher](#)
Cc: [Alissa Shay](#); [Randy Lewis](#)
Subject: Local Projects 2023-2025 Funding Request - Haul Road Mid-Term Planning
Date: Wednesday, August 3, 2022 4:36:24 PM
Attachments: [PART IA -- FINAL Form -- 2023-25 Local Projects Recruitment 6-30-2022 Haul Road mid-term planning FINAL.docx](#)
[Attachment A.pdf](#)

Scott,

Please find our attached funding request for the Planning Phase of the Haul Road Mid-Term Protection Project. Also attached is a file labeled "Attachment A" that is referenced in both of our 2023-2025 applications and should accompany them.

Kris Koski
Port Engineer



Port of Grays Harbor

Port of Grays Harbor

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Part IA

2023-25 Local Projects Recruitment Process, Schedule

FINAL Recruitment Form for Plan, Study, Design, Permit Projects

Instructions:

1. Please submit project requests (via this recruitment form) to scottb@sbgh-partners.com no later than 5:00 p.m., 8/03/2022.
2. Please submit one recruitment form for each project proposed, even past projects previously or partially funded.
3. Note: Sections III and IV [marked by "(**)"] will be scored for review/evaluation. Sections I, II, and V will not be scored.
4. Note: Section V is necessary to help the Chehalis River Basin Flood Authority, Office of Chehalis Basin, and Chehalis Basin Board understand the scope and scale of future Local Projects.
5. See https://www.ezview.wa.gov/site/alias_1492/37773/2023-25-local-projects-recruitment-process.aspx for more information.

Schedule:

June 30, 2022	Flood Authority posts/distributes FINAL 2023-25 local project recruitment request.
August 3, 2022	Project sponsors submit proposals no later than 5:00 p.m., Wednesday, August 3, 2022, to Scott Boettcher, scottb@sbgh-partners.com .
August 4, 2022 [CBB #1]	Chehalis Basin Board presented with local project proposals received.
September 15, 2022 [FA #1]	Flood Authority reviews/discusses local project proposals received and results of initial evaluation by Projects Committee and Review Team.
October 6, 2022 [CBB #2]	Chehalis Basin Board updated on the status of the 2023-25 local projects recruitment effort.
November 17, 2022 [FA #2]	Flood Authority approves ranked, prioritized funding recommendation to Chehalis Basin Board.
December 1, 2022 [CBB #3]	Chehalis Basin Board approves ranked, prioritized funding recommendation to Governor.

Section I General	
1. Date:	August 3, 2022
2. Project Name and Project Phase/Stage:	Haul Road Mid-Term Protection Project—Planning Phase
3. Project Location -- Please provide location of project and latitude, longitude coordinates (e.g., 46.712222, -122.977811).	46.963104, -123.535511
4. Project Manager/Contact -- Please identify who will be responsible for overseeing, implementing the project on a day-to-day basis (i.e., name, organization, contact information).	Kris Koski Port of Grays Harbor kkoski@portgrays.org (360) 533-9545
5. Project Sponsor and Key Partners -- Please identify project sponsor and key partners who will assist in project delivery, implementation.	Sponsor: Port of Grays Harbor Key Partners: Grays Harbor PUD, Grays Harbor Energy

Section II Description, Timing and Cost	
6. Project Description -- Please describe the project, what is intended to be accomplished, flood hazard reduction benefits to be accrued to whom and when. Please identify what phase/stage of the project funding is sought (e.g., study phase/stage, planning phase/stage, design/engineering/permitting phase/stage). Please identify any local or state funding previously secured for this project.	This project is the planning phase of the second part of a three-part strategy to slow erosion on the site to protect the Haul Road and associated critical utilities (pump station power/controls duct bank, 42-inch water main, and overhead fiber optics). The mid-term phase will expand on the short-term project to be constructed in fall of 2022. Ballasted large wood structures are anticipated to be constructed and placed in-water along the left bank of the Chehalis River to protect against further bank erosion at the project site. The structures will be designed to slow velocities along the steep bank, recruit in-stream wood, and recruit sediment to slow erosion in the project area and stabilize the bank until reach-scale alternatives can be developed and implemented through the third phase of the site strategy. Design and construction of the short-term project has been funded by the Port (\$150,000), the Office of the Chehalis Basin (OCB, \$125,000 design and \$400,000 Construction), and the Grays Harbor PUD (in-kind services, approximately \$30,000). OCB has also funded the Grays Harbor Conservation District Keys Road to SR 107 Reach Analysis (\$200,000), which is the planning portion of the

	long-term strategy for this project. A separate request to OCB for 2021-2023 budget funds (\$170,000) for planning, design, and permitting of the mid-term phase is currently in process.
7. Project Timeline -- Please describe the timeline and phases/stages for completing the overall project and the timeline for completing the phase/stage to be funded by 2023-25 funding.	Project planning, design, and permitting for this project will occur in fall of 2022 through June of 2023. Construction is planned for the 2023 in-water work window and will be fully complete no later than the end of the 2023 calendar year, if funded.
8. Project Cost and Funding -- What is the cost of the overall project (or anticipated cost)? What is the cost of the phase/stage to be funded by 2023-25 funding? What are the on-going maintenance and operation requirements and costs? Who will cover on-going maintenance and operation requirements and costs?	<p>Overall Project Cost for mid-term strategy including planning and construction: \$2,000,000</p> <p>Planning Phase Cost: \$250,000 Construction Phase Cost: \$1,750,000</p> <p>Request for funding for planning phase: \$170,000</p> <p>Overall maintenance, operation, and monitoring will be the responsibility of the Port. Depending on the interaction between the river and this project, as well as the timing for implementation of the long-term strategy, maintenance may be required, including relocation or addition of existing structures. Funding for maintenance comes out of the Port's operating or capital budget. Future funding requests to the Office of Chehalis Basin may be necessary based upon the timing of the long-term strategy and the scope of any needed repairs or maintenance. It is difficult to quantify the scope of this possible future need at this time, but if a future maintenance project to relocate or add structures is necessary, costs for design, permitting and construction would likely exceed \$500,000.</p>
9. Other Funding -- Please describe other funding sources and partners that have already contributed (or could contribute in the future) to this project and for what phase/stage.	The Port of Grays Harbor and Office of Chehalis Basin have been primary funders to date. Funding requests are pending from Grays Harbor County .09 Economic Development Funds and Grays Harbor Energy. Grays Harbor PUD is expected to contribute in-kind.

Section III (**) Completion, Doability, Alternatives, and Impacts	
10. Project Completion -- Does the funding requested complete, substantially complete, or continue a project already started? If so, please explain.	This funding request would continue to build on the short-term strategy project to be constructed in 2022 and would complete planning funding needed for the construction of the mid-term strategy in

	2023, if funded.
11. Project Doable -- Can this project or the phase/stage for which funding is sought be completed by June 30, 2025? Please describe any circumstances with potential to impact the project's doability or timeline (e.g., permitting or regulatory unknowns, lack of availability of other funding resources, etc.). Please describe any advance coordination or vetting with agencies, tribes, other entities, etc. and the outcomes of that effort.	Yes, this project is doable by June 30, 2025. A significant amount of work has been completed by our consultant for this project that will prepare us for this phase including surveying, bathymetry and gathering of other data. Consultation with all resource agencies and tribes has been ongoing. Our project has been shaped by the feedback we have received from all consultations. We feel confident we have the data and feedback we need to have final design and permitting completed by June 2023.
12. Project Alternatives -- Please describe alternatives to the project that were considered (including doing nothing), and the rationale for selecting the project described, proposed here.	<p>Alternatives examined for this site have included doing nothing, relocating the roadway and utilities, armoring the site with rock, installing engineered wood systems and structures, and various combinations of these alternatives.</p> <p>Doing nothing would likely result in loss of the haul road, duct bank, and fiber optic lines during the upcoming 2022-2023 flood season, causing the Grays Harbor Energy power plant to shut down, significantly interrupting critical communications and internet service to and from a significant portion of Grays Harbor County, and incurring the need for costly and environmentally damaging repairs. Relocation of the roadway and utilities could not be completed prior to the 2022/23 flood season, would be prohibitively expensive and would have significant impacts on the extensive wetlands in the adjacent Chehalis River floodplain, as well as Elizabeth Creek.</p> <p>Armoring the site with rock, while highly undesirable, was originally proposed as a necessary emergency alternative. As further information was collected about the topography, bathymetry, and geology of the site, together with input from stakeholders and permitting agencies, rock placement was abandoned in lieu of engineered wood systems and structures.</p> <p>The selected alternative is a three-phase approach, including short-term construction of brush mattresses, timber piling, and toe logs to slow erosion on the upper bank during the upcoming flood season; mid-term construction of engineered wood structures to further stabilize the full bank height (this funding request is for planning phase of mid-term solution); and development and</p>

	<p>implementation of a longer-term, reach-scale program to address erosion issues over the entire Keys Road to SR 107 reach.</p> <p>The selected option is the most environmentally friendly option, is permissible and constructible, and is significantly less costly than the do nothing or relocation options.</p>

Section IV (**) Benefits Stated and Quantified	
<p>13. Emergency Response Benefits -- Please describe (and quantify) how this project enhances in the future emergency response in a flood emergency (e.g., does it keep critical access roads and transportation facilities open/functional, does it enable easy movement of cattle, equipment and farm chemicals out of harm's way, is it part of a larger hazard mitigation plan, etc.).</p>	<p>The fiber optic utility that this project will protect provides SCADA services for mission critical infrastructure, 911 traffic, first responder networking, cellular phone, and land line communications which would all be critical to evacuation coordination during a flood emergency.</p>
<p>14. Essential Infrastructure Protection Benefits -- Please describe (and quantify) how this project protects in the future essential infrastructure and the risks or consequences of not acting this funding cycle.</p>	<p>The 42-inch water line underneath Haul Road is owned and operated by the Port of Grays Harbor and serves as a backup to our potable water supply for the business park. The power and communications duct bank provides power and communications to the pump station that supplies this water main. Grays Harbor Energy, a natural gas combustion power plant, is the primary user of the pump station and water line at this time. They have invested heavily in their facility and count on our water source being available to them for their plant operations. The Haul Road is used by Grays Harbor Energy staff for critical access to and maintenance of the wells on the Chehalis River. If further erosion continues, Grays Harbor Energy would be forced to shut down for as long as it took to repair the water line. They are an important provider of power both in Washington State and on the West Coast and a shutdown would have serious consequences. The fiber optic utility on the project site provides SCADA services for mission critical infrastructure, 911 traffic, first responder networking, cellular phone, land line communications, and internet to and from a significant portion of Grays Harbor County.</p>

<p>15. Public Health, Safety and Welfare Benefits -- Please describe (and quantify) how this project protects in the future public health, safety, and welfare.</p>	<p>This project will protect publicly owned assets in the form of a road, power lines, and water line that are utilized for an existing business which generates electricity for public benefit, and would also be used for future economic development and job creation. The fiber optic utility on the site provides critical public safety communications and internet service for commercial, education, agricultural, and residential users.</p>
<p>16. Residential, Commercial and/or Agricultural Protection Benefits -- Please describe (and quantify) how this project protects in the future residential communities, commercial and/or agricultural interests and benefits of acting (or consequences of not acting) this funding cycle. Consider factors like number of structures and people at risk, historic frequency of flood damage, magnitude of benefit for the cost, etc.</p>	<p>While the water line is primarily used for Grays Harbor Energy, it is also designated as the back-up to the potable water supply for the Satsop Business Park should something happen to the well on the Satsop River. Any future large industrial water users locating at the Satsop Business Park would utilize this water line for their water supply. The infrastructure at the business park has the potential to create hundreds of jobs. The water supply is essential for continuing to provide job creation and economic development in Grays Harbor. The fiber optic utility on the site provides critical public safety communications and internet service for commercial, education, agricultural, and residential users.</p>
<p>17. Habitat Benefits – Please describe (and quantify) how this project in the future benefits or improves existing or future habitat conditions.</p>	<p>The existing eroded bank lacks vegetation and structure for fish. The project will be designed to be self-mitigating by using bioengineered systems including ballasted wood structures, logs, root wads where appropriate, slash, and riparian plantings where feasible to enhance fish habitat. Over the longer term, the upper bank will likely revegetate, provide shade and wildlife habitat.</p>
<p>18. Costs, Benefits, Impacts – Please describe (and quantify) anticipated:</p> <p>(a) <u>Costs</u> of this phase/stage of the project if funded, and if not funded? This would include any costs (beyond direct cost of the project) that might be incurred or avoided as a result of the project being funded (or not funded) and when.</p> <p>(b) <u>Benefits</u> of this phase/stage of the project if funded and when those benefits would be realized?</p> <p>(c) <u>Impacts</u> of this phase/stage of the project if</p>	<p>a) If funded, the total planning, design, permitting, and construction cost of this project will be approximately \$2 million. The immediate on-site benefits will begin to be realized in the 2023-2024 flood season, and the longer-term benefits described in item b will be present for years to come. See item c for costs and impacts avoided if the project is funded.</p> <p>b) Benefits of this phase include preservation of the utilities and prevention of outages; increased stability and longevity of the improvements constructed by the short-term project, habitat improvements, and creating additional time to plan, fund, and</p>

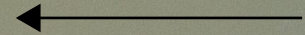
funded, if not funded, and when those impacts would occur.	<p>implement the long-term, reach-scale improvement program with its erosion reduction and habitat improvement benefits.</p> <p>c) If the project is not constructed and the infrastructure is damaged by erosion, as would likely occur in the 2023-2024 flood season, temporary emergency repairs with costs similar to or greater than the proposed project will be required. The Grays Harbor Energy power plant could likely be offline for 2 months or longer while the site is stabilized and long-lead cable and/or large-diameter pipe materials are procured, with far-ranging impacts and costs that are difficult to quantify. The repairs would likely include emergency use of large rock in the river, with significant negative habitat impacts. Subsequent efforts and costs would still be required to provide long-term stabilization at the site.</p>
19. Other Project Benefits -- Please describe (and quantify) any other in the future project benefits not already discussed. This could include how this project compliments, leverages, or implements another project or planning process already underway.	As noted above, this project represents the second phase of a 3-phase strategy to provide reach-scale erosion and habitat benefits from Keys Road to SR 107. The project will complement the phase 1 project, which is currently funded to \$675,000 for design, permitting, and construction by multiple funding partners including the Port and OCB, and will lay the foundation for the implementation of the long-term, reach-scale improvement program, which is currently funded to \$200,000 for planning by OCB.
20. Anything Else -- Please offer any additional information (e.g., links, photos, maps, video, drawings, drone, etc.) that would help to better understand the scope, timing, and benefits of this project.	Attachment A includes an orthophoto of the site with utility locations shown, an aerial photo of erosion conditions on the site as of July 5, 2022, and an outline of the 3-phase approach to erosion at the site.

Section V	
Local Plan, Study, Design, Permit Projects Beyond 2023-25	
21. Project Name and Project Phases/Stage:	Keys Road to SR 107 Reach Study Program
22. Project Location -- Please provide location of project and latitude, longitude coordinates (e.g., 46.712222, -122.977811).	Chehalis River, Keys Road Bridge (46.962162, -123.603635) to SR 107 Bridge (46.962194, -123.603621)

<p>23. Project Sponsor and Key Partners -- Please identify who would be sponsoring the project and key partners who would assist with project delivery, implementation.</p>	<p>The planning phase of this project is sponsored by Grays Harbor Conservation District (GHCD) and funded by OCB. Key partners for the implementation phase may include GHCD, the Port, Grays Harbor County, and the Department of Fish and Wildlife.</p>
<p>24. Project Description -- Please describe the project, what is intended to be accomplished, the flood hazard reduction benefits to be accrued and to who and when. Please identify what phase/stage of the project funding would be sought (e.g., study phase/stage, planning phase/stage, design/engineering/permitting phase/stage).</p>	<p>The planning phase of this project is currently underway to develop a reach-scale analysis and a program of improvement projects to reduce erosion and flood damage and to improve aquatic species habitat in the reach, similar to the plan that was developed for the Lower Satsop River. The future funding phase, beginning in the 2025-2027 biennium, would be for implementation of the improvement program. This program would include Phase 3 of the Port's 3-phase strategy for addressing Haul Road erosion.</p>
<p>25. Costs -- Please describe (quantify) anticipated project costs.</p>	<p>Costs are unknown at this time and will be developed as part of the improvement program. Estimated program costs will likely exceed \$5 million.</p>
<p>26. Benefits -- Please describe (quantify) anticipated project benefits.</p>	<p>The project benefits will include leveraging prior work, such as the first two phases of the Haul Road project, as well as developing complementary, reach-scale approaches to erosion, flooding, and habitat issues identified in the reach-scale analysis.</p>
<p>27. Impacts -- Please describe (quantify) anticipated project impacts.</p>	<p>Project goals and impacts will be determined as part of the reach-scale analysis.</p>

Port of Grays Harbor
Haul Road Emergency Repair

Chehalis River



Approximate location
of existing duct bank,
8'-10" wide per
design drawings.

Approximate
location of existing
overhead fiber optic.

Haul Road

100' +/-

Approximate
location of existing
42" diameter
makeup water main.



Port of Grays Harbor Haul Road Erosion Control Strategy Overview

Short-Term Strategy (Phase 1): "Soft approach" erosion mitigation measures at Haul Road erosion site to slow down erosion and minimize loss of bank line and utilities over flood season of 2022-2023. Work items include erosion blanket, brush mattresses and bundles, untreated timber piling, toe logs, temporary ballast boulders, and similar items. Mostly above water level at time of construction and permittable with USACE. Fully funded, in design and permitting, planned for September 2022 construction start.

Mid-Term Strategy (Phase 2): Additive to Short-Term Strategy. Stabilize toe of slope and bank line at Haul Road erosion site during 2023 in-water work window. Elements include engineered wood structural elements and woody structures in water and above. Additional erosion control measures as necessary.

Long-Term Strategy (Phase 3): Longer-term actions such as reach-scale projects and protection of Haul Road and Port well field in 2025 or beyond. Program to be developed through reach-scale planning effort managed by Grays Harbor Conservation District. Implementation may or may not be led by the Port, and projects are dependent on feasibility of alternatives availability of funding.