

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, SEATTLE DISTRICT P.O. BOX 3755 SEATTLE, WASHINGTON 98124-3755

Rec'd: 7/14/2021 Aquatics ID: 123780 Team: NWRO

Valid: 7/14/2021

Planning, Environmental, and Cultural Resources Branch

14 July 2021

Rebekah Padgett Washington Department of Ecology 3190 160th Avenue S.E. Bellevue, Washington 98008

Dear Ms. Padgett:

The U.S. Army Corps of Engineers, Seattle District (Corps), is proposing to continue building erodible berms to supply spawning gravel and large woody debris for fish habitat. The past Clean Water Act (CWA) Water Quality Certification (WQC) Orders for this project are order numbers #2498 and #8030.

The Corps is requesting 401 WQC concurrence from the Washington Department of Ecology for the activities described in the attached documentation.

As per 33 CFR 336.1(b)(8)(ii), enclosed is the documentation for the WQC request, including a Joint Aquatic Resources form (enclosure 1), 404(b)(1) evaluation (enclosure 2), Water Quality Monitoring Plan (enclosure 3), construction designs (enclosure 4), a copy of the last WQC (enclosure 5), and examples of the typical plan set for berm construction (enclosure 6).

The Corps hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The Corps hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time. The Corps requests your assistance to meet this deadline.

If you have any questions or need additional information, Mr. Collin Ray is the Environmental Coordinator for this project and can be reached at (206)764-3713 or Collin.Ray@usace.army.mil, and Ms. Joanne Gardiner, Chief of Environmental Analysis Section, can be reached at (206) 764-6878 or at Joanne.L.Gardiner@usace.army.mil.

Sincerely,

BOERNER.LAURA. A.1251907443

Digitally signed by BOERNER.LAURA.A.1251907443 Date: 2021.07.14 14:25:28 -07'00'

Laura Boerner, LG, LHG Chief, Planning, Environmental, and Cultural Resources Branch



DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, SEATTLE DISTRICT P.O. BOX 3755 SEATTLE, WASHINGTON 98124-3755

Encls



WASHINGTON STATE



Joint Aquatic Resources Permit

Application (JARPA) Form^{1,2}

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.

SUBMITTED FOR INFORMATION PURPOSES ONLY

Date received:	7/14/2021 edoc Rec'd Required Statements					
Agency reference #:						
Tax Parcel #(s):						

Part 1-Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]	
Green River Gravel Nourishment Project	

Part 2-Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Mi	2a. Name (Last, First, Middle)					
Tobie LaRoy						
2b. Organization (If app	olicable)					
U.S. Army Corps of Er	ngineers, Seattle District					
2c. Mailing Address (S	Street or PO Box)					
P.O. Box 3755						
2d. City, State, Zip						
Seattle WA 98124						
2e. Phone (1)	2f. Phone (2)	2g. Fax	2h. E-mail			
(206)764-6950	()	()	Tobie.m.LaRoy@usace.army.mil			

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@ora.wa.gov.

JARPA Revision 2012.2 Page 1 of 14

¹Additional forms may be required for the following permits:

[•] If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.

[•] If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx.

Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county
government to make sure they accept the JARPA.

²To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias resourcecenter/jarpa jarpa form/9984/jarpa form.aspx.

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [help]

3a.	Name (Last, First, Mi	ddle)					
30.	Organization (If app	olicable)					
3c.	Mailing Address (S	Street or PO Box)					
3d.	City, State, Zip						
		25 =:					
3e.	Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail			
()	()	()				
Dart	4-Property O	wnor(e)					
		` '					
				where the project will occur. Consider both the adjacent aquatic land. [help]			
	ame as applicant. (S	•	•				
	,		rights-of-way or easeme	nts. (Skip to Part 5.)			
	ere are multiple up ach additional prope		Complete the section bel	ow and fill out <u>JARPA Attachment A</u> for			
cont		o) 902-1100 to determin		d aquatic lands. If you don't know, p. If yes, complete <u>JARPA Attachment E</u>			
4a. Name (Last, First, Middle)							
4b. Organization (If applicable)							
4c. Mailing Address (Street or PO Box)							
4d. City, State, Zip							
	,,, -						
4e.	Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail			
()	()	()				

JARPA Revision 2012.2 Page 2 of 14

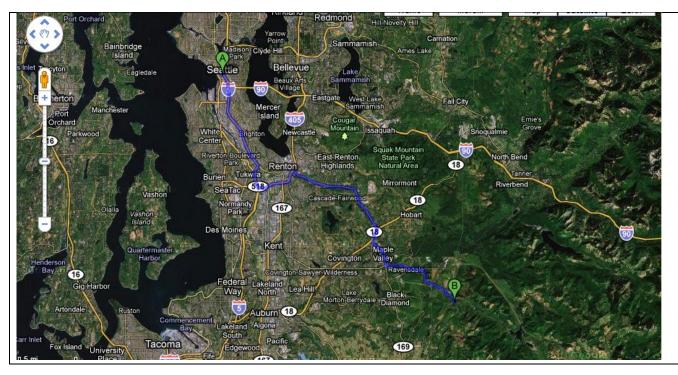
Part 5-Project Location(s)

_		•	s where the project will occur			
There are multiple proje <u>Attachment B</u> for each a			jects). Complete the section	pelow and use <u>JARPA</u>		
5a. Indicate the type of o	wnership	of the property.	(Check all that apply.) [help]			
☐ Private ☐ Federal ☐ Publicly owned (state, of a continuous) ☐ Tribal ☐ Department of Natura			schools, ports, etc.) aged aquatic lands (Complete	e <u>JARPA Attachment E</u>)		
5b. Street Address (Cann	ot be a PO	Box. If there is no ad	dress, provide other location inform	ation in 5p.) [help]		
5c. City, State, Zip (If the I	project is no	t in a city or town, pr	ovide the name of the nearest city o	or town.) [help]		
Near Kanaskat-Palmer						
5d. County [help]						
King						
5e. Provide the section, t	township,	and range for the	e project location. [help]			
1/4 Section	;	Section Township Range				
	13		21N	7E		
5f. Provide the latitude a • Example: 47.03922 N		• •	location. [help] decimal degrees - NAD 83)			
47.31 N lat / -121.85 W.	long					
5g. List the tax parcel nu • The local county asse						
1321079017						
5h. Contact information f	for all adjo	oining property ov	vners. (If you need more space, us	se <u>JARPA Attachment C</u> .) [help]		
Name		N	Mailing Address	Tax Parcel # (if known)		
Washington Dept. of Nat Resources	tural	950 Farman Av		1321079001		
King County Water and	Enumclaw, WA 98022					
Resources Division	Land	500 Forth Aver		1221079018		
	Land	500 Forth Aver		1221079018		
	Land	500 Forth Aver		1221079018		
	Land	500 Forth Aver		1221079018		

JARPA Revision 2012.2 Page 3 of 14

5i. List all wetlands on or adjacent to the project location. [help]
5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]
Green River
5k. Is any part of the project area within a 100-year floodplain? [help]
5l. Briefly describe the vegetation and habitat conditions on the property. [help]
The property has a gravel haul access road down to the Green River that was installed in 2003 for this project. The right bank of the river has forested WDNR timberland.
5m. Describe how the property is currently used. [help]
The property is fish and wildlife habitat, and is currently used for yearly construction of erodible gravel berms for this project.
5n. Describe how the adjacent properties are currently used. [help]
There is a road alongside the Green River at this location. Upstream of the project location is a parking area and water treatment facility.
5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]
The City of Tacoma Public Utilities (TUP) water treatment facility is I adjacent to the project location. TUP Structures are located on the left bank of the Green River. The project site is approximately 0.45 miles downstream of the TUP pipeline bridge and stream gauge.
5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]
From Seattle: Take I-5 South (10.9 miles) Take exit 154A to merge onto I-405 N toward Renton (4.0 miles) Take exit to WA-169 S/Maple Valley Hwy toward Enumclaw (14.1 miles) Turn left at SE Kent Kangley Rd (3.4 miles) Turn right at Retreat-Kanaskat Rd (3.1 miles) Turn left at Green River Headworks Rd (follow to Tacoma Public Utilities water treatment facility)

JARPA Revision 2012.2 Page 4 of 14



Part 6-Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [help]

This project is a requirement of National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) Biological Opinions for the Howard Hansen Dam Additional Water Supply Project (NMFS reference WSB-00-198, USFWS reference 1-3-00-F-1381). This project is also referenced as an ongoing process in the 2019 BiOp (WCR-2014-997) for Howard Hanson Dam (HHD) Operations and Maintenance which includes the continuation of this project to offset effects of the HHD.

Annual berm construction was previously approved by Ecology under Order number 5659 issued July 22, 2003, Order number 2498 issued June 24, 2005, and Order number 8030 issued December 03, 2010.

The work through 2031 will consist of the construction of an erodible berm each year. The annual berm construction will occur within established fish work windows as provided in Ecology Order number 8030 (August 1 – August 30, and November 15 – February 15). The berm will be constructed of screened, washed gravel, and may total up to an estimated 12,000 cubic yards in any year (up to 21,000 tons). The berm may also contain logs placed within the gravel berm, on top of the berm, or in the river near the berm.

Adaptive management has led to change in berm shape and gravel size to manage erosion rates of the berm for habitat benefits; however, the upper limit for total quantity has not changed since the initial consultation. As part of the adaptive management discussed above, the Corps initiated the use of large equipment to push additional gravel into the Green River in an additional cycle during the winter approved in the 2010 water quality certificate. The Corps collaborated with the Washington State Department of Ecology (Ecology), USFWS, and NMFS (Services) to determine the additional in-water work timing. This work occurs between November 15 and February 15 when needed to help prevent scouring of the riverbed and loss of anadromous fish eggs. The exact timing depends on the number and severity of storm events after berm construction each August.

As part of future adaptive management of this project, the future berm may extend an additional 200 feet downstream.

6b. Describe the purpose of the project and why you want or need to perform it. [help]

The purpose of this project is to enhance spawning and rearing habitat for threatened anadromous fish in the Green River.

This project is a requirement of NMFS and USFWS Biological Opinions (BiOp) for the Howard Hansen Dam Additional Water Supply Project (NMFS reference WSB-00-198, USFWS reference 1-3-00-F-1381). This

JARPA Revision 2012.2 Page 5 of 14

project is also referenced as an ongoing resource stewardship activity in the 2014 Howard Hanson Dam Continued Operations Supplemental Biological Opinion to offset effects of the HHD.								
6c. Indicate the project cate	6c. Indicate the project category. (Check all that apply) [help]							
	Residential	— '	Recreational					
6d. Indicate the major eleme	ents of your project. (Check all	that apply) [help]						
 □ Aquaculture □ Bank Stabilization □ Boat House □ Boat Launch □ Boat Lift □ Bridge □ Bulkhead □ Buoy ☑ Channel Modification 	☐ Culvert ☐ Dam / Weir ☐ Dike / Levee / Jetty ☐ Ditch ☐ Dock / Pier ☐ Dredging ☐ Fence ☐ Ferry Terminal ☐ Fishway	☐ Float ☐ Floating Home ☐ Geotechnical Survey ☐ Land Clearing ☐ Marina / Moorage ☐ Mining ☐ Outfall Structure ☐ Piling/Dolphin ☐ Raft	 ☐ Retaining Wall (upland) ☐ Road ☐ Scientific Measurement Device ☐ Stairs ☐ Stormwater facility ☐ Swimming Pool ☐ Utility Line 					
Other:	L		1					
methods and equipment Identify where each element	 6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [help] Identify where each element will occur in relation to the nearest waterbody. Indicate which activities are within the 100-year floodplain. 							
Annual berms will be constructed below the ordinary high-water mark (OHWM) of the Green River using heavy equipment. Gravel will be placed by bulldozer, front-end loader and/or backhoe. The Corps will monitor for turbidity and slow work if it is approaching allowable turbidity at the point of compliance, which is 300 feet downstream.								
For winter work, the Services and Ecology have previously approved the Corps use of heavy equipment to push additional gravel into the Green River at several times throughout the year. Adding gravel to the river will be performed slowly to ensure that water quality standards for turbidity are not exceeded. The Corps will monitor for turbidity and slow or temporarily stop work if it is approaching the allowable turbidity amount at the point of compliance.								
 6f. What are the anticipated start and end dates for project construction? (Month/Year) [help] If the project will be constructed in phases or stages, use <u>JARPA Attachment D</u> to list the start and end dates of each phase or stage. 								
Start date:	End date:	⊠ See	JARPA Attachment D					
6g. Fair market value of the	project, including materials,	labor, machine rentals, etc.	[help]					
N/A								
6h. Will any portion of the project receive federal funding? [help]If yes, list each agency providing funds.								

JARPA Revision 2012.2 Page 6 of 14

100% federally funded, U.S. Army Corps of Engineers									
Part 7–Wetlands	-	•							
Check here if there (If there are none,			on or adjace	nt to the proje	ct area.				
7a. Describe how th	ne project has be	en designed to a	avoid and mir	nimize advers	e impacts to w	etlands. [<u>help</u>]			
☐ Not applicab	ole								
71- 10/11 (1									
7b. Will the project									
Yes N									
7c. Will the project i									
☐ Yes ☐ N 7d. Has a wetland of			2 [holp]						
	he report, including o			ge.					
☐ Yes ☐ No	0								
7e. Have the wetlar System? [help]		sing the Westerr	n Washington	or Eastern W	ashington We	tland Rating			
	the wetland rating fo		th the JARPA pa	ackage.					
☐ Yes ☐ No						0 5 5			
7f. Have you prepaIf Yes, submit the	ared a mitigation he plan with the JAR	•	•	adverse impac	ts to wetlands	! [help]			
	oplicable , explain be		~	ot be required.					
☐ Yes ☐ No ☐ Not applicable									
	7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]								
7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]									
Activity (fill,	Wetland	Wetland	Impact	Duration of impact ³	Proposed mitigation	Wetland			
flood, etc.)									
		category ²	Acres)			acres)			
Î.	i	Ĩ	Î.	1	i	Î.			

JARPA Revision 2012.2 Page 7 of 14

¹ If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.
² Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.
³ Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable. ⁴ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)
Page number(s) for similar information in the mitigation plan, if available:
7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]
7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]
Part 8-Waterbodies (other than wetlands): Impacts and Mitigation
In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help
Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)
8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]
☐ Not applicable
Avoidance and minimization with this project apply only to short term construction impacts. Long term benefits are expected due to increases of gravel and improved habitat complexity to the Green River.
Minimization:
 Initial berm construction will occur within established fish work windows for this project in the Green River (August 1 – August 30, and November 15 – February 15).
Gravel will contain less than 5% fine sediment to reduce turbidity. Water multiplicated described during the property of the containing the conta
 Water quality will be monitored during berm construction. Work will be conducted slowed if approaching the turbidity limits under WAC 173-201A-200(1)(e), to ensure that water quality standards are met. Adding gravel to the river will be performed slowly. Water quality will be monitored to ensure that turbidity standards are not exceeded.
8b. Will your project impact a waterbody or the area around a waterbody? [help]
8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help]
If Yes, submit the plan with the JARPA package and answer 8d.
If No, or Not applicable, explain below why a mitigation plan should not be required.
☐ Yes ☐ No ☒ Not applicable

JARPA Revision 2012.2 Page 8 of 14

Short term	າ impacts to	o water quality	y may occu	r, but long-term	benefits are	e expected	due to increase	s of gravel
and impro	ved habitat	t complexity to	o the Green	River.				

- **8d.** Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.
 - If you already completed 7g you do not need to restate your answer here. [help]

N/A. Project is mitigation in accordance to BiOps from USFWS and NMFS.

8e. Summarize impact(s) to each waterbody in the table below. [help]

	` '	•	'		
Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name ¹	Impact location ²	Duration of impact ³	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Fill: Gravel Berm	Green River	Abutting; below OHWM	7-30 days	Up to 12000 cubic yards	600 linear feet

¹ If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

The berm will be constructed with gravel ranging size range between 0.5 inches to 6 inches, as required by NMFS and USFWS. Gravel will be unwashed with 5% or less fine material colloidally attached.

Gravel will be sourced from existing permitted local quarries.

Material will be placed along the riverbank and in the Green River. The berm will be constructed using large equipment with access from the existing road. Gravel will be placed by bulldozer, front-end loader, and/or backhoe. Gravel will not be end-dumped from the supply truck directly into the river.

For winter work, the Corps will use bulldozer, front-end loader, and/or backhoe to push gravel from the berm into the river.

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

JARPA Revision 2012.2 Page 9 of 14

² Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

³ Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

N/A						
		ewer(s) understand your projuestion.	ect. Complete as much of			
9a. If you have already v	vorked with any government	agencies on this project, list t	hem below. [help]			
Agency Name	Contact Name	Phone	Most Recent Date of Contact			
Department of Ecology	Rebekah Padgett	(425) 649-7129	February 25, 2020			
		()				
		()				
 9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [help] If Yes, list the parameter(s) below. If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: http://www.ecy.wa.gov/programs/wg/303d/. 						
⊠ Yes □ No						
The Green River is on the 303(d) list for dissolved oxygen and temperature						
 9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help] Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC. 						
17110013						
	e Inventory Area Number (WI va.gov/services/gis/maps/wria/wria.	RIA #) is the project in? [help]				

JARPA Revision 2012.2 Page 10 of 14

exceedances have occurred in the past, the Corps will implement recommended and feasible construction BMP's and will continue to monitor water quality for turbidity to ensure that water quality standards are met.					
 9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help] If you don't know, contact the local planning department. For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html. 					
☐ Rural ☐ Urban Natural ☐ Aquatic ☐ Conservancy ☐ Other					
9g. What is the Washington Department of Natural Resources Water Type? [help] • Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.					
☐ Shoreline ☐ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal					
 9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help] • If No, provide the name of the manual your project is designed to meet. 					
Name of manual:					
9i. Does the project site have known contaminated sediment? [help]If Yes, please describe below.					
☐ Yes ⊠ No					
9j. If you know what the property was used for in the past, describe below. [help]					
It has been used for the construction of the erodible berm since 2004.					
 9k. Has a cultural resource (archaeological) survey been performed on the project area? [help] If Yes, attach it to your JARPA package. 					
∑ Yes ☐ No					
Cultural Resources have been assessed as part of the 2001 EIS					
91. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]					
Northern spotted owl (<i>Strix occidentalis</i>), Grizzly bear (<i>Ursus arctos</i>), Canada lynx (<i>Lynx canadensis</i>), Marbled murrelet (<i>Brachyramphus marmoratus</i>), Bull trout (<i>Salvelinus confluentus</i>), Puget Sound Chinook Salmon (<i>Oncorhynchus tshawytscha</i>), and Puget Sound steelhead (<i>Oncorhynchus mykiss</i>)					

JARPA Revision 2012.2 Page 11 of 14

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]
Bull trout (Salvelinus confluentus), Puget Sound Chinook Salmon (Oncorhynchus tshawytscha), and Puget Sound steelhead (Oncorhynchus mykiss)

Part 10-SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at http://apps.ecy.wa.gov/opas/.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@ora.wa.gov.
- For a list of addresses to send your JARPA to, click on agency addresses for completed JARPA.

Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help] For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html .				
☐ A copy of the SEPA determination or letter of exemption is included with this application.				
A SEPA determination is pending with (lead agency). The expected decision date is				
☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]				
☐ This project is exempt (choose type of exemption below). ☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?				
Other:				
⊠ SEPA is pre-empted by federal law.				

JARPA Revision 2012.2 Page 12 of 14

10b. Indicate the permits you are applying for. (Check all that apply.) [help]				
LOCAL GOVERNMENT				
Local Government Shoreline permits: Substantial Development Conditional Use Variance Shoreline Exemption Type (explain):				
Other City/County permits: ☐ Floodplain Development Permit ☐ Critical Areas Ordinance				
STATE GOVERNMENT				
Washington Department of Fish and Wildlife:				
☐ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption – Attach Exemption Form				
Effective July 10, 2012, you must submit a check for \$150 to Washington Department of Fish and Wildlife, unless your project qualifies for an exemption or alternative payment method below. Do not send cash.				
Check the appropriate boxes:				
\$150 check enclosed. Check # Attach check made payable to Washington Department of Fish and Wildlife.				
My project is exempt from the application fee. (Check appropriate exemption) HPA processing is conducted by applicant-funded WDFW staff. Agreement # Mineral prospecting and mining. Project occurs on farm and agricultural land. (Attach a copy of current land use classification recorded with the county auditor, or other proof of current land use.) Project is a modification of an existing HPA originally applied for, prior to July 10, 2012. HPA #				
Washington Department of Natural Resources:				
Aquatic Use Authorization Complete <u>JARPA Attachment E</u> and submit a check for \$25 payable to the Washington Department of Natural Resources. <u>Do not send cash.</u>				
Washington Department of Ecology:				
⊠ Section 401 Water Quality Certification				
FEDERAL GOVERNMENT				
United States Department of the Army permits (U.S. Army Corps of Engineers):				
☐ Section 404 (discharges into waters of the U.S.) ☐ Section 10 (work in navigable waters)				
United States Coast Guard permits:				
☐ Private Aids to Navigation (for non-bridge projects)				

JARPA Revision 2012.2 Page 13 of 14

Part 11-Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

1	1a.	Αp	plicant	Sic	nature	(rec	uired') [help	o1
---	-----	----	---------	-----	--------	------	--------	---------	----

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

only after I have received all necessary perr	mits.	·
I hereby authorize the agent named in Part application (initial)	3 of this application to act on my behalf in ma	atters related to this
	nority to grant access to the property. I also g here the project is located to inspect the proj	
FEDERAL PROJECT = NO SIGNATURE Applicant Printed Name	Applicant Signature	Date
11b. Authorized Agent Signature [help]		
	d belief, the information provided in this appl uthority to carry out the proposed activities a ssued.	
FEDERAL PROJECT = NO SIGNATURE		
Authorized Agent Printed Name	Authorized Agent Signature	Date
11c. Property Owner Signature (if not applied Not required if project is on existing right)	, 	
	g the property where the project is located to at reasonable times and, if practical, with price	
FEDERAL PROJECT = NO SIGNATURE Property Owner Printed Name	Property Owner Signature	Date
Froperty Owner Printed Name	Property Owner Signature	Dale

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ENV-019-09 rev. 08/2013

JARPA Revision 2012.2 Page 14 of 14





WASHINGTON STATE Joint Aquatic Resources Permit Application (JARPA) [help]

Attachment D: Construction sequence [help]

Use this attachment <u>only</u> if your project will be constructed in phases or stages. Complete the outline showing the construction sequence and timing of activities, including the start and end dates of each phase or stage.

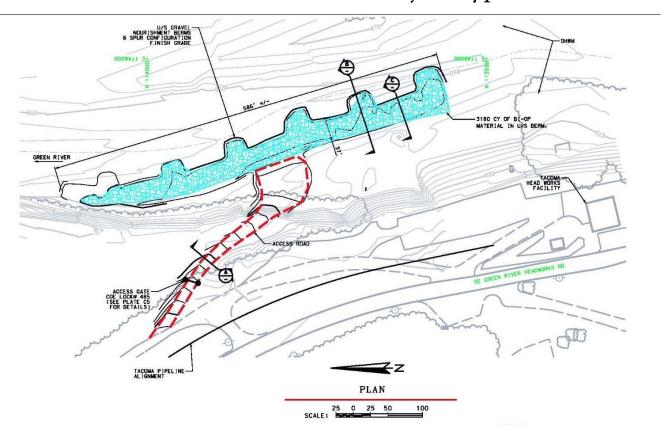
AGENCY USE ONLY				
Date received:				
Agency reference #:				
Tax Parcel #(s):				
TO BE COMPLETED BY APPLICANT [help]				
Project Name: Green River Gravel				
Nourishment				
Location Name (if applicable):				

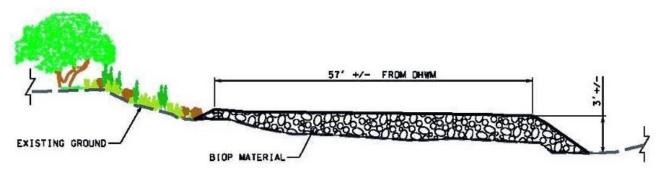
Use black or blue ink to enter answers in white spaces below.

Phase or Stage	Start Date	End Date	Activity Description
August Work 2021- 2031	August 1 st	August 31	Annual berm construction
Winter work 2021- 2031	November 15	February 15	Large equipment will be used to push additional gravel into the river if needed to prevent scouring of the riverbed the exact timing is dependent on the number and severity of storm events following berm construction.

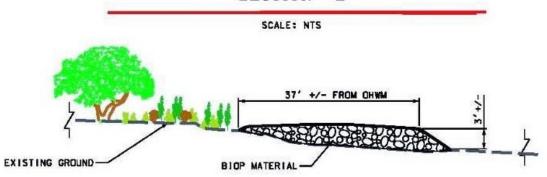
If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-015 rev. 10/2016

Green River Gravel Nourishment Project Typical Plan Set





TYPICAL U/S GRAVEL NOURISHMENT BERM SECTION "B"



TYPICAL U/S GRAVEL NOURISHMENT BERM SECTION "C"

SCALE: NTS

Green River Gravel Nourishment Project 2020 Plan (Not built due to high flows)

Zone 1 Berm Design January 2020



Add in January 2020

Existing Berm