

**Application Name:** Lostine Wetland and Side Channel Complex

**Application Number:** 219-5018-16328

**By:** Nez Perce Tribe

**Offering Type:** Open Solicitation

**Application Type:** Technical Assistance

**OWEB Region:** Eastern Oregon

**County:** Wallowa

**Coordinates:** 45.548977,-117.490136

**Applicant:**

Kathryn Frenyea  
PO Box 909  
Joseph OR 97846-0909  
541.432.2506  
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**Payee:**

Arleen Henry  
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**Project Manager:**

Montana Pagano  
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montanap@nezperce.org

**Budget Summary:**

OWEB Amount Requested: \$60,275  
Total Project Amount: \$102,090

## Administrative Information

### Abstract

Provide an abstract statement for the project in 250 words or less. Include the following information: 1) Identify the project location; 2) Briefly state the project need; 3) Describe the proposed work; 4) Identify project partners.

This proposed project is located on a private ranch adjacent to the Lostine River, approximately 3 miles east of the town of Wallowa, Wallowa County, Oregon. The property is currently under two separate permanent easements totaling over 450 acres encompassing the main stem Lostine River, adjacent floodplain and riparian forest, and agricultural land. The landowner, the Wallowa Land Trust and project partners are seeking funds to restore stream and floodplain connectivity and function as well as create emergent wetland where deemed appropriate within the project area. Old channel and meander scrolls exist throughout the proposed project area illuminating the historic Lostine River channel, side channel and wetland network. The previous landowner kept much of the floodplain and dis-connected side channels protected from livestock grazing leaving old scrolls largely intact. This prior and current management allows for a more passive restoration approach including the removal or partial breach of existing levees. The current landowner maintains a long term commitment to restoration, protection and enhancement of resources. The NEOR Recovery Plan, the Grande Ronde Subbasin Plan (GRSBP), the Wallowa Atlas restoration prioritization process (Wallowa Atlas), and the Wallowa County Salmon Habitat Recovery Plan (WCSHRP), all identify this reach of the Lostine River as deficient for habitat quantity and quality, water quality, stream complexity, and floodplain connectivity. Species which will benefit include ESA listed spring/summer Chinook salmon, steelhead, bull Trout, Columbia Spotted Frog and others. With the collaboration of the landowner, the Wallowa Land Trust, the Oregon Department of Fish and Wildlife, the Grande Ronde Model Watershed, and the Nez Perce Tribe (sponsor), this project seeks technical assistance monies to survey, permit and design a floodplain and side channel re-integration project that will create or re-inundating emergent wetland communities.

### 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 include a complete list of participating private landowners

Woody and Meghan Wolfe

*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

## **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 well
- Aerial application of chemicals
- Transporting individuals on the water
- 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 this Technical Assistance Application seeks to address.

This proposed project is located on a private ranch adjacent to the Lostine River, Wallowa County, Oregon. The property is a family run Century farm. The current parcel was purchased in 2004 and within just over a decade's time enrolled in two separate permanent easements with the Wallowa Land Trust measuring 188 and 266 acres respectively. Since that time all irrigation practices have been converted from flood to sprinkler utilizing some of the first pivot systems in the lower Wallowa valley. The landowner has also agreed to a long-term late season lease and began incorporating cover crop rotations and fallow methodologies leaving more water in-stream during crucial summer months. The majority of work in this proposed project location will occur within the footprint of the second easement, due west of the Lostine river. The landowner, Land Trust, and project partners share a long-term vision involving the restoration of fisheries, terrestrial, and wetland habitats. The partnership seeks to achieve this through the utilization of less agriculturally productive ground. We seek to restore or create habitat where it can be beneficial to a host of species including ESA listed Chinook salmon, steelhead, bull Trout, Columbia spotted frog, Long-billed Curlew, and others. In line with the above mentioned easements, the landowner has taken land not irrigated by a new upgraded pivot system completely out of production and begun working with ODFW to create an intact wildlife migration corridor and peripheral habitat.

The lower Lostine River, like many rivers throughout Wallowa County, has been channelized to accommodate agricultural and residential infrastructure resulting in a largely disconnected floodplain and network of historical side channels. This disruption of natural riverine processes and function also reduced valuable juvenile salmonid rearing habitat which is deficient throughout the Wallowa-Lostine River corridor. As identified in several subbasin plans and assessments, emergent wetland and juvenile salmonid rearing are limited in the project reach. Agriculture in and adjacent to the floodplain leads to the conversion of natural wetland habitat to crop land reducing the hyporheic exchange throughout the floodplain which is crucial to regulating stream temperatures and enhancing flow.

The ESA Recovery Plan for Northeast Oregon Snake River Spring and Summer Chinook Salmon and Snake Basin Steelhead Populations (NEOR Recovery Plan), the Grande Ronde Subbasin Plan (GRSBP), the Wallowa Atlas restoration prioritization process (Wallowa Atlas), and the Wallowa County Salmon Habitat Recovery Plan (WCSHRP), all identify this reach of the Lostine River as deficient for habitat quantity and quality; impaired for water quality; and lacking in stream complexity, and floodplain connectivity. The NEOR Recovery Plan suggests that improving habitat access and restoring degraded habitat will benefit Northeast Oregon Snake River spring/summer Chinook salmon and steelhead during spawning and rearing life stages. Achieving population viability, habitat restoration focusing on increasing habitat complexity, reconnecting floodplains, improving riparian vegetation, increasing summer flows, and decreasing sediment input are essential. The lower Lostine River corridor, where this project is located, is listed as a priority area for these restoration actions.

Additionally, the project area hosts known Columbia Spotted frog breeding sites. Habitat degradation and fragmentation through past and current influences of livestock grazing and agricultural production are major contributors to their decline. A 1997 survey conducted in Wallowa County revealed twelve known breeding sites county wide. Since the inception of the first easement in 2011 a few breeding sites were identified in the project area and are known to be increasing, with the property currently hosting nine breeding sites (see attached map). These sites are monitored annually by ODFW and Wallowa Land Trust staff and will be avoided to minimize impact or injury. The creation of new breeding and rearing sites in emergent wetland and adjacent side channel areas will further protect and allow for the proliferation of this crucial indicator species.

Declines in beaver populations have also contributed to the loss of suitable habitat for spotted frogs and salmonids. Beaver play a major role in the creation of small pools with slow-moving water that function as habitat for frog reproduction, and juvenile salmonid rearing, as well as the creation of wet meadows that provide foraging habitat and protective vegetation cover for a host of sensitive species (St. John 1994). This project seeks to restore floodplain and side channel connectivity, hyporheic exchange and the creation of adjacent emergent wetland. If deemed appropriate by the stakeholder team, beaver reintroduction or structures promoting re-colonization may be utilized.

Project design considerations to be vetted through this technical assistance grant include, but, are not limited to:

- Levee removal or breaching to re-connect historic meanders and side channels.
- Creation of additional side channels.
- Beaver dam analog (BDA) structures, post assisted log structures (PALS), or beaver-reintroduction to achieve appropriate surface water elevations for seasonal and persistent floodplain inundation.
- Large Wood Material (LWM) structures to provide additional cover, interstitial spacing and deep zero velocity pools for juvenile salmonid rearing.
- Floodplain excavation to promote hyporheic and cold water exchange aiding in the creation of emergent wetland development
- Native seeding, container planting, and sedge mat installation to create an intact riparian forest and adjacent wetland or wetted meadow community.

*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

### Goals and Objectives

Provide a goal statement for this Technical Assistance Application.

Acquire engineered designs and permitting to promote natural stream condition and function within the project reach of the Lostine River. Designs will aim to provide additional summer/winter juvenile rearing habitat for ESA listed Chinook salmon and steelhead, reintroduced lamprey, coho, and other native aquatic fish species, as well as improve water quality at the reach scale. Specifically we will be seeking to re-connect and create side channels while enhancing floodplain connection and wetland habitat.

We will seek an implementation-ready engineer-approved design for an emergent wetland and multiple side channels incorporating pools, alcoves, and large wood to further increase habitat complexity and floodplain connectivity. A suite of design alternatives will be produced to reconnect existing side channel habitat to the main Lostine River, currently removed from natural riverine processes by a levee. Designs will also include plans to enhance existing sedge and rush plant communities on the floodplain adjacent to the river. Side channels will intercept the existing groundwater to increase base flows in the main river channel and deep water pools will provide juvenile Chinook and steelhead rearing habitat year-round. The mouths of the side channels where they reenter the Lostine River will also provide unique juvenile rearing habitat in the form of backwater alcoves. Riparian plantings throughout the floodplain, wetland, and riparian buffer on the main river channel will also be enhanced.

List the objectives of this Technical Assistance Application.

The overall objective of this project is to obtain final designs and specifications to address the multiple habitat, water quality, and stream function deficiencies associated with this reach of the Lostine River. All design activities will be directed towards the following objectives :

- Conduct surveys to assess hydrologic and hydraulic function
- Complete 85-100% design
- Acquire all required permits (see products section)
- Coordination of stakeholders, regulators, funders, and partners for a fully vetted project design complete with specifications, ESA consultation, and all required permits .

Specific objectives for restoration or enhancement through this project include, but, are not limited to:

- Improve stream, riparian, wetland/meadow conditions and functions, including improved water quality and use of riparian and wetland areas for native plant, fish, and wildlife communities.
- Improve stream structure and channel complexity to increase juvenile salmonid rearing habitat
- Construct preferential flow paths to encourage floodplain interaction and connection
- Improve riparian vegetation species composition and distribution, reducing water temperature and increasing fine sediment retention

## **Project History**

Continuation - Are you requesting funds to continue work on a project previously funded by OWEB?

- 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 phased technical assistance project?

- Yes  
 No

## **Plans and Salmon**

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

- Yes  
 No

List the name of the assessment or plan being implemented by this project. The description must include the purpose of the plan.

- The ESA Recovery Plan for Northeast Oregon Snake River Spring and Summer Chinook Salmon and Snake Basin Steelhead Populations (2017) provides strategic guidance for the protection and restoration of Snake River spring/summer Chinook salmon and Snake River Basin summer steelhead populations that occupy reaches of Oregon's northeast corner.

- The Grande Ronde Subbasin Plan (2004) prepared for the Northwest Power and Conservation Council includes an assessment of the condition of aquatic and terrestrial species and physical attributes, future conditions, and goals, objectives and strategies to guide habitat recovery specific to the Grande Ronde. Pages 14-16, and 49 cite key habitat diversity, key habitat quantity, and temperature for spring Chinook and steelhead for the Lower Lostine River. Sediment and flow are also listed as limiting factors for steelhead in the proposed project reach. The plan states impacts resulting from restoration actions on Chinook abundance and productivity would be large, while steelhead abundance, productivity, and diversity would be moderate. Spring Chinook and steelhead abundance and productivity would see the highest potential impact from comprehensive habitat restoration in the Wallowa-Lostine watershed.

- The Wallowa Atlas process (in progress) is used as a tool to prioritize and inform fish habitat restoration actions based on the greatest biological and geomorphological need and feasibility. This process is being sponsored and led by the GRMW with funding from an OWEB Focused Investment Partnership (FIP) capacity building grant. Other partners include research biologists, implementers, and related experts from NPT, ODFW, USFS, USFWS, TFT, NMFS, BPA, and others. The Wallowa Atlas restoration prioritization process (in progress) identifies floodplain condition, instream structural habitat, temperature, water quantity, and riparian vegetation as limiting factors for spring Chinook, steelhead, bull Trout, and lamprey in the Lower Lostine.

- The Wallowa County Salmon Habitat Recovery Plan (1999) guides restoration and maintenance of Chinook salmon and other salmonid habitat in Wallowa County. This plan addresses 1) in-channel water quality and quantity parameters required for salmon perpetuation and 2) general ecosystem requirements to sustain those conditions. Local Wallowa County citizens, natural resources agency professionals, and the Nez Perce Tribe originally

developed the plan in 1992 in response to the ESA listing of Snake River spring/summer Chinook salmon. In 1998 it was revised to include multiple species such as Snake River Basin summer steelhead following their ESA listing. Pages 47-50, Wallowa River – Strathearn's Pond to Wallowa River, identifies water quantity (minimum flow), water temperature, excess fine sediment, and irrigation return flows as high priority water quality concerns. Related to stream structure and substrate, woody debris and cobble embeddedness are categorized as high priorities.

- The Mid-Columbia Recovery Unit Implementation Plan for bull Trout (2015) prepared by ODFW and USFWS describes the threats and site-specific management actions needed for recovery of the species within the Mid-Columbia Recovery Unit. The plan identifies the following issues specific to Wallowa/Minam bull Trout populations: Water Quality (1.3) Agricultural practices and other land use activities result in high water temperatures and low flows that degrade habitat quality and impede connectivity, particularly in FMO habitats.

Will this project benefit salmon or steelhead?

Yes

No

✓ Snake River Basin - Steelhead

✓ Snake River Spring/Summer-run - Chinook Salmon

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

According to the GRSP, reduced habitat capacity has resulted in a 90% decrease in Wallowa-Lostine spring Chinook salmon population abundance. The mid to lower Wallowa river has been identified as priority restoration area in the Wallowa Subbasin for Chinook salmon and summer steelhead. Although juvenile spring Chinook and summer steelhead may inhabit the project reach year-round, limited suitable rearing habitat due to the riffle-dominated, high gradient nature of the channelized river limit rearing capacity. Age 0 Chinook life stages are most greatly limited by a lack of pools and backwater habitat. Age 0 Chinook and steelhead life stages are also limited by reduced riparian function and large wood (GRSP, 2004). This project will increase both habitat quantity and quality through the addition or re-connection of side channels, large wood, enhanced riparian vegetation, and pool development and wetland habitat creation.

This proposed project seeks to secure an engineered design for the creation or connection of multiple side channels incorporating pools, alcoves, emergent wetland and large wood to further increase habitat complexity and floodplain connectivity. Increasing connectivity between surface and subsurface water will improve juvenile rearing habitat by moderating seasonal stream fluctuations and increasing late-summer discharge. A suite of design alternatives will be produced to reconnect existing side channel habitat to the main Lostine River which are currently blocked by an existing levee. Designs will also include plans to enhance existing sedge and rush plant communities on the floodplain adjacent to the river. Created or re-connected side channels will aid in the creation of deep water pools and serve as perennial or seasonal rearing habitat for juvenile Chinook and steelhead. Multiple access points of the side channels will provide unique summer/winter juvenile rearing habitat in the form of backwater alcoves. Riparian plantings throughout the floodplain, wetland, and riparian buffer on the main river channel will also be enhanced.

Other salmonid species that will likely benefit from this restoration project include coho which were reintroduced into the Lostine River during the spring of 2017 and are expected to utilize this reach and any available side channel habitat year round, similar to Chinook and steelhead. Bull Trout are likely to inhabit the reach during winter and spring, using it primarily as a migration corridor. The Nez Perce Tribe, through an easement with BPA, owns and operates a salmon and steelhead weir located within the project site spring through fall annually. The program uses the weir, in part, to estimate upstream migration of adult returns as well as collects Chinook salmon broodstock for a co-management supplementation program. Data collected by the program as well as the Tribe's continued landowner coordination guides long-term management goals. Capture information from the weir also provides valuable monitoring data for fluvial bull Trout.

Non-salmonid fish species such as mountain whitefish, chiselmouth, dace, Sculpin, pike minnow, and suckers could be present in the project reach as well. There is a strong potential for lamprey to inhabit this reach of the Lostine River, as adults are being translocated annually and ammocetes have been sampled through electrofishing surveys and juvenile outmigrant traps throughout the subbasin.

**Technical Assistance Type**

What type of technical assistance do you need in support of future voluntary restoration actions? (choose one)

- Technical Design -- Details will follow.*
- Technical Planning*

**Technical Design**

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

- Yes
- No

<b>Regional Assessments or Recovery Plans</b>
(Draft)Proposed ESA Recovery Plan for Snake River Spring/Summer Chinook & Snake River Steelhead
Northwest Power and Conservation Council Grande Ronde Subbasin Plan
A Monitoring Strategy for the Oregon Plan for Salmon and Watersheds Monitoring

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

- The ESA Recovery Plan for Northeast Oregon Snake River Spring and Summer Chinook Salmon and Snake Basin Steelhead Populations (2017) provides strategic guidance for the protection and restoration of Snake River spring/summer Chinook salmon and steelhead populations that occupy reaches of Oregon’s northeast corner.
- The Grande Ronde Subbasin Plan (2004) prepared for the Northwest Power and Conservation Council includes an assessment of the condition of aquatic and terrestrial species and physical attributes, future conditions, and goals, objectives and strategies to guide habitat recovery specific to the Grande Ronde. Pages 14-16, and 49 cite key habitat diversity, key habitat quantity, and temperature for spring Chinook and steelhead for the Lower Lostine River. Sediment and flow are also listed as limiting factors for steelhead in the proposed project reach. The plan states impacts resulting from restoration actions on Chinook abundance and productivity would be large, while steelhead abundance, productivity, and diversity would be moderate. Spring Chinook and steelhead abundance and productivity would see the highest potential impact from comprehensive habitat restoration in the Wallowa-Lostine watershed.
- The Wallowa County Salmon Habitat Recovery Plan (1999) guides restoration and maintenance of Chinook salmon and other salmonid habitat in Wallowa County. This plan addresses 1) in-channel water quality and quantity parameters required for salmon perpetuation and 2) general ecosystem requirements to sustain those conditions. Local Wallowa County citizens, natural resources agency professionals, and the Nez Perce Tribe originally developed the plan in 1992 in response to the ESA listing of Snake River spring/summer Chinook salmon. In 1998 it was revised to include multiple species such as Snake River Basin summer steelhead following their ESA listing. Pages 47-50, Wallowa River – Strathearn's Pond to Wallowa River, identifies water quantity (minimum flow), water temperature, excess fine sediment, and irrigation return flows as high priority water quality concerns. Related to stream structure and substrate, woody debris and cobble embeddedness are categorized as high priorities.

## Design

Select the level of design that will be produced through this application.

- 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).

Explain why the design level is the appropriate level to address the watershed problem described in the Problem Statement.

Achieving 85-100% design level will secure an implementation ready project which will aid in the efficiency and timeliness of getting the project on the ground, including securing necessary permits. Survey data and analysis will inform the project sponsor and stakeholders as to which actions are most appropriate and effective in meeting project goals and objectives. All life stages of salmon and steelhead use the project area throughout the year, including, spawning, winter rearing, and summer rearing. There is considerable opportunity across this proposed project area to implement habitat enhancement measures to address limited factors benefiting multiple fish, terrestrial, and aquatic species. Stakeholder and design team input will be sought at each conceptual and design iteration (concepts, 30%, 60%, 90%, and final). Concerns from team members will be vetted and considered as to their potential impacts and incorporated accordingly. This level of participation and commitment to a successful project addressing key limiting factors is required for project success at the watershed scale.

## Products

List the products that will be produced as a result of this grant.

Title	Brief Description	Responsible Party
Longitudinal Profile	Survey of existing channel, floodplain, and project footprint to determine existing conditions.	Nez Perce Tribe
Wetland Delineation	Full wetland survey and identification which will guide project parameters and footprint.	Nez Perce Tribe
Basis of Design Report	Project location survey and information delineated as well as project alternatives.	Engineering firm
Engineered Cost Estimate	Detailed itemized cost estimate to be used in contracting documents and contractor selection.	Engineering Firm
Engineered Stamped Design	Plan sets and specifications for chosen design team alternative	Engineering firm
Section 106 Cultural Review	Survey conducted by engineer, BPA , or tribal staff seeking to achieve cultural concurrence.	Nez Perce Tribe, BPA
JPA	Seek concurrence through Oregon DSL and USACE for removal/fill, 401, and 404 permits.	Nez Perce Tribe
ESA Section 7 Consultation	USFWS, NMFS, and BPA concurrence	Nez Perce Tribe
ODFW Fish Passage Concurrence	State approval of project parameters relating to passage or design.	Nez Perce Tribe

## **Review**

List the names of the people or agencies that will be involved in the review of the design.

<b>Name</b>	<b>Agency</b>
Kathryn Frenyee, Montana Pagano	Nez Perce Tribe
Coby Menton	Grande Ronde Model Watershed
Jeff Yanke, Kyle Bratcher	Oregon Department of Fish and Wildlife
Woody and Meghan Wolfe	Landowner
Kathleen Ackley, Eric Greenwell	Wallowa Land Trust
Sean Welch	BPA

Once the design is complete and prior to implementation, who must approve the design?

Once design is completed the following entities must approve the design:

- Technical review team (listed previously)
- BPA Restoration Review Team including environmental compliance and technical engineering staff
- The Wallowa County Natural Resources Advisory Committee (NRAC)
- The Wallowa County Planning Department
- The Wallowa Land Trust
- Woody and Meghan Wolfe, landowners
- NMFS
- USFWS
- ODFW Fish Passage

Estimated total acres of habitat affected by this technical assistance design.

80

Estimated total miles of stream affected by this technical assistance design.

1.5

## Wrap-Up

### Outcomes

Describe how the proposed technical assistance activities will address the watershed problem identified in the Problem Statement.

This proposed project is a unique opportunity to work within a permanent conservation easement to enhance and further protect valuable rearing and spawning habitat for a variety of species. The remnants of historic agricultural and land management practices pose threats to the recovery of ESA listed Chinook salmon, steelhead, bull Trout and other species. Overarching watershed concerns including a lack of habitat quantity and diversity, excess fine sediment, a lack of hyporheic floodplain connection, and low summer flows would all be addressed with the development of this proposed grant. The project will be designed to address the limiting factors identified in several sub-basin plans and watershed assessments. Once implemented there will be an increase in channel complexity, floodplain connection, pool and alcove abundance, off-channel habitat and improved riparian and emergent wetland establishment.

### Project Management

List the key participants, their roles, and qualifications relevant to the technical assistance activities.

Role	Name	Affiliation	Qualifications	Email	Phone
Project Sponsor	Katie Frenyea	Nez Perce Tribe DFRM	Katie has a B.S. in Fisheries Management and has worked extensively in eastern Oregon for fisheries agencies for 17 years. She has 7 years of restoration implementation and project management experience.	kathrynf@nezperce.org	(541) 432-2506
Project Manager	Montana Pagano	Nez Perce Tribe DFRM	Montana has a B.S. in Fishery Resources from the University of Idaho. She has over ten years of experience working on various research and habitat projects in the Oregon, Idaho, and Washington.	montanap@nezperce.org	(541) 432-2507
Easement Manager	Eric Greenwell	The Wallowa Land Trust	Eric has worked managing lands across the Pacific Northwest. His expertise lies in developing relationships with landowners, and and maintaining a host of viable land use options.	eric@wallowalandtrust.org	(541) 426-2042

Project Implementation Partner	Coby Menton	The Grande Ronde Model Watershed	Coby has extensive experience in water quality and stream flow gauging. He is a key member of the partnership seeking implementation and monitoring projects while managing contracting, engineering, and design.	rcoby@grmw.org	(541) 398-0151
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List the major project elements and time schedule estimated for completing the technical assistance project and the future restoration project.

Element	Start Date	End Date
Hire Design Firm	10/2018	12/2018
Project Concept Development	12/2018	2/2019
30% Design	1/2019	3/2019
60% Design	3/2019	7/2019
Wetland delineation	11/2018	12/2019
Project Permitting	3/2019	5/2020
90% Design	7/2019	9/2019
100% Design	9/2019	10/2019

Element	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Hire Design Firm							
Project Concept Development							
30% Design							
60% Design							
Wetland delineation							
Project Permitting							
90% Design							
100% Design							

## **Optional Monitoring**

## Budget

Item	Unit Type	Unit Number	Unit Cost	OWEB Funds	External Cash	External In-Kind	Total Costs
<b>Salaries, Wages and Benefits</b>							
NPT Project Leader - Project Coordination	Hours	100	\$40.00	\$0	\$0	\$4,000	\$4,000
Sean Welch - BPA Fish and Wildlife Program engineer	Match Lump Sum	20	\$150.00	\$0	\$0	\$3,000	\$3,000
NPT Project Leader - Engineering Management and Direction	Hours	80	\$40.00	\$3,200	\$0	\$0	\$3,200
NPT-Project Leader - Archaeological Management and Direction	Hours	5	\$40.00	\$0	\$0	\$200	\$200
NPT Project Leader - Landowner Management	Hours	20	\$40.00	\$0	\$0	\$800	\$800
NPT Project Leader - ESA Section 7 Consultation Coordination	Hours	40	\$40.00	\$0	\$0	\$1,600	\$1,600
NPT Watershed Specialist - Project Review, Coordination and Oversight	Hours	100	\$35.00	\$0	\$0	\$3,500	\$3,500
NPT Watershed Deputy Director - Project Review, Oversight, and Grant Management	Hours	40	\$45.00	\$0	\$0	\$1,800	\$1,800
GRMW Project Coordinator - Restoration Team Coordination	Hours	40	\$45.00	\$0	\$0	\$1,800	\$1,800
<b>Category Sub-total</b>				<b>\$3,200</b>	<b>\$0</b>	<b>\$16,700</b>	<b>\$19,900</b>
<b>Contracted Services</b>							
Wetland Delineation Survey and Plant ID	Each	1	\$8,200.00	\$0	\$8,200	\$0	\$8,200
Wetland Delineation Mapping and Reporting	Each	1	\$6,000.00	\$0	\$6,000	\$0	\$6,000
Wetland Delineation Mitigation Analysis	Each	1	\$6,000.00	\$0	\$6,000	\$0	\$6,000
Site Investigation - Site visits, topographic survey, Project Management	Hours	40	\$130.00	\$5,200	\$0	\$0	\$5,200
Design Engineering - Hydrology HECRAS Modeling and Analysis	Hours	70	\$120.00	\$8,400	\$0	\$0	\$8,400
Design Engineering - Basis of Design Report and Review	Hours	85	\$110.00	\$9,350	\$0	\$0	\$9,350
Design Engineering - 60% Draft Designs and Review	Hours	75	\$120.00	\$9,000	\$0	\$0	\$9,000
Design Engineering - 100% Design Drawings, Review and Cost Estimate	Hours	72	\$110.00	\$7,920	\$0	\$0	\$7,920
Design Engineering - Prepare Final Drawings, Contract and Bid Documents	Hours	65	\$120.00	\$7,800	\$0	\$0	\$7,800
Environmental Permits - Data Gathering	Hours	35	\$85.00	\$2,975	\$0	\$0	\$2,975

Environmental Permits - Project Management	Hours	20	\$120.00	\$2,400	\$0	\$0	\$2,400
Environmental Permits - 404 Permit Application	Hours	30	\$85.00	\$2,550	\$0	\$0	\$2,550
Archaeological Services - Review, Manage Cultural Report	Hours	60	\$80.00	\$0	\$4,800	\$0	\$4,800
Archaeological Services - OR SHPO Known Fee	Each	1	\$600.00	\$600	\$0	\$0	\$600
<b>Category Sub-total</b>				<b>\$56,195</b>	<b>\$25,000</b>	<b>\$0</b>	<b>\$81,195</b>
<b>Travel</b>							
NPT Travel to Project Site and Coordination Meetings	Miles	200	\$0.58	\$0	\$0	\$115	\$115
<b>Category Sub-total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$115</b>	<b>\$115</b>
<b>Materials and Supplies</b>							
			\$0	\$0	\$0	\$0	\$0
<b>Category Sub-total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Equipment and Software</b>							
			\$0	\$0	\$0	\$0	\$0
<b>Category Sub-total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Other</b>							
			\$0	\$0	\$0	\$0	\$0
<b>Category Sub-total</b>				<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Modified Total Direct Cost Amounts</b>				<b>\$59,395</b>	<b>\$25,000</b>	<b>\$16,815</b>	<b>\$101,210</b>
<b>Indirect Costs</b>							
Federally Negotiated Indirect Cost Rate		Override Amount			\$880		
<b>Total</b>				<b>\$60,275</b>	<b>\$25,000</b>	<b>\$16,815</b>	<b>\$102,090</b>

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

The Wetland Delineation cost is significantly higher than other project costs. Recent projects and permitting conducted by partner agencies cite these costs were approximately \$15,000-30,000. This increase is due to more stringent Army Corp of Engineer wetland assessments and project mitigation. A major component of this proposed project is wetland preservation and creation therefor we anticipate wetland delineation and associated costs to be high.

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
Tribe	Nez Perce Tribe	Project design, management, coordination and contracting.	In-Kind - Labor	\$12,015	Project design, coordination and management	Secured
Non-Governmental Organization	Grande Ronde Model Watershed	Project Development and design review	In-Kind - Labor	\$1,800	Review team and design coordination	Secured
Non-Governmental Organization	Grande Ronde Model Watershed	Project Development and design review	Cash	\$25,000	The Nez Perce Tribe (project sponsor) will seek monies to pay for cultural and wetland delineation surveys	Pending
Federal	BPA	BPA fish and wildlife engineer design and review	In-Kind - Labor	\$3,000	Engineer will assist in design and review	Secured
<b>Fund Source Cash Total</b>			<b>\$25,000</b>	<b>Fund Source In-Kind Total</b>		<b>\$16,815</b>

### Match

Contribution Source-Type: Description	Amount
Nez Perce Tribe-In-Kind - Labor: Project design, coordination and management	\$12,015
Grande Ronde Model Watershed-In-Kind - Labor: Review team and design coordination	\$1,800
Grande Ronde Model Watershed-Cash: The Nez Perce Tribe (project sponsor) will seek monies to pay for cultural and wetland delineation surveys	\$25,000
BPA-In-Kind - Labor: Engineer will assist in design and review	\$3,000
<b>Match Total</b>	<b>\$41,815</b>

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 funding include NOAA/PCSRF funds?

- Yes  
 No

## Uploads

Map: [Lostine\\_Wetland\\_Side\\_Channel\\_OWEB\\_20180430.pdf - Project locator map](#)

Map: [WLT\\_CE\\_Map.pdf - Conservation easement boundaries](#)

Project Design: [Conceptual\\_and\\_5year\\_Inundation\\_5-1-18.pdf - Project conceptual design and 5 year inundation map](#)

Map: [Wolfe Spotted Frog Breeding Sites.pdf - Columbia spotted frog breeding locations](#)

Photos: [Lostine Wetland and Side Channel Complex Site Photos.pdf - Site photos](#)

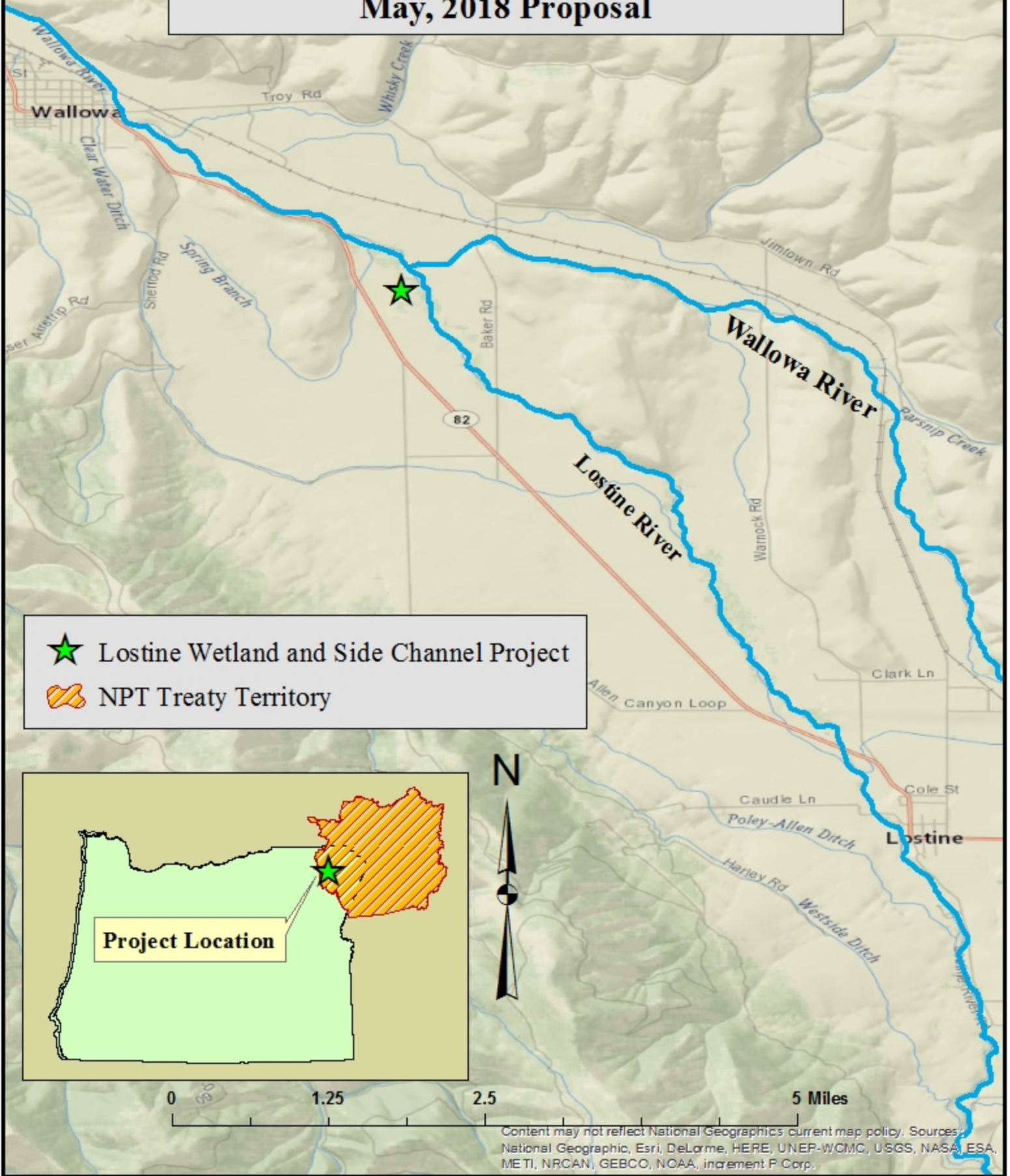
Federally Negotiated Indirect Cost Rate Plan: [FY18 NPT Indirect Cost Rate Agreement.pdf -](#)



Secured Match Forms: [Signed\\_Match\\_forms\\_Wolfe.pdf -](#)

**Permit Page**

No Permits have been identified for this application.

**Lostine Wetland and Side Channel Complex**  
**Lostine River, Oregon**  
**Oregon Watershed Enhancement Board**  
**May, 2018 Proposal**



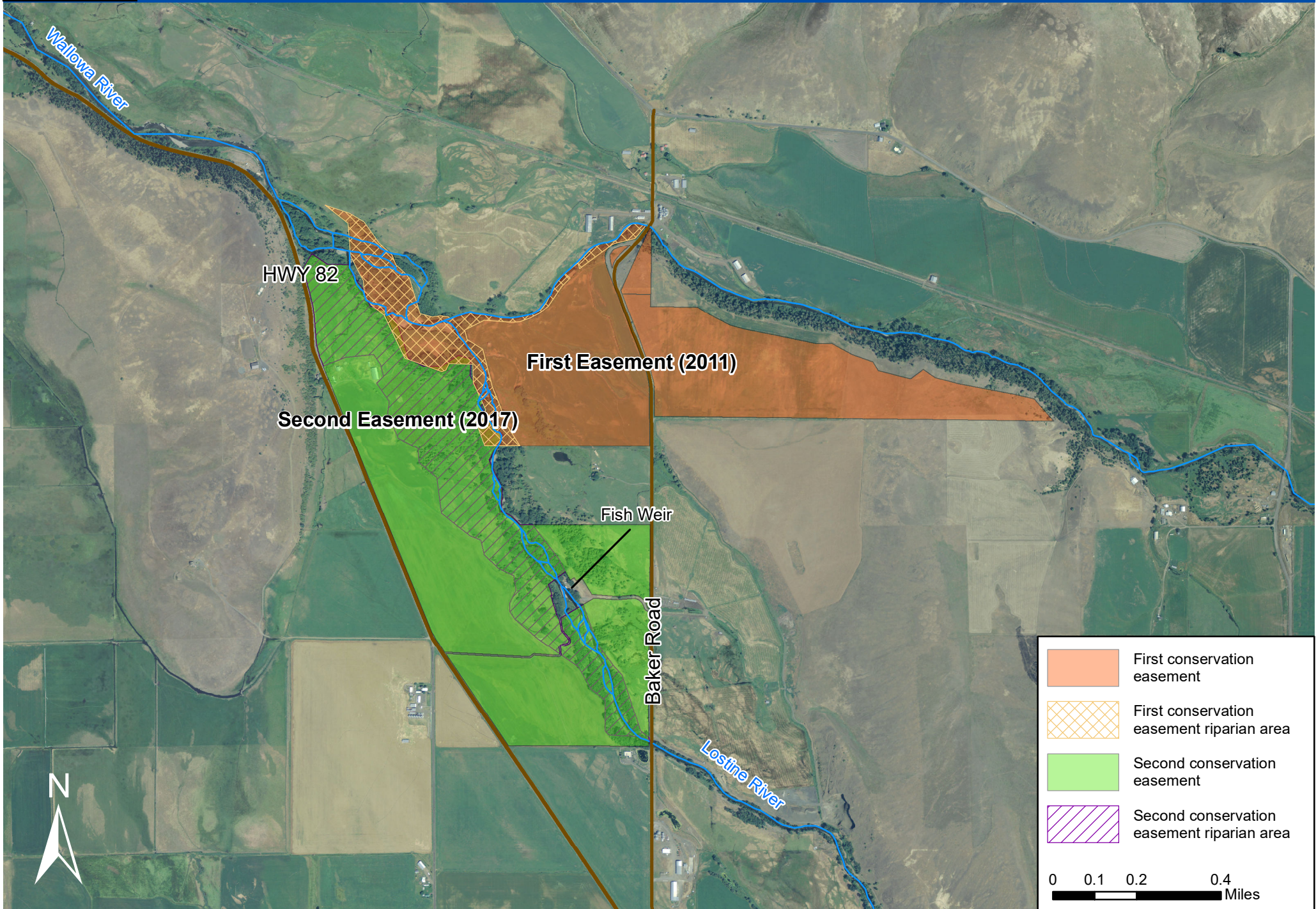
-  Lostine Wetland and Side Channel Project
-  NPT Treaty Territory



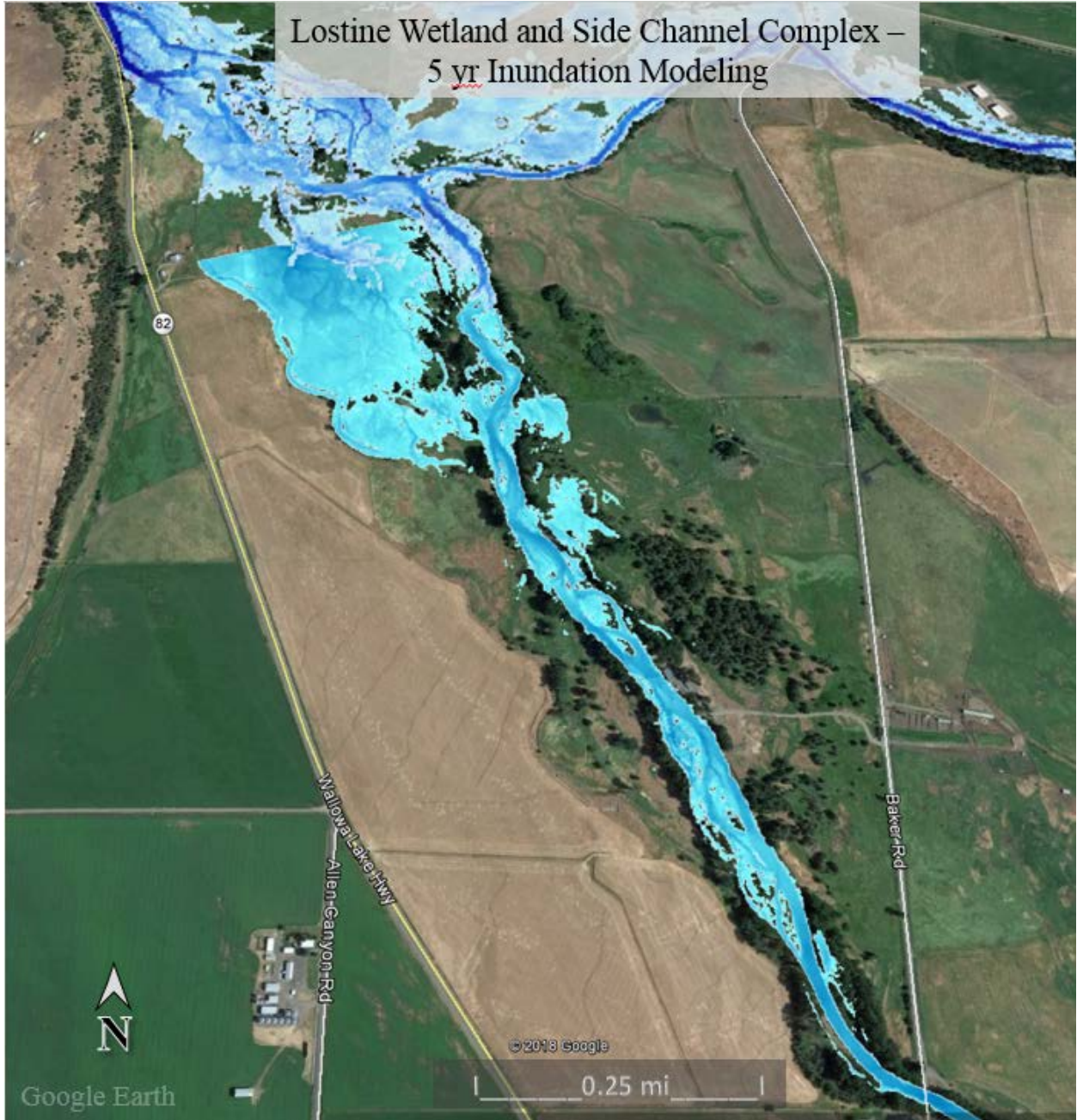
0 1.25 2.5 5 Miles

Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, iNaturalist P Corp.

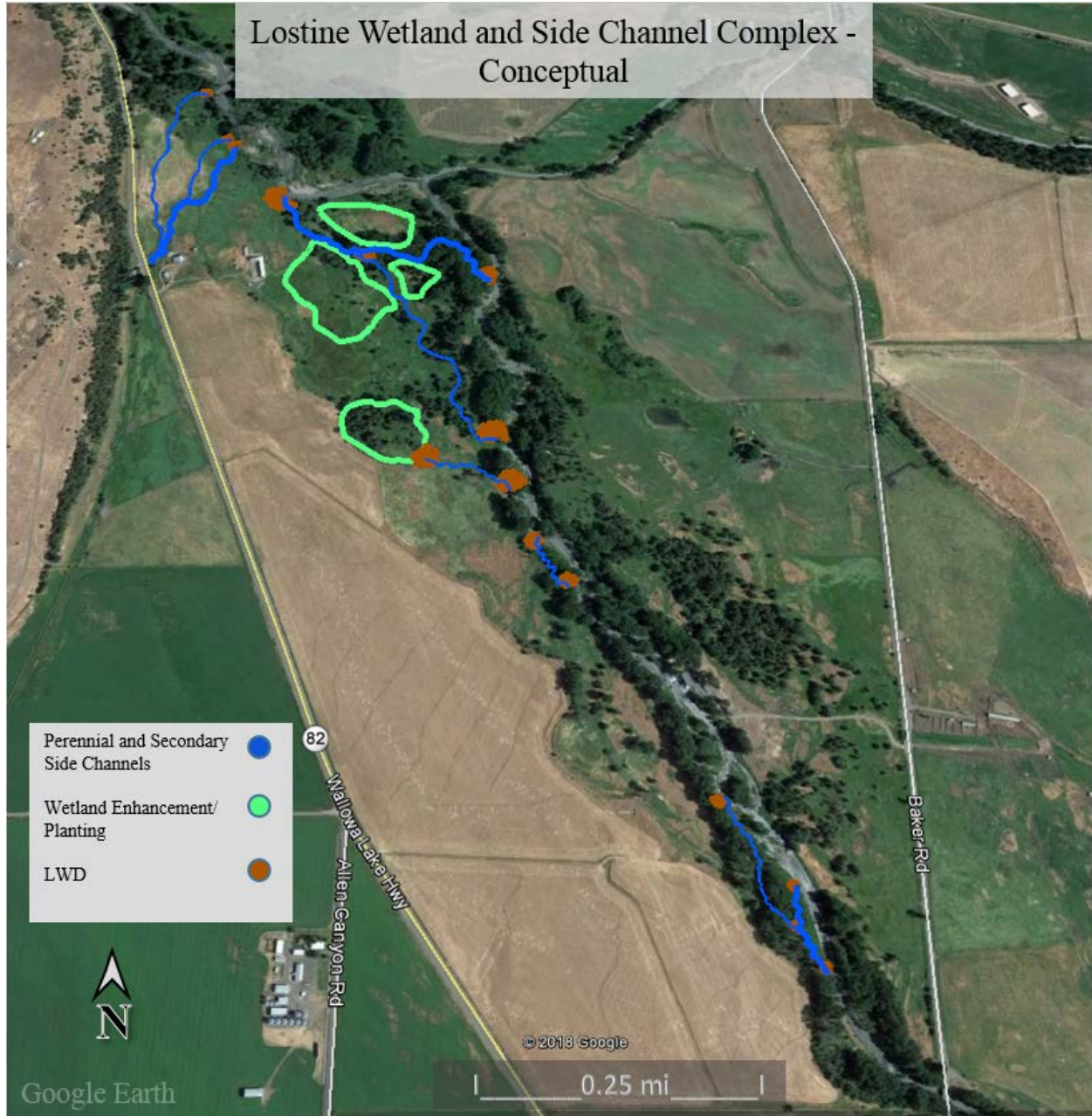
# Wolfe Farm Conservation Easements



Lostine Wetland and Side Channel Complex –  
5 yr Inundation Modeling



# Lostine Wetland and Side Channel Complex - Conceptual



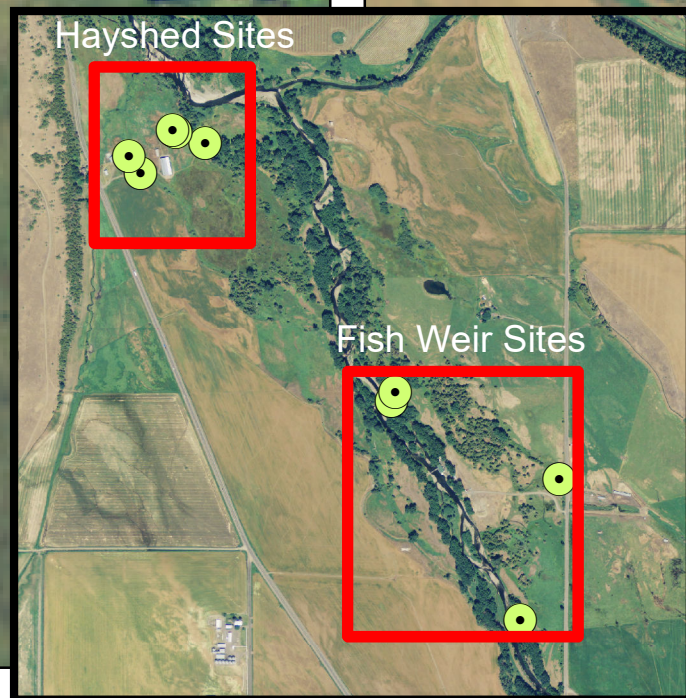


Wallowa Land Trust

# Wolfe Farm Conservation Easement: Columbia Spotted Frog Breeding Sites

## Hayshed Sites

## Fish Weir sites



## Lostine Wetland and Side Channel Complex Site Photos



**Figure 1.** Wetland area located northwest of the hay shed (shown in background) near the downstream-most extent of the project reach.



**Figure 2.** Wetland area located due east of the hay shed near the downstream-most extent of the project reach.



**Figure 3.** Photo of swales populated with wetland vegetation approximately mid-project reach. Lostine River riparian shown in background.



**Figure 4.** Naturally occurring side channel network feeding into the Lostine River located near the top end of the project reach.



**Figure 5.** Looking downstream at the Lostine River and riparian corridor from the upstream-most extent of the project reach. Person on left standing on existing levee.



**Figure 6.** Naturally occurring seasonal side-channel and large woody debris located near confluence at the downstream-most extent of the project reach.



# Match Funding Form

**OWEB accepts all non-OWEB funds as match.** An applicant may NOT use *another OWEB grant* to match an OWEB grant; this includes ODA Weed Board projects because they are funded through OWEB grants. However, an applicant who benefits from a pass-through OWEB agreement with another state agency, by receiving either staff expertise or a grant from that state agency, MAY use those benefits as match for an OWEB grant. (Example: A grantee MAY use as match the effort provided by ODFW restoration biologists because OWEB funding for those positions is the result of a pass-through agreement). At the time of application, match funding for OWEB funds requested does not have to be *secured*, but you must show that **AT LEAST 25% of match funding has been sought**. On this form, you do not necessarily need to show authorized signatures (“secured match”), but the more match that is secured, the stronger the application. Identify the type of match (cash or in-kind), the status of the match (secured or pending), and either a dollar amount or a dollar value (based on local market rates) of the in-kind contribution. In the table below, the match may be identified as Effectiveness Monitoring (EM), Plant Establishment (PE) or Other (OTHER) Dollar Value. **If you are not requesting funds from OWEB to support effectiveness monitoring or plant establishment, disregard the EM column or the PE column and use only the OTHER column.**

**Effectiveness Monitoring (EM):** If you are requesting more than \$3,500 in OWEB funds to support Effectiveness Monitoring activities as part of a Watershed Restoration Grant Application AND filling out information for Question R17, you must include matching funds which will be used as match for the effectiveness monitoring portion of the project. This is identified in the table below as the EM Dollar Value.

**Plant Establishment (PE):** If you are requesting more than \$3,500 in OWEB funds to support Plant Establishment as part of a Watershed Restoration Grant Application AND filling out information for Question R18, you must include matching funds which will be used as match for the Plant Establishment portion of the application. This is identified in the table below as the PE Dollar Value.

More information about match is contained in OWEB’s guidance entitled “Budget Categories: Definitions and Policy” available at: <http://www.oregon.gov/OWEB/forms/2017-Budget-Categories-Defs.pdf> If you have questions about the eligibility of certain match, contact OWEB’s Acquisitions Coordinator (contact information available in the instructions to this application).

Project Name: Lostine Wetland and Side Channel Complex

Applicant: Nez Perce Tribe

Match Funding Source	Type (V one)	Status (V one)**	EM Dollar Value	PE Dollar Value	OTHER Dollar Value	Match Funding Source Signature/Date**
Nez Perce Tribe	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> pending			\$12,015.00	<i>K. Thayer 5/3/18</i>
Grande Ronde Model Watershed	<input checked="" type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> pending			\$25,000.00	<i>R. Chy Math For Jeff Overson 5/3/18</i>
Grande Ronde Model Watershed	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input checked="" type="checkbox"/> secured <input type="checkbox"/> pending			\$1,800	<i>R. Chy Math For Jeff Overson 5/3/18</i>
Bonneville Power Administration	<input type="checkbox"/> cash <input checked="" type="checkbox"/> in kind	<input type="checkbox"/> secured <input checked="" type="checkbox"/> pending			\$3,000.00	
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> pending				
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> pending				
	<input type="checkbox"/> cash <input type="checkbox"/> in kind	<input type="checkbox"/> secured <input type="checkbox"/> pending				

Table 1. Match Table.

**\*\* IMPORTANT:** If you checked the “Secured” box in the Status Column for any match funding source, you must provide EITHER the signature of an authorized representative of the match source in the final Column, OR attach a letter of support from the match funding source that specifically mentions the dollar amount you show in the EM, PE, or OTHER Dollar Value Column(s).