Application Name: Indian Creek Connectivity Project Phase 1 Implementation: Reconnecting Habitat for

Application Number: 220-8205-18752

By: Trout Unlimited Inc

Offering Type: Upper Grande Ronde Initiative

Application Type: Restoration

OWEB Region: Eastern Oregon
County: Union
Coordinates: 45.472667,-117.866117

Applicant:
Chrysten Lambert
1777 N Kent St Ste 100
Arlington VA 22209
(541) 273-2189
clambert@tu.org

Payee:
Dawn Elzy
1777 N Kent St Ste 100
Arlington VA 22209
(541) 450-4678
dawn.elzy@tu.org

Project Manager:
Levi Old
2210 18th St
Baker City OR 97814
5414083770
lold@tu.org

Budget Summary:
OWEB Amount Requested: $1
Total Project Amount: $282,871

Administrative Information

Abstract

Provide an abstract statement for the project. Include the following information: 1) Identify the project location; 2) Briefly state the project need; 3) Describe the proposed work; 4) Identify project partners.

Indian Creek originates in the Wallowa Mountains and flows into the Grande Ronde River near Elgin, Oregon. The creek's headwaters begin on National Forest land. Downstream of the forest boundary there is a mix of commercial and private timber lands, and an agricultural valley before the creek reaches its confluence with the Grande Ronde.

The Indian Creek watershed is home to ESA-listed Snake River Chinook salmon, Snake River steelhead, bull trout, State-Sensitive Redband trout and Pacific Lamprey, as well as a suite of other important aquatic and terrestrial species. If awarded, this request will support the removal of three in-stream passage barriers and associated floodplain infrastructure (RMs 5.4 to 7.0). This will include the placement of approximately 22 large wood structures for habitat complexity, and floodplain connectivity. This aquatic connectivity focused effort will open up over 10 miles of critical habitat for juvenile salmon, steelhead, bull trout, and other fishes.

The project is a collaborative partnership between Private Timber Management Company, Trout Unlimited, Grande Ronde Model Watershed, Confederated Tribes of the Umatilla and our funding partners.

Location Information

What is the ownership of the project site(s)?

❑ *Public land (any lands owned by the Federal government, the State of Oregon, a city, county, district or municipal or public corporation in Oregon)*

✓ *Private (land owned by non-governmental entities)*

Please select one of the following Landowner Contact Certification statements:

❍ I certify that I have informed all participating private landowners involved in the project of the existence of the application, and I have advised all of them that all monitoring information obtained on their property is public record.

● I certify that contact with all participating private landowners was not possible at the time of application for the following reasons: Furthermore, I understand that should this project be awarded, I will be required by the terms of the OWEB grant agreement to secure cooperative landowner agreements with all participating private landowners prior to expending Board funds on a property.

Please List your reasons

This proposal is through the Grande Ronde Model Watershed for BPA funding support. This is an OWEB specific question. TU does have an agreement with the private landowner.

❑ *This grant will take place in more than one county.*

Permits

Other than the land-use form, do you need a permit, license or other regulatory approval of any of the proposed project activities?

● Yes
❍ No

For Details Go to Permit Page

I acknowledge that I am responsible for verifying applicable permits, licenses, and General Authorizations required for the project, and can update information at grant agreement execution.

✓*Yes*

Racial and Ethnic Impact Statement

Racial and Ethnic Impact Statement

❍ The proposed grant project policies or programs could have a disproportionate or unique POSITIVE impact on the following minority persons. (indicate all that apply)

❍ The proposed grant project policies or programs could have a disproportionate or unique NEGATIVE impact on the following minority persons. (indicate all that apply)

● The proposed grant project policies or programs WILL HAVE NO disproportionate or unique impact on minority persons.

Insurance Information

❑*Working with hazardous materials (not including materials used in the normal operation of equipment such as hydraulic fluid)*

❑*Earth moving work around the footprint of a drinking water well*

✓*Removal or alteration of structures that hold back water on land or instream including dams, levees, dikes, tidegates and other water control devices (this does not include temporary diversion dams used solely to divert water for irrigation)*

❑*Applicant's staff or volunteers are working with kids related to this project (DAS Risk assessment tool not required, additional insurance is required)*

❑*Applicant's staff are applying herbicides or pesticides (DAS Risk assessment tool not required, additional insurance is required)*

Additional Information

❑ *This project affects Sage-Grouse.*

Problem Statement

Describe the watershed problem(s) that this restoration project seeks to address.

The Indian Creek sub-watershed contains three fish passage barriers approximately 5-6 miles upstream from its confluence with the Grande Ronde River. The barriers do not meet fish passage standards and limit floodplain connectivity. The barriers include an old cobble dam (Barrier 1), an old hydroelectric dam and associated floodplain infrastructure (Barrier 2), and a undersized culvert and road bed in the creek (Barrier 3).

Barrier 1: The most downstream barrier is an old cobble dam made of concrete, river cobble and wood (log-crib). The concrete and log-crib span the stream. Cobble berms were built up to facilitate a dam in the floodplain on river right and left. This significantly constricts a natural side-channel that flows through the floodplain on river right. The cobble berms protrude out 20-30 feet into the floodplain on either side of the river. The berm on river right spans downstream 100 feet.

Barrier 2: The hydroelectric dam is a solid concrete and metal structure that spans the stream channel. The hydro operation has a pump house nearby and a electric wire pipe that crosses the stream 100 yds downstream from the dam. The dam also has a water in-take pipe approximately 1 mile upstream from the passage barrier. The entry to this in-take pipe includes an in-stream boulder diversion and large alcove (in-stream/floodplain berm) that decreases floodplain connectivity. The pipe entrains fish.

Barrier 3: Just upstream of the hydro-dam is an old culvert and roadbed in the stream. This significantly decreases floodplain connectivity and is a velocity-driven passage barrier at certain flows. The road no longer fully crosses the river's floodplain width, but the culvert and old road/bridge fill does funnel all the water through the culvert at low flows.

Each of these barriers to latitudinal and longitudinal connectivity, and their associated infrastructure cause significant challenges for the creek's geophysical and ecosystem, form and function.

Over the past several years TU and project partners have collected and observed data on Indian Creek throughout a variety of the system's reaches. The reach around the barriers has very little woody debris in the system. The project team will improve the habitat and encourage more floodplain connectivity by placing more wood within the footprint around the passage barriers.

How have past or current land management practices contributed to the problem?

This effort addresses limiting factors related to aquatic connectivity (floodplain and up-to-downstream) and habitat complexity. The connectivity problems were created via past land management practices associated with water management, logging (road/bridge building) and hydro-electric interests. The lack of complexity problem is likely due to historic wood removal from the stream, road building (channelization) and the floodplain logging.

Project History

Continuation - Are you requesting funds to continue work on a project previously funded by OWEB where that work did not result in a completed project?

❍ Yes
● No

Resubmit - Have you submitted, but were not awarded an OWEB application for this project before?

❍ Yes
● No

Phased - Is proposed work in this application a phase of a comprehensive watershed restoration plan or project?

● Yes
❍ No

List the phases of the project.

Phase	Brief Description	Project Number
Phase 1	Remove three barriers & infrastructure, place LWD	
Phase 2	Connect more floodplain habitat & add more LWD	

Plans and Salmon

Is the proposed restoration activity(ies) identified in a local assessment or other plan?

● Yes
❍ No

Provide name of local plan, Watershed assessment or other locally relevant document.

Upper Grande Ronde River Restoration Atlas (BPA, GRMW)
Grande Ronde River and Catherine Creek Restoration Geospatial Prioritization Atlas - The purpose of this science-based tool is to guide restoration practitioners in work that is most beneficial to aquatic ecosystems. The projects are ranked using biological benefit, and feasibility metrics. The focal species for conservation and restoration action include Chinook, steelhead and bull trout. Indian Creek is a Tier 2 Biologically Significant Reach. Passage barriers are considered a Tier 1 Priority by the Implementation Team.

Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp) (U.S. Bureau of Reclamation, Bonneville Power Association, US Army Corps of Engineers, 2004) - The BiOp Identifies limiting factors for ESA-listed fish species as substrate, water quality and quantity, water temperature, and riparian vegetation conditions.

Northeast Oregon Snake River Recovery Plan (National Marine Fisheries Service, 2010) - The recovery plan defines Ecological Concerns for ESA-listed fish as increased sediment quantity, riparian condition, LWD recruitment and temperature, side channel & wetland conditions, floodplain connection, anthropological barriers, in-stream structural complexity, and decreased water quantity.

NMFS [National Marine Fisheries Service]. 2014. Endangered Species Act Section 7(a) (2) Supplemental Biological Opinion. Consultation on Remand for Operation of the Federal Columbia River Power System. National Oceanic and Atmospheric Administration. NWR-2013-9562. - The NMFS Plan Identifies basin appropriate passage and limiting factors.

NMFS [National Marine Fisheries Service]. 2013. Draft Proposed ESA Recovery Plan for Snake River Spring/Summer Chinook salmon and Snake River Steelhead. National Marine Fisheries Service, Northwest Region. National Oceanic and Atmospheric Administration. Predecisional document, Accessed March 28, 2014. - The plan identifies limiting factors by fish species.

Bureau of Reclamation (Reclamation). 2014. Upper Grande Ronde River Tributary Assessment, Grande Ronde River Basin, Tributary Habitat Program, Oregon: Department of Interior, Bureau of Reclamation, Pacific Northwest Region, Boise, Idaho, 74 p. - The assessment identifies limiting factors for ESA-listed fish species and existing conditions.

Oregon Department of Fish and Wildlife Fish Passage Barrier Database includes one of the three barriers. The purpose of this database is to identify fish passage barriers that might cause aquatic connectivity issues. This database has proven to be a coarse overview and not all of it has been verified on the ground. For this reason, the other barriers were not identified via the review of aerial imagery, which is the primary method used to create the database.

Trout Unlimited, Indian Creek: Rapid Assessment of Fish Passage and Associated Restoration Opportunities. 2019. - TU used best available information (ODFW database and extensive ground-truth, expert knowledge) to compile the known passage barrier issues on Indian Creek, a tributary to the Grande Ronde River. The three barriers slated to be removed via this project were all analyzed and documented in the assessment.

Will this project benefit salmon or steelhead?

● Yes
❍ No

✓Snake River Basin - Steelhead
✓Snake River Spring/Summer-run - Chinook Salmon

How will the resulting restoration project benefit salmon or steelhead or their habitat?

The project will improve aquatic connectivity for salmon and steelhead. The removal of all three barriers will re-connect at least 10 miles of salmon and steelhead habitat (especially at low flows). The project will reconnect the river with its floodplain in areas immediate to all three barriers and the hydro in-take pipe. The project will place approximately 22 LWD jams for habitat complexity and floodplain connectivity.

Does the project address a restoration action identified in a regional assessment or recovery plan?

● Yes
❍ No

Regional Assessments or Recovery Plans
ESA Recovery Plan for Snake River Spring/Summer Chinook & Snake River Basin Steelhead
Oregon Conservation Strategy

For each plan chosen above, describe how your project is consistent with specific recovery/restoration actions cited in that plan.

NMFS [National Marine Fisheries Service]. 2013. Draft Proposed ESA Recovery Plan for Snake River Spring/Summer Chinook salmon and Snake River Steelhead. National Marine Fisheries Service, Northwest Region. National Oceanic and Atmospheric Administration. Predecisional document, Accessed March 28, 2014. - "The freshwater habitat strategy is in line with findings from recent studies, which show that restoration planning that

carefully integrates watershed processes is more likely to succeed in restoring depleted salmonid populations (Roni et al. 2008; Beechie et al. 2003). Beechie et al. (2010) outlined four principles that would ensure that river restoration is guided toward sustainable actions: (1) address the root cause of degradation, (2) be consistent with the physical and biological potential of the site, (3) scale actions to be commensurate with the environmental problems, and 4) clearly articulate the expected outcomes (NMFS 2010)."

Oregon Conservation Strategy. 2016. Oregon Department of Fish and Wildlife, Salem, Oregon. - Salmon, steelhead and bull trout are listed as a strategy species. Limiting Factors include: Loss of Riparian Habitat, Floodplain Function, and Habitat Complexity; as well as Passage Barriers and Channel Complexity. "In many locations throughout Oregon, water flow and hydrology have been impacted by barriers (e.g., roads, dams, and culverts) and irrigation diversions that can reduce water flow and interfere with fish and wildlife migration." " In arid areas, such as the Blue Mountains and Columbia Plateau ecoregions, riparian habitats can provide abundant insects, plants, and moisture throughout the year."

Does this project address one or both of the following:

✓ *Habitat needs for one or more Endangered Species Act-listed species and/or species of concern*

❑ *Concerns identified on 303(d) listed streams*

❑ *No*

Proposed Solution

Goal, Objectives, and Activities

State your project goal. A goal statement should articulate desired outcomes (the vision for desired future conditions) and the watershed benefit.

The project goal is to return geophysical form and function to Indian Creek and thereby improve habitat connectivity and diversity for ESA-listed steelhead, Chinook salmon, and bull trout.

List specific and measurable objectives. Objectives support and refine the goal by breaking it down into steps for achieving the goal. (NOTE: If you quantify your objectives, ensure all numbers match the metrics listed in your selected habitat types.) Provide up to 7 objectives.

Objective #1

Objective

Remove three in-stream passage barriers (2 dams, and 1 road-bed and culvert) from the creek's main channel to improve upstream to downstream aquatic connectivity.

Describe the project activities. Activities explain how the objective will be implemented.

TU and Project Partners will hire a construction contractor to remove the three in-stream barriers and regrade the main channel.

Objective #2

Objective

Remove floodplain infrastructure and in-stream barriers to improve floodplain connectivity.

Describe the project activities. Activities explain how the objective will be implemented.

TU and Project Partners will hire a construction company to remove road fill, berms from dams, a hydro-electric pump house, and other small pieces of infrastructure to re-engage historic floodplain habitat.

Objective #3

Objective

Place approximately 22 LWD structures in the stream to improve habitat complexity (shade, cover, sediment sorting and routing, macro-communities), engage historic floodplain environments by increasing frequency of inundation, catch downstream fluvial-sorted wood, encourage localized channel aggradation, and encourage pool development.

Describe the project activities. Activities explain how the objective will be implemented.

TU and Project Partners will hire a construction contractor to place LWD structures in the stream. The LWD structures include apex structures, 3-log cross structures, channel spanning structures, and deflector structures.

List the major project activities and time schedule for each, including post project implementation.

Element	Description	Start Date	End Date
100% Design	The Project Team is working with the Design Firm to complete the final design - 100%.	5/2020	7/2020
Secure Funding and Finish Permitting	The Project Team is working diligently to acquire all permits for the project, and to secure implementation funding.	1/2020	9/2020
Work with the private landowner to secure the majority of the wood for the project.	TU will provide information to the timber management company for the LWD.	7/2020	7/2021
Release an RFP & Secure Construction Contractor	TU will secure a construction contractor for the project.	8/2020	7/2021
Implement the Construction Portion of the Project	Work with the contractor and the project team to implement the project and conduct the post-project rehab.	9/2020	9/2021

Element	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
100% Design							
Secure Funding and Finish Permitting							
Work with the private landowner to secure the majority of the wood for the project.							
Release an RFP & Secure Construction Contractor							
Implement the Construction Portion of the Project							

Habitat Types

In which habitat type(s) are you proposing to work?

✓*Instream Habitat: below the ordinary high water mark (includes in-channel habitat restoration, bank stabilization, flow, fish screening, and fish passage) -- Details will follow.*

❑*Riparian Habitat: above the ordinary high-water mark of the stream and within the stream's floodplain.*

❑*Upland Habitat: above the floodplain and improves native habitat and watershed function.*

❑*Wetland Habitat: land or areas covered, often intermittently, with shallow water or have soil saturated with moisture.*

❑*Estuarine Habitat: tidally influenced areas.*

Instream Habitat

Select all applicable Instream categories.

❑**Bank stabilization**

✓**Fish passage improvement**

Select all the actions you propose to implement to address the problem.

✓*Barriers at Road Crossings: Improve fish passage at road crossings.*

Check the passage problem types that you will address.

✓*Culverts*

Number of culvert crossings

1

❑*Bridges*

❑*Fords*

Select which fish passage improvement(s) the project proposes to implement.

❑*Culverts installed/improved*

❑*Bridges installed/improved*

❑*Fords installed/improved*

✓*Road crossings removed and not replaced*

Number of road crossings

1

Stream miles with improved access

10

✓*Non-road Crossing Barriers: Improves fish passage not located at road crossings.*

Types of non-road crossing barriers to be improved or removed for the benefit of fish passage (select all that apply).

✓*Diversion dam*

Number of structures

1

Size (feet)

40.0

Structural material

Concrete, log-crib, cobble dam berms

Purpose

Old municipal reservoir

❑*Push-up Dam*

✓*Non-Diversion Dam*

Number of structures

1

Size (feet)

50.0

Structural material
Concrete, metal

❑*Weirs*
❑*Natural debris jam barriers*
❑*Tidegates*
❑*Natural Boulder/Rock barrier*
❑*Landslide*

Number of non-road crossings to be treated/removed
2

❑*Fish ladders or engineered bypasses not associated with road crossings*

Total stream miles with improved access
10

Total number of barriers removed or modified
3

Are you coordinating or do you plan to coordinate with ODFW's fish passage program on this project?
❍ Yes
● No

❑**Fish screening project**
❑**Instream Flow**

✓**Instream habitat restoration**

Select all the actions you propose to implement to address the problem.
✓*Placement of materials in channel*
Does the proposed project follow:
✓*ODFW Guidelines*
✓*NOAA Guidelines*
✓*Other*
Specify

Bonneville Power Administration HIP 3 Guidelines

What types of instream habitat materials are you proposing to install? (select all that apply)
✓*Large wood*
Number of structures.
22

Average number of logs per structure.
7

Average length of logs per structure (feet)
42

Average diameter of logs per structure (feet)
1.5

❑*Boulders*
❑*Combination log/boulder*
❑*Other materials: Materials that stabilize the streambed*

❑*Channel reconfiguration and connectivity, including alcoves and side channel reconnection*
❑*Spawning gravel placement*
❑*Beaver reintroduction*
❑*Non-native plant control*
❑*Nutrient enrichment*
❑*Animal species removal*

Is the primary purpose of the instream habitat restoration treatment(s) to address water quality limiting factors?
❍ Yes
● No

Total miles of stream to be treated with all instream habitat restoration treatments
1.6

❑**Stockpiling logs**

Wrap-Up

Watershed Benefit

Describe the watershed or ecosystem function(s) that the project will address through the proposed restoration actions and the resulting benefits to water quality, native fish and wildlife habitat, and/or watershed health. Explain why the project is a priority for investment at this time.

Statement from Basis of Design Report (Tetra-Tech and TU): The Project is intended to restore ecological functions while maintaining protection of local infrastructure. To address the overall Project goal, the following Project objectives were identified:

- Restore adult and juvenile fish passage at three existing barrier sites;
- Increase channel complexity, with channel morphology closer to historical and natural form;
- Increase quality and quantity of habitat, especially large wood and deep, complex pools;
- Improve sediment sorting and routing;
- Increase floodplain connectivity and frequency of inundation;
- Increase suitable adult holding and spawning habitat; and
- Increase area suitable for juvenile summer and overwinter rearing, including cold water off-channel rearing, high-flow refugia, and foraging habitat.

This project is a priority because Indian Creek is an important sub-watershed for fish and wildlife. The system contains all three ESA-listed focal species that drive much of the regional restoration prioritization efforts. TU is developing a positive relationship with the private company that manages a large portion of the land in the sub-watershed. Passage barrier removal for aquatic connectivity is a fundamental restoration strategy for salmonid and char life stages, and population recovery. This project has the unique opportunity to fully remove three barriers from the system.

Public Awareness

Does this proposed project include public awareness activities?

● Yes
❍ No

Describe these activities, as well as any related products, and explain how the proposed activities relate to the project's objectives.

TU and Project Partners have a strong opportunity to demonstrate a positive working relationship between ecological interests and a private timber company. This could lead to future work in the basin and elsewhere. TU plans to develop a small suite of project media and will work with partners to make this a reality. In the past TU has used a variety of outlets including blogs, photo stories, video, newspaper stories, and radio.

Design

Were design alternatives considered?

● Yes
❍ No

Describe the design alternatives that were considered and why the preferred alternative was selected.

The project team and local partners considered several design alternatives, which are outlined below.

Alternative A – Passage and Infrastructure Only: Under this alternative, restoration actions would be focused only on restoring fish passage at the two full barriers and at the partial barrier (an undersized 5 ft. culvert).

Alternative B – Passage and Large Wood: This alternative included the actions listed in Alternative A, but also included local placements of large wood structures at all three sites to provide additional habitat complexity and increase pools. It also included removal of the old pumphouse at the middle site and decommissioning the hydroelectric intake system at the upper site.

Alternative C – Passage, Large Wood and Floodplain Connectivity: This alternative included all the actions listed in Alternatives A and B, plus improvements to floodplain connectivity at all three sites. The lower site included removal of an existing berm. The middle site would involve excavation and reconnection of perennial flows to a blocked remnant side channel on river right where the pumphouse would be removed. The upper site would include construction of a high flow side channel from the north end of the manmade alcove and direct high flows back into the main channel.

These alternatives were discussed by TU and the technical review team and Alternative C was selected because the additional actions would be address more limiting factors; it would be very cost effective since equipment would already be mobilized in to these sites; the majority of the large wood will be provided at no cost by Hancock Timber as part of their cost share; and the floodplain and side channel reconnections would require a moderate level of excavation work.

At the 30% review it was noted that not all the project team was comfortable with the floodplain connection alternatives due to policy issues associated with funding. This approach was scaled back for the 80% design although the project team is still generally following the approach outlined in Alternative C.

Select the appropriate level of design for your project.

❍ No design is required.
❍ 10-30%: Conceptual design (evaluation of alternatives, concept-level plans, design criteria for project elements, rough cost estimates).
❍ 30-85%: Preliminary design (selection of the preferred alternative, draft plans, draft design report, preliminary cost estimates).
● 85-100%: Final design (final design report, plans, and specifications, contracting and bidding documents, monitoring plan, final cost estimate).

If work remains on the project's design, describe the work that remains to be done and when you expect to have it completed. If no design is required put "N/A"

TU is working with the design firm and BPA to prepare the 100% design set. The project team expects to have this completed no later than July 1, 2020.

Describe the steps you will take to minimize adverse impacts to the site and adjacent lands during and after project

implementation.

TU is working with project partners and the design firm to make sure there is no adverse impacts to adjacent landowners.

Project Management

List the key individuals, their roles, and qualifications relevant to project and post project implementation. At a minimum include the following: project management, project design, project implementation, and project inspection.

Role	Name	Affiliation	Qualifications	Email	Phone
Project Manager	Levi Old	Trout Unlimited	Project Manager, Systems Restoration Ecologist M.S. Botany - Field Natural History; 16 years in river restoration, wilderness education and conservation	lold@tu.org	(541) 408-3770
Design	Vance McGowan	Tetra-Tech	Senior Aquatic Biologist - 25+ years in Aquatic Biology and Restoration	Vance.McGowan@tetratech.com	(541) 962-5216
Project Management - Contract Review and Administration	Aaron Penvose	Trout Unlimited	Project Manager - 20+ years in habitat and flow restoration	apenvose@tu.org	(509) 881-7689
Project Management, Land Manager and Review	Private Timber Company	Private Timber Company	Project Manager on Private Timberlands for 20+ years.	N/A	(541) 408-3770
Project Engineering Review; Compliance; Funding	BPA Team-Engineer; EC Lead; COTR	Bonneville Power Administration	Project Management	tdkessler@bpa.gov	(503) 230-5468
Project Review & Cultural Review	Jesse Steele	Grande Ronde Model Watershed	Executive Director and Partnership Coordinator	jesse@grmw.org	(541) 805-0884

Optional Monitoring

OPTIONAL: Restoration Project Monitoring

- ❑ *Salmonid Monitoring*
- ❑ *Non-salmonid biological monitoring*
- ❑ *Water (quantity) flow monitoring*
- ❑ *Water quality monitoring*
- ❑ *Rangeland monitoring*
- ❑ *Onsite*
- ❑ *Downstream*
- ❑ *Upstream*
- ❑ *Upslope*

Will effectiveness monitoring be conducted for this project?

❍ Yes
● No

Budget

Item	Unit Type	Unit Number	Unit Cost	OWEB Funds	External Cash	External In-Kind	Total Costs
Salaries, Wages and Benefits							
TU Project Manager	Hours	160	$41.00	$0 *	$6,560	$0	$6,560
On-Site Implementation Support/Oversight	Hours	50	$120.00	$0 *	$6,000	$0	$6,000
TU Project Manager for Design Phases	Hours	180	$41.00	$0 *	$0	$7,380	$7,380
			Category Sub-total	$0	$12,560	$7,380	$19,940
Contracted Services							
Mobilization & Demobilization	Each	1	$16,578.00	$0 *	$16,578	$0	$16,578
Clearing and Grubbing	Each	1	$11,154.00	$0 *	$11,154	$0	$11,154
Pre-construction: Surveying and Layout	Each	1	$12,000.00	$0 *	$12,000	$0	$12,000
Lower Site Excavation: Main Channel Regrade and Bypass Channel	Cubic yards	131	$18.00	$0 *	$2,358	$0	$2,358
Middle Site Excavation: Main Channel Regrade, Construction Bypass, and Floodplain Topography	Cubic yards	557	$36.00	$0 *	$20,052	$0	$20,052
Upper Site Excavation: Alcove Outlet	Cubic yards	28	$36.00	$0 *	$1,008	$0	$1,008
Contractor Large Wood (LWD): Acquire, Hall, and Stockpile Whole Trees (Hancock to deliver 2/3)	Each	108	$240.00	$0 *	$25,920	$0	$25,920
Ballast Boulders	Each	8	$70.00	$0 *	$560	$0	$560
Contractor Racking (2/3 provided by Hancock)	Each	352	$12.00	$0 *	$4,224	$0	$4,224
Contractor Slash (CY) (2/3 acquired by Hancock)	Each	88	$24.00	$0 *	$2,112	$0	$2,112
Single-Log Surface Placement	Each	8	$96.00	$0 *	$768	$0	$768
3-log Structure Placement	Each	7	$417.00	$0 *	$2,919	$0	$2,919
Channel Spanning Structure Placement	Each	7	$736.00	$0 *	$5,152	$0	$5,152
Bar Apex Structure Placement	Each	4	$1,377.00	$0 *	$5,508	$0	$5,508
Deflector Structure Placement	Each	4	$960.00	$0 *	$3,840	$0	$3,840
Upper Pipeline Removal and Disposal (approx. 250ft. from floodplain)	Each	1	$6,240.00	$0 *	$6,240	$0	$6,240
Upper Headworks Demo and Removal-Disposal	Each	1	$1,080.00	$0 *	$1,080	$0	$1,080
Diversion Demo and Removal-Disposal	Each	1	$9,600.00	$0 *	$9,600	$0	$9,600
Building Removal - Disposal (for floodplain topography, floodplain infrastructure removal, and bypass channel)	Each	1	$3,500.00	$0 *	$3,500	$0	$3,500
Culvert Removal and Disposal	Each	1	$1,200.00	$0 *	$1,200	$0	$1,200
Cast Iron Pipe Removal and Disposal (spans stream at middle site)	Each	1	$1,440.00	$0 *	$1,440	$0	$1,440

Equipment Rental: Earthwork, Floodplain Wood, Site Clean-up, Maintenance, and Repairs	Hours	85	$180.00	$0 *	$15,300	$0	$15,300
Construction BMPs (HIP Guidelines) - Sediment Control etc.	Each	1	$7,200.00	$0 *	$7,200	$0	$7,200
Seeding	Each	1	$4,635.00	$0 *	$4,635	$0	$4,635
Planting (plants - 1 to 5 gal)	Each	1320	$5.00	$0 *	$6,600	$0	$6,600
Water Control/Dewatering	Each	1	$9,600.00	$0 *	$9,600	$0	$9,600
Category Sub-total				$0	$180,548	$0	$180,548
Travel							
Roundtrip: Baker City - Project Site - 126 miles - 21 trips	Miles	2646	$0.58	$0 *	$1,535	$0	$1,535
Overnight Lodging (LG-Per Diem)	Days	15	$94.00	$0 *	$1,410	$0	$1,410
Category Sub-total				$0	$2,945	$0	$2,945
Materials and Supplies							
LWD Acquisition	Each	150	$350.00	$0 *	$0	$52,500	$52,500
Category Sub-total				$0	$0	$52,500	$52,500
Equipment							
			$0	$0	$0	$0	$0
Category Sub-total				$0	$0	$0	$0
Other							
Indirect (NICRA - 13.74%)	Each	1	$26,937.00	$0 *	$26,937	$0	$26,937
Category Sub-total				$0	$26,937	$0	$26,937
Modified Total Direct Cost Amounts				$0	$222,990	$59,880	$282,870
Indirect Costs							
Federally Negotiated Indirect Cost Rate		Override Amount			$1		
Total				$1	$222,990	$59,880	$282,871

* = OWEB funds excluded from indirect.

If the budget includes unusually high costs and/or rates, provide justification for those costs and/or rates.

If the budget identifies a contingency amount for specific line item(s) within the Contracted Services and Materials and Supplies budget categories, explain the specific reasons a contingency is needed for each line item. Contingencies are line-item specific and cannot be used for other costs.

Funding and Match

Fund Sources and Amounts

Organization Type	Name	Source Note	Contribution Type	Amount	Description	Status
Private organization	Private Timber	Wood Contribution	In-Kind - Materials	$52,500	Hancock (with TU as partner and coordinator) plans to provide a minimum of 2/3 of the total wood quantities	Pending
Non-Governmental Organization	Trout Unlimited	Staff Time Design	In-Kind - Labor	$7,380	These funds were contributed as staff time for design phases and a small portion for implementation.	Pending
Federal	BPA	Implementation Funding	Cash	$222,990	Implementation Funding Request	Pending
Fund Source Cash Total			**$222,990**	**Fund Source In-Kind Total**		**$59,880**

Match

Contribution Source-Type: Description	Amount
Private Timber-In-Kind - Materials: Hancock (with TU as partner and coordinator) plans to provide a minimum of 2/3 of the total wood quantities	$1
Trout Unlimited-In-Kind - Labor: These funds were contributed as staff time for design phases and a small portion for implementation.	$1
BPA-Cash: Implementation Funding Request	$0
Match Total	**$2**

Do match funding sources have any restrictions on how funds are used, timelines or other limitations that would impact the portion of the project proposed for OWEB funding?

❍ Yes
● No

Do you need state OWEB dollars (not Federal) to match the requirements of any other federal funding you will be using to complete this project?

❍ Yes
● No

Does the non-OWEB cash funding include Pacific Coast Salmon Recovery Funds?

❍ Yes
● No

Uploads

Federally Negotiated Indirect Cost Rate Plan: FY21-22 TU Indirect Cost Rate Agreement.pdf **- TU Indirect Agreement**

Map: IndianCreekRestorationProjectMapRestorationReach.pdf **- Overview Map**

Project Design: Indian80%.pdf **- Design**

Risk Assessment: RiskAssessment.pdf **- Risk Assessment Filler**

Permit Page

Project Activity Requiring a Permit or License	Name of Permit or License	Entity Issuing Permit or License	Status
LWD Placement & Material Removal Fill	RGP-6 & Joint Permit	USACE/ODEQ/ODSL	Will submit for review in June.
Cultural	Section 106	SHPO	In Review Stages
BPA-Funding	HIP	BPA	In Review Stages

The following file has been corrupted: FY21-22 TU Indirect Cost Rate Agreement.pdf
Upload Type: Federally Negotiated Indirect Cost Rate Plan
Upload Description: TU Indirect Agreement
Upload Exception: System.ArgumentException: PdfReader not opened with owner password
  at iTextSharp.text.pdf.PdfReaderInstance.GetImportedPage(Int32 pageNumber)
  at GrantApplication.outputPDF.CombineUploadPDFs(MemoryStream applicationPDF) in C:\app\asp\OOGA\GrantApplication\outputPDF.aspx.cs:line 106