

Nez Perce Soil and Water Conservation District

US Bureau of Reclamation

WaterSmart Grant Application

Lower Clearwater Snake Rivers Phase I

March 2023

Contents

I. Executive Summary	3
Date:.....	3
Applicant Name:	3
City:	3
County:.....	3
State:.....	3
Duration of Project:	3
Amount of Federal Funds Requested:	3
Amount of non-federal cost-share/match committed:.....	3
Project Title:.....	3
Brief Project Description:.....	3
Administrative Contact:	3
II. Project Location:	4
III. Technical Description:	10
Project Objectives	10
Site Descriptions	10
Project Methods	11
Project Timeline	12
Project Management	14
IV. Applicant Category and Eligibility:	15
V. Performance Measures:	15
VI. Evaluation Criteria:	15
VII. Project Budget:	26

I. Executive Summary

Date: 3/28/2023

Applicant Name: Nez Perce Soil and Water Conservation District

City: Culdesac

County: Nez Perce, Lewis

State: Idaho

Duration of Project: Start Date: January 1, 2024, End Date: December 31, 2026

Amount of Federal Funds Requested: \$453,058.50

Amount of non-federal cost-share/match committed: \$151,019.50

Project Title: Lower Clearwater Snake Rivers Phase I

Brief Project Description:

The Nez Perce Soil and Water Conservation District (NPSWCD) is requesting funds to improve anadromous fish habitat for steelhead trout and improve water quality in the Lower Clearwater River Basin. Steelhead are federally listed as endangered within the Lapwai Creek Watershed. Project funds will be used to install one culvert to improve aquatic organism passage and reduce erosion, 129.2 acres of forest thinning to prevent wildfires, and the installation of 108 small wood structures to improve 10,831 feet of stream for juvenile steelhead rearing habitat. The project provides multiple ecological benefits including improved watershed health, improved flow timing, increased groundwater recharge, reduced stream temperatures and reduced sediment.

Administrative Contact:

Lynn Rasmussen, Director
Nez Perce Soil and Water Conservation District
PO Box 131 Culdesac, Idaho 83524
208-843-2931
LynnR@co.nezperce.id.us

Federal Land Statement: This project is not focused on a Federal facility and does not involve Federal land.

II. Project Location:

The project is located in the Lapwai Creek watershed, a tributary to the Clearwater River (HUC 17060306). The watershed is being monitored by the Idaho Department of Environmental Quality and the Nez Perce Tribe for compliance with the EPA Clean Water Act for the purpose of establishing TMDLS. The watershed has monitoring data which indicates that water quality is not meeting beneficial uses due to agricultural pollutants. In addition, the watershed contains critical habitat for ESA listed steelhead (*O. mykiss*). The Lapwai Creek Ecologic Restoration Strategy (watershed management plan) identifies the need for removal of anthropogenic barriers to fish passage. All project sites are identified in these plans.

Three private land parcels are identified for proposed treatments. All locations are within Nez Perce and Lewis Counties, Idaho (figure 1, 2). Within each parcel are planned one culvert, 129.1 acres of forest thinning and grass seeding, and 10,831 feet of instream habitat improvements using wood structures. Project locations are identified in the table below:

Site #	Description	County	Lat	Long
1	Wood Structures	Nez Perce	46.240657°	-116.727539°
2A	Culvert	Nez Perce	46.168425°	-116.785219°
2B	Thinning – 48 acres	Nez Perce	46.168072°	-116.789523°
2C1	Wood Structures	Nez Perce	46.171897°	-116.769316°
2C2	Wood Structures	Nez Perce	46.168096°	-116.783227°
3A	Wood Structures	Lewis	46.174127°	-116.659524°
3B1	Thinning – 4.1 acre	Lewis	46.190921°	-116.667619°
3B2	Thinning – 77.1 acre	Lewis	46.182205°	-116.661572°

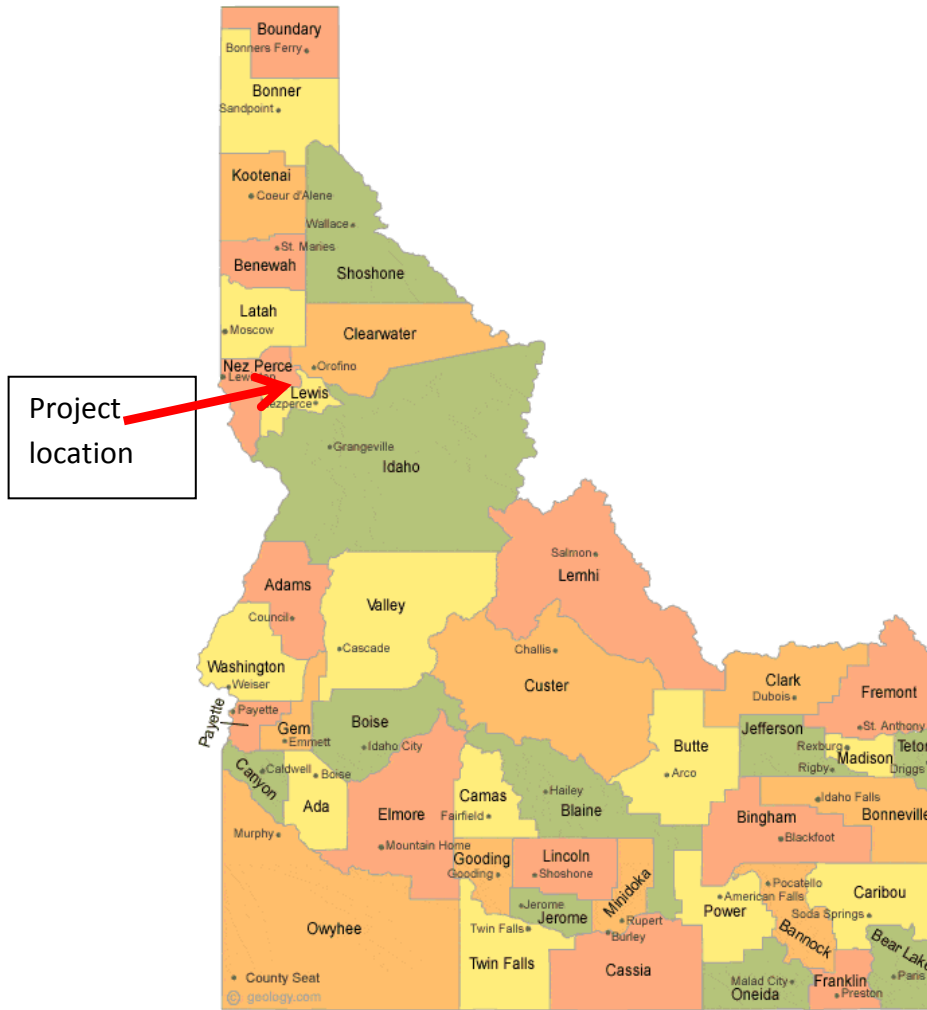


Figure 1. Idaho showing county locations. Project is located within Nez Perce and Lewis counties.

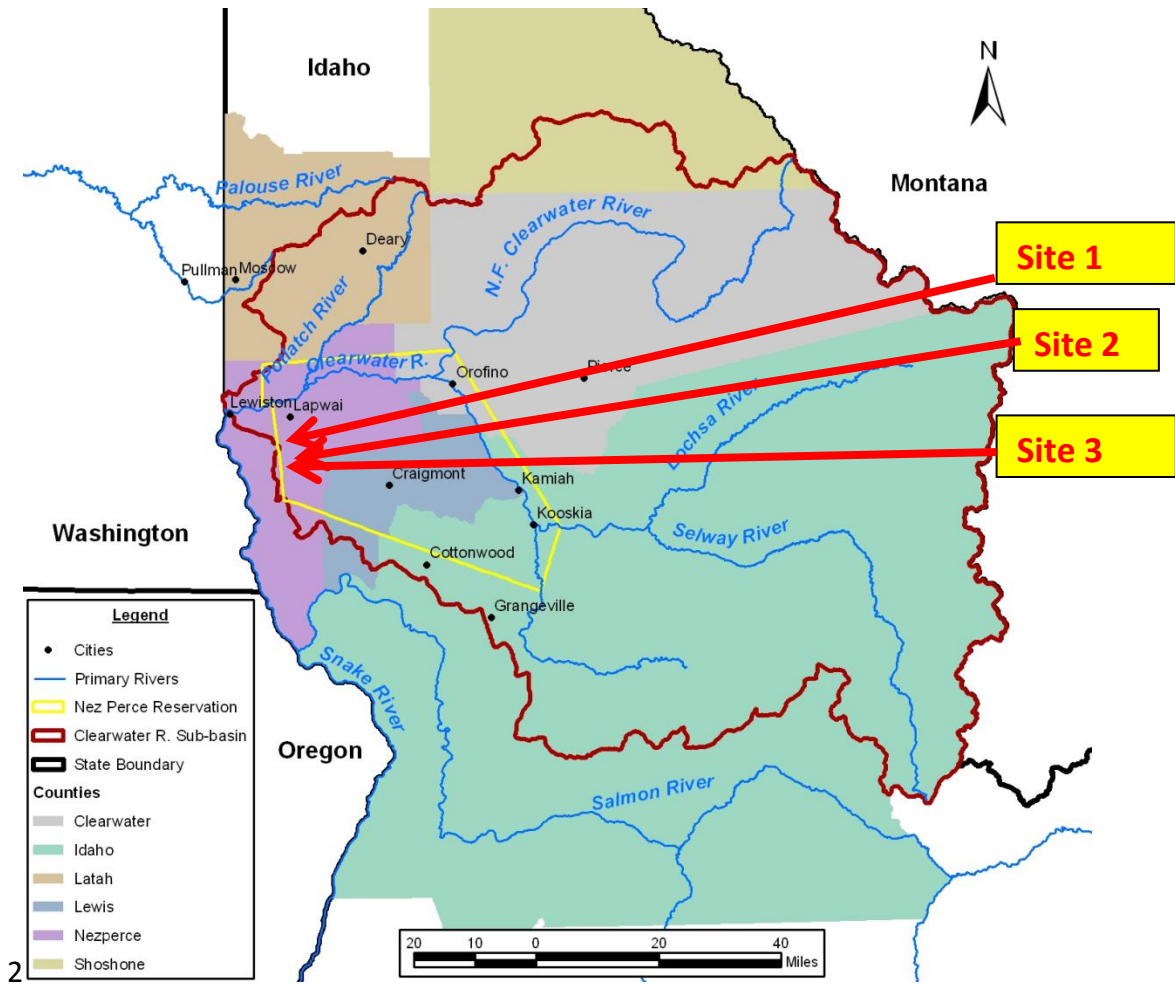


Figure 2, Project location within the Clearwater Subbasin in North Central, Idaho.

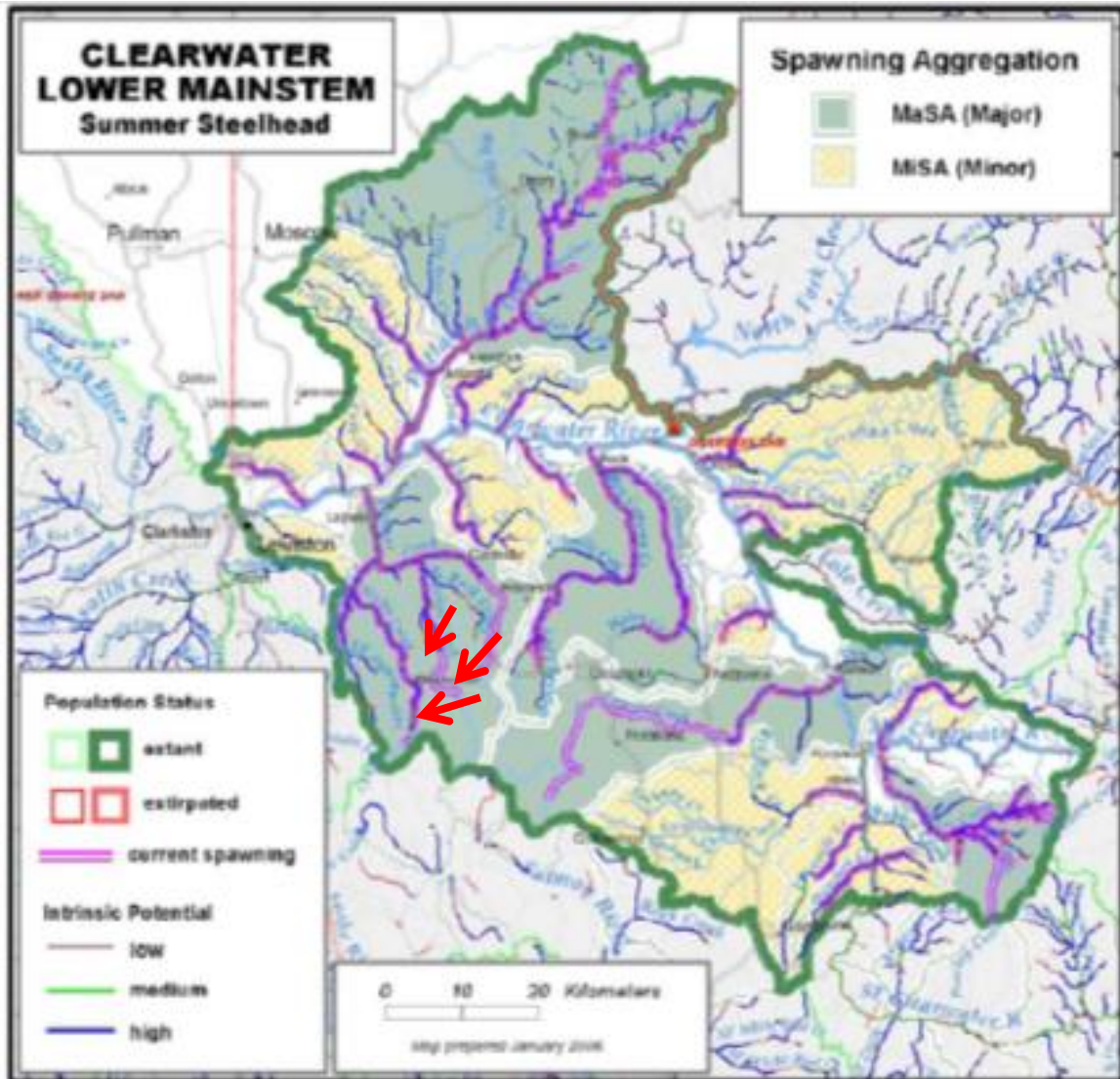


Figure 3. Summer Steelhead Critical Habitat

Figure 3. Red arrows indicate project locations. Map is copied from the Idaho Steelhead Recovery plan (NOAA). Yellow shaded areas indicate minor spawning areas and green shaded areas indicate major spawning areas.

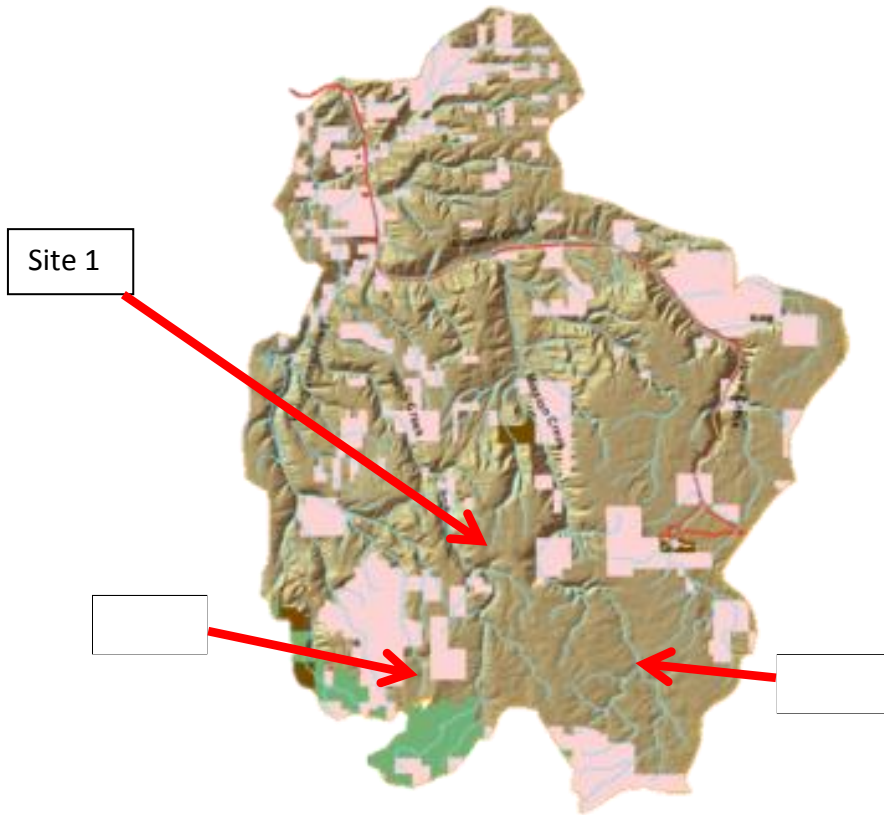


Figure 4. Project locations within the Lapwai Creek watershed, Idaho. Brown shaded areas are private lands, pink are tribal land, and green are state lands.

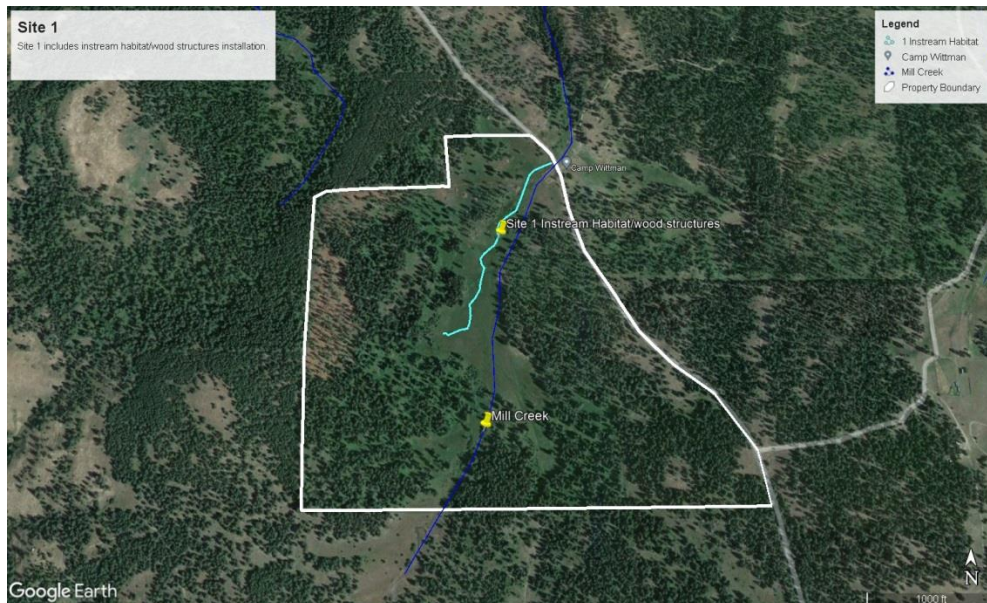


Figure 5. Site 1 Plan map. Blue line indicates area of proposed treatment.

Lower Clearwater Snake Rivers Phase I

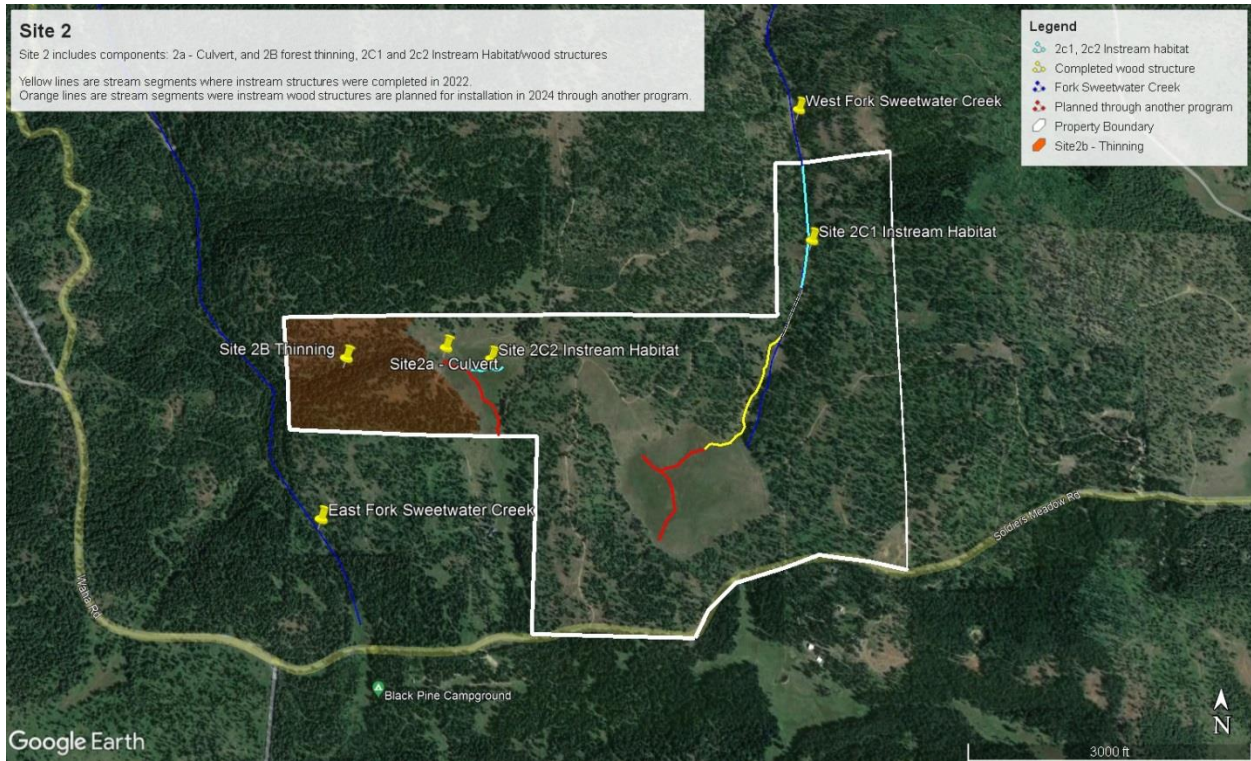


Figure 6. Site 2 location map. Orange shaded area indicates proposed fuel reduction treatment, yellow pin shows planned culvert, and blue lines indicate planned stream treatments.

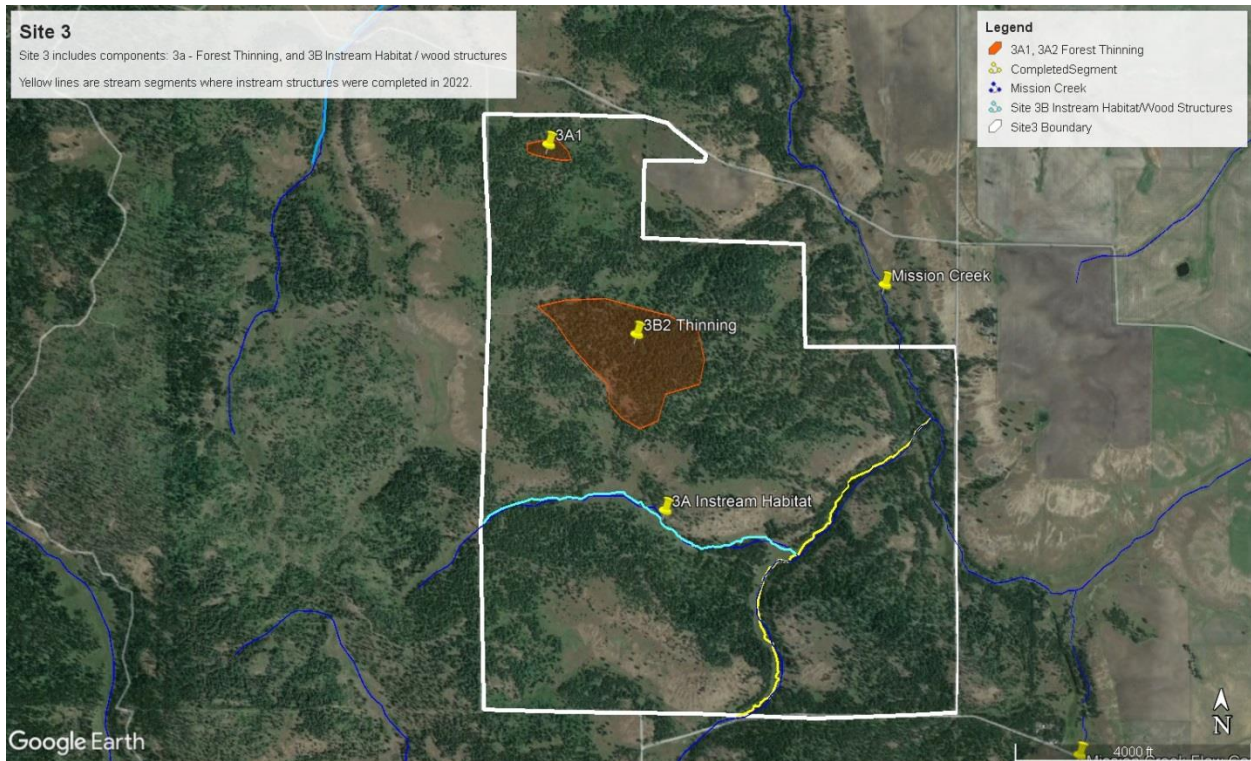


Figure 7. Site 3 plan map. Orange shaded area indicates planned fuel reduction treatments and blue line indicates planned streambank erosion treatments.

III. Technical Description:

Project Objectives

- Objective 1 – Restore aquatic organism passage at all life stages and reduce erosion on 434 linear feet of stream.
- Objective 2 - Reduce the risk for wildfire through treatment of 129.s acres of forestland through fuels reduction measures.
- Objective 3 – Increase the habitat complexity, increase water storage in streambanks, and improve low summer flows on 2 miles of stream.

Site Descriptions

Site 1: The goal of treatments planned for this site is to improve steelhead rearing habitat and provide groundwater recharge. The site is located on 2,112 (0.4 miles) of Mill Creek, a tributary to Mission Creek within the Lapwai Creek watershed. This site is located at the headwaters of the stream within a grazed wetland meadow. Treatments include the installation of approximately 21 small wood structures including a combination of beaver dam analogs (BDAs), post assisted log structures (PALS), and log jumbles. Work at this site will increase floodplain access and complexity of the stream, which will help accumulate sediment, create hydraulic diversity, and enhance steelhead spawning and rearing habitat. Standard drawings for instream wood structures are included in Appendix A. The site is one of the few meadows located within the watershed and is located at the headwaters. Installation of habitat improvements at this location will provide for cooler stream temperatures through shading, increased bank storage to allow slower release of water over the summer and provide an area for groundwater recharge.

Site 2: The goal of treatments planned at this site are to improve juvenile steelhead rearing habitat. The site is located at the headwaters of Sweetwater Creek along a 1,926 foot segment of grazed meadow lands. Work includes the installation of 25 wood structures including BDAs, PALS, and log jumbles (see drawings in Appendix A). Forestland thinning will occur on 48 acres of ponderosa pine and Douglas Fir timber. The thinning is needed to reduce fuels and prevent future wildfire. A culvert will be replaced at this site in order to reduce erosion and provide aquatic organism passage. This site is located at the headwaters of both East and West Sweetwater Creek. The wetland area is an important groundwater recharge area. Installation measures will allow for reduced runoff, increased groundwater recharge, sediment reduction and reduced stream temperatures.

Site 3 includes the installation of 62 wood structures to increase bank recharge, reduce streambank erosion and to increase low summer flows both on-site and downstream. This site is located on Mission Creek, a tributary to Sweetwater Creek. 81.2 acres of forest land thinning will be completed on this private landowner parcel. The thinning will reduce wildfire risk and provide a fuel break near the Forest Road and Summer Camp Road areas.

Project Methods

The tools and methods used for this project are described in this section.

Tools:

A DJI Matrice Drone with a MicaSense Altum multispectral and thermal sensor will be used to obtain aerial imagery of project areas. The imagery will be geo-rectified and processed for use in ArcMap (GIS software). Hec-Ras or comparable software will be used for hydrology analysis at all sites.

Design Methods:

The culvert will be installed using NOAA's anadromous salmonid fish passage facility design manual to ensure fish passage criteria is met. This manual can be located at <https://www.fisheries.noaa.gov/resource/document/anadromous-salmonid-passage-facility-design>. Culvert design and public transportation safety will be designed using the Idaho Department of Transportation's Hydraulic Manual (<https://apps.itd.idaho.gov/Apps/bridge/manual/Hydraulics.pdf>) will be used to design the culvert size and perform hydrology analysis. Construction specifications will also be adopted from the IDT's road and bridge manuals.

Installation Methods:

Instream wood structures:

108 wood structures are planned for installation. These structures include a combination of log jumbles, post assisted log structures and beaver dam analogs. Locations for these structures were selected by an engineer and planners in 2022. Construction methods will be to utilize the Idaho Department of Corrections offender work crew and an excavator to cut, move and place wood at identified locations. The purpose of these structures is to provide bank roughness, instream channel complexity and refugia for juvenile steelhead for both summer and winter rearing. Wood will be obtained from ponderosa pine, Douglas fir and Lodgepole pine located on-site.

Riparian plants will be installed along the riparian zone where the instream wood structures are planned. The plants will be a combination of large wood cuttings and potted plants. Species include cottonwood, dogwood, and willow. Plantings will occur during the dormant season. The plants will require cages to prevent elk browse. In addition, a temporary drip irrigation system will be installed to water plants in the first 3 summer seasons to increase survival. A large elk herd is established in the watershed and needs to be a planning consideration for riparian vegetation establishment.

The NPSWCD has installed 4 projects of a similar nature in adjacent areas. These projects are performing well and the construction methodology has been established.

Forest Thinning

The forest land thinning will be completed following Idaho Department of Lands protocols. A contractor will be hired to perform the thinning activities. The contractor will be selected through a bidding process. The thinning will be inspected by NPSWCD personnel and/or the Idaho Department of Lands forester. The NPSWCD has completed over 400 acres in adjacent areas with excellent results.

Culvert Installation

An existing culvert will be replaced with a larger culvert that provides aquatic organism passage as well as prevents erosion. The culvert will be a 6 foot diameter arch culvert. A contractor will be hired to remove the existing culvert and place the new culvert.

Project Timeline

The project will begin on January 1, 2024 (or within 30 days of award) and end on December 31, 2026 (or 3 years after award). The tasks and timeframes are outlined in the table below.

Task	Description	TimeFrame
Task 1 – Project Management	Manage grant/project.	2024-2026
Task 2 – Review and finalize design for Site 1	Review and finalize design for site 1. Design is 60% completed as of February 2023.	January 2024-April 2024
Task 3 – Prepare and finalize design for Site 2	Design is 30% completed as of February 2023. The culvert component is 30% completed, the thinning component is 50% completed and the instream habitat component is 60% completed. Work will include development of thinning contract for bid..	January 2024 – June 2024.
Task 4 – Submit necessary permitting for Site 1	Submit IDWR/ACOE section 404 permit.	April 2024.
Task 5 – Prepare and finalize design for site 3	The in-stream habitat component is 60% completed, the thinning component is 30% completed. Work will include development of thinning contract for bid.	January 2024 – June 2024.
Task 6 – Submit necessary permitting for Site 2	Submit IDWR/ACOE section 404 permit	April 2024

Task 7 – Prepare drone flights for all sites	Collect drone imagery for all sites.	February 2024-April 2024
Task 8 – Submit necessary permitting for Site 3.	Submit IDWR/ACOE section 404 permit.	May 2024
Task 9 – Collect baseline habitat quality data for Sites 1-3	Collect baseline habitat condition data for Sites 1-3	May – June 2024
Task 10 – Select contractor for installation of culvert	Prepare request for quotes, solicit quotes, select contractor	November 2024-February 2025
Task 11 – Select contractor for installation of instream habitat structures	Prepare request for quotes, solicit quotes and select contractor.	February – May 2025
Task 12 – Prepare landowner contracts	Prepare landowner contracts that include ingress/egress, plan details.	February 2025=May 2025
Task 13 – Schedule Idaho Department of Labor Inmate crew	Schedule Idaho Department of Labor inmate crew for instream structure and tree planting.	August 2025-October 2025, August 2026-October 2026
Task 14 – Install Site 1	Construct Site 1	August 2025 – September 2025
Task 13 – Install Site 2	Construct Site 2	September 2025-October 2025
Task 14 – Install Site 3	Construct Site 3	August 2026 – September 2026
Task 15 – Evaluate effectiveness of installed measures	Evaluate effectiveness of installed measures.	September – December 2026
Task 12 – Close out grant	Produce final report, billing	December 2026

Ties to other Efforts

The proposed project work compliments other efforts located within the watershed which have been funded by Idaho Governor’s Office of Species Conservation through the Pacific Coast Salmon Recovery Fund. There has been extensive steelhead habitat restoration work completed within the watershed.

The Clearwater, River subbasin has been designated as “Essential Fish Habitat” for Chinook salmon (*Onchorhynchus tshawytscha*), steelhead (*O. mykiss*) and coho (*O. kisutch*), under the Magnuson-Stevens Fishery Conservation Management Act (M-SFCMA) (M-SFCMA 1996). All three of these species are found within the Lapwai Creek watershed.

Project Management

The project oversight will be conducted by the Nez Perce Soil and Water Conservation District board. This board is comprised of 7 officials elected on the general election ballot in Nez Perce County, Idaho. The NPSWCD board has extensive experience in project oversight with the completion of over 70 projects since the early 1980s. The NPSWCD board's role will be to review and authorize contracts and expenditures, make decisions to alleviate project delays/problems, and to monitor the progress to ensure timely completion of deliverables.

The project will be managed by the NPSWCD's executive director, Lynn Rasmussen. Ms. Rasmussen has over 25 years of project and grant management experience as well as completion of the two-year Risk Management Certification Program administered by the Idaho Public Risk Management Association.

The project's technical support will be provided by Bill Reynolds, Nez Perce County GIS coordinator, and Tom Vestal, Nez Perce County spatial analyst. Nikki Lane is the project planner and biologist. Ms. Lane has 12 years of experience working on habitat installation measures and supervising the Idaho Department of Corrections labor crew. Both Mr. Reynolds and Mr. Vestal have a combined experience of 30 years in geospatial analysis and innovative technology use for natural resource assessment.

Harris and Company will provide a financial audit of the expenditures during the project period as part of the NPSWCD annual audit requirements in Idaho Code 67-450B.

Project Risks

Project completion and delays may occur. The risk of permitting not being completed on time: Mitigate through regular project meetings and monitoring status of work. Engineering labor has been limited in this area for the past 2 years. Plans to mitigate include using internal engineering staff to complete part of the work and inspections for construction phases. Selection of engineers will include contract agreements that specify a timeline. For the culvert construction projects there is a risk of delayed materials due to supply chain and manufacturing issues. This will be mitigated by ordering 12 months in advance of anticipated construction

IV. Applicant Category and Eligibility:

The NPSWCD is a category A applicant. The NPSWCD is organized as a sub-unit of Idaho State Government .

V. Performance Measures:

Performance measures include:

- . 1. Installation of 108 wood structures on 10,831 feet of stream to improve steelhead habitat and water quality.
2. Installation of 129.1 acres of forestland thinning to reduce wildfire risk.
3. Collect benchmark imagery to be used as the baseline to compare project implementation imagery.
4. Installation of 1 culvert to provide aquatic organism passage and reduce erosion.
5. Project reporting as required, including, but not limited to progress reports, final report, supplemental narratives to explain and support payment requests.

VI. Evaluation Criteria:

A. Project Benefits	
E1.1.1.1 General Project Benefits.:	
Explain how the project will benefit ecological values that have a nexus to water resources.	The planned measures would have direct benefits to the ecosystem by improving the resiliency to withstand climate change impacts (increased runoff, increased magnitude of peak flows), reducing channel scour and sediment transport downstream, reconnecting habitat areas, increasing the available territory for juvenile salmon habitat, and decreasing competition of juveniles for limited space. Other aquatic species would benefit such as sculpin, native trout, and invertebrates in improved channel morphology

	<p>conditions as well as connected habitat and increased habitat access during low summer flow months. Watershed processes that will benefit include erosion and sediment transport, storage and routing of water, movement of nutrients and food sources, and improved food web cycling. The proposed projects include the following actions identified on page 11 of the application package: improving stream channel structure and complexity (installation of instream habitat measures will allow for reduced stream velocity), improving channel and floodplain connectivity (wood structures installed in the stream will slow water and allow water to pond behind the structure and rewet the floodplain), protecting streams to reduce erosion (riparian plantings and wood structure installation will provide erosion reductions by reducing velocity and trapping sediment), influences water temperature and improves timing of flow runoff (wood structures will slow water and reduce the peak runoff time, riparian vegetation will shade the stream), improves groundwater recharge (wood structures will slow the water and allow for bank recharge) and riparian habitat (increased water storage will ensure that riparian vegetation has an adequate water supply in drought and the planting of riparian vegetation will enhance the riparian area).</p>
<p>Will the project improve watershed health in a river basin that is adversely impacted by a Reclamation water project?</p>	<p>Project work is located in the Lapwai Creek watershed. The Lewiston Orchards Project is a BOR project to provide irrigation and domestic water to the City of Lewiston serving 16,000 residents. The proposed work will enhance watershed health by improving the watersheds resiliency to floods, drought and low flow conditions.</p>
<p>Is the project for the purpose of meeting existing environmental mitigation or obligations under federal or state law?</p>	<p>No</p>
<p>If the project will benefit aquatic or riparian system within the watershed, explain the extent of those benefits. (pag 36)</p>	<p>The expected outcomes include enhancing channel forming process through re-establishment of channel function, reduction of sediment, fish passage and access to the stream</p>

	<p>on approximately 2 miles of stream.</p> <p>The culvert installation will provide about 500 feet of upstream connectivity for aquatic organisms.</p> <p>Passage barriers are one of the limiting factors identified in the NOAA Steelhead Recovery Plan for Idaho, the Lapwai Creek Watershed Ecological Restoration Strategy and the Cottonwood Creek watershed restoration plan. Passage barriers within the Lapwai Creek watershed were identified and assessed through an inventory effort that was most recently updated in April 2021. Combined these passage barriers are either a juvenile passage barrier or a full barrier to all life stages.</p> <p>Lapwai Creek Fish Passage Assessment 2021 http://www.nezperceswcd.org/Portals/29/DocumentLibrary/Publications/Lapwai%20Creek%20Fish%20Passage%20Assessment%20Status%20Report%20-%202021.pdf?ver=2021-04-27-154539-397</p>
<p>If the project will benefit specific species and habitats, describe the species and/or type of habitat that will benefit and the status of the species habitat.</p>	<p>The proposed project work will directly benefit ESA listed Snake River Steelhead through by addressing limiting factors to survival (limiting factors are included in Appendix D) including sediment, high stream temperatures, lack of aquatic habitat diversity, poor channel function, lack of refugia, and low summer flows.</p>
<p>If the project will benefit a federally listed threatened or endangered species address the following: Is species subject to recovery plan and what is the relationship of the species to water supply?</p>	<p>Steelhead: The NOAA Fisheries Salmon Recovery Plan for the Snake River includes Lapwai Creek. The overall goal for the recovery plan is to achieve conditions for each Evolutionarily Significant Unit (ESU) and Distinct Population Segment (DPS) so that they no longer need protection under the Endangered Species Act (ESA) because either the danger of extinction or the likelihood of endangerment within the foreseeable future has been eliminated.</p> <p>The Salmon Recovery Plan names Lapwai Creek as one of the 5 Major Spawning Aggregation (MaSA)</p>

	<p>areas within the Lower Clearwater Basin (Figure 3) and identifies restoration objectives designed to improve habitat condition and bolster salmonid productivity.</p> <p>Coho Prior to the 1900s, naturally produced coho salmon were widespread in the Columbia River Basin, including the Snake River (Cramer et al. 1991). All upper and middle Columbia River and Snake River runs were drastically reduced or destroyed by various factors prior to the end of the 1950s, including overharvest and habitat destruction or passage blockage. They were generally considered functionally extinct by the end of the 1980's. Along with Snake River coho salmon in general, native coho salmon were historically extirpated from the Lapwai drainage. They have been reintroduced by the Nez Perce Tribe and now use Lapwai Creek. Thus Lapwai Creek is EFH for coho salmon.</p> <p>Chinook There are two races of chinook salmon found in the Clearwater River system and potentially in the Lapwai Creek drainage—spring/summer chinook and fall chinook. It is likely that, at a minimum, spring chinook utilize Lapwai Creek for juvenile rearing. Thus, Lapwai Creek is EFH for chinook salmon as well as coho. Fish distribution and abundance surveys completed by the Nez Perce Tribe in 2007 indicated the presence of Chinook juveniles within the Lapwai Creek watershed. This project will implement actions to specifically address factors that limit the abundance and productivity of lower Clearwater River A-run steelhead and Coho salmon. An extended network of management, protection and restoration efforts, as well as fish and wildlife programs, exist for the Lapwai Creek drainage on the local, tribal, state and federal level. This proposal will implement restoration treatments to tributary habitats on non-public lands as mitigation for the Federal Columbia River</p>
--	---

	Power System (FCRPS) and as part of recovery efforts for listed A-run steelhead trout. As such, the proposed project will implement components of the Pacific Northwest Electric Power Planning and Conservation Act and the Endangered Species Act. This project will implement numerous objectives and strategies identified throughout the Clearwater Subbasin Management Plan. (NPPC, 2005).
Will the project address drought conditions or drought-related impacts on water supplies, species, habitat, or ecosystem as a whole. Page 37	The project will address drought conditions through the installation of wood structures in the stream that provide for increased bank storage and floodplain connectivity. These structures will improve groundwater recharge which will provide flows to the stream in low summer flow months. Appendix C includes a description of the Climate change impacts and especially drought that are anticipated within the watershed.
If the project will result in long-term improvements to water quality, explain the extent of those benefits.	The stream segments planned for treatment are eroding. The 10,831 feet of streambank will be protected through the planting of vegetation and installation of wood structures will slow water and trap sediment. The streams are water quality limited for sediment and high stream temperatures. Treatments will provide long term benefits by reducing sediment production, trapping sediment and providing shade to the stream.
Are there project benefits not addressed in the preceding questions?	No
E.1.1.1.2 Water Conservation Benefits	
Explain where the water that will be conserved is currently going?	Back to the stream and contributing to groundwater recharge.
Explain, how water conserved as a result of this project will be used to increase water sustainability for ecological values.	Water stored in the streambanks will be available for release in the summer months when stream flows are the lowest.
Describe the benefits that are expected to result from increased flows.	Juvenile steelhead habitat area will be increased due to increased low summer flows.
E.1.1.1.3 Water Management and Infrastructure Improvement Benefits	Not applicable to this project.
E.1.1.1.4 Restoration Project Benefits	
Invasive Species – Vegetation.	Weed control will be performed through grass

Lower Clearwater Snake Rivers Phase I

	seeding of the bare soil areas created during the forest land thinning measures as well as through mowing around planted trees.
Invasive Species – Other Taxa	Not applicable to this application
Forest Fuels Management Activities	Thinning will occur on 129.1 acres of forestland. The areas selected were designated as a forest health and wildfire risk in Forest Stewardship plans created by professional foresters for the private land owners. The forestlands are currently dense and provide ladder fuels in high risk wildfire areas. The area to south of the project location burned in 2021 and the Sweetwater and Mission Creek drainages are considered a high risk for future wildfires in the Nez Perce County All Hazard Mitigation Plan.
Post-Wildfire Fire Sediment Removal	Not applicable.
E.1.1.2 Multiple Benefits	
If the project benefits multiple water users and benefits to other water uses	The project will benefit three private landowners who utilize water for cattle. In addition, downstream water users will benefit from improved hydrology and water quality.
If the project will provide multiple restoration benefits, explain how.	The project benefits multiple restoration enefits including fish habitat (through installation of wood structures in the stream which provide juvenile refugia), protection against invasive species (through reseeding grass on thinning acres), watershed health (through improved groundwater storage, reduced water quality impacts from sediment, and reduced water temperatures in riparian areas). The Nez Perce Tribe members fish Lapwai Creek as well as the Clearwater River. Improving habitat conditions for fish and their food sources will hopefully relate to improved fish health and fish numbers.
Will the project reduce water conflicts within the watershed? How?	No.
B. Collaborative Planning	
Is your project supported by a specific strategy or planning document?	The proposal is supported by the Lapwai Creek Ecological Restoration Strategy.
When was the plan or strategy prepared?	The Nez Perce Tribe and NPSWCD developed a watershed level restoration plan “Lapwai Creek Ecological Restoration Strategy” in 2009 in order to address steelhead habitat and limiting factors.

	<p>This plan was funded by the Bonneville Power Administration. As part of the watershed plan a passage barrier assessment was completed in 2004 and updated in 2021. In addition a habitat assessment was conducted in 2009. The resulting documents can be found at:</p> <p>Lapwai Creek Ecological Restoration Strategy: http://www.nezperceswcd.org/Portals/29/DocumentLibrary/Publications/Lapwai%20Creek%20Ecological%20Restoration%20Strategy%20-%202009.pdf?ver=2019-07-30-083650-613</p> <p>Lapwai Creek Stream Habitat Assessment: http://www.nezperceswcd.org/Portals/29/DocumentLibrary/Publications/Lapwai%20Creek%20Stream%20Inventory%20and%20Assessment%20-%202003-2007.pdf?ver=2019-07-30-083650-423</p>
<p>What was the purpose?</p>	<p>The watershed plan was developed to address water quality, water quantity and steelhead habitat issues.</p>
<p>What types of issues are addressed in the plan?</p>	<p>Water Quality, Water Quantity, Riparian, Barriers, Erosion, Hydrology</p>
<p>Is one of the purposes of the strategy to plan to increase the reliability of water supply?</p>	<p>The reliability of the water supply is addressed through a BiOP between NOAA, BOR and LOID.</p>
<p>Was the strategy or plan developed as part of a collaborative process by:</p>	<p>Steelhead habitat restoration projects have been ongoing in the Lapwai and Cottonwood Creek watersheds. In Lapwai Creek, the Nez Perce Tribe and NPSWCD coordinate restoration actions to ensure the highest benefits. Projects are coordinated on an annual basis with all stakeholders during a watershed meeting. Since 2009, over \$2,5 million dollars in steelhead habitat restoration projects have been installed through 45 projects within the watershed. Cottonwood Creek has received Snake River Basin Adjudication funding as well as Pacific Coastal Salmon Recovery Funding to install 8 steelhead habitat improvement projects since 2012.</p> <p>The Lapwai Creek watershed plan was revised in 2022 to include a five year prioritized list of projects. (Appendix E). The proposed projects are identified in the 5 year action plan specifically</p>

	in Strategy A1.1 (page 10) to improve steelhead habitat summer and overwintering refugia through the installation of small wood structures.
Describe who was involved in the plan preparation	<p>The plan was developed by resource professionals from the Nez Perce Tribe, Lewis Conservation District, Idaho Department of Transportation, Nez Perce County, City of Lapwai, City of Culdesac, Lewiston Orchards Irrigation District, Idaho Department of Lands, Idaho Department of Fish and Game, Idaho Department of Environmental Quality, a landowner advisory group, and the Nez Perce Soil and Water Conservation District.</p> <p>The 2022 amendment (Appendix D) which identifies specific projects for the next 5 years, was reviewed by the Northwest Power and Planning Council’s Independent Scientific Review Panel.</p>
If the strategy or plan was developed by an entity other than the applicant	Not applicable, applicant developed the plan in cooperation with the Nez Perce Tribe
Does the project implement a goal or need identified in the plan?	<p>Yes, this project addresses the goal of improved juvenile steelhead habitat, improved water quality, and improved hydrology.</p> <p>The proposed projects specifically address Strategy A1.1 (page 10), B1.1 (page 11), and B1.4 (page 11) of the 2022 Amendment to the watershed plan (See Appendix D). The objectives addressed include: Reduction of maximum summer water temperatures on 4.5 miles of stream to tolerance limits identified for steelhead spawning and rearing. (proposed project will treat a portion of the 4.5 miles); Improve juvenile summer and overwinter refugia and stream margin habitat through the installation of wood structures on one mile of perennial stream by 2027 (the projects would achieve this objective).</p>
Describe how the proposed project is prioritized in the reference plan or strategy.	The project is prioritized by working on the headwaters of the Sweetwater and Mission Creek drainages. Also a priority is to address channel function and hydrology within the watershed, which the planned installation measures achieve.

C. Stakeholder Support for the

proposed project.	
Describe the level of stakeholder support for the proposed project. Are letters of support provided? Is anyone providing cost-share?	Letters of support are provided in Appendix B as well as through a recent Lapwai Creek Watershed meeting held in February 2023, where watershed stakeholders attended and the project was proposed.
Explain whether the project is supported by a diverse set of stakeholders, as appropriate,	While project activities occur on 3 private land parcels, the implemented measures will provide benefits to downstream stakeholders such as the Nez Perce Tribe, Nez Perce County, and private landowners.
Is the project supported by entities responsible for the management of land, water, fish and wildlife, recreation or forestry within the project area? Is the project consistent with the policies of those agencies?	Sites 1 -3 have been reviewed and discussed at public meetings of the NPSWCD board. Additional engagement activities were held in February 2023. In addition, Idaho Department of Lands is preparing a wildfire strategy for the area which identifies fuel reduction measures to prevent wildfire. This project would assist those efforts by treating acres in a priority area..
Is there opposition to the project?	No
D. Readiness to proceed.	
Describe the implementation plan for the proposed project. Include an estimate project schedule that shows the stages and duration of the project work.	See in text of proposal.
Proposals with a budget and budget narrative that explain project costs.	See budget narrative
Describe any permits and agency approvals that will be required along with the agencies and time frame for obtaining such permits and approvals.	Sites 1 through 3 are construction projects and will require the following permits: ACOE/IDWR 404 stream alteration permit, CWA section 401 certification, Nez Perce County Floodplain permit, National Historic Preservation Act section 106 consultations, and NEPA evaluation. The NHPA section 106 consultation is partially completed for site 3. No other permitting has been completed and is planned to occur within the scope of this project.
Identify and describe any engineering or design work performed specifically in support of the proposed project.	The three sites are at the following design phases: Site 1 – 60%, Site 2 – 50%, and Site 3 – 60%. Engineering will be needed to finalize the culvert design to prepare a construction package.
Does the applicant have access to the land or water source where the project is	All land access is secured through written agreements between the NPSWCD and the

Lower Clearwater Snake Rivers Phase I

located?	landowners.
Identify whether the applicant has contacted the local Reclamation office to discuss the potential environmental and cultural resource compliance requirements for the project and the associated costs.	Contact was made on 3/24/2023. There was inadequate time for their response, so a line item of \$30,000 was included in the budget.
Is the project completely or partially located on Federal land or at a Federal Facility	No, all project work is planned on private lands.
E. Performance Measures	
Describe the performance measures	Performance measures include the installation of 1 culvert, 129.1 acres of forestland thinning, and 108 wood structures to treat 10,831 feet of stream.
Monitoring plan	Monitoring and evaluation will include a combination of field measurements and remote sensing using low altitude aerial photography, LiDar and drone imagery. Project installation compliance monitoring will be conducted to ensure the projects are installed as per design criteria. Pre and post monitoring will be conducted as Sites 1-3 to evaluate channel features (cross section, longitudinal profiles), scour and erosion measurements
G. Presidential and DOI Priorities	
E1.6.1 Climate Change	
How will the project build long-term resilience to drought?	Climate change impacts in the Lapwai Creek watershed were evaluated through a modeling and literature review process in 2021. The results are included in Appendix C of this proposal. Expected climate change impacts include reduced snowpack, increased rainfall, and increased magnitude of peak flow events. Replacing culverts that are sized for larger storm events will help improve the resiliency of the channel system to respond to high flow events as well as decrease the amount of channel scour that may occur in an undersized culvert situation.
Does the proposed project include other natural hazard risk reductions for hazards such as wildfires or floods?	The proposed measures will help reduce the risk of downstream flooding and wildfires.

Lower Clearwater Snake Rivers Phase I

Will the proposed project establish and use a renewable energy source?	No
Will the proposed project reduce greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation?	Some in the trees that will be planted and the increased vegetation growth anticipated in restored areas.
Does the proposed project include green and sustainable infrastructure to improve community climate resilience?	No
Does the proposed project seek to reduce or mitigation climate pollutions such as air or water pollution?	Water pollution specifically sediment will be reduced through treatment measures.
E.1.6.2 Disadvantaged or Underserved Communities	
Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities?	The project will serve residents of the local area, which include Nez Perce Tribe members. The project work at two of the sites are managed by women, and one of the sites is partially owned by a veteran. The NPSWCD staff are local community members and funds for personnel will be directly spent within the community.
Describe in detail how the community is disadvantaged based on a combination of variables.	According to the Climate and Economic Justice Screening tool accessed on 3/28/2023 (https://screeningtool.geoplatform.gov/en/#9.09/46.195/-116.8675) Site 1 is located in census tract 16069940000 and is considered disadvantaged. Race within this tract is 54% white, 38% native American, 4% two or more races, and 4% Hispanic or latino. This tract is identified as 91 st (above the 90 th percentile) for projected flood risk and 74 th (above 65 th percentile) for low income. Site 2 is partially disadvantaged. This site is located in census tract 16069960700 with demographics (91% white, 2% one or more races and 4% latino or Hispanic. This site is located in an area that has a projected wildfire risk of 90 th (above 90 th percentile), is identified as 91 st (above the 90 th percentile) for wastewater discharge. Site 3 is located in census tract 1606194002 and is considered a disadvantaged community. Demographics include 89% white, 4% native American, 2% one or more races, and 3% Hispanic or latino. The area is considered low income and

Lower Clearwater Snake Rivers Phase I

	ranks 65 th (above the 65 th percentile)
If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in EO 13985.	Information not available.
E.1.6.3 Tribal Benefits	
Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for an Indian Tribe?	No
Does the proposed project support Reclamations Tribal Trust responsibilities or a Reclamation Activity with a tribe?	No
Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits, such as improved public health and safety, by addressing water quality, new water supplies, or economic growth opportunities?	Steelhead and Coho are culturally important to the Nez Perce Tribe (NPT) and the NPT monitors and completes projects to increase productivity of these fish within the planned watersheds. The NPSWCD is located at Culdesac, Idaho (within the Nez Perce Tribe Indian reservation) and provides employment to local, rural, underserved residents. The NPSWCD has 3 employees that live within the small community of Culdesac. The NPSWCD has a local hiring preference and funds spent will be utilized within the community.

VII. Project Budget:

Funding Plan and letters of commitment:

The non-federal cost-share component of this project will be obtained through three private landowners, Nez Perce County, and the Nez Perce Soil and Water Conservation District. The letters of commitment are included in attachment B.

Amount of non-federal cost share commitment: \$151,019.50

Date funds available to applicant: January 1, 2024

Any time constraints on the availability of funds: None

Any other contingencies association with the funding commitment: None

Budget Proposal:

Table 1. Summary of Non-Federal and Federal Funding Sources.

Funding Sources	Amount
Non-Federal Entities	
1. Nez Perce County	\$40,548
2. Private Landowners	\$32,300
3. Nez Perce Soil and Water Conservation District	\$78,171.50
Non-Federal Subtotal	\$151,019.50
REQUESTED Reclamation Funding	\$453,058.50

Table 2. Total Project Cost Table

Source	Amount
Costs to be reimbursed with the Federal Funding	453,058.50
Costs to be paid by the applicant	78,171.50
Value of third-party contributions	72,848
Total Project Cost	\$604,078

Budget Narrative:

Included as separate document.

Pre-Award Costs:

None are planned at the time of the application..



Phone: (208) 843-2931
Fax: (208) 843-2253
www.nezperceswcd.org
npswcd@co.nezperce.id.us

3/27/2023

Lynn Rasmussen
Nez Perce Soil and Water Conservation District
PO Box 131
Culdesac, Idaho 83524

Re: NPSWCD WaterSmart Grant Application Match

Dear Ms. Rasmussen:

The Nez Perce Soil and Water Conservation District intends to provide up to \$78,171.50 in match be applied towards the non-Federal match requirement of the Lower Clearwater and Snake Rivers Phase I grant application in the form of a combination of non-federal cash value and non-federal in-kind.

We acknowledge that the non-Federal match, whether cash or in-kind, is expected to be paid out at the same general rate as the Bureau of Reclamation (BOR) share unless otherwise granted by the BOR. We acknowledge that the cost share commitment will be met over the life of the award (three years or less), and that the same Federal compliance requirements that apply to the Federal fund awards, apply to the non-Federal match.

We acknowledge that non-Federal match used to meet the BOR requirements may not be included as contribution for any other federally assisted project or program.

Sincerely,

Steve Becker
Chair



Phone: (208) 843-2931
Fax: (208) 843-2253
www.nezperceswcd.org
npswcd@co.nezperce.id.us

3/27/2023

Bureau of Reclamation
Water Resources and Planning Office
Attn: Robin Graber
PO Box 25007, MS 86-69200
Denver, CO 80225

Re: NPSWCD WaterSmart Grant Application

Dear Ms. Graber:

The Nez Perce Soil and Water Conservation District is a stakeholder within the Lapwai Creek watershed and supports the WaterSmart grant application. The projects identified are needed to improve water quality, improve low summer flows and provide juvenile steelhead rearing habitat within the watershed.

The proposal was adopted at a public meeting of the NPSWCD Board on March 16, 2023. The NPSWCD has worked with the private landowners where project work is proposed for the past 15 years and has established a good working relationship with them.

Sincerely,

A handwritten signature in black ink that reads "Steve A. Becker". The signature is written in a cursive style with a large initial "S".

Steve Becker
Chair

Sweetwater Cattle Company
18786 Zinn Lane, Lewiston, Idaho 83501 208-305-7010

March 23, 2023

Bureau of Reclamation
Water Resources and Planning Office
Attn: Robin Graber
PO Box 25007, MS 86-69200
Denver, CO, 80225

RE: NPSWCD WaterSmart Grant application

Dear Ms. Graber;

The Sweetwater Cattle Company is writing this letter in support of the Lower Clearwater and Snake Rivers Phase I WaterSMART application submitted to Bureau of Reclamation by the Nez Perce Soil and Water Conservation District.

Our family has operated a cow/calf operation for over in the Sweetwater Creek drainage. We have installed numerous conservation projects on our land that benefit watershed health and reduce the impacts of climate change. We are a stakeholder in the Lapwai Creek watershed and participate in local watershed meetings to discuss needed restoration activities. Selecting this project for funding would further the goals of the local watershed improvement efforts as well as provide opportunities to landowners to make improvements on their lands.

Sincerely



Angela Forsman, Owner

Sweetwater Cattle Company
18786 Zinn Lane, Lewiston, Idaho 83501 208-305-7010

March 23, 2023

Lynn Rasmussen
Nez Perce Soil and Water Conservation District
PO Box 131
Culdesac, Idaho 83524

RE: NPSWCD WaterSmart Grant application

Dear Ms. Rasmussen;

The Sweetwater Cattle Company plans to participate in the Lower Clearwater and Snake Rivers Phase I WaterSMART grant project if funded. As a participant we would provide land access for the planned conservation measures.

We would also supply a letter of match commitment if this project is selected for funding.

The projects we are planning include those that improve water quality, reduce erosion, decrease stream temperatures, and reduce greenhouse gas emissions.

Sincerely



Angela Forsman, Owner



OFFICE OF
NEZ PERCE COUNTY ROAD & BRIDGE DEPT.

**3215 E. MAIN STREET
LEWISTON, IDAHO 83501
(208) 799-3060
(208) 799-3064 FAX**

March 23, 2023

Bureau of Reclamation
Water Resources and Planning Office
Attn: Robin Graber
PO Box 25007, MS 86-69200
Denver, CO, 80225

RE: NPSWCD WaterSmart Grant application

Dear Ms. Graber;

The Nez Perce County Road and Bridge Department is writing this letter in support of the Lower Clearwater and Snake Rivers Phase I WaterSMART application submitted to Bureau of Reclamation by the Nez Perce Soil and Water Conservation District.

The proposed activities will not only improve water quality, reduce sediment and stream temperatures, but also improve watershed health and reduce impacts to flooding.

The Nez Perce County Road and Bridge Department maintains many roads within the project boundary and the proposed activities will help reduce sediment and reduce the impacts of undersized culverts on floodplains.

Sincerely,

A handwritten signature in blue ink, which appears to be "Roy Hill", is written over a blue oval-shaped scribble.

Roy Hill, Director