

PROJECT: 24-1117 REST, RACE LAGOON CULVERT #1893 - PHASE 2 Sponsor: Island County Public Works Program: Salmon State Projects Status: Application Submitted

Parties to the Agreement

PRIMARY SPONSOR	
Address	Island County Public Works PO Box 5000
City	Coupeville State WA Zip 98239
Org Type	County-Engineering/Public Works
Vendor #	SWV0000203-00
UBI	
Date Org created	
Org Notes	Mailing Address for IC Public Works is now: 1 NE 7th Street Coupeville, WA 98239
SECONDARY SPONSO	DRS
	Skagit Fisheries Enhancement Group
Address	PO Box 2497
City	Mount Vernon State WA Zip 98273
Org Type	Non-Gov-Reg Fisheries Enhance Group
Vendor #	SWV0015097-00
UBI	601296455
Date Org created	
Org Notes	link to Organization profile ☐Org data updated

MANAGING AGENCY

Recreation and Conservation Office

LEAD ENTITY

Island County LE

QUESTIONS

#1: List project partners and their role and contribution to the project.

External Systems

SPONSOR ASSIGNED INFO

Sponsor-Assigned Project Number

Sponsor-Assigned Regions

EXTERNAL SYSTEM REFERENCE

Source	Project Number	Submitter
HWS	06-NP-01-017	SRPEditUser

Project Contacts

Contact Name Primary Org	Project Role	Work Phone	Work Email
<u>Bridget Kaminski</u> Rec. and Conserv. Office	Project Manager	(360) 472-5546	bridget.kaminski@rco.wa.gov
<u>Matthew Lander</u> Island County of	Project Contact	(360) 679-7331	m.lander@islandcountywa.gov
<u>Aundrea McBride</u> Skagit Watershed Council	Alt Project Contact	(360) 419-9326	amcbride@skagitwatershed.org
<u>Yuki Reiss</u> Skagit Fish Enhancement Group	Alt Project Contact	(360) 770-3177	kyreiss@skagitfisheries.org
<u>Clea Barenburg</u> Island County LE	Lead Entity Contact	(360) 544-2272	C.Barenburg@islandcountywa.gov
<u>Alison Studley</u> Skagit Fish Enhancement Group	Secondary Sponsor Contac	(360) 336-0172 300	astudley@skagitfisheries.org

Worksites & Properties

Worksite Name

#1 Race Lagoon #1893

Restoration Property Name

✓ Race Rd Culvert #1893

Worksite Map & Description

Worksite #1: Race	Lagoon #1893		
WORKSITE ADD	RESS		
Street Address	503 Race Rd		
City, State, Zip	Coupeville	WA	98239

Worksite Details

Worksite #1: Race Lagoon #1893

SITE ACCESS DIRECTIONS

Site is located on Whidbey Island near Coupeville, WA. From Highway 20, travelling either north or south, turn east on West Welcher Road, travel 1.3 miles down W Welcher Road and take a sharp right onto Race Road. The first culvert crossing, 1893, is approximately 0.43 miles south.

TARGETED ESU SPECIES

Species by ESU	Egg Present	Juvenile Present	Adult Present	Population Trend
Chinook-Puget Sound, Threatened		\checkmark		Declining
Coho-Puget Sound/Strait of Georgia, Species of Concern		\checkmark		Unknown
Pink-Odd Year, Not Warranted		\checkmark		Stable
Chum-Puget Sound/Strait of Georgia, Not Warranted		\checkmark		Stable

Reference or source used

WDFW salmonscape cites Coho, Pink, and Chum ESUs in the project area. Fish sampling conducted by Skagit River System Cooperative in 2006 and 2007 confirmed the presence of juvenile Chinook (Age 0 and 1), chum (Age 0), pink salmon (Age 0) in Race Lagoon.

TARGETED NON-ESU SPECIES

Species by Non-ESU Searun Cutthroat Notes

Stream is accessible to searun cutthroat trout and cutthroat trout were found in

Questions

#1: Give street address or road name and mile post for this worksite if available.

by tribes in Race Lagoon

Culvert #1893 flows under Island County-owned Race Rd near 503 Race Road, Coupeville, WA 98239.

Project Location

RELATED PROJECTS

Projects in PRISM

PRISM Number	Project Name	Program Name	Current Status	Relationship Type	Notes
19-1343 P	Island County Culvert Prioritization - Area 2	Salmon State Projects	Closed Completed	Earlier Phase	Current culvert prioritization identified the two Race Lagoon culverts as a restoration priority.
22-1089 P	Race Lagoon Passage - Culverts #1893 & 1894	Salmon Federal Projects	Active	Current Phase	Currently working on completing the design phase of this project.

Related Project Notes

The previous grant phase investigated two barriers on separate streams that flow into Race Lagoon. Culvert #1984 was dropped from this phase grant request because the downstream property owner could not accommodate the necessary removal of downstream barriers located on private property downstream of Culvert #1894.

Questions

#1: Project location. Describe the geographic location, water bodies or habitat types, and the location of the project in the watershed, i.e. nearshore, tributary, main-stem, off-channel, etc.

The proposed barrier removal project is located on central Whidbey Island just east of Coupeville, WA. on an unnamed tributary stream that flows directly into a nearby estuary habitat, Race Lagoon. Culvert #1893 limits fish access to rearing habitat in coastal tributary streams that flow into Race Lagoon. The culvert is located less than 200 feet upstream from the lagoon.

#2: How does this project fit within your regional recovery plan and/or local lead entity's strategy to restore or protect salmonid habitat? Cite section and page number.

Island County nearshore has been determined to be critical rearing habitat for out-migrating juvenile salmon from the Skagit River and other Puget Sound Rivers (Beamer et al, 2000; Beamer et al, 2005). The amount of rearing habitat for juvenile salmonids is limited in WRIA 6 and removal of fish passage barriers in the nearshore is critical for population recovery of Puget Sound salmon populations. The central location of WRIA 6 in the Salish Sea, at the junction of Puget Sound, the Strait of Juan de Fuca and Georgia Strait, means that most Puget Sound juvenile and adult salmon and trout populations utilize WRIA 6 marine and nearshore waters to some extent (WRIA 6 Technical Advisory Group, 2005). One of the goals of the WRIA 6 Multi-species Salmon Recovery

Plan is to "Over the long term, achieve a net increase in salmon habitat through protection, enhancement, and restoration of naturally-functioning ecosystems that support self-sustaining salmon populations and the species that depend on salmon." One of the objectives included in this goal is to "restore/enhance critical rearing habitats for forage fish and juvenile salmon." Estuaries are one of those habitat types. This project falls within Geographic priority area 2, priority area 1 is the most used by juvenile salmonids but juvenile rearing usage has been documented all over priority area 2, especially in pocket estuaries.

The WRIA 6 recovery plan explicitly identifies connectivity modifications, streamflow modifications, and undersized culverts as pressures/limiting factors which need to be addressed by restoration entities. "Removing fish passage barriers to benefit anadromous fish," and "reconnecting creek mouths, backshore areas, and estuaries" are both explicitly listed as tier 1 recovery strategy priorities in the 2019 recover plan. In this same plan, "providing adequate streamflow" is listed as a tier 2 recovery strategy priority. This project meets these goals and objectives and is in line with the most up to date research and recovery plans. Lack of rearing habitat is a limiting factor in Chinook recovery. Lack of rearing habitat is a limiting factor in Chinook recovery. Research by Skagit River System Cooperative (SRSC) and others indicates that small, non-natal estuaries (pocket estuaries) within Whidbey Basin are preferred 20 to 1 by endangered Chinook salmon for nearshore rearing during the early stages of their out-migration.

- #3: Is this project part of a larger overall project? No
- #4: Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. Aquatic Districts and Managers

No

Property Details

Property: Race Rd Culvert #1893 (Worksite #1: Race Lagoon #1893)

Restoration

LANDOWNER

Name	Island County Public Works			
Address	1 NE 7th Street			
City	Coupeville			
State	WA Zip 98239			
Туре	Local			

CONTROL & TENURE

Instrument Type Sponsor owned property (deed) Timing Existing Term Length Perpetuity # Yrs Expiration Date Note Right of Way of Race Rd

Project Proposal

Project Description

This project proposes to implement Phase 2 of the Race Lagoon Culvert No. 1893 replacement. Island County Public Works has been working with the Skagit Fisheries Enhancement Group to replace two fish barrier culverts,

culvert 1893 and 1894, under Race Road near Coupeville. Removal of these fish passage barriers will open up critical rearing habitat for juvenile salmonids including ESA-listed Threatened Chinook, pink, coho, and chum salmon. These two coastal streams drain to Race Lagoon which has been identified as important pocket estuary habitat for outmigrating salmon from the Skagit, Stillaguamish, and Snohomish Rivers. Pocket estuaries and small coastal streams such as these provide important feeding, resting, and and refuge habitat as juvenile salmon transition from freshwater to saltwater habitat. These culverts were identified in the Culvert Prioritization Inventory conducted by SFEG and Island County in 2021 during which

time a Chinook smolt was found in the stream above culvert #1893. In addition, SFEG has been working with local landowners who are open to additional wetland and riparian restoration upstream of these culverts. This grant would fund the final design and construction of culvert 1893. We are still working with property owners on for #1984 for future grant project. Fish passage barrier removal is one of the most rapid and cost-effective ways of increasing the amount of accessible habitat for salmon.

Project Questions

#1: Problem statement. What are the problems your project seeks to address? Include the source and scale of each problem. Describe the site, reach, and watershed conditions. Describe how those conditions impact salmon populations. Include current and historic factors important to understand the problems.

Pacific salmon rely on estuaries to rear. A lack of estuary habitat for rearing is known to be one of the limiting factors in threatened Puget Sound Chinook salmon recovery. Estuary habitat restoration is a vital component of salmon recovery. Multiple studies, including one research project completed by tribal biologists in 2013, demonstrated 1) Skagit, Samish, and Stillaguamish juvenile salmon use pocket estuaries and coastal streams on Whidbey Island to rear in, even when those streams do not host spawning adults and, 2) shoreline culverts on these streams and pocket estuaries are detrimental to rearing juvenile salmon. Undersized culverts limit access to usable habitat in streams, interfere with natural tidal exchange, and cause fatal stranding during the normal tidal cycle. This research has shown that culverts at the mouth of streams are associated with lower numbers of juvenile Chinook, suggesting that these culverts impair the ability of fish to access rearing habitat, particularly at sites that do not backwater during the tidal cycle. The study concluded, "...juvenile Chinook salmon are not just present in these small streams, but are actively rearing and growing. They appear to be using the streams as a nursery, much like natal and pocket estuaries are used by juvenile Chinook salmon, and "...A small streams restoration strategy should include removing culverts or retrofitting streams with culverts at their mouth to a design that allows upstream juvenile salmon passage." (Beamer et al 2013). The amount of rearing habitat for juvenile salmonids is limited in WRIA 6 and removal of fish passage barriers particularly in the nearshore including these this barrier along Race Lagoon is critical for population recovery of Puget Sound salmon populations. Race Lagoon is identified in the Skagit Watershed Council (2022) Strategic Approach as a Tier 2 potential pocket estuary in the Whidbey Basin.

SFEG partnered with Island County Public Works and several tribes to complete phase two of an Island County fish passage barrier inventory project in 2022 (RCO#19-1343). This inventory focused on identifying barriers within 200 meters of the shoreline. SFEG used current (2019) WDFW inventory methods for tidally influenced culverts to identify fish passage barriers. Culverts were further prioritized for habitat assessments that met the following additional criteria: Chinook use in stream or nearshore, watershed area greater than 45 hectares, stream slope <10%, known as fish-bearing, and associated with a pocket estuary. SFEG met with Island County Public Works, Island County Salmon Recovery Lead Entity staff, and Tribal biologists to identify the best projects out of the list of known barriers which also met the criteria for habitat assessment.

#2: Describe the limiting factors, and/or ecological concerns, and limiting life stages (by fish species) that your project expects to address.

Limiting factors for Puget Sound salmon recovery include a lack of rearing habitat including loss of pocket estuary and coastal stream habitat. Research by Skagit River System Cooperative (SRSC) and others indicates that small, non-natal estuaries (pocket estuaries) within Whidbey Basin are preferred 20 to 1 by endangered Chinook salmon for nearshore rearing during the early stages of their out-migration. Pocket estuaries also provide a faster growing environment and are safer for fry sized chinook than adjacent nearshore or offshore areas (Beamer et al 2006). The nearshore environment has been heavily altered and access for salmonids is very limited compared to historic conditions. A total of 96 historic pocket estuaries within the Whidbey Basin region have been identified. All but 26 of these have either been completely destroyed or are too small to be sustainably maintained for fish habitat (McBride 2006).

Impassable culverts on coastal streams that outlet into pocket estuaries such as these prevent access to important nearshore resources including food and shelter for out-migrating juvenile salmon. In 2021 while surveying the culverts, SFEG found a Chinook salmon smolt in peril above culvert #1893 as the tide receded and left the salmon stranded and in too shallow water. This project aims to provide coastal stream juvenile Chinook rearing habitat accessible from the Race Lagoon pocket estuary. The project will also substantially benefit coho, chum and pink juvenile salmon, and sea-run cutthroat trout.

#3: What are the project goals? The goal of the project should be to solve identified problems by addressing the root causes. Then clearly state the desired future condition. Include which species and life stages will benefit from the outcome, and the time of year the benefits will be realized. Example Goals and Objectives

The goal of this project is to improve access to limited quality rearing habitat for Chinook salmon within a coastal stream associated with the Race Lagoon pocket estuary. This will be accomplished by removing a fish passage barrier and replacing with larger fish passable culvert. Replacing the Race Road culvert #1893 will improve natural flow, and sediment transport processes in the stream improving pocket estuary function. Culvert #1893 is the most downstream barrier of the stream and located approximately 200 feet from the estuary.

#4: What are the project objectives? Objectives support and refine biological goals, breaking them down into smaller steps. Objectives are specific, quantifiable actions the project will complete to achieve the stated goal. Each objective should be SMART (Specific, Measurable, Achievable, Relevant, and Time-bound). **Example Goals and Objectives**

The project objective is to remove a fish passage barrier to benefit upstream fish movement. The project design will also restore natural flows under Race Road to Race Lagoon at culvert #1893.

#5: Scope of work and deliverables. Provide a detailed description of each project task/element. With each task/element, identify who will be responsible for each, what the deliverables will be, and the schedule for completion.

For the #1893 culvert barrier replacement project, Island County Public Works will be responsible for: permit applications, final design reports and drawings, technical specifications, CONStruction quantities and costs, cultural resource compliance, bidding documents, control and tenure documents, and as built documentation. Island County will also provide construction oversight for all work OCCUITING in the Island County Right-of Way. SFEG would be utilized for fish exclusion (in the unlikely event that it was necessary) and planting of disturbed areas. SFEG will be responsible for working with local landowners and the work taking place outside of the County right-of-way. Environmental investigation and reports would begin January of 2025 or July 2025 (when RCO funds are awarded) Permits would be expected by August 2026. Construction contract documentation would begin after securing permits and prepared by December 2026. The project would go to bid in early January of 2027. Construction would occur July to September of 2027.

#6: What are the assumptions and physical constraints that could impact whether you achieve your objectives? Assumptions and constrains are external conditions that are not under the direct control of the project, but directly impact the outcome of the project. These may include ecological and geomorphic factors, land use constraints, public acceptance of the project, delays, or other factors. How will you address these issues if they arise?

> Culver #1893 is located on a publicly owned two-lane road that is the access for local residences. The project construction may need to be phased to keep one lane open or a temporary detour around the project may need to be constructed. Any temporary

> construction impacts would be restored. SFEG conducted landowner outreach while conducting habitat surveys of these two streams with positive feedback from the community

> and willingness to look at larger restoration of wetland and stream buffers upstream of the culverts. Temporary construction easements are expected from downstream and upstream properties.

#7: How have lessons learned from completed projects or monitoring studies informed this project?

SFEGs experience on other projects has been that the best approach to restoration projects is to first engage and get to know landowners. For this project we have the support of the current property owner, Island County, the landowner of culvert RFEG053, as well as the support of private landowners along the stream to do planting restoration. To date, SFEG has successfully completed over 74 salmon passage barrier removal projects. SFEG is currently conducting fish sampling with the assistance of SRSC to better determine fish use in Race Lagoon and using DNA analysis be able to determine the Chinook stocks utilizing Race Lagoon.

#8: Describe the alternatives considered and why the preferred was chosen.

A correction analysis form was completed for both culvert, #1893 . The preferred alternatives were chosen based on input from Island County. For both locations concrete box culverts were chosen as the preferred design. Metal arch culverts were considered as cheaper alternatives, however they could be susceptible to saltwater corrosion due to their proximity to Race Lagoon and do not meet site specific standards for 75 year life structure. At culvert 1893, a 14'x4.67"x64' concrete box culvert was chosen

based on meeting WDFW fish passage standards and longevity (concrete) in the tidal environment.

#9: How were stakeholders consulted in the development of this project? Identify the stakeholders, their concerns or feedback, and how those concerns were addressed.

Stakeholders for this project include Island County, adjacent landowners, and neighbors. SFEG only works with interested landowners and will acquire signed landowner acknowledgment forms and agreements from the land owners. SFEG has done outreach and worked with landowners along these streams to conduct habitat assessments. Adjacent landowners have expressed interest in riparian and wetland restoration along these streams and have given verbal/email approval. Neighbors are aware of this proposed project and have raised no concerns. Signed access agreements will be obtained with all landowners where work will occur during construction.

#10: Does your project address or accommodate the anticipated effects of climate change? Yes

#10a: How will your project be climate resilient given future conditions?

Climate change models predict increased temperature and increased rainfall. In WRIA 06, climate changes impacts include coastal flooding (sea level rise and exaggerated storm surge events) and potentially altered hydrology (higher temperatures and flashier stream flows). Culverts that are somewhat passible today can become complete barriers due to these expected climate change effects. The design for Culvert #1893 have considered future conditions, including the expected sea level rise and tidal storm surges and have incorporated WDFW's climate change guidance per their water crossing design manual.

#10b: How will your project increase habitat and species adaptability?

This project will provide critical coastal stream rearing habitat for out-migrating juvenile salmon known to utilize Race Lagoon including ESA listed Chinook salmon. This project will provide additional habitat areas for feeding, resting, and sheltering from predators that is lacking and critical for the recovery of declining salmon populations in the Puget Sound.

#11: Describe the sponsor's experience managing this type of project. Describe other projects where the sponsor has successfully used a similar approach.

Island County Public Works (ICPW) manages Island County's road system and stormwater infrastructure and has extensive experience with bidding and managing public works construction contracts meeting state and federal requirements. Island County replaced a fish barrier culvert under Beach Drive, Camano Island with a concrete box culvert in 2021. ICPW currently has two concrete box fish passage projects, which are permitted and scheduled for construction in 2024.

SFEG is one of 14 Regional Fisheries Enhancement Groups in Washington. We have been managing & implementing restoration projects in the Skagit basin since 1990. SFEG has a long history of fish passage restoration projects in the Skagit basin; we have completed over 74 fish passage barrier removal projects since 1991. SFEG has completed fish passage improvement projects funded by the SRFB, USFWS, FFFPP, and other grant programs over the past 20 years.

- #12: Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.
 - No

Restoration Supplemental

- #1: What level of design (per Appendix D) have you completed? Please attach. Preliminary
 - #1a: What level of design will be produced prior to construction? Final
- #2: Will (or did) a licensed professional engineer design the project? Yes
- #3: Does the project include measures to stabilize an eroding stream bank? No
- #4: Is the primary activity of the project invasive species removal? No
- #5: Is the primary activity of the project riparian planting?
 - No
- #6: Describe the steps you will take to minimize the introduction of invasive species during construction and restoration. Consider how you will use un-infested materials and clean equipment entering and leaving the project area.
 - Island County will ensure that all work follows the current WDFW (2016) protocols for preventing the spread of aquatic invasive species during all in-water work activities. Island County and its contractors will utilize protocols for the prevention of invasive species spread as outlined in the "WDFW Invasive Species Management Protocols" (Feb 2016). Specifically, Island Co will follow those procedures outlined in Part I. Protocols for Field Work in Terrestrial Areas and Part II. Protocols for Field Work on all Waters (A. Decontamination Protocols-Basic Precautions). SFEG will: 1)Survey the site for any invasive species of concern before work, if found species will be demarcated to prevent spread by the contractor or field staff during dirt moving activities. 2)Contractor will be required to clean equipment prior to doing work on site, if invasive species present in work area contractor will also clean equipment before leaving site. 3) Crews will clean work boots, clothes, and equipment
- #7: Describe the long-term stewardship and maintenance obligations for the project.

Island County Public Works will be responsible for maintaining the new fish passable culvert in the County Road Right of Way replacing barrier culvert #1893.

Restoration Metrics

Worksite: Race Lagoon #1893 (#1)

Miles of Stream and/or Shoreline	Treated or Protected (C.0.b)
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Project Identified In a Plan or Watershed Assessment (C.0.c)

The WRIA 06 Multispecies Salmon Recovery Plan Update identifies Race Lagoon as important outmigration rearing habitat for juvenile salmon including Chinook, chum, pink, salmon and cutthroat trout. Access to the coastal stream habitat at the mouth of pocket estuaries is critical for resting, feeding, and refuge for migrating salmon (WRIA 06 MSSRP 2019; pages 16-17)

0.01

ority in Recovery Plan	Removing barriers to benefit anadromous fish use is designated a Tier 1 strategy (WRIA 06 MSSRP, page 21)
pe Of Monitoring (C.0.d.1)	Implementation Monitoring
onitoring Location (C.0.d.2)	Onsite
FISH PASSAGE IMPROVEMENT	
Miles Of Stream Made Accessible (SRFB) (C.2.b.1)	0.84
Habitat made accessible (2489)	A total of 1.35 miles, 0.84 miles of rearing habitat will be made accessible above culvert #1893
Additional barriers (2490)	There are 3 unnatural fish passage barriers upstream of #1893. The first one is 67% passable the second one is 33% passable and the 3rd is 0% passable to adult salmon according to a Level A analysis.
Type Of Barrier (C.2.b.3)	Culvert
Number of blockages / impediments / barriers impeding passage (C.2.b.4)	1
Describe the current barrier (2486)	Culvert 1893 is a round corrugated steelpipe with a 0.85 meter span and is 18.63 meters in length and a 3.0*% slope. It is 33% passible. It is slightly crushed at the top and the bottom is rusting out. Note: Note: Culvert 1894 is a round corrugated steel pipe with a 0.50 meter span and is 23.14 meters in length and a 0.97% slope. The Qfp water Outlet velocity during the fish migration period is 1.368m/s. Velocities above 1.22m/s are considered 0% fish passible.
Passage problem (2487)	Slope Note: Note: 1893 is a slope barrier and 1894 is a velocity barrier
Passability (2488)	33% (Partial)
	Note: Note: 1893 is currently only 33% passible according to a WDFW Level A Assessment (to adult fish, there are no criteria to access juvenile however juveniles are poorer swimmers than adults). 1894 is a 100% barrier even for adult fish according to a WDFW Level B assessment
	due to excessive water velocities.

Total cost for Culvert installed or improved	\$764,429
Number of culverts (C.2.f.2)	1
Miles of stream made accessible by culvert installation/repair (C.2.f.3)	0.84
Correction option (2491)	Stream simulation
PERMITS	

Obtain permits

Total cost to Obtain permits

Number of permits required for implementation of project

ARCHITECTURAL & ENGINEERING

\$63,234

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E)

Overall Project Metrics

COMPLETION DATE

Projected date of completion

03/31/2028

Restoration Cost Estimates

Worksite #1: Race Lagoon #1893

Category	Work Type	Estimated Cost	Note
Fish Passage Improvement	Culvert installed or improved (C.2.f.1)	\$764,429	
Permits	Obtain permits	\$63,234	
Admin, Architecture, and	Subtotal:	\$827,663 \$228,754	
Lignoonig	Total Estimate For Worksite:	\$1,056,417	
Summary			
	Total Estimated Costs Without AA&E:	\$827,663	
	Total Estimated AA&E:	\$228.754	
	Total Estimated Restoration Costs:	\$1,056,417	

Cost Summary

	Estimated Cost	Project %	Admin/AA&E %
Restoration Costs			
Restoration	\$827,663		
Admin, Architecture, and Engineering	\$228,754		27.64 %
SUBTOTAL	\$1,056,417	100.00 %	
Total Cost Estimate	\$1,056,417	100.00 %	

Funding Request and Match

FUNDING PROGRAM					
Salmon State Projects	\$897,954	84.999957			
SPONSOR MATCH					
Other Monetary Funding	Grant - Local				
Amount					\$158,463.00
Funding Organization					Island County Public Works
Grant Program					Island County Clean Water Funds
			Match Total:	\$158,46315.000043	

Total Funding Request (Funding + Match):

\$1,056,417100.000000

Questions

#1: Explain how you determined the cost estimates

Engineer cost estimate was provided as part of the preliminary design package

Cultural Resources

Cultural Resource Areas

Worksite #1: Race Lagoon #1893

Area: Groundwater dispersion area

#1: Provide a description of the project actions at this worksite (acquisition, development and/or restoration activities that will occur as a part of this project)

Treated groundwater may be dispersed within this area.
Excavation related to any disturbance will be less than 6 inches
and will be related to restoring any disturbance and seeding the
area

#2: Describe all ground disturbing activities (length, width and depth of disturbance and equipment utilized) that will take place in the Area of Potential Effect (APE). Include the location of any construction staging or access roads associated with your project that will involve ground disturbance.

Ground disturbance is limited to restoring and seeding the area, if necessary from groundwater dispersion. Disturbance is expected to be minimal to the area and less than 6 inches deep. The area disturbed is expected to be less than 200 feet by 50 feet by 0.5 feet. (LWD)

#3: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

Geotechnical investigations have already occurred in the area.

#4: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

A mowed area of grasses and shrubs.

- #5: Will a federal permit be required to complete the scope of work on the project areas located within this worksite? Yes
 - #5a: List the agency that will be issuing the permit and the date you anticipate applying for and receiving the permit. Will the federal permit cover ALL proposed ground disturbing activities included in the project?

ACOE

#6: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not.

No	

Salmon State Project funds and local funds are expected for the project.

#7: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?

Yes

#7a: Summarize the previous cultural resource review; including lead agency and date of review, reference name and numbers, etc. If RCO, include the prior phase grant number. NOTE: Do not provide any site-specific information considered confidential. Attach previous surveys or other reference documents.

Skagit fisheries Enhancement group coordinated with DAHP prior to geotechnical borings.

#8: Is the worksite located within an existing park, wildlife refuge, natural area preserve, or other recreation or habitat site?

No

Dewatering dispersion area within private property.

#9: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.
No

Area: Site limits of Culvert #1893 replacement

#1: Provide a description of the project actions at this worksite (acquisition, development and/or restoration activities that will occur as a part of this project)

Excavation limits for culvert replacement.

#2: Describe all ground disturbing activities (length, width and depth of disturbance and equipment utilized) that will take place in the Area of Potential Effect (APE). Include the location of any construction staging or access roads associated with your project that will involve ground disturbance.

Excavation limits are 100 feet long by 80 wide. The excavation depth is expected up to around 10 feet. Excavated material will hauled offsite to an approved pit. A concrete box culvert, concrete side walls, stream sediment/cobbles, road fill, and hot mixed asphalt will imported to restore the disturbed count road. Road shoulder slopes will be seeded.

#3: Describe any planned ground disturbing pre-construction/restoration work. This includes geo-technical investigation, fencing, demolition, decommissioning roads, etc.

> Previous geo-technical hand borings have occurred adjacent to the site. Additional borings within the road and the installation of a groundwater monitoring well may occur but are not expected.

#4: Describe the existing project area conditions. The description should include existing conditions, current and historic land uses and previous excavation/fill (if depths and extent is known, please describe).

Paved County Road with fill above expected historic ground elevation. Gravel shoulders, grass, and shrubs within road shoulders.

- #5: Will a federal permit be required to complete the scope of work on the project areas located within this worksite? Yes
 - #5a: List the agency that will be issuing the permit and the date you anticipate applying for and receiving the permit. Will the federal permit cover ALL proposed ground disturbing activities included in the project?

ACOE

#6: Are you utilizing Federal Funding to complete the scope of work? This includes funds that are being shown as match or not.

No

Yes

Salmon State Projects and local funding expected.

#7: Do you have knowledge of any previous cultural resource review within the project boundaries during the past 10 years?

#7a: Summarize the previous cultural resource review; including lead agency and date of review, reference name and numbers, etc. If RCO, include the prior phase grant number. NOTE: Do not provide any site-specific information considered confidential. Attach previous surveys or other reference documents.

SFEG coordinated with DAHP in the previous grant	
phase.	

#8: Is the worksite located within an existing park, wildlife refuge, natural area preserve, or other recreation or habitat site?

No

Excavation limits within County Right of Way and private property.

#9: Are there any structures over 45 years of age within this worksite? This includes structures such as buildings, tidegates, dikes, residential structures, bridges, rail grades, park infrastructure, etc.

No

Project Permits

Permits and Reviews	Issuing Organization	Applied Date	Received Date	Expiration Date	Permit #
Archaeological & Cultural Resources (EO 21-02)	DAHP	01/27/2023	08/15/2023		Completed during phase 1
		Note: This proj through concur	ect had a cultur rence with DAH	al survey done d IP in 2023 via the	uring phase 1 and has gone last SRFB grant.
Endangered Species Act Compliance [ESA]	US Fish & Wildlife				
Hydraulics Project Approval [HPA]	Dept of Fish & Wildlife				
Nationwide Permit	Army Corps of Eng.				

Permit Questions

#1: Are you planning on using the federal permit streamlining process? Limit 8 Yes

Attachments

Required Attachments	6 out of 6 done
Applicant Resolution/Authorizations	\checkmark
Cost Estimate	\checkmark
Landowner acknowledgement form	\checkmark
Map: Restoration Worksite	\checkmark
Photo	\checkmark
RCO Fiscal Data Collection Sheet	\checkmark

PHOTOS (JPG, GIF)

Photos (JPG, GIF)



596859

PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
<u>لم</u>	05/09/2024	Project Review Comments	Project Review Comments Report, 24- 1117R (05/09/24 12:20:41)	BridgetK	Project Review Comments Report - 24- 1117 (05-09-2024_12-20-41).pdf, 615331	\checkmark
X	05/09/2024	Project Application Report	Project Application Report, 24-1117R (05/09/24 12:20:41)	BridgetK	Project Application Report - 24-1117 (05-09-2024_12-20-41).pdf, 615330	\checkmark
×	04/23/2024	Cost Estimate	Race Lagoon SAL- CostEstimate.2024.4.16.xlsx	AlisonS	Race Lagoon SAL- CostEstimate.2024.4.16.xlsx, 609602	\checkmark
×	04/23/2024	Design document	RRCR 1893-1894.R24_03.28.24.pdf	AlisonS	RRCR 1893-1894.R24_03.28.24.pdf, 609588	\checkmark
¥	04/23/2024	Site Plan: Restoration Site Plan	RRCR 1893-1894.R24 (Stream Design)_04.10.24.pdf	AlisonS	RRCR 1893-1894.R24 (Stream Design)_04.10.24.pdf, 609584	\checkmark
Å	04/23/2024	Preliminary design report	Race Lagoon Tribs Crossing Race Road Basis of Design Report	AlisonS	Race Lagoon Tribs Crossing Race Road Basis of Design Report 4-15-2024.pdf, 609583	√
لحر	04/10/2024	Letters of Support	race lagoon LOS SRTCC.pdf	AlissaF	race lagoon LOS SRTCC.pdf, 606611	\checkmark
X	03/27/2024	Application Review Report	Grant Manager Comments, 24- 1117R(rtnd 03/27/24 12:11)	BridgetK	Grant Manager Comments Report - 24- 1117 (rtnd 03-27-2024_12-11-49).pdf, 604029	√

File Type	Attach Date	Attachment Type	Title	Person
لم م	02/23/2024	Project Application Report	Project Application Report, 24-1117R (sub 02/23/24 10:44:01)	MatthewL
Å	02/21/2024	Application Document	Project Application Report - 24-1117.pdf	BridgetK
X	02/21/2024	Project Review Comments	Project Review Comments Report, 24- 1117R (02/21/24 09:14:40)	BridgetK
×	02/21/2024	Project Application Report	Project Application Report, 24-1117R (02/21/24 09:14:40)	BridgetK
لم م	02/14/2024	Project Application Report	Project Application Report, 24-1117R (sub 02/14/24 15:45:19)	MatthewL
Å	02/13/2024	Project plan document	Race Lagoon Tribs Crossing Race Road Basis of Design Report2	AlisonS
x	02/13/2024	Cost Estimate	Race Lagoon SAL- CostEstimate.2024.2.13.xlsx	AlisonS
Å	02/13/2024	Visuals	PrelimDesignRRCR 1893- 1894.R24_02.12.24.pdf	AlisonS
Å	02/12/2024	Cost Estimate	Race Road Culvert Replacements Construction Costs.pdf	AlisonS
	02/12/2024	Photo	1894 US Inlet (2).jpg.JPG	AlisonS
~	02/12/2024	Photo	1893 US Inlet.jpg.JPG	AlisonS
	02/12/2024	Photo	1893 Race Lagoon Estuary (2).jpg.JPG	AlisonS
	02/12/2024	Photo	1893 DS Outlet (2).jpg.JPG	AlisonS
A	02/12/2024	Map: Restoration Worksite	RaceRoad Culverts MAP.pdf	AlisonS
A	02/12/2024	Visuals	Race Lagoon 1963.pdf	AlisonS
X	02/12/2024	Visuals	Race Lagoon 1942.pdf	AlisonS
X	02/12/2024	Map: Area of Potential Effect (APE)	RaceRoad Culverts APE.pdf	AlisonS
X	02/12/2024	Monitoring activity	RaceLagoonFishReport11-30-07.pdf	AlisonS
w	02/12/2024	Correction Analysis Form	Culvert 1894 Correction Analysis Form.docx	AlisonS
W	02/12/2024	Correction Analysis Form	Culvert 1893 Correction Analysis Form.docx	AlisonS
×	02/12/2024	WDFW barrier & screening forms	1894 Survey.pdf.PDF	AlisonS
X	02/12/2024	WDFW barrier & screening forms	1893 Survey.pdf.PDF	AlisonS
Å	02/12/2024	Applicant Resolution/Authorizations	applicant resolution_authorization_ICPW 2024 unsigned.pdf	AlisonS
X	02/12/2024	RCO Fiscal Data Collection Sheet	FiscalDataCollectionSheet_SFEG_060722	AlisonS
	02/12/2024	Photo	Private Culvert.jpg	AlisonS
×	02/12/2024	Landowner acknowledgement form	SFEG-RCO LOA County Race Lagoon.fully executed.pdf	AlisonS
Å	02/12/2024	Landowner acknowledgement form	SFEG-RCO Landowner Agreement Blubaugh.signed.pdf	AlisonS
	02/12/2024	Photo	1894 upstream.jpg	AlisonS
	02/12/2024	Photo	1894 downstream.jpg	AlisonS
×	02/12/2024	Cultural Resources: Inadvertent Discovery Plan (IDP)	22-1089 IDP-Race Lagoon Passage - Culverts.pdf	AlisonS
Å	02/09/2024	Visuals	Race Lagoon Culverts Climate Change Information Visual.pdf	MatthewL
¥	02/09/2024	Visuals	EJScreen Community Report Race Rd Culverts Blockgroup Cennsu	MatthewL

File Name, Number Associations	Shared
Project Application Report - 24-1117	\checkmark
(submitted 02-23-2024_10-44-01).pdf, 598429	
Project Application Report - 24- 1117.pdf, 597896	\checkmark
Project Review Comments Report - 24- 1117 (02-21-2024_09-14-40).pdf, 597895	~
Project Application Report - 24-1117 (02-21-2024_09-14-40).pdf, 597894	\checkmark
Project Application Report - 24-1117 (submitted 02-14-2024_15-45-19).pdf, 597257	√
Race Lagoon Tribs Crossing Race Road Basis of Design Report 2-14-2024.pdf, 596953	√
Race Lagoon SAL- CostEstimate.2024.2.13.xlsx, 596925	\checkmark
PrelimDesignRRCR	\checkmark
Race Road Culvert Replacements	\checkmark
1894 US Inlet (2).jpg.jpg, 596861	\checkmark
1893 US Inlet.jpg.jpg, 596860	~
1893 Race Lagoon Estuary (2).jpg.jpg, 596859	\checkmark
1893 DS Outlet (2).jpg.jpg, 596858	\checkmark
RaceRoad Culverts MAP.pdf, 596857	\checkmark
Race Lagoon 1963.pdf, 596856	\checkmark
Race Lagoon 1942.pdf, 596855	\checkmark
RaceRoad Culverts APE.pdf, 596854	\checkmark
RaceLagoonFishReport11-30-07.pdf, 596853	\checkmark
Culvert 1894 Correction Analysis Form.docx, 596852	\checkmark
Culvert 1893 Correction Analysis Form.docx, 596851	\checkmark
1894 Survey.pdf.pdf, 596850	\checkmark
1893 Survey.pdf.pdf, 596849	\checkmark
applicant resolution_authorization_ICPW 2024	\checkmark
FiscalDataCollectionSheet_SFEG_06	
Private Culvert.jpg, 596846	\checkmark
SFEG-RCO LOA County Race Lagoon.fully executed.pdf, 596845	
SFEG-RCO Landowner Agreement	
Blubaugh.signed.pdf, 596844	
1094 upstream ing 596843	√
1094 downstream.jpg, 596842 22-1089 IDP-Race Lagoon Passage -	V
Culverts.pdf, 596841	-
Race Lagoon Culverts Climate Change Information Visual.pdf, 596586	\checkmark
EJScreen Community Report Race Rd Culverts Blockgroup Cennsus Tract WRIA6.pdf, 596579	~

Application Status

Application Due Date: 06/24/2024

Status Name	Status Date	Submitted By	Submission Notes
Application Submitted	06/05/2024	Matthew Lander	
Preapplication	01/18/2024		

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional documents before evaluation or approval of this project and I agree to provide them. (Matthew Lander, 06/05/2024)

Date of last change: 06/05/2024