

# Aquatic Resource Delineation Report – Two Rivers Joslyn Site - Priest River, Idaho

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Draft



Prepared for:  
Idaho Department of Environmental Quality

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**Alta**  
Science & Engineering, Inc.

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## Acronyms and Abbreviations

Alta	Alta Science & Engineering, Inc.
APE	Area of Potential Effects
FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
NWPL	National Wetland Plant List
OHWM	Ordinary High Water Mark
PEM	Palustrine Emergent
PSS	Palustrine Scrub-Shrub
SFHA	Special Flood Hazard Area
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WETS	NRCS Climate Analysis for Wetlands Tables



## Executive Summary

The City of Priest River entered Idaho Department of Environmental Quality's (IDEQ) Brownfield program to conduct All Appropriate Inquiry in compliance with the Code of Federal Regulations, per 40 CFR Part 312 prior to acquiring the property from Joslyn Manufacturing, Inc. in 2021. The City prepared the Joslyn Park Master Plan (Welch Comer 2023) in order to develop the site into a sustainable multi-use community park. A primary objective of the Master Plan is to stabilize the site's shoreline and restore environmental quality by reducing sediment loading and loss of riparian wetland areas along the confluence of the Priest and Pend Oreille rivers and provide wide-spread recreational use of the property by the general public. Construction of bank stabilization measures will include installation of riprap along approximately 3350 feet of shoreline.

The ordinary high water mark (OHWM) delineation was conducted using the appropriate OHWM characteristics, as defined in 33 CFR § 328.3(e) and 33 CFR § 329.11(a)(1), and guided by the United States Army Corps of Engineers (USACE) Regulatory Guidance Letter 05-05 (USACE 2005), A Field Guide to the Identification of the Ordinary High-Water Mark in the Arid West Region of the United States (USACE 2008), and the Interim Draft of the National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (USACE 2022). 3550 linear feet of OHWM was delineated during the field assessment and was identified by breaks in slope, distinctive vegetation changes, and sediment patterns.

The wetland delineation was conducted by Tetra Tech, Inc. in 2023 and 2024 in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Western Mountains Valleys and Coast Region Supplement (USACE 2010). Hydrophytic vegetation, wetland soils, and wetland hydrology were observed in three wetlands types; PEM1C, PSS1C, and PFO1A. Total acreage of the wetlands in the study area amounts to 3.89 acres.

Based on the engineering design, 0.098 acres of wetland will be filled by riprap and 2425 cubic yards of riprap will be installed below the OHWM along the 3350 linear feet stretch.



## Section 1 Introduction

The City of Priest River entered Idaho Department of Environmental Quality's (IDEQ) Brownfield program to conduct All Appropriate Inquiry in compliance with the Code of Federal Regulations, per 40 CFR Part 312 prior to acquiring the property from Joslyn Manufacturing, Inc. in 2021. The City prepared the Joslyn Park Master Plan (Welch Comer 2023) in order to develop the site into a sustainable multi-use community park. A primary objective of the Master Plan is to stabilize the site's shoreline and restore environmental quality by reducing sediment loading and loss of riparian wetland areas along the confluence of the Priest and Pend Oreille rivers and provide wide-spread recreational use of the property by the general public. Construction of bank stabilization measures will include installation of riprap along approximately 3200 feet of shoreline. In order to provide documentation of potential impacts below the ordinary high water mark (OHWM), on April 10, 2025, Alta Science & Engineering, Inc. (Alta) conducted a field assessment at the proposed site of bank stabilization to delineate the OHWM and confirm previously delineated wetland boundaries (Tetra Tech, Inc. 2024). This report provides documentation to complete the permitting process for this streambank stabilization project.

### 1.1 Contact Information

Contact information for the applicant, property owner(s), and agent(s) are below.

#### **Applicant/Owner:**

Steve Gill  
Brownfields Coordinator  
Idaho Department of Environmental Quality  
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### 1.2 Project Location

The Two Rivers/Joslyn project is located at the confluence of the Priest and Pend Oreille rivers in Priest River, Idaho from the Bonner Park West Boat Ramp on the west to the Priest River Bridge to the east. The APE is 14.76 acres, and the approximate center point of the study area is located at 48.175106°N, - 116.897216°W. The location map (Appendix A) shows the APE extent.



## Section 2 Methods

The following section describes methodology used to delineate wetlands and the ordinary high-water mark (OHWM) in the APE.

### 2.1 Wetland Delineation

A wetland delineation was performed by Tetra Tech, Inc. in 2023 within the boundaries of the site (Tetra Tech, Inc. 2024) and the report is included in Appendix B. The Tetra Tech, Inc. wetland delineation was performed in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and the Western Mountains Valleys and Coast Region Supplement (USACE 2010). Two wetlands were recorded in the existing APE during the delineation in 2023 and were recorded as Wetland A and Wetland B. Wetland A occurs along the Pend Oreille River and Wetland B is a small, isolated wetland occurring north of Wetland A.

During the April 10, 2025, field assessment, Tom Jenkins of Alta who is trained in wetland delineation with 11 years of wetland delineation, mitigation, and permitting experience, conducted a rapid assessment of wetland boundaries previously delineated within the APE by Tetra Tech, Inc. in 2023. Geospatial data from the previous delineation was provided to Alta and imported into field a GPS device capable of sub-meter accuracy. Delineated wetland boundaries and data plots were walked and examined in the field to determine whether any visible shifts in vegetation, hydrology, or geomorphic position had occurred since the prior delineation in 2023.

In addition to confirming boundaries of the 2023 Tetra Tech, Inc. delineation, Alta personnel walked the extent of the APE and visually inspected it for wetland criteria. Results of this assessment are included in Section 4.

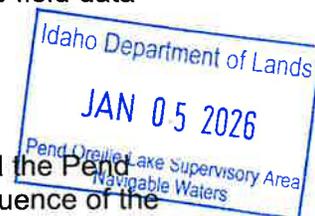
### 2.2 Ordinary High Water Mark Delineation

The OHWM delineation was conducted using the appropriate OHWM characteristics, as defined in 33 CFR § 328.3(e) and 33 CFR § 329.11(a)(1), and guided by the USACE Regulatory Guidance Letter 05-05 (USACE 2005), A Field Guide to the Identification of the Ordinary High-Water Mark in the Arid West Region of the United States (USACE 2008), and the Interim Draft of the National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams (USACE 2022).

OHWM boundaries were determined by discoloration of the pier adjacent to marina and distinctive breaks in slope, vegetation changes, and sediment patterns. Points along the OHWM boundary were collected with GPS equipment capable of sub-meter accuracy. The OHWM was obvious in most places along the eroding banks and appeared accurate in comparison with aerial imagery collected during the desktop analysis portion of the assessment. The field data sheet for OHWM delineation is included in Appendix C.

## Section 3 Existing Conditions

The shoreline of the project site is situated at the confluence of the Priest River and the Pend Oreille River (Figure 2). The shoreline experiences accelerated erosion at the confluence of the two rivers. Both rivers are controlled by the Albeni Falls Dam approximately 4.75 river miles west of the APE. Pool (May through September) and drawdown levels (October through April) cause unnatural seasonal water level fluctuations of more than 12 feet and increase the complexity of the shoreline's erosion. The site shoreline is particularly vulnerable to shear forces exerted by the flow dynamics of the two converging rivers. These forces promote lateral



displacement in the site's silty sediment. Historical imagery illustrates the shifts in sediment along the shoreline of the site and highlights areas sensitive to the behaviors of the Priest and Pend Oreille Rivers.

Project elevations range from approximately 2,060 feet above sea level (amsl) at the exposed shoreline during low water periods to 2,080 amsl in the northern portion adjacent to the BNSF Railroad (see supplementary maps [Appendix B] for USGS topographic map). The area has an average annual precipitation of 31.43 inches (see supplementary data [Appendix C] for NRCS WETS table data). According to NRCS WETS table data (NRCS 2025b), the growing season in the area is typically from early May to late September when using a surface temperature threshold of 28°F. Field investigation occurred prior to the growing season. Climatic and hydrologic conditions were typical for the time of year.

FEMA floodplain mapping indicates the confluence of Priest and Pend Oreille rivers is a regulatory floodway (see supplementary maps [Appendix B] for NFHL map). The majority of the APE is within the floodway boundary, and the remaining area is within the 100-year floodplain. The entire APE is designated as a Zone AE Special Flood Hazard Area (SFHA) (FEMA 2025).

Vegetative community types include a mosaic of mixed conifer and deciduous forests in the predominantly flat floodplain valley, intermixed with upland and wet meadows. Native trees and shrubs are abundant throughout the undeveloped portions of the floodplain while the herbaceous layers in the meadows and understory are dominated by non-native grasses and forbs. A more detailed description of vegetation species occurring onsite is included in the wetland report in the Tetra Tech report in Appendix C and Section 4.7 below. Apart from the parking areas of Bonner Park West in the western portion of the APE, the remaining area is undeveloped forestland and upland and wet meadows.

Multiple land use occurs within the Action Area. The area northwest of the APE is primarily comprised of urban development within the limits of the City of Priest River and industrial development on the outskirts. Across the river South of the City of Priest River is the Laclede Mill, a sawmill operated by Idaho Forest Group. Logging on the forested hillsides has occurred over the past century south of Pend Oreille River. Northwest of the APE is the U.S. Army Corps of Engineers Priest River Recreation Area and a restored wetlands site in partnership with the Valencia Wetland Trust. The Pend Oreille Valley Railroad that connects to the Burlington Northern Sante Fe (BNSF) in Sandpoint runs east/west north of the APE. Historical changes that have occurred include construction of the Albeni Falls Dam completed in 1955.

## Section 4 Aquatic Resources

Based on results of the assessment three types of aquatic resources occur within the APE: palustrine emergent wetlands, palustrine scrub shrub wetlands, and the Priest and Pend Oreille Rivers. A small 0.02 acre palustrine forested wetland occurs north of the APE. Cowardin classifications of each aquatic resource are described in the following sections along with description of how boundaries were mapped. A map of all delineated aquatic resources is included as Appendix D.

### 4.1 Wetlands

The total wetland area within the APE, as delineated by Tetra Tech, Inc. in 2023 and confirmed by Alta in 2025, is approximately 3.87 acres. Alta found these acreages to be accurate based on observations made in the field on April 10, 2025. Predominant wetland vegetation within wetland such as cattails (*Typha latifolia*) and reed canary grass (*Phalaris arundinacea*) in Wetland A were visible outside the growing season in dormant growing

conditions and surface water was present in Wetland B during the April 10, 2025, site assessment.

Classification of wetland types differed for Wetland A from the April 10, 2025, assessment compared to the 2023 Tetra Tech, Inc. assessment differed slightly. The western portion of Wetland A is predominantly comprised of emergent vegetation with little to no presence of shrubs. This wetland type is PEM1C; palustrine, emergent persistent, seasonally flooded. Photos 18 through 20 in Appendix E show the vegetation composition in the PEM1C wetlands and the figure in Appendix D shows the location and extent of PEM1C wetlands. The remaining wetland acreage is predominately comprised of PSS1C (palustrine, scrub-shrub, deciduous, seasonally flooded) wetlands as described in the Tetra Tech, Inc. wetland report (Tetra Tech, Inc. 2024). This differs from the PFO1C wetlands mapped in the U.S. Fish and Wildlife Service Wetland Mapper (USFWS 2025), however, PFO1C is characterized by a dominance of woody vegetation 6 meters or taller. Aside from the central stand of balsam poplar (*Populus balsamifera*), the remaining woody vegetation is far less than 6 meters in height. Tetra Tech's wetland delineation report is included in Appendix F.

Wetland A is bound by the Pend Oreille River to the south and an elevation contour that slopes up to north surrounding the northern boundary of the wetland. Evidence of hydrology was observed in Wetland A with matted vegetation, evidence of ponding, and a network of drainage patterns within the PEM1C wetlands.

## 4.2 Priest and Pend Oreille Rivers

Priest and Pend Oreille Rivers are classified as deepwater habitat L1UBH; lacustrine, limnetic, unconsolidated bottom, and permanently flooded; both lower perennial rivers. Pend Oreille River is flood controlled by Albeni Falls Dam. During summer pool, backwater of the Pend Oreille River influences water levels of Priest River at the confluence. Priest River flows south from Priest Lake approximately 44 river miles before the confluence of the Pend Oreille River. A contributing subsurface seep and stormwater outfall were observed and recorded in the field. These features are included in the figure in Appendix D with photos in Appendix E and described in further detail in sections below.

The delineated OHWM within the APE equals 3349.61 linear feet. The OHWM was delineated through the APE with clear OHWM characteristics, including discoloration of the pier adjacent to marina and changes in sediment, vegetation, and slope along the shoreline for the remainder of the APE. Supporting photos are included in the Appendix E.

## 4.3 Seep

One seep was observed emanating from the eroding bank east of the marina below the OHWM. No OHWM characteristics were observed apart from rills caused by sheet flow over the fine silts and sands of the exposed shoreline. This location is called out in the figure in Appendix D and photos of the seep are included in Appendix E.

## 4.4 Wastewater Outfall

The City of Priest River Wastewater Treatment Plant is located northwest of the APE between Highway 2 and the BNSF Railroad. Treated effluent from the plant flows into a wetland that was delineated as part of the Tetra Tech, Inc. 2023 wetland delineation. From the southern end of this wetland, hydrology flows south subsurface through a culvert between the wetland and the railroad towards the APE ultimately draining to Pend Oreille River. Photos (24 & 25) of the

wastewater outfall are included in Appendix E and location is called out in the figure in Appendix D. Personal communication with Alta and IDEQ indicates the outfall flows during all periods when exposed during low water levels (Gill 2025).

The culvert from the wetlands north of the APE runs below the railroad and is aligned north to south from the railroad to the outfall into Pend Oreille River (Photo 28 in Appendix E). At the time of the site assessment, the culvert was in disrepair and exposed in multiple locations visible along the alignment. Plans are in place to repair/replace the culvert.

#### 4.5 Aquatic Resources Table

Table 1 summarizes all aquatic resources within or adjacent to the APE.

**Table 1. Aquatic Resources Within the APE**

Aquatic Resource Name	Aquatic Resource Classification		Aquatic Resource Size <sup>(a)</sup> (acres)	Aquatic Resource Length <sup>(b)</sup> (Linear Feet)
	Cowardin	Location (lat/long)		
Pend Oreille/Priest River	Riverine Lower Perennial; L1UBH	48.175106° -116.897216°	NA	3,550
Wetland	PEM1C	48.175626° -116.898593°	1.21	NA
Wetland	PSS1C	48.175273° -116.896903°	2.72	NA
Wetland*	PFO1A*	48.176124° -116.897056°	0.02*	NA
Total			3.87	3,350

(a) Area listed for all aquatic resource features.

(b) Length listed for rivers/OHWM only.

\* The PF01A wetland is outside of the APE and not included in the total acreage but was included in the Study Area.

#### 4.6 Hydrology

The Project Area is within Hydraulic Unit Code (HUC) 170102140405 Albeni Falls Dam-Pend Oreille River. The Pend Oreille River flows west towards Albeni Falls Dam in the southern portion of the APE while the Priest River flows south along the eastern boundary of the APE until it meets with the Pend Oreille River. Both river systems are part of the Columbia River basin.

Wetlands within the APE primarily receive hydrology from groundwater and overbank flow during high water periods; both associated to Priest and Pend Oreille River. There is a seep located between the marina and the stormwater outfall that was flowing during the site assessment on April 10, 2025. The stormwater outfall flows during all months it is visible not inundated by Pend Oreille River during high water levels from May to October.



The streambank and OHWM are heavily eroded in most places with roots of remaining conifers, deciduous shrubs and trees, and deep rooted rhizomatic grasses and forbs holding remaining soil in place. Photos 2 through 17 in the Appendix E clearly show evidence of substantial streambank erosion.

#### 4.7 Vegetation

Vegetative community types within the APE include a mosaic of mixed conifer and deciduous forest intermixed with upland and wet meadows. Dominant conifer species include ponderosa pine (*Pinus ponderosa*), grand fir (*Abies grandis*), Douglas fir (*Pseudotsuga menziesii*), lodgepole pine (*Pinus contorta*), and western hemlock (*Tsuga heterophylla*). Common deciduous species include cottonwood/balsam poplar (*Populus balsamifera*), thinleaf alder (*Alnus incana*), red alder (*Alnus rubra*), Douglas hawthorne (*Crataegus douglasii*), paper birch (*Betula papyrifera*) and various willow species (*Salix spp.*). Common shrubs throughout the APE include red osier dogwood (*Cornus sericea*), snowberry (*Symphoricarpos albus*), and rose spirea (*Spiraea douglasii*) along with sapling/shrub varieties of the deciduous tree species listed above. Dominant forbs and grasses in the wetland/meadow areas include reed canary grass (*Phalaris arundinacea*) and cattail (*Typha latifolia*). Forbs and grasses common in the forested and upland meadows include orchard grass (*Dactylis glomerata*), quackgrass (*Elymus repens*), common tansy (*Tanacetum vulgare*), clover species (*Trifolium spp.*).

Upland species are common on the eroding banks from the marina to the wetlands and many ponderosa pine trees remain the only vegetation stabilizing the cut-banks while generally shallow-rooted herbaceous vegetation such as Timothy grass and annual forbs comprise the remaining vegetation composition apart from a few alder shrubs.

#### 4.8 Soils

The USDA NRCS Web Soil Survey indicates the presence of Mission silt loams (Map unit symbol 31) and Wrencoe silty clay (Map unit symbol 64) in the APE (NRCS 2025a). Mission silt loams make up the majority of the west and northern portion of the APE in the forested and developed portions of the site. Wrencoe silty clay makes up the point of confluence of the Priest and Pend Oreille Rivers likely the result of sediment deposition from the rivers. Both Mission silt loams and Wrencoe silty clay are listed as a state hydric soil (NRCS 2025c). Soils data from the Tetra Tech, Inc. wetland delineation are included in Appendix B.

### Section 5 References

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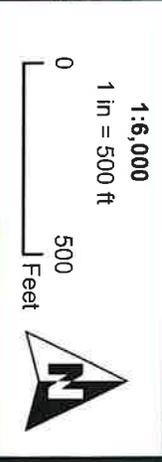


**Appendix A**  
**Location Map**

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters



Maple Lifescore, Ltd Community Maps Contribution  
 Aerial Imagery by GeoTechnics, Inc. (GTI/NT)



PRINT DATE  
 PROJECT NUMBER  
 24076.005.001

PROJECTION  
 PROJECT MANAGER  
 CARTOGRAPHER  
 NAD83  
 Derek Forsell  
 M. Wood

PROJECT NAME  
**IDEQ  
 Two Rivers Park**

FIGURE 1

# Project Location

JAN 05 2026  
 Pend Oreille Lake Supervisory Area  
 Navigable Waters

**Appendix B**  
**Supplementary Maps**

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters



U.S. Fish and Wildlife Service

# National Wetlands Inventory

## NWI Wetland Map\_ Two Rivers



May 23, 2025

### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

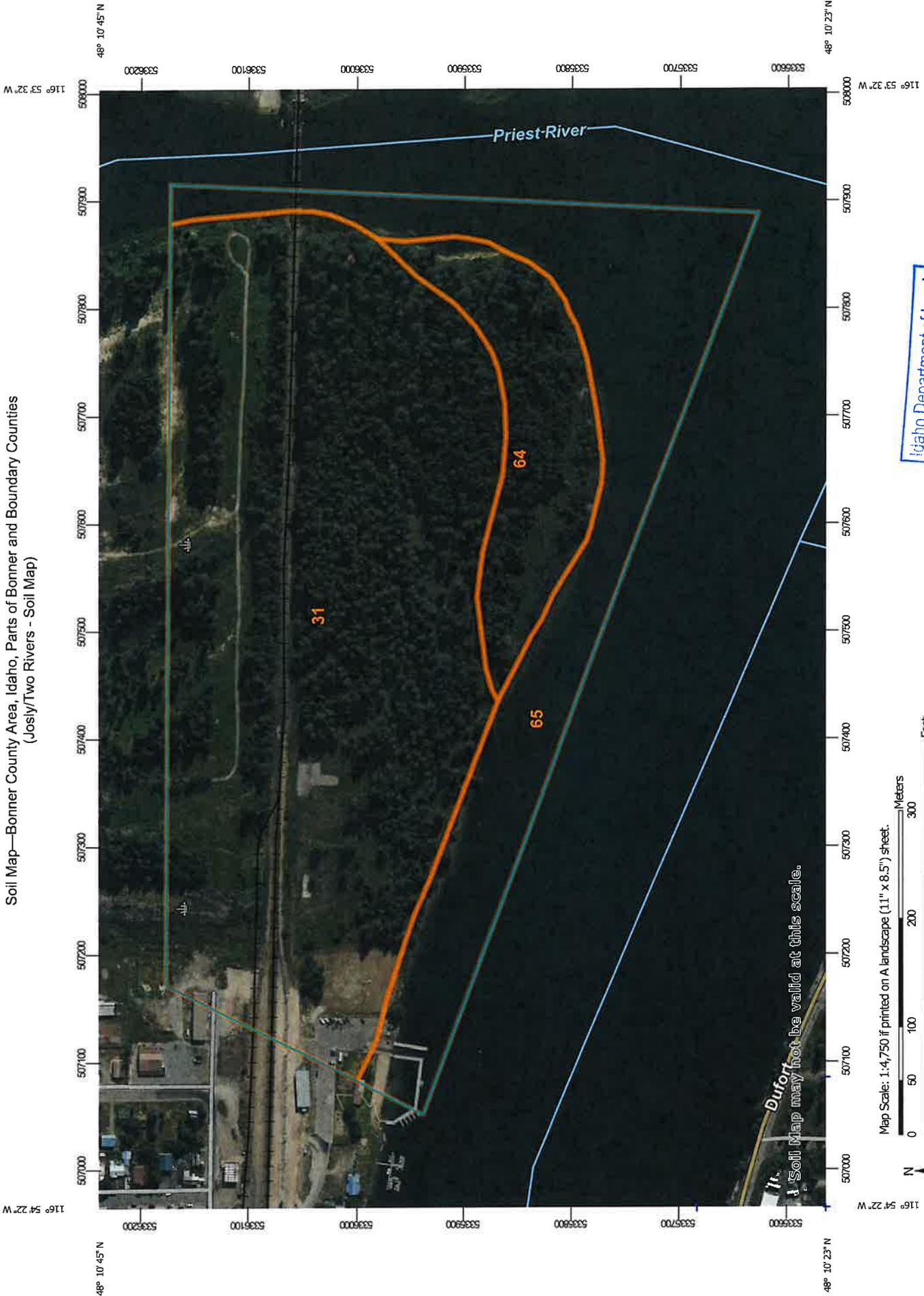
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Idaho Department of Lands  
 JAN 05 2026  
 Pend Oreille Lake Supervisory Area  
 Navigable Waters

Soil Map—Bonner County Area, Idaho, Parts of Bonner and Boundary Counties  
(Josly/Two Rivers - Soil Map)



Map Scale: 1:4,750 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters

## MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Streams and Canals
 Borrow Pit	 Transportation
 Clay Spot	 Rails
 Closed Depression	 Interstate Highways
 Gravel Pit	 US Routes
 Gravelly Spot	 Major Roads
 Landfill	 Local Roads
 Lava Flow	 Background
 Marsh or swamp	 Aerial Photography
 Mine or Quarry	
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bonner County Area, Idaho, Parts of Bonner and Boundary Counties  
Survey Area Data: Version 20, Aug 22, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 14, 2023—Aug 13, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Idaho Department of Lands

JAN 05 2026

Pend Oreille Lake Supervisory Area  
Navigable Waters

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
31	Mission silt loam, 0 to 2 percent slopes	50.8	63.7%
64	Wrencoe silty clay, 0 to 2 percent slopes	8.6	10.8%
65	Water	20.4	25.6%
<b>Totals for Area of Interest</b>		<b>79.8</b>	<b>100.0%</b>





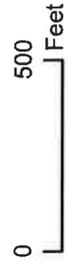
Area of Potential Effects (APE)

**Legend**

- APE
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- 0.2% Annual Chance Flood Hazard
- SFHA/Flood Zone Boundary

Source: Federal Emergency Management Agency (FEMA), 2025.  
National Flood Hazard Layer (NFHL)

1:6,000  
1 in = 500 ft



Idaho Department of Lands

JAN 05 2026

Pend Oreille Lake Supervisory Area  
Navigable Waters

PROJECT NAME

**IDEQ**  
**Two Rivers Park**

PROJECTION NAD83

PROJECT MANAGER  
Derek Forseith

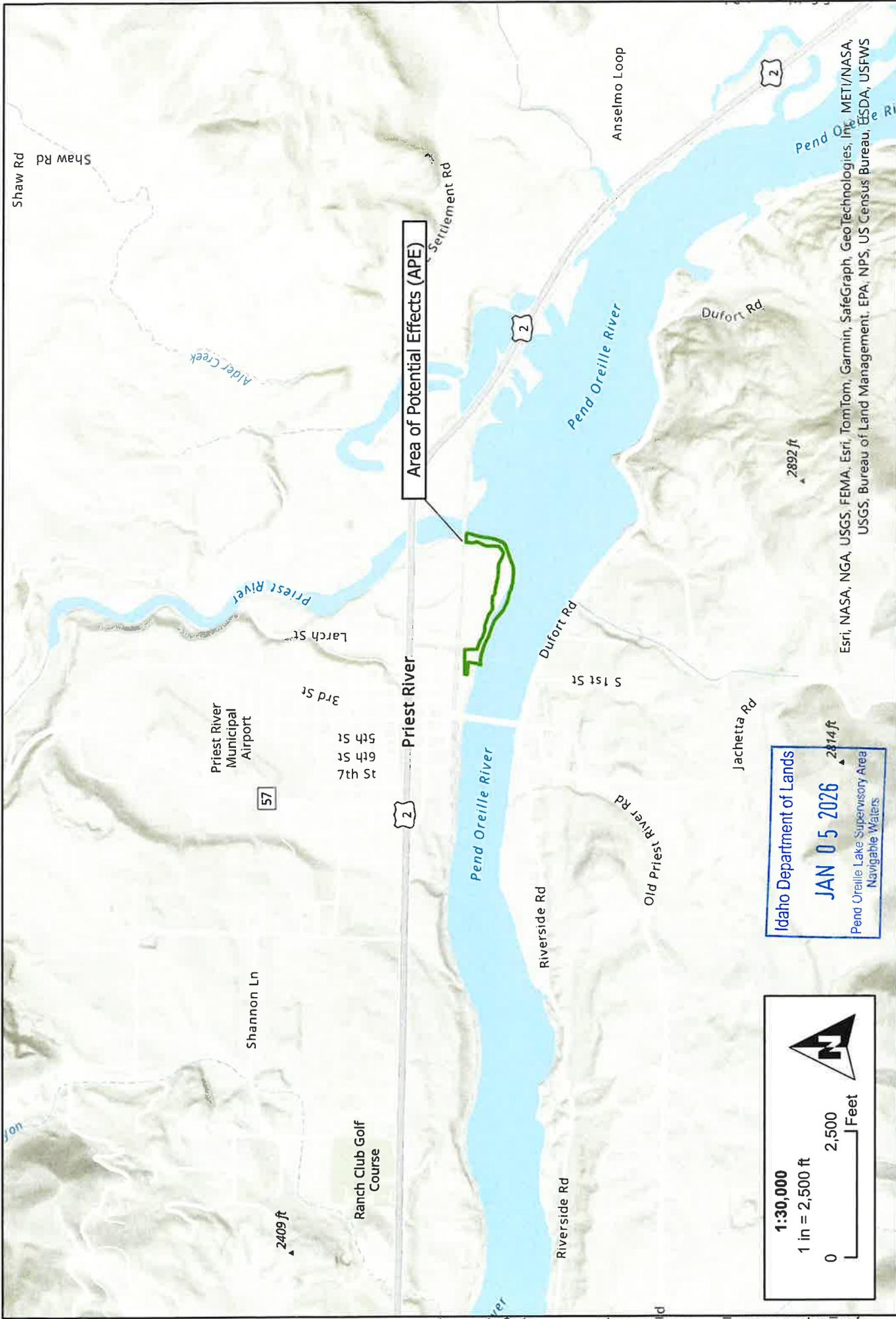
CARTOGRAPHER  
M. Wood

PRINT DATE

PROJECT NUMBER  
24076.005.001



**Special Flood Hazard Area**



Area of Potential Effects (APE)

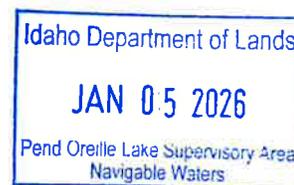
Idaho Department of Lands  
 JAN 05 2026  
 Pend Oreille Lake Supervisory Area  
 Navigable Waters

1:30,000  
 1 in = 2,500 ft  
 0 2,500 Feet

Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, ESDA, USFWS

	PRINT DATE	24076.005.001
	PROJECT NUMBER	24076.005.001
PROJECT NAME	<b>IDEQ</b> <b>Two Rivers Park</b>	
PROJECTION	NAD83	
PROJECT MANAGER	Derek Forseith	
CARTOGRAPHER	M. Wood	
<h1>USGS Topographic Map</h1>		

**Appendix C**  
**Supplementary Data**



**U.S. Army Corps of Engineers (USACE)  
 RAPID ORDINARY HIGH WATER MARK  
 (OHWM) FIELD IDENTIFICATION DATA SHEET**  
 The proponent agency is Headquarters USACE CECW-COR.

*Form Approved -  
 OMB No. 0710-0024  
 Expires: 2027-09-30*

**The Agency Disclosure Notice (ADN)**

The Public reporting burden for this collection of information, 0710-0024, is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at [whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil](mailto:whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

Project ID #: 24076      Site Name: Two Rivers Park      Date and Time: 04/11/2025 11:00am

Location (lat/long): 48° 10' 35"N / 116°53'50"W      Investigator(s): Tom Jenkins, Kate Dezi

**Step 1 Site overview from remote and online resources.**  
 Check boxes for online resources used to evaluate site:

gage data     LIDAR     geologic maps  
 climatic data     satellite imagery     land use maps  
 aerial photos     topographic maps     Other: \_\_\_\_\_

**Describe land use and flow conditions from online resources.**  
 Were there any recent extreme events (floods or drought)?  
**Municipal land use, owned by the City of Priest River. No recent extreme events.**

**Step 2 Site conditions during field assessment.** First look for changes in channel shape, depositional and erosional features, and changes in vegetation and sediment type, size, density, and distribution. Make note of natural or human-made disturbances that would affect flow and channel form, such as bridges, riprap, landslides, rockfalls, etc.  
**Two Rivers Park is located roughly five miles upstream of Albeni Falls Dam and is positioned at the confluence of Priest River and Pend Oreille River. The east facing shoreline begins at the POVA Priest River Bridge and continues downstream where it ends at the mouth of Priest River.**

**Step 3 Mark the boxes next to the indicators used to help identify the location of the OHWM.**  
 OHWM is at a transition point, therefore some indicators used to identify the location of the OHWM may be just below or above the OHWM. Make a slash in boxes next to indicators that are helpful in identifying the OHWM. After the initial assessment, those indicators identified at the OHWM elevation should be changed from slashes to x's. Note, it is not necessary to mark indicators that are present but do not help inform identification of the OHWM.  
 Go to page 2 to describe overall rationale for location of OHWM, write any additional observations, and attach a photo log.

**Geomorphic indicators**

Break in slope  
 on the bank  
 undercut bank  
 valley bottom  
 Other: \_\_\_\_\_

Shelving  
 shelf at top of bank  
 natural levee  
 human-made berms or levees  
 other berms: \_\_\_\_\_

Secondary channels

**Channel bar**  
 shelving (berms) on bar  
 unvegetated  
 vegetation transition (go to veg. indicators)  
 sediment transition (go to sed. indicators)  
 upper limit of deposition on bar

**Instream bedforms and other bedload transport evidence**  
 deposition bedload indicators (e.g., imbricated clasts, gravel sheets, etc.)  
 bedforms (e.g., pools, riffles, steps, etc.)  
 Weathered clasts or bedrock  
 erosional bedload indicators (e.g., obstacle marks, scour, smoothing, etc.)

**Sediment indicators**

Soil development  
 Changes in character of soil  
 Mudcracks  
 Changes in particle-sized distribution  
 transition from silt to clay  
 upper limit of sand-sized particles  
 silt deposits

**Vegetation indicators** (Consider the vegetation transition looking from the middle of the channel, up the banks, and into the floodplain)

Change in vegetation type from \_\_\_\_\_ to \_\_\_\_\_  
 Change in density of vegetation  
 Exposed roots below intact soil layer     Vegetation matted down and/or bent  
 Other vegetation observations  
**Vegetation transitioned from bare banks to grassy to woody.**

**Other physical indicators**

Sediment deposited on vegetation or structures  
 Wracking/presence of organic litter  
 Presence of large wood  
 Leaf litter disturbed or washed away  
 Water staining

**Other observed indicators? Describe:**  
**Evidence of sediment deposition at different stages of Albeni Falls Dam drawdown on shoreline.**





Print Form

Save As

**OHWM Field Identification Data Sheet Instructions and Field Procedure**

**Step 1 Site overview from remote and online resources (Chapter 5)** **Complete Step 1 prior to site visit.**

**Online Resources:** Identify what information is available for the site. Check boxes on data sheet next to the resources used to assess this site.

- a. gage data
- b. aerial photos
- c. satellite imagery
- d. LiDAR
- e. topographic maps
- f. geologic maps
- g. land use maps
- h. climatic data (precipitation and temperature)

**Landscape context:** Use the online resources to put the site in the context of the surrounding landscape. (Chapter 4)

- a. Note on the data sheet under Step 1:
- i. Overall land use and change if known
  - ii. Recent extreme events if known (e.g., flood, drought, landslides, debris flows, wildfires)
  - iii. Erosional and depositional environments
- b. Consider the following to inform weighting of evidence observed during field visit.
- i. What physical characteristics are likely to be observed in specific environments?
  - ii. Was there a recent flood or drought? Are you expecting to see recently formed or obscured indicators?
  - iii. How will land use affect specific stream characteristics? How natural is the hydrologic regime? How stable has the landscape been over the last year, decade, century?

**Step 2 Site conditions during the field assessment (assemble evidence) (Chapter 1 and 3)**

- a. Identify the assessment area.
- b. Walk up and down the assessment area noting all the potential OHWM indicators.
- c. Note broad trends in channel shape, vegetation, and sediment characteristics.
  - i. Is this a single thread or multi-thread system? Is this a stream-wetland complex?
  - ii. Are there any secondary and/or floodplain channels?
  - iii. Are there obvious human-made alterations to the system?
  - iv. Are there man-made (e.g., bridges, dams, culverts) or natural structures (e.g., bedrock outcrops, Large Wood jams) that will influence or control flow?
- d. Look for signs of recurring fluvial action.
  - i. Where does the flow converge on the landscape?
  - ii. Are there signs of fluvial action (sediment sorting, bedforms, etc.) at the convergence zone?
- e. Look for indicators on both banks. If the opposite bank is not accessible, then look across the channel at the bank.
- f. In Step 2 of the data sheet, describe any adjacent land use or flow conditions that may influence interpretation of each line of evidence.
  - i. What land use and flow conditions may be affecting your ability to observe indicators at the site?
  - ii. What recent extreme events may have caused changes to the site and affected your ability to observe indicators?

**Step 3a List evidence (Chapter 2 and 3)**

Assemble evidence by marking each box with a slash next to each line of evidence.

If using fillable form, then follow the instructions for filing in the fillable form.

*Context is important when assembling evidence. For instance, pool development may be an indicator of interest on the bed of a dry stream, but may not be a useful indicator to take note of in a flowing stream. On the other hand, if the pool is found in a secondary channel adjacent to the main channel, it could provide a line of evidence for a minimum elevation of high flows. Therefore, consider the site context when deciding which indicators provide evidence for identifying the OHWM. Explain reasoning in Step 5.*

**Questions to consider while making observations and listing evidence at a site:**

<p><b>Geomorphic indicators</b></p> <p>Where are the breaks in slope?          Are there identifiable banks?          Is there an easily identifiable top of bank?          Are the banks actively eroding?          Are the banks undercut?          Are the banks armored?          Is the channel confined by the surrounding hillslopes?          Are there natural or man-made berms and levees?          Are there fluvial terraces?          Are there channel bars?</p>	<p><b>Sediment and soil indicators</b></p> <p>Where does evidence of soil formation appear?           Are there mudcracks present?           Is there evidence of sediment sorting by grain size?</p>	<p><b>Vegetation indicators</b></p> <p>Where are the significant transitions in vegetation species, density, and age?           Is there vegetation growing on the channel bed?           If no, how long does it take for the non-tolerant vegetation to establish relative to how often flows occur in the channel?           Where are the significant transitions in vegetation?           Is the vegetation tolerant of flowing water?           Has any vegetation been flattened by flowing water?</p>	<p><b>Other physical indicators</b></p> <p>Is there organic litter present?           Is there any leaf litter disturbed or washed away?           Is there large wood deposition?           Is there evidence of water staining?</p>
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Are the following features of fluvial transport present?

*Evidence of erosion: obstacle marks, scour, armoring*  
*Bedforms: riffles, pools, steps, knickpoints/headcuts*  
*Evidence of deposition: imbricated clasts, gravel sheets, etc.*

In some cases, it may be helpful to explain why an indicator was NOT at the OHWM elevation, but found above or below. It can also be useful to note if specific indicators (e.g., vegetation) are NOT present. For instance, note if the site has no clear vegetation zonation.

**OHWM Field Identification Data Sheet Instructions and Field Procedure**

**Step 3b Weight each line of evidence (Chapter 1 and 3)**

Consider importance of each indicator by assessing the following:

**a. Relevance:**

- i. Is this indicator left by low, high, or extreme flows? Did recent extreme events and/or land use affect this indicator?
- ii. Consider the elevation of the indicator relative to the channel bed. What is the current flow level based on season or nearby gages?
- iii. Consider the elevation of the indicator relative to the current flow. If the stream is currently at baseflow and indicator is adjacent to that, then it is likely a low-flow indicator. The difference between high-and extreme-flow indicators can sometimes be difficult to determine.
- iv. Recent floods may have left many extreme-flow indicators, or temporarily altered channel form. Other resources will likely be needed to support any OHWM identification at this site. Field evidence of the OHWM may have to wait for the site to recover from the recent flood.
- v. Droughts may cause field evidence of OHWM to be obscured because there has been an extended time since the last high-flow event. There can be overgrowth of vegetation or deposition of material from surrounding landscape that can obscure indicators.
- vi. Both human-made (e.g., dams, construction, mining activities, urbanization, agriculture, grazing) and natural (e.g., fires, floods, debris flows, beaver dams) disturbances can alter how indicators are expected to appear at a site. Chapter 6 and Chapter 7 of the OHWM field manual provide specific case-studies that can help in interpreting evidence at these sites.

\*Landscape context from Step 1 (Chapter 4) can help determine the relevance, strength, and reliability of the indicators observed in the field.

\*In Chapter 2 of the OHWM field manual provides information on specific indicators that can assist in putting these in context and determining relevance, strength, and reliability.

**b. Strength:**

- i. Is this indicator persistent across the landscape?
  - 1. Look up and downstream and across the channel to see if you see the same indicator at multiple locations.
  - 2. Does the indicator occur at the same elevation as other indicators?

**c. Reliability:**

- i. Is this indicator persistent on the landscape over time? Will this indicator still persist across seasons?
  - 1. This can be difficult to determine for some indicators and may be specific to climatic region (in terms of persistence of vegetation) and history of land use or other natural disturbances.
  - 2. Chapter 2, Chapter 6, and Chapter 7 of the OHWM field manual describe each indicator in detail and provide examples of areas where indicators are difficult to interpret.

**Step 4 Was additional information used to support identification of the OHWM? Are other resources used to support the lines of evidence observed in the field?**

- a. If additional resources are needed, then repeat steps 3a and 3b for the resources selected in Step 1 of assembling and weighting evidence collected from online resources. Chapter 5 of the OHWM field manual provides information on using online resources.
- b. Any data collected from online tools have strengths and weaknesses. Make sure these are clear when determining relevance, strength, and reliability of the remotely collected data. Clearly describe why other resources were used to support the lines of evidence observed in the field, as well as the relevance, strength, and reliability of the supporting data and/or resources.
- c. Attach any remote data and data analysis to the data sheet.

**Step 5 Describe rationale for location of OHWM: (Chapter 1 and Chapter 3)**

**a. Weigh body of evidence:**

Combine information from Step 3b: Why do the combination of indicators represent the OHWM?

- i. Integrate the lines of evidence (relevance, strength, and reliability) of each indicator.
- ii. Consider which indicators are high value indicators that co-occur along the stream reach. Which indicators are most relevant to identifying high flow elevations, which are most persistent across the landscape, and which are most persistent over time?
- iii. Which indicators that are found above and below the location of the OHWM were helpful in identifying the elevation of the OHWM?
- b. If there is more than one possible location, explain why. Include any relevant discussion on why specific indicators were not included in the final decision.
- c. If needed, add additional site notes on page 2 of the data sheet under Step 5 or attach additional sketches and field observations to the data sheet.
- d. Take photographs of indicators and attach an imagery log using page 2 of data sheet or another method of logging images.
  - i. Annotate images with descriptions of indicators.





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 Pend Oreille  
 Wainwright

1943	3.14	2.09	3.55	2.92	3.15	3.24	0.65	1.19	0.03	0.25	2.97	2.39	29.54
1944	2.48	1.67	0.96	2.55	2.42	3.16	0.40	0.69	1.86	1.49	2.97	2.39	23.04
1945	3.88	2.71	5.99	1.59	3.14	1.83	0.62	0.36	3.15	3.20	4.88	3.70	35.05
1946	4.20	3.57	3.50	3.03	1.11	4.19	0.42	0.41	2.24	2.84	5.53	3.83	34.87
1947	3.64	1.75	2.31	1.84	0.94	4.24	0.47	2.11	2.80	8.31	2.14	2.84	33.39
1948	3.09	4.23	1.56	4.51	5.18	4.92	3.43	0.91	1.06	1.41	5.03	4.10	39.43
1949	0.70	6.53	3.65	1.22	1.65	0.85	0.40	0.62	1.76	3.22	4.79	5.01	30.40
1950	5.58	3.82	5.57	1.70	0.92	3.54	1.26	1.39	0.51	8.12	3.62	4.73	40.76
1951	5.42	3.51	3.28	0.56	1.82	2.31	0.91	0.62	1.78	8.19	3.89	6.62	38.91
1952	5.32	2.14	2.00	1.34	1.04	4.10	0.46	0.22	0.45	0.47	1.25	4.84	23.63
1953	8.31	2.23	2.32	2.47	2.33	2.88	0.09	2.42	0.38	0.89	3.10	4.40	31.82
1954	8.38	3.29	1.92	2.17	1.95	3.31	1.49	2.84	0.89	0.97	3.31	3.61	34.13
1955	2.46	3.33	2.37	4.53	1.60	2.93	2.72	0.01	3.19	5.46	5.75	7.46	41.81
1956	4.99	3.92	3.16	0.47	1.27	2.21	2.06	1.57	0.66	3.68	0.66	4.31	28.96
1957	2.31	5.20	2.53	1.40	4.83	2.30	0.19	1.23	0.64	3.29	2.40	5.37	31.69
1958	4.71	5.57	2.29	3.82	0.61	4.13	0.70	0.90	1.36	1.95	5.47	4.10	35.61
1959	7.57	2.57	2.18	1.99	3.98	1.93	0.21	1.16	4.04	2.77	7.79	3.26	39.45
1960	3.11	2.33	3.84	2.18	4.10	0.97	T	1.81	1.19	2.93	8.58	1.74	32.78
1961	3.58	5.96	3.04	2.23	4.52	1.53	0.90	0.84	0.79	4.05	2.57	6.52	36.53
1962	2.42	1.85	3.36	1.82	4.67	0.60	0.44	0.99	2.92	3.04	6.71	3.89	32.71
1963	1.40	3.43	3.25	3.02	2.03	2.93	1.20	0.43	1.26	2.45	6.11	2.71	30.22
1964	5.12	0.78	3.86	1.25	1.37	2.16	1.50	2.72	2.20	0.50	5.49	6.95	33.90
1965	3.34	3.43	0.36	2.87	1.64	1.35	0.72	2.79	1.00	0.38	4.07	3.76	25.71
1966	5.19	1.18	4.80	0.54	1.46	4.09	1.15	0.92	0.31	1.61	6.65	6.51	34.41
1967	7.93	1.40	4.12	2.12	1.48	2.54	0.26	0.05	0.35	4.79	2.46	3.12	30.62
1968	4.88	4.24	2.41	1.07	1.68	2.17	0.84	3.27	2.39	5.09	4.46	5.84	38.34
1969	6.78	2.06	1.16	3.39	2.89	2.24	0.80	T	2.98	1.55	1.94	4.15	29.94
1970	6.87	3.77	2.17	1.42	1.49	2.06	0.53	0.12	2.20	3.31	2.28	6.07	32.29
1971	4.43	2.54	3.37	2.58	1.78	3.13	0.87	1.84	2.07	1.89	2.98	5.25	32.73
1972	4.23	3.59	2.60	2.43	1.90	3.23	1.34	1.42	1.83	0.78	2.57	5.24	31.16
1973	4.09	1.09	1.71	0.81	2.30	0.61	T	0.47	2.61	2.51	10.46	7.77	34.43
1974	8.26	3.96	3.58	1.98	3.49	0.73	2.19	0.86	0.98	0.18	7.81	5.02	39.04
1975	3.55	4.32	2.61	2.14	1.62	2.31	2.13	2.83	0.33	3.68	2.98	3.76	32.26
1976	2.80	4.50	1.75	2.52	1.98	1.28	0.90	3.66	0.12	0.89	1.36	1.85	23.61

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1977	1.24	1.11	2.28	0.32	2.42	1.02	0.50	2.20	2.21	1.66	2.25	26	
1978	3.62	2.15	1.45	2.53	4.73	1.22	3.41	2.98	1.73	2.25	1.46	25	
1979	1.10	6.45	1.46	2.05	2.44	0.72	1.36	0.84	0.98	2.81	5.64	27	
1980	3.92	3.17	2.65	2.53	2.77	1.72	1.56	1.72	3.32	1.03	6.78	35	
1981	1.09	4.25	1.66	3.20	3.14	4.32	1.96	0.04	1.59	3.02	4.30	31	
1982	4.28	6.04	4.08	4.15	1.60	2.15	1.94	0.64	2.49	2.06	5.24	38	
1983	5.06	4.40	3.81	1.53	1.46	2.86	4.03	2.41	1.14	1.33	3.04	39	
1984	2.56	2.22	2.97	2.16	3.90	3.77	0.15	0.60	1.14	1.81	4.09	32	
1985	0.27	3.43	2.36	1.00	1.40	1.26	0.20	2.07	2.11	2.58	0.93	21	
1986	4.24	3.62	2.80	1.64	2.21	1.30	0.98	0.02	3.09	0.87	1.80	27	
1987	2.29	1.31	4.94	1.94	1.59	1.08	2.37	1.44	0.53	0.13	6.34	26	
1988	M2.67	M1.38	3.02	3.41	2.08	2.51	0.29	0.56	1.86	0.56	3.61	27	
1989	3.90	M1.95	M4.21	1.87	2.52	1.19	0.47	3.14	0.43	2.30	2.48	28	
1990	7.72	3.91	1.30	1.76	4.60	3.66	1.21	1.64	0.01	3.37	2.35	34	
1991	3.24	1.76	M2.28	2.93	2.33	1.69	0.88	0.82	0.17	1.00	3.13	23	
1992	4.85	1.87	0.73	1.96	0.74	4.43	2.27	0.50	1.23	1.27	4.63	27	
1993	2.92	0.92	2.32	3.87	1.85	1.72	3.91	1.11	1.25	0.78	4.35	26	
1994	3.04	2.29	2.01	2.18	2.01	2.54	0.05	0.22	1.09	2.92	4.68	28	
1995	4.67	2.54	4.88	1.84	1.82	4.16	0.75	1.45	1.61	3.95	4.57	36	
1996	3.91	5.25	1.34	4.51	4.38	3.30	0.63	0.87	1.35	4.69	8.78	47	
1997	4.83	2.01	5.36	2.85	3.58	1.78	2.03	0.55	3.52	3.88	2.09	34	
1998	4.66	M2.11	3.25	1.16	7.13	1.75	2.13	0.86	1.32	0.94	7.42	39	
1999	4.02	6.66	1.66	0.98	1.97	2.28	0.50	1.67	0.33	2.42	5.67	32	
2000	4.78	2.84	3.19	2.78	2.26	3.56	0.79	0.28	1.55	1.92	2.10	28	
2001	1.20	1.29	2.29	4.49	1.86	2.53	0.95	0.33	0.40	3.86	M5.11	29	
2002	M4.47	2.12	1.65	M2.09	2.39	1.99	0.70	0.22	0.79	0.72	M6.08	26	
2003	M4.92	M1.33	4.89	1.68	2.49	1.79	0.00	0.64	2.03	2.69	M3.85	29	
2004	3.59	1.71	1.63	1.66	4.01	1.80	0.53	4.12	1.82	2.82	M2.06	29	
2005	2.68	M0.20	4.94	1.47	3.59	2.98	1.57	0.84	0.86	2.79	3.93	28	
2006	M7.35	2.70	M2.92	2.69	2.79	3.36	0.23	0.30	0.14	1.23	9.34	M3.42	36
2007	3.18	2.88	3.49	0.93	1.75	1.82	0.50	0.70	0.94	3.34	2.65	8.08	30
2008	5.31	1.73	3.34	1.63	1.28	2.03	0.45	2.25	1.95	1.86	M5.66	30	
2009	2.48	M1.83	4.03	2.35	2.19	1.08	2.22	1.15	0.41	4.93	3.44	28	
2010	2.70	1.32	2.92	2.92	3.62	5.61	0.90	0.61	3.76	4.54	5.17	4.09	38

2011	4.77	2.58	4.69	3.78	4.78	2.31	0.54	0.03	0. 28	2. 67	5.76	2.06	34. 25
2012	4.03	2.87	8.12	3.93	2.07	6.84	1.89	0.28	0. 33	4. 41	6.14	6.35	47. 26
2013	2.26	1.20	2.29	3.07	2.95	4.85	0.12	0.68	4. 54	0. 81	4.00	1.90	28. 67
2014	2.63	3.37	6.04	3.43	2.33	3.64	0.59	2.40	0. 81	2. 95	4.04	4.01	36. 24
2015	3.18	3.95	4.10	1.39	1.77	0.66	0.58	0.48	0. 35	2. 43	3.85	7.48	30. 22
2016	4.68	2.48	5.08	1.47	3.78	0.74	1.33	0.49	1. 33	10. 64	3.80	2.37	38. 19
2017	1.92	7.32	6.84	3.85	2.06	1.76	0.14	0.10	1. 44	2. 51	6.28	3.97	38. 19
2018	5.92	3.62	2.33	3.99	1.70	1.81	0.42	0.70	0. 72	2. 30	3.74	4.16	31. 41
2019	3.18	3.84	1.23	2.65	1.02	1.07	0.66	1.20	1. 64	2. 44	2.08	M4. 46	25. 47
2020	8.71	1.20	1.64	0.62	6.16	2.25	0.84	0.08	1. 09	3. 01	2.58	3.86	32. 04
2021	5.70	1.48	0.69	0.81	0.55	0.91	0.15	1.77	2. 77	2. 73	4.25	4.25	26. 06
2022	4.40	2.75	2.40	1.21	3.54	3.81	0.88	0.17	0. 47	1. 26	4.32	6.37	31. 58
2023	1.67	1.35	1.75	3.41	3.31	0.58	0.09	2.25	2. 05	0. 83	3.75	7.47	28. 51
2024	4.58	3.65	2.57	1.18	2.94	2.87	0.88	0.51	0. 54	1. 97	7.22	5.25	34. 16
2025	1.50	3.51	M4.74										9.75

Notes: Data missing in any month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2025-04-18



**Appendix D**  
**Aquatic Resources**

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters



1:3,600  
1 in = 300 ft  
0 275 Feet



**Legend**

- Seep
- Storm Water Outfall
- Stormwater Culvert
- OHWM (3549.61 linear feet)
- 2023/24 Tetra Tech, Inc.
- Delineation Boundary

**Wetlands**

- PEM1C (1.21 acres)
- PSS1C (2.72 acres)
- PFO1A (0.02 acres)

**APE**

- Access Road
- Clearing and Grubbing
- Riprap Footprint

Idaho Department of Lands  
IAN 05 2026

	PRINT DATE	PROJECT NUMBER	PROJECT	FIGURE ID
		24076.005.001	Pend Oreille Lake Riprap/Slurry Area NAD83 Non-Point Source Waters	Two Rivers
			PROJECT MANAGER	IDEQ
			CARTOGRAPHER	
			Derek Forseth	
			M. Wood	

# Aquatic Resources

**Appendix E**  
**Photo Log**

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters

Photo 1



Waterline stain on concrete pier extending into Pend Oreille River.

Photo 2



Large woody debris wracked, break in slope, and sediment deposition on shoreline. Shoreline faces Pend Oreille River.

Photo 3



Exposed root system and cracking of shoreline bank material along Pend Oreille River.

Photo 4



Break in slope and bank erosion. Photo facing upstream of Pend Oreille River.



PRINT DATE:

APRIL 15, 2025

PROJECT MANAGER:

DEREK FORSETH

PROJECT NUMBER:

24076

CREATED BY:

KATE DEZII

PROJECT NAME:

TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG

ORDINARY HIGH WATER MARK DELINEATION

Idaho Department of Lands

JAN 05 2026

Pend Oreille Lake Supervisory Area  
Navigable Waters

Photo 5



Undercut banks, root exposure, and rills along Pend Oreille River. Photo facing upstream.

Photo 6



Sediment shifts from silt (bottom of bank) to cobble (break in slope) to clay (top of bank)

Photo 7



Vegetation shift with exposed rootline along wetland boundaries facing Pend Oreille River, west of Priest River.

Photo 8



Break in slope and undercut bank approaching the confluence of Pend Oreille River and Priest River.



Idaho Department of Lands

JAN 05 2026

Pend Oreille Lake Supervisory Area  
Navigable Waters

PRINT DATE:

APRIL 15, 2025

PROJECT MANAGER:

DEREK FORSETH

PROJECT NUMBER:

24076

CREATED BY:

KATE DEZIL

PROJECT NAME:

TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG

ORDINARY HIGH WATER MARK DELINEATION

Photo 9



Combination of shelving, vegetation shift, and root exposure along the confluence.

Photo 10



Vegetation break line along the confluence and wrack line of woody debris.

Photo 11



Shelving, break in slope, exposed roots, wracking of woody debris observed immediately after confluence and facing Priest River..

Photo 12



Break in slope and exposed root line on bank facing Priest River.



PRINT DATE:

APRIL 15, 2025

PROJECT MANAGER:

DEREK FORSETH

PROJECT NUMBER:

24076

CREATED BY:

KATE DEZII

PROJECT NAME:

TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG

ORDINARY HIGH WATER MARK DELINEATION

Photo 13



Break in slope along silty interface. Photo facing upstream Priest River, shoreline facing Priest River.

Photo 14



Break in slope along silty interface. Shoreline facing Priest River and extending towards confluence.

Photo 15



Grassy vegetation line along woody vegetation. Shoreline relatively flat in this location, gradual slope shifts and cracking in clay interface. Shoreline facing Priest River and extending towards confluence.

Photo 16



Grassy vegetation line at top of bank with water lines showing changes in water surface elevation on Priest River. Photo facing upstream Priest River..



Science & Engineering, Inc.

PRINT DATE:

APRIL 15, 2025

PROJECT MANAGER:

DEREK FORSETH

CREATED BY:

KATE DEZII

PROJECT NAME:

TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG

ORDINARY HIGH WATER MARK DELINEATION

Idaho Department of Lands

JAN 05 2026

Pend Oreille Lake Supervisory Area  
Navigable Waters

Photo 17



Erosion and exposed tree roots in western portion of study area facing north.

Photo 18



Unvegetated depression in PEM1C wetland facing south.

Photo 19



View from western edge of PEM1C wetland facing east

Photo 20



View from eastern edge of PEM1C/PSS1C wetland facing west



PRINT DATE:  
APRIL 15, 2025

PROJECT NUMBER:  
24076

PROJECT MANAGER:  
DEREK FORSETH

CREATED BY:  
KATE DEZII

PROJECT NAME:  
TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG  
ORDINARY HIGH WATER MARK DELINEATION



Photo 21



Seep in western portion of APE emanating from eroding bank facing east.

Photo 22



Seep in western portion of APE flowing into Pend Oreille River facing south

Photo 23



View of seep surface flow facing east

Photo 24



Stormwater outfall facing north



Science & Engineering, Inc.

Idaho Department of Lands

JAN 05 2026

Pend Oreille Lake Supervisory Area  
Navigable Waters

PRINT DATE:

APRIL 15, 2025

PROJECT MANAGER:

DEREK FORSETH

PROJECT NAME:

TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG

ORDINARY HIGH WATER MARK DELINEATION

Photo 25



Stormwater outfall facing south.

Photo 27



View of cribs to be removed as part of the Action facing west.

Photo 26



View of pilings and cribs to be removed as part of the Action facing west

Photo 28



View of culvert location that spans the railroad and leads to stormwater outfall north of APE facing north.



Illinois Department of Lands

JAN 05 2026

Pennardville Lake Supervisory Area  
Navigable Waters

PRINT DATE:

APRIL 15, 2025

PROJECT NUMBER:

24076

PROJECT MANAGER:

DEREK FORSETH

CREATED BY:

KATE DEZII

PROJECT NAME:

TWO RIVERS PARK  
SHORELINE  
STABILIZATION

APPENDIX E PHOTO LOG

ORDINARY HIGH WATER MARK DELINEATION

**Appendix F**  
**Tetra Tech Wetland Delineation Report**

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters

November 2, 2023 (updated from October 5, 2023)

Jon Welge, Senior Environmental Scientist; Tetra Tech  
1212 N. Washington Street, Suite 120, Spokane, WA 99201  
(509) 344-0262; (509) 232-4311; (509) 263-5737  
[jon.welge@tetratech.com](mailto:jon.welge@tetratech.com)

**Re: Wetland Delineation Letter Report for the “Joslyn Park” Properties, Priest River, ID  
RP56N05W250501A; T 56N, R 5W, portion of Section 25 (south parcel), and  
RPR00000250700A; T 56N R 5W portion of Section 25 (north parcel)**

Dear Jon:

Per your request for environmental services, I am submitting this Wetland Delineation Letter Report for the properties referenced above (Figure 1). On July 27, 2022, I delineated wetlands on the north parcel, and on June 12, 2023, I delineated wetlands on the south parcel. I used the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region 2010 (Version 2.0), to determine whether the three required wetland parameters (hydrophytic vegetation, hydric soils, and wetland hydrology) were present to identify an area as a jurisdictional wetland. Eight Data Plots were completed for the north parcel and fifteen Data Plots were completed (for the south parcel). I flagged the wetland boundary points using labelled blue ribbon flagging (on vegetation) and located the points using a submeter GPS unit. The south parcel boundary points were then professionally land surveyed by Welch Comer Associates. The differences between the GPSd points and the formal survey were considered to be insignificant ( $\pm$  3-5 feet).

#### Site Conditions

The 10-acre north parcel is undeveloped and its northern boundary abuts Hwy 200 in Priest River, and its south boundary is the railroad. The 38-acre south parcel is undeveloped and its northern boundary abuts the railroad and the eastern boundary abuts the confluence of Priest River and Pend Oreille River (Figure 1). The National Wetland Inventory (NWI) mapped wetlands as occurring on both properties. The 7.5' USGS quad map is Priest River.

#### Vegetation

The vegetation consists of three associations:

Upland forest: non-hydrophytic evergreen trees: grandfir (*Abies grandis* [FACU]), hemlock (*Tsuga heterophylla* [FACU]), cedar (*Thuja plicata* [FAC]), Ponderosa pine (*Pinus ponderosa* [FACU]), lodgepole pine (*Pinus contorta* [FAC]), and western white pine (*Pinus monticola* [FACU]) over serviceberry (*Amelanchier alnifolia* [FACU]), snowberry (*Symphoricarpos albus* [FACU]), trailing blackberry (*Rubus ursinus* [FACU]), Oregon grape (*Mahonia repens* [UPL]), with low growing upland weedy species: (ox-eye daisy (*Leucanthemum vulgare* [FACU]), orchardgrass (*Dactylis glomerata* [FACU]), quackgrass (*Elymus repens* [FAC]), tansy (*Tanacetum vulgare* [FACU]), and clover (*Trifolium pratense* [FACU]). This association dominates the southern property and is not hydrophytic.

Riparian shrub: cottonwood (*Populus balsamifera* [FAC]), dogwood (*Cornus alba* [FACW]), alder (*Alnus incana* [FACW]), hawthorn (*Crataegus douglasii* [FAC]), spiraea (*Spiraea douglasii* [FACW]) over canarygrass (*Phalaris arundinacea* [FACW]) and occasional horsetail (*Equisetum arvense* [FAC]) and angelica (*Angelica arguta* [FACW]). This association is located near the Pend Oreille River shoreline and is hydrophytic.

Meadow: dominated by canarygrass with considerable tansy, clover, quackgrass, bluegrass (*Poa pratensis* [FAC]), with occasional cottonwood and lodgepole pine. The association also contains weedy upland species and is in some places hydrophytic and in others, non-hydrophytic. On the north parcel, the western wetland contains considerable cattail (*Typha latifolia* [OBL]).

\*Wetland Indicator Status; UPL: upland; FACU: facultative upland; FAC: facultative; FACW: facultative wetland; OBL: obligate



## Soils

The Natural Resources Conservation Service (NRCS) identified the property as being underlain by Mission silt loam (not hydric, but may contain hydric inclusions) over the majority of the properties, and Wrencoe silty clay loam (hydric) nearer the Pend Oreille River (Figure 2). The soils investigated in the Data Plots generally ranged from upland forest soils (10YR 4/3 and 4/2) to marginally hydric (2.5Y 4/2 with redoximorphic features) to black saturated soils (in the south parcel along the shoreline). In the northern parcel, Data Plot 5N was completely inundated. According to the National Technical Criteria for Hydric Soils, soils are considered hydric if ponding occurs (NTCHS 2012).

## Hydrology (Figure 2)

### North Parcel:

The National Wetland Inventory (NWI) mapped a large PEM1F (palustrine, emergent, persistent, semi-permanently flooded) wetland occurring in the northern property. It was completely inundated during the July 2022 wetland delineation. There is a culvert under the railroad from this wetland entering the southern property.

### South Parcel:

A PEM1C (palustrine, emergent, persistent, seasonally flooded) wetland occurs as a small, isolated wetland in the western portion of the southern property. A PEM1F (palustrine, emergent, persistent, semi-permanently flooded) wetland was mapped along the Pend Oreille River shoreline. A relatively large band of PFO1C (palustrine, forested, deciduous, seasonally flooded) wetland was mapped along the Pend Oreille River shoreline, as well as Priest River and Pend Oreille River as L1UBH (Figure 2). Hydrology was not observed over the majority of the southern property, except along the shoreline of Pend Oreille River. The culvert connected to the large western wetland in the northern parcel leads to a small excavated pond area in the western portion of the property. This is culverted to the river. I would not consider this southern parcel feature to be regulated.

## Wetland Determination (Figures 3, 4, 5)

### North Parcel:

Based on the site investigations and the Data Plots, I determined that a large wetland encompasses a considerable portion of the parcel (Figures 3, 4). The western portion was inundated and contained considerable cattail. The eastern lobe of the wetland contains canarygrass, Nebraska sedge, and Canada thistle. It showed evidence of ponding. There is a small upland mound within the eastern lobe of the wetland (indicated on Figure 4). The approximate areal extent is 5.47 acres (-0.34 ac [upland inclusion]) = **5.13 acres**.

### South Parcel:

An area along the shoreline of Pend Oreille River would be considered wetland (Wetland "A" on Figures 3 and 5). It is dominated by alder, dogwood, hawthorn over canarygrass and meadow foxtail. It contained black, saturated and shallowly inundated soils during high river levels (at full pool) and is bound by a fairly steep slope up to non-hydrophytic and dry slopes. It would be classified as PSS1C (palustrine, scrub-shrub, deciduous, seasonally flooded) with some minor representation by cottonwood. **Wetland "A" is about 3.87 acres** (OHWM approximated). A second very small isolated depression (Wetland "B") showed a dominance by spiraea bounded by cottonwood. It had surface features indicating short-term seasonal ponding and would be classified as PSS1C. **It is 0.02 acres in extent.**

The upland / wetland boundaries were determined largely by hydrophytic vs non-hydrophytic vegetation, topographic relief, and evidence of or observed hydrology.

## Regulatory Implications

At this time, I am not aware of any intent to fill any of the on-site wetlands. The City of Priest River does not impose building-to-wetland boundary setbacks ([https://codelibrary.amlegal.com/codes/priestriverid/latest/priestriver\\_id/0-0-0-1](https://codelibrary.amlegal.com/codes/priestriverid/latest/priestriver_id/0-0-0-1)).



### **Regulatory Implications - Corps of Engineers**

Under the Section 404 of the Clean Water Act, the US Army Corps of Engineers regulates the discharge of fill or dredged materials into “Waters of the US” (WOTUS). Although the recent (September 9, 2023) EPA definition of WOTUS has changed, an email from Russell Kaiser (Director [Acting]), Oceans, Wetlands and Communities Division, EPA [Kaiser.Russell@epa.gov], clarified that, due to a pending lawsuit, Idaho is still maintaining the “pre-2015” definition of WOTUS. All subsequent guidance submitted by the Corps and EPA (December 2, 2008) is considered valid and identifies federal regulation for WOTUS. This is interpreted as there has been no significant change (in Idaho) regarding which types of wetlands and their connections to “Navigable Waters of the US” are federally regulated. **Isolated wetlands** (those not having a “relatively permanent surface water connection” to navigable waters) **are not considered federally regulated**.

#### South Parcel:

For this project, only **Wetland “B” would likely be considered isolated** as there are no surface water connections from this wetland to navigable waters. **Wetland “A”** is clearly adjacent the Pend Oreille River and **would be federally regulated**.

#### North Parcel:

The wetland in the north parcel does have a culvert under the railroad, but the duration of “relatively permanent surface water connection” may not be sufficient to render this wetland federally regulated. Based on Corps guidance (2008), this phrase may include surface water connections with durations as short as 3 months. It is unknown if this wetland has the connection to meet this definition of “relatively permanent surface water connection”.

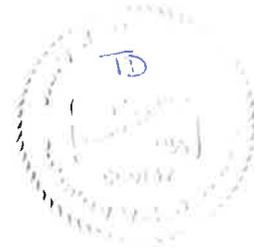
An approved jurisdictional determination form request is being submitted to the Corps to determine jurisdictionality. Only the Corps can make these determinations.

Thank you for requesting my services. Let me know if you have any questions or need additional information.

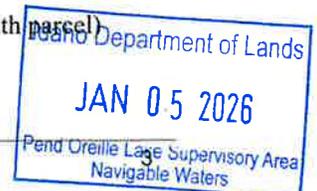
Sincerely,



Tom Duebendorfer, MA, PWS (Emeritus)

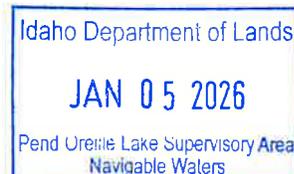


attachments:      References  
                         Regulatory Requirements  
                         Figure 1: Vicinity Map  
                         Figure 2: National Wetland Inventory and NRCS Soils Map  
                         Figure 3: Wetland, Data Plot, and Photograph Location Map  
                         Figure 4: Wetland, Data Plot, and Photograph Location Map - North Parcel  
                         Figure 5: Wetland, Data Plot, and Photograph Location Map - South Parcel  
                         Photosheet (south parcel)  
                         Wetland Boundary Points (North Parcel [Duebendorfer GPS])  
                         Wetland Boundary Points (South Parcel [Duebendorfer GPS])  
                         Wetland Boundary Points (South Parcel [Welch Comer Survey])  
                         Data Plot Forms (23) 2-page forms: 8 Data Plots (north parcel); 15 Data Plots (south parcel)  
                         Résumé



**References Used** (not necessarily cited):

- Bonner County Viewer (on-line mapping tool) (<https://cloudgisapps.bonnercountyid.gov/public/>).
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Office of Biological Services, Fish and Wildlife Service, U.S. Dept. of the Interior, FWS/OBS-79/31.
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- ESRI. ArcMap 10.5.1 GIS software. Arrow Series 100 GPS unit.
- Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1977 (and as updated 2018 in 2nd Edition). Vascular Plants of the Pacific Northwest. University of Washington Press. Seattle, Washington (five volumes).
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- NAIP 2013. National Agricultural Imagery Program. <https://www.fsa.usda.gov/programs-and-services/aerial-photography/imagery-programs/naip-imagery/index>.
- NRCS 2018. Field Indicators of Hydric Soils in the United States, Version 8.0.
- NRCS. US Department of Agriculture, National Resources Conservation Service. Soil Survey (website) (<https://websoilsurvey.nrcs.usda.gov/app/>).
- NTCHS 2012. National Technical Committee for Hydric Soils, Natural Resources Conservation Service. Hydric Soils List Criteria. New NASIS Database Selection Criteria. Federal Register Doc. 2012-4733 Filed 2-28-12
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region 2010 (Version 2.0)
- Vepraskas, M.J. 1992. Redoximorphic Features for Identifying Aquic Conditions. North Carolina Agricultural Research Service. Raleigh, North Carolina.
- US Army Corps of Engineers 2018 [Federal Register/Vol. 73, No. 70 / Thursday, April 10, 2008 / Rules and Regulations].
- US Army Corps of Engineers. 2018. 33 CFR Part 332 - Compensatory Mitigation for Loss of Aquatic Resources 33 U.S.C. 401 et seq.; 33 U.S.C. 1344; and Pub. L. 108-136.
- US Army Corps of Engineers. 2021. Nationwide Permit 29 Residential Developments Effective Date: March 15, 2021 / Expiration Date: March 15, 2026 Authorities: Sections 10 and 404 (<https://saw-reg.usace.army.mil/NWP2021/NWP29.pdf>).
- USDI. National Wetland Inventory mapping (website) (<https://www.fws.gov/wetlands/data/Mapper.html>).
- USGS. Priest River, ID 7.5' topographic quadrangle (<https://www.usgs.gov/programs/national-geospatial-program/topographic-maps>).



## Regulatory Permitting Process: Types of Permits - Corps of Engineers

Under the Clean Water Act, the Corps has the authority to regulate the discharge or fill or dredged material into "Waters of the US". There are three Permits the Corps uses to regulate fill into wetlands. The Regional General and Individual Permits (not described here) are probably not appropriate for your site.

(1) Nationwide General (NWP): This permit is authorized for specific activities nationwide with minimal impact and minimal evaluation time. The NWPs typically have a ½ acre limit for fill in wetlands and 300 linear foot limit for fill in stream channels. A Pre-Construction Notification application (PCN) must be submitted to the appropriate field office (Walla Walla District). Typically, less than 1/10-acre of wetland fill does not require mitigation (though a PCN is required), and up to ½ acre of wetland fill, requires mitigation. (See below for **compensation methods**.) There are Regional Conditions for Nationwide Permits (<https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Permits/2017-Nationwide-Permits/>). There are 54 Nationwide Permits each regarding specific activities proposed in wetlands ([www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/](http://www.nww.usace.army.mil/Business-With-Us/Regulatory-Division/Nationwide-Permits/)).

When any permit application is received, it is evaluated based upon three criteria: avoidance, minimization, and mitigation. Once the applicant meets these criteria, a permit can be issued. Although, technically, the Corps has 45 days with which to respond to permit applications (US Army Corps of Engineers 2021), it is taking Corps presently about 60 days to process permits.

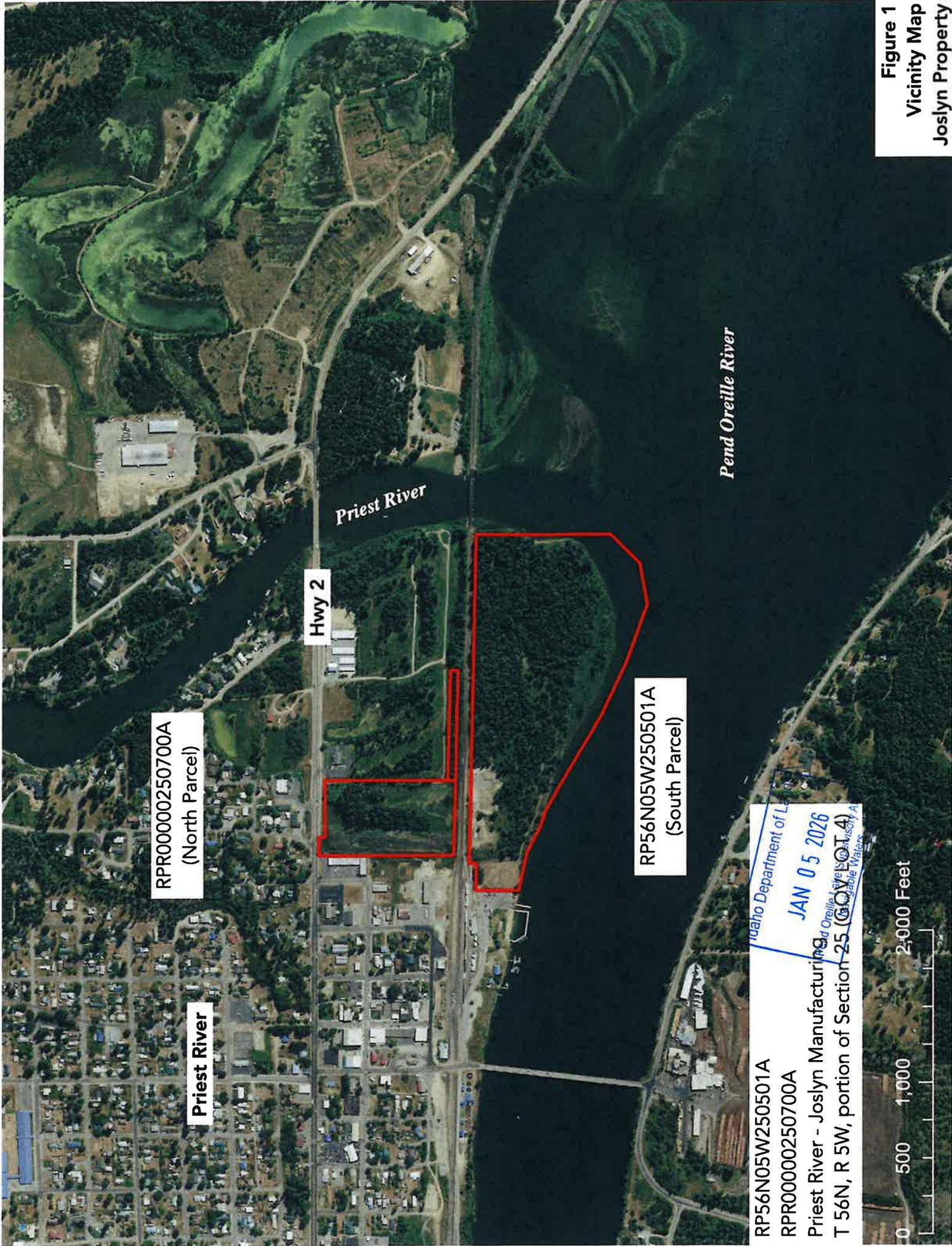
### **Compensation Methods for unavoidable Wetland Impacts**

According to the 2008 Final Mitigation Rule (US Army Corps of Engineers 2018 [Federal Register/Vol. 73, No. 70 / Thursday, April 10, 2008 / Rules and Regulations]), under § 332.1 (c) the Final Mitigation Rule maintains the requirements set forth in Section 404(b)(1) Guidelines at 40 CFR part 230 which state that "*the permit applicant [is required] to take all appropriate and practicable steps to avoid and minimize adverse impacts to waters of the United States. Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. Compensatory mitigation for unavoidable impacts may be required to ensure that an activity requiring a section 404 permit complies with the Section 404(b)(1) Guidelines*" (emphasis mine). According to § 230.93 (a)(2), restoration of impacted wetland is the first priority in the compensation sequence followed by purchasing credits (employing the use of approved Wetland Mitigation Banks within the service area) § 230.93 (b)(2) (US Army Corps of Engineers 2018).

The 1999 Montana Wetland Assessment Method is used to calculate the number of Wetland Credits to be purchased from the Valencia Wetland Mitigation Bank (Bank) in Priest River should there be any wetland impacts (fill > 1/10 acre) required as a result of the proposed development. The Assessment will result in a score between 1 and 12. This score is multiplied by the area to be filled. That result is the number of credits required to be purchased from the Bank. Currently one credit costs \$28,000.

**The City of Priest River Ordinance** does not identify any wetland setbacks to development. Any wetland fill may require a permit from the US Army Corps of Engineers.





RPR00000250700A  
(North Parcel)

Priest River

Hwy 2

Priest River

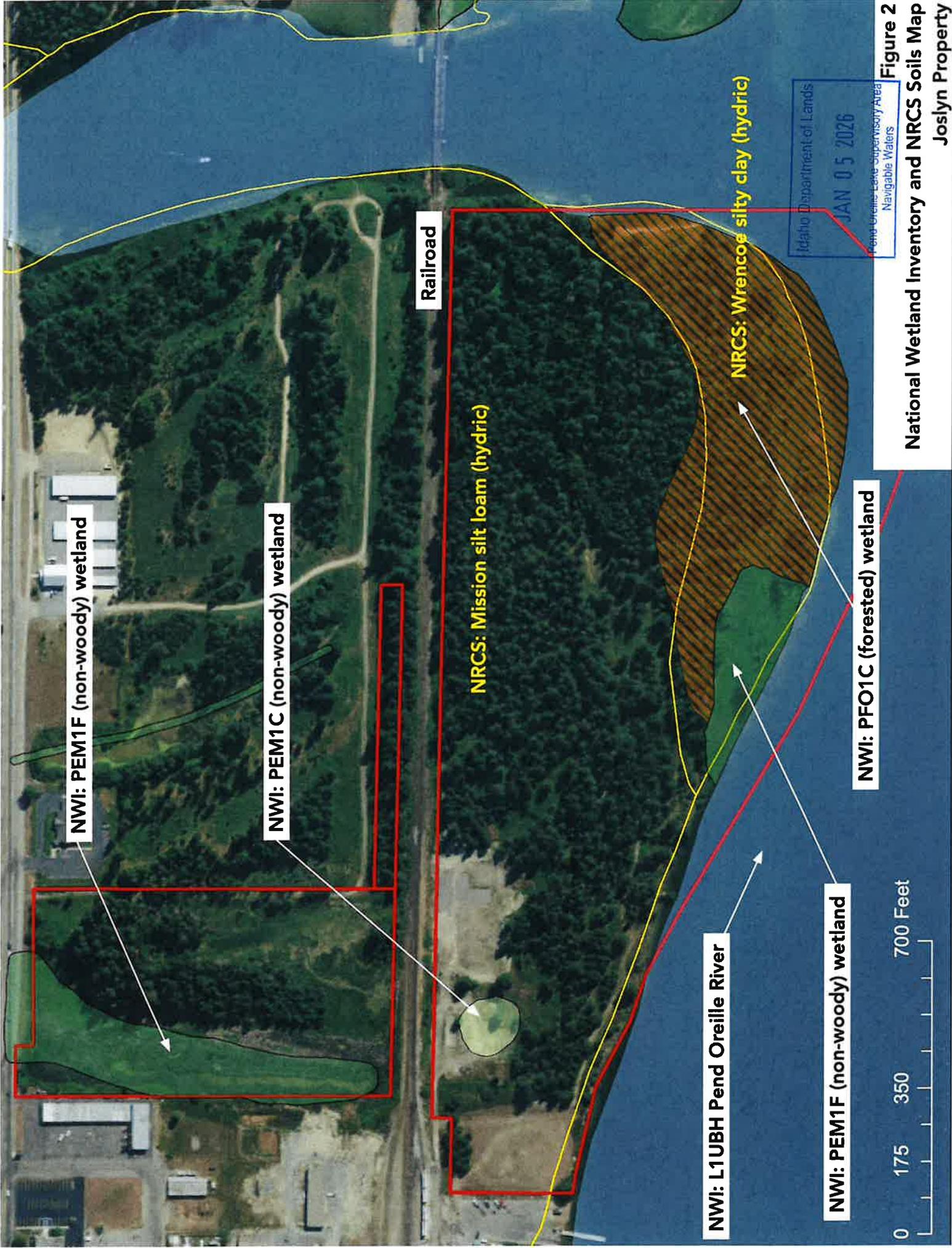
Pend Oreille River

RP56N05W250501A  
(South Parcel)

RP56N05W250501A  
RPR00000250700A  
Priest River - Joslyn Manufacturing  
T 56N, R 5W, portion of Section 25 (GOV LOT 4)  
Utah Department of Lands  
JAN 05 2026  
Oreille State University  
Sustainable Trails

0 500 1,000 2,000 Feet

Figure 1  
Vicinity Map  
Joslyn Property



NWI: PEM1F (non-woody) wetland

NWI: PEM1C (non-woody) wetland

Railroad

NRCS: Mission silt loam (hydric)

NWI: L1UBH Pend Oreille River

NWI: PEM1F (non-woody) wetland

NWI: PFO1C (forested) wetland

NRCS: Wrencoë silty clay (hydric)



Idaho Department of Lands  
 Pend Oreille Lake Supervisory Area  
 Navigable Waters  
 JAN 05 2026

**Figure 2**  
**National Wetland Inventory and NRCS Soils Map**  
 Joslyn Property



See also Figures 4, 5

Wetland Boundary

Data Plots (typ)

Wetland Boundary

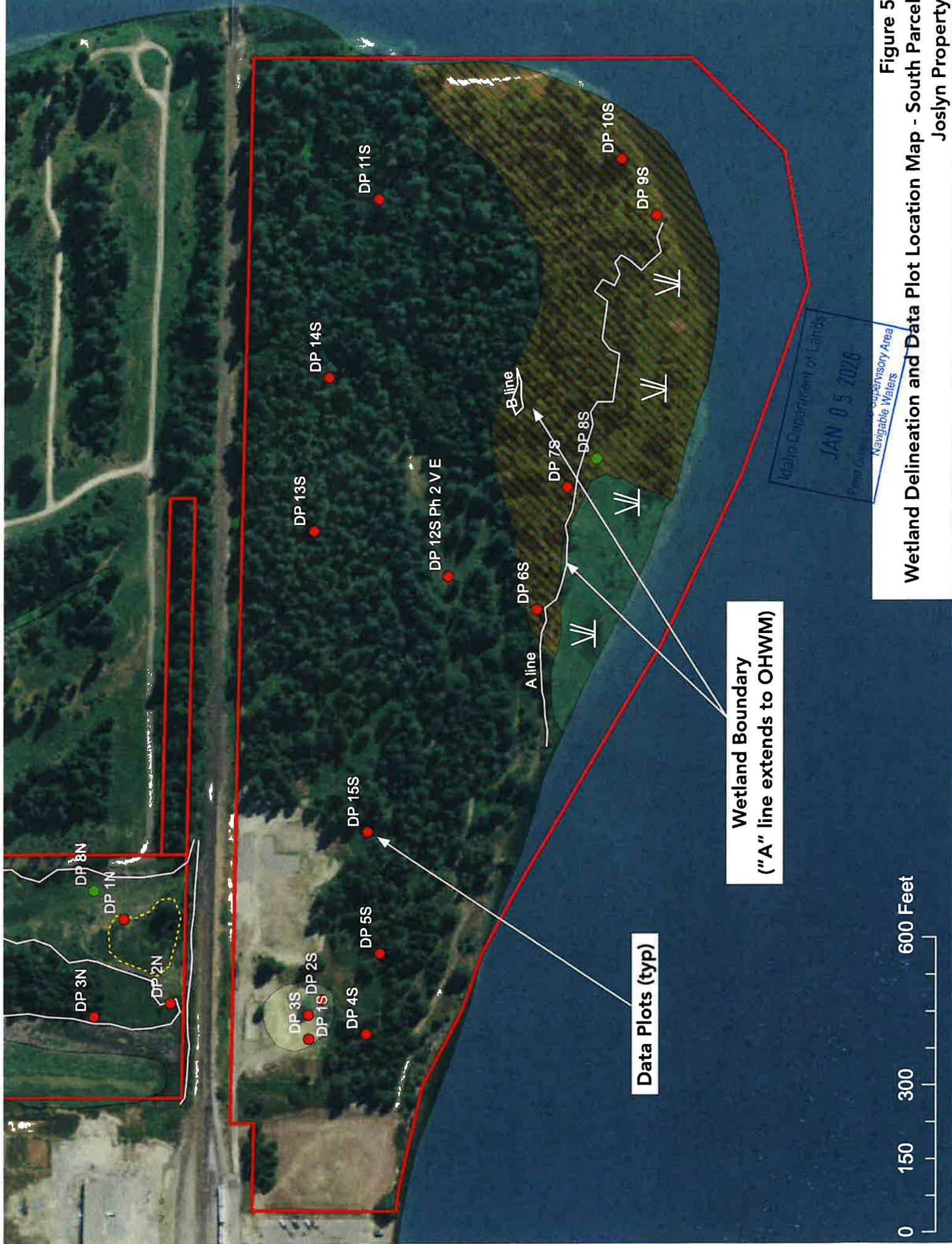


Idaho Department of Lands  
 Navigable Waters  
 JAN 05 2026  
 Supervisory Area

Figure 3  
 Wetland Delineation and Data Plot Location Map  
 Joslyn Property



**Figure 4**  
**Wetland Delineation and Data Plot Location Map - North Parcel**  
 Joslyn Property



**Wetland Boundary  
("A" line extends to OHWM)**

**Data Plots (typ)**

0 150 300 600 Feet

Idaho Department of Lands  
 Statewide Wetland Supervisory Area  
 Navigable Waters  
 JAN 05 2026

**Figure 5  
Wetland Delineation and Data Plot Location Map - South Parcel  
Joslyn Property**



Photo 1: View east into Wetland "B" from Wetland Boundary Flag B-5. Small isolated swale with cottonwood and few spiraea. Hydrophytic vegetation and evidence of short-term early season ponding. This wetland depression is small and does not appear to have any surface connections to other areas.



Photo 2: View east into meadow area at Data Plot 12. Ponderosa pine over meadow foxtail and tansy; soils 3/4 (non-hydric), no evidence of ponding.

Idaho Department of Lands  
JAN 05 2026  
Pend Oreille Lake Supervisory Area  
Navigable Waters

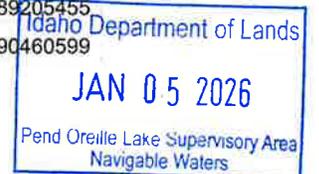
**Photosheet**  
**Joslyn Property**  
**June 12, 2023**

Joslyn N parcel wet bdy points (Duebendorfer GPS)

type	Ident	Latitude	Longitude	y_proj	x_proj
WET BDY	A1	48.17801427	-116.90294564	5336089.9344233	507215.918171987
WET BDY	A2	48.17798950	-116.90289227	5336087.18632049	507219.888748112
WET BDY	A3	48.17798054	-116.90278022	5336086.20098716	507228.21986323
WET BDY	A4	48.17797355	-116.90265847	5336085.43561714	507237.271837519
WET BDY	A5	48.17797025	-116.90256955	5336085.07651176	507243.882239972
WET BDY	A6	48.17796334	-116.90246169	5336084.31878549	507251.901656484
WET BDY	A7	48.17797098	-116.90237160	5336085.17681793	507258.597442363
WET BDY	A8	48.17797275	-116.90226750	5336085.38366244	507266.33614591
WET BDY	A9	48.17797328	-116.90211533	5336085.45703652	507277.648082583
WET BDY	A10	48.17796234	-116.90197590	5336084.25437978	507288.01422428
WET BDY	A11	48.17795066	-116.90184470	5336082.96791498	507297.769685781
WET BDY	A12	48.17794661	-116.90172405	5336082.52981068	507306.73914945
WET BDY	A13	48.17795061	-116.90161522	5336082.9840325	507314.82887567
WET BDY	A14	48.17795082	-116.90151905	5336083.01667481	507321.977789611
WET BDY	A15	48.17793544	-116.90134242	5336081.3238101	507335.109937929
WET BDY	A16	48.17792914	-116.90113325	5336080.64346312	507350.660258026
WET BDY	A17	48.17791736	-116.90094983	5336079.35158962	507364.297531877
WET BDY	A18	48.17790920	-116.90075428	5336078.46400652	507378.835548264
WET BDY	B1	48.17793355	-116.90074553	5336081.17107157	507379.482331922
WET BDY	B2	48.17797032	-116.90092386	5336085.24139537	507366.22070541
WET BDY	B3	48.17805352	-116.90102051	5336094.47950164	507359.023792437
WET BDY	B4	48.17821840	-116.90105474	5336112.80207576	507356.455825896
WET BDY	B5	48.17839197	-116.90105129	5336132.09482752	507356.686868428
WET BDY	B6	48.17853011	-116.90098023	5336147.45566172	507361.949548278
WET BDY	B7	48.17869475	-116.90098947	5336165.7543046	507361.239596501
WET BDY	B8	48.17879402	-116.90108895	5336176.77909501	507353.830304558
WET BDY	B9	48.17889879	-116.90104355	5336188.42832726	507357.190059357
WET BDY	B10	48.17895203	-116.90098587	5336194.35191851	507361.470555365
WET BDY	B11	48.17910903	-116.90099711	5336211.80080035	507360.612027065
WET BDY	B12	48.17924648	-116.90099049	5336227.07853539	507361.084512854
WET BDY	B13	48.17939166	-116.90099114	5336243.2156485	507361.015709651
WET BDY	B14	48.17952493	-116.90102718	5336258.02471555	507358.317701739
WET BDY	B15	48.17960135	-116.90102416	5336266.51927491	507358.530630115
WET BDY	B16	48.17953592	-116.90105924	5336259.24340077	507355.932547888
WET BDY	B17	48.17949512	-116.90111226	5336254.70317884	507351.997157359
WET BDY	B18	48.17942117	-116.90106703	5336246.4880874	507355.370128872
WET BDY	B19	48.17936509	-116.90107500	5336240.25375682	507354.785589019
WET BDY	B20	48.17928911	-116.90111281	5336231.80529393	507351.985315461
WET BDY	B21	48.17923959	-116.90115327	5336226.2977572	507348.984742856
WET BDY	B22	48.17919057	-116.90122752	5336220.84145795	507343.472477064
WET BDY	B23	48.17922388	-116.90130856	5336224.53634569	507337.443482347

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WET BDY	B24	48.17928005	-116.90139857	5336230.77142409	507330.744163728
WET BDY	B25	48.17937619	-116.90142956	5336241.45473562	507328.427364074
WET BDY	B26	48.17938431	-116.90151062	5336242.34886019	507322.400563994
WET BDY	B27	48.17927515	-116.90155050	5336230.21219011	507319.451523101
WET BDY	B28	48.17917021	-116.90155429	5336218.54808074	507319.184759553
WET BDY	B29	48.17908785	-116.90157877	5336209.39080855	507317.37646608
WET BDY	B30	48.17900705	-116.90155214	5336200.41320182	507319.367384693
WET BDY	B31	48.17892594	-116.90159974	5336191.39246314	507315.840566966
WET BDY	B32	48.17882909	-116.90156849	5336180.63134945	507318.177087729
WET BDY	B33	48.17873430	-116.90161945	5336170.09002912	507314.402390221
WET BDY	B34	48.17862985	-116.90176212	5336158.46699841	507303.811895861
WET BDY	B35	48.17853222	-116.90174405	5336147.61793224	507305.169180106
WET BDY	B36	48.17846902	-116.90175776	5336140.59214233	507304.158564385
WET BDY	B37	48.17839194	-116.90180471	5336132.02016725	507300.679778929
WET BDY	B38	48.17825974	-116.90186963	5336117.31956958	507295.872576495
WET BDY	B39	48.17815722	-116.90192555	5336105.91948051	507291.729429289
WET BDY	B40	48.17816454	-116.90203780	5336106.72201083	507283.384378303
WET BDY	B41	48.17812212	-116.90211715	5336101.99952656	507277.491539386
WET BDY	B42	48.17803573	-116.90207089	5336092.40221922	507280.942462993
WET BDY	B43	48.17801484	-116.90217405	5336090.07067766	507273.276772404
WET BDY	B44	48.17806239	-116.90227749	5336095.34558418	507265.580766
WET BDY	B45	48.17817570	-116.90231116	5336107.93672807	507263.061379611
WET BDY	B46	48.17827755	-116.90232132	5336119.25697197	507262.292066261
WET BDY	B47	48.17839407	-116.90227602	5336132.21162554	507265.643283087
WET BDY	B48	48.17849053	-116.90227332	5336142.93408207	507265.830316794
WET BDY	B49	48.17860979	-116.90223013	5336156.19368053	507269.024209114
WET BDY	B50	48.17874928	-116.90221441	5336171.69949234	507270.172630951
WET BDY	B51	48.17885982	-116.90218632	5336183.98798078	507272.245337014
WET BDY	B52	48.17901020	-116.90220245	5336200.70116135	507271.025225408
WET BDY	B53	48.17909327	-116.90216959	5336209.93723782	507273.45619239
WET BDY	B54	48.17922430	-116.90215096	5336224.50307845	507274.822342868
WET BDY	B55	48.17934675	-116.90213023	5336238.11573564	507276.34609164
WET BDY	B56	48.17945932	-116.90211847	5336250.629074	507277.204062411
WET BDY	B57	48.17960927	-116.90210473	5336267.29634326	507278.204483511
WET BDY	B58	48.17980860	-116.90207540	5336289.45486464	507280.356543857
WET BDY	B59	48.17992812	-116.90210935	5336302.73669875	507277.815936683
WET BDY	B60	48.18008504	-116.90213963	5336320.17545805	507275.542453004
WET BDY	B61	48.18021953	-116.90206070	5336335.13125388	507281.390847745
WET BDY	B62	48.18037968	-116.90194701	5336352.9417947	507289.819748601
WET BDY	Culv	48.17898509	-116.90304439	5336197.83078234	507208.441265447
WET BDY	DP 1	48.17832072	-116.90140687	5336124.1420943	507330.264553688
WET BDY	DP 2	48.17806720	-116.90210563	5336095.89641296	507278.355972512
WET BDY	DP 3	48.17848950	-116.90221737	5336142.82410803	507269.989205455
WET BDY	DP 4	48.18005706	-116.90199644	5336317.07880206	507286.190460599


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<b>WET BDY</b>	DP 5	48.18011729	-116.90225303	5336323.74845894	507267.108810558
<b>WET BDY</b>	DP 6	48.17991444	-116.90156141	5336301.26796134	507318.549169378
<b>WET BDY</b>	DP 7	48.17954359	-116.90175109	5336260.02966451	507304.501828553
<b>WET BDY</b>	DP 8	48.17848844	-116.90116807	5336142.80598034	507347.99188687
<b>WET BDY</b>	Metal St	48.17810349	-116.90084519	5336100.05062875	507372.049694249
<b>WET BDY</b>	Stake W	48.17976618	-116.90085322	5336284.85635228	507371.214120905
<b>WET BDY</b>	Tavu 10	48.18022519	-116.90183254	5336335.78217564	507298.350425845
<b>WET BDY</b>	U1	48.17807404	-116.90179700	5336096.6858742	507301.297723832
<b>WET BDY</b>	U2	48.17813902	-116.90187562	5336103.90157828	507295.444390724
<b>WET BDY</b>	U3	48.17823272	-116.90181328	5336114.32158944	507300.064957585
<b>WET BDY</b>	U4	48.17834237	-116.90175067	5336126.51579569	507304.703770003
<b>WET BDY</b>	U5	48.17839956	-116.90167092	5336132.87909454	507310.623826204
<b>WET BDY</b>	U6	48.17840539	-116.90148178	5336133.5454841	507324.683620541
<b>WET BDY</b>	U7	48.17836179	-116.90137525	5336128.70921312	507332.608760202
<b>WET BDY</b>	U8	48.17825127	-116.90139526	5336116.42375333	507331.137345535
<b>WET BDY</b>	U9	48.17817222	-116.90133650	5336107.64317253	507335.516346808
<b>WET BDY</b>	U10	48.17812547	-116.90124197	5336102.45500301	507342.550578735
<b>WET BDY</b>	U11	48.17804932	-116.90123099	5336093.99244146	507343.377847694
<b>WET BDY</b>	U12	48.17800886	-116.90138900	5336089.48063561	507331.636981348
<b>WET BDY</b>	U13	48.17803728	-116.90159521	5336092.61953796	507316.303945266

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Joslyn N parcel wet bdy points (Duebendorfer GPS)

type	Ident	Latitude	Longitude	y_proj	x_proj
WET BDY	A1	48.17801427	-116.90294564	5336089.9344233	507215.918171987
WET BDY	A2	48.17798950	-116.90289227	5336087.18632049	507219.888748112
WET BDY	A3	48.17798054	-116.90278022	5336086.20098716	507228.21986323
WET BDY	A4	48.17797355	-116.90265847	5336085.43561714	507237.271837519
WET BDY	A5	48.17797025	-116.90256955	5336085.07651176	507243.882239972
WET BDY	A6	48.17796334	-116.90246169	5336084.31878549	507251.901656484
WET BDY	A7	48.17797098	-116.90237160	5336085.17681793	507258.597442363
WET BDY	A8	48.17797275	-116.90226750	5336085.38366244	507266.33614591
WET BDY	A9	48.17797328	-116.90211533	5336085.45703652	507277.648082583
WET BDY	A10	48.17796234	-116.90197590	5336084.25437978	507288.01422428
WET BDY	A11	48.17795066	-116.90184470	5336082.96791498	507297.769685781
WET BDY	A12	48.17794661	-116.90172405	5336082.52981068	507306.73914945
WET BDY	A13	48.17795061	-116.90161522	5336082.9840325	507314.82887567
WET BDY	A14	48.17795082	-116.90151905	5336083.01667481	507321.977789611
WET BDY	A15	48.17793544	-116.90134242	5336081.3238101	507335.109937929
WET BDY	A16	48.17792914	-116.90113325	5336080.64346312	507350.660258026
WET BDY	A17	48.17791736	-116.90094983	5336079.35158962	507364.297531877
WET BDY	A18	48.17790920	-116.90075428	5336078.46400652	507378.835548264
WET BDY	B1	48.17793355	-116.90074553	5336081.17107157	507379.482331922
WET BDY	B2	48.17797032	-116.90092386	5336085.24139537	507366.22070541
WET BDY	B3	48.17805352	-116.90102051	5336094.47950164	507359.023792437
WET BDY	B4	48.17821840	-116.90105474	5336112.80207576	507356.455825896
WET BDY	B5	48.17839197	-116.90105129	5336132.09482752	507356.686868428
WET BDY	B6	48.17853011	-116.90098023	5336147.45566172	507361.949548278
WET BDY	B7	48.17869475	-116.90098947	5336165.7543046	507361.239596501
WET BDY	B8	48.17879402	-116.90108895	5336176.77909501	507353.830304558
WET BDY	B9	48.17889879	-116.90104355	5336188.42832726	507357.190059357
WET BDY	B10	48.17895203	-116.90098587	5336194.35191851	507361.470555365
WET BDY	B11	48.17910903	-116.90099711	5336211.80080035	507360.612027065
WET BDY	B12	48.17924648	-116.90099049	5336227.07853539	507361.084512854
WET BDY	B13	48.17939166	-116.90099114	5336243.2156485	507361.015709651
WET BDY	B14	48.17952493	-116.90102718	5336258.02471555	507358.317701739
WET BDY	B15	48.17960135	-116.90102416	5336266.51927491	507358.530630115
WET BDY	B16	48.17953592	-116.90105924	5336259.24340077	507355.932547888
WET BDY	B17	48.17949512	-116.90111226	5336254.70317884	507351.997157359
WET BDY	B18	48.17942117	-116.90106703	5336246.4880874	507355.370128872
WET BDY	B19	48.17936509	-116.90107500	5336240.25375682	507354.785589019
WET BDY	B20	48.17928911	-116.90111281	5336231.80529393	507351.985315461
WET BDY	B21	48.17923959	-116.90115327	5336226.2977572	507348.984742856
WET BDY	B22	48.17919057	-116.90122752	5336220.84145795	507343.472470984
WET BDY	B23	48.17922388	-116.90130856	5336224.53634569	507337.443482347



WET BDY	B24	48.17928005	-116.90139857	5336230.77142409	507330.744163728
WET BDY	B25	48.17937619	-116.90142956	5336241.45473562	507328.427364074
WET BDY	B26	48.17938431	-116.90151062	5336242.34886019	507322.400563994
WET BDY	B27	48.17927515	-116.90155050	5336230.21219011	507319.451523101
WET BDY	B28	48.17917021	-116.90155429	5336218.54808074	507319.184759553
WET BDY	B29	48.17908785	-116.90157877	5336209.39080855	507317.37646608
WET BDY	B30	48.17900705	-116.90155214	5336200.41320182	507319.367384693
WET BDY	B31	48.17892594	-116.90159974	5336191.39246314	507315.840566966
WET BDY	B32	48.17882909	-116.90156849	5336180.63134945	507318.177087729
WET BDY	B33	48.17873430	-116.90161945	5336170.09002912	507314.402390221
WET BDY	B34	48.17862985	-116.90176212	5336158.46699841	507303.811895861
WET BDY	B35	48.17853222	-116.90174405	5336147.61793224	507305.169180106
WET BDY	B36	48.17846902	-116.90175776	5336140.59214233	507304.158564385
WET BDY	B37	48.17839194	-116.90180471	5336132.02016725	507300.679778929
WET BDY	B38	48.17825974	-116.90186963	5336117.31956958	507295.872576495
WET BDY	B39	48.17815722	-116.90192555	5336105.91948051	507291.729429289
WET BDY	B40	48.17816454	-116.90203780	5336106.72201083	507283.384378303
WET BDY	B41	48.17812212	-116.90211715	5336101.99952656	507277.491539386
WET BDY	B42	48.17803573	-116.90207089	5336092.40221922	507280.942462993
WET BDY	B43	48.17801484	-116.90217405	5336090.07067766	507273.276772404
WET BDY	B44	48.17806239	-116.90227749	5336095.34558418	507265.580766
WET BDY	B45	48.17817570	-116.90231116	5336107.93672807	507263.061379611
WET BDY	B46	48.17827755	-116.90232132	5336119.25697197	507262.292066261
WET BDY	B47	48.17839407	-116.90227602	5336132.21162554	507265.643283087
WET BDY	B48	48.17849053	-116.90227332	5336142.93408207	507265.830316794
WET BDY	B49	48.17860979	-116.90223013	5336156.19368053	507269.024209114
WET BDY	B50	48.17874928	-116.90221441	5336171.69949234	507270.172630951
WET BDY	B51	48.17885982	-116.90218632	5336183.98798078	507272.245337014
WET BDY	B52	48.17901020	-116.90220245	5336200.70116135	507271.025225408
WET BDY	B53	48.17909327	-116.90216959	5336209.93723782	507273.45619239
WET BDY	B54	48.17922430	-116.90215096	5336224.50307845	507274.822342868
WET BDY	B55	48.17934675	-116.90213023	5336238.11573564	507276.34609164
WET BDY	B56	48.17945932	-116.90211847	5336250.629074	507277.204062411
WET BDY	B57	48.17960927	-116.90210473	5336267.29634326	507278.204483511
WET BDY	B58	48.17980860	-116.90207540	5336289.45486464	507280.356543857
WET BDY	B59	48.17992812	-116.90210935	5336302.73669875	507277.815936683
WET BDY	B60	48.18008504	-116.90213963	5336320.17545805	507275.542453004
WET BDY	B61	48.18021953	-116.90206070	5336335.13125388	507281.390847745
WET BDY	B62	48.18037968	-116.90194701	5336352.9417947	507289.819748601
WET BDY	Culv	48.17898509	-116.90304439	5336197.83078234	507208.441265447
WET BDY	DP 1	48.17832072	-116.90140687	5336124.1420943	507330.264553688
WET BDY	DP 2	48.17806720	-116.90210563	5336095.89641296	507278.355972512
WET BDY	DP 3	48.17848950	-116.90221737	5336142.82410803	507269.989205455
WET BDY	DP 4	48.18005706	-116.90199644	5336317.07880206	507286.190499599

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<b>WET BDY</b>	DP 5	48.18011729	-116.90225303	5336323.74845894	507267.108810558
<b>WET BDY</b>	DP 6	48.17991444	-116.90156141	5336301.26796134	507318.549169378
<b>WET BDY</b>	DP 7	48.17954359	-116.90175109	5336260.02966451	507304.501828553
<b>WET BDY</b>	DP 8	48.17848844	-116.90116807	5336142.80598034	507347.99188687
<b>WET BDY</b>	Metal St	48.17810349	-116.90084519	5336100.05062875	507372.049694249
<b>WET BDY</b>	Stake W	48.17976618	-116.90085322	5336284.85635228	507371.214120905
<b>WET BDY</b>	Tavu 10	48.18022519	-116.90183254	5336335.78217564	507298.350425845
<b>WET BDY</b>	U1	48.17807404	-116.90179700	5336096.6858742	507301.297723832
<b>WET BDY</b>	U2	48.17813902	-116.90187562	5336103.90157828	507295.444390724
<b>WET BDY</b>	U3	48.17823272	-116.90181328	5336114.32158944	507300.064957585
<b>WET BDY</b>	U4	48.17834237	-116.90175067	5336126.51579569	507304.703770003
<b>WET BDY</b>	U5	48.17839956	-116.90167092	5336132.87909454	507310.623826204
<b>WET BDY</b>	U6	48.17840539	-116.90148178	5336133.5454841	507324.683620541
<b>WET BDY</b>	U7	48.17836179	-116.90137525	5336128.70921312	507332.608760202
<b>WET BDY</b>	U8	48.17825127	-116.90139526	5336116.42375333	507331.137345535
<b>WET BDY</b>	U9	48.17817222	-116.90133650	5336107.64317253	507335.516346808
<b>WET BDY</b>	U10	48.17812547	-116.90124197	5336102.45500301	507342.550578735
<b>WET BDY</b>	U11	48.17804932	-116.90123099	5336093.99244146	507343.377847694
<b>WET BDY</b>	U12	48.17800886	-116.90138900	5336089.48063561	507331.636981348
<b>WET BDY</b>	U13	48.17803728	-116.90159521	5336092.61953796	507316.303945266

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### Southern Parcel Wet Pts (Welch Comer Survey)

type	ident	Latitude	Longitude	y_proj	x_proj
WET BDY	W1	48.1777627851	-116.9028298772	5336061.99287223	507224.559033874
WET BDY	W2	48.1777564087	-116.9028205386	5336061.28501744	507225.254150605
WET BDY	W3	48.1777486749	-116.9028078364	5336060.42660478	507226.199504498
WET BDY	W4	48.177748438	-116.9027868316	5336060.40224767	507227.761011159
WET BDY	W5	48.1777514025	-116.9027772095	5336060.73265419	507228.475890654
WET BDY	W6	48.177757816	-116.902772048	5336061.44599529	507228.858689287
WET BDY	W7	48.177768613	-116.9027693282	5336062.64632972	507229.05935846
WET BDY	W8	48.1777744863	-116.9027671588	5336063.29934673	507229.219803567
WET BDY	W9	48.1777796527	-116.9027714373	5336063.87318612	507228.901018616
WET BDY	W10	48.1777813799	-116.902781216	5336064.06424389	507228.173838664
WET BDY	W11	48.1777878038	-116.9027903279	5336064.77739924	507227.495567844
WET BDY	W12	48.1777855211	-116.9028045694	5336064.52234028	507226.437192201
WET BDY	W13	48.1777749968	-116.9028191058	5336063.35120593	507225.358051833
WET BDY	W14	48.1778174704	-116.9028433549	5336068.06983759	507223.549435971
WET BDY	W15	48.1778310366	-116.9028086883	5336069.58096813	507226.124602673
WET BDY	W16	48.1778290366	-116.9027472075	5336069.36444906	507230.69529054
WET BDY	W17	48.1778263461	-116.9026861959	5336069.07114092	507235.231196155
WET BDY	W18	48.1778251596	-116.9026102099	5336068.94641486	507240.88006903
WET BDY	W19	48.1759556176	-116.8999620579	5335861.40096613	507438.010813305
WET BDY	W20	48.1759463696	-116.8998172349	5335860.38707654	507448.778508017
WET BDY	W21	48.175962147	-116.8997182292	5335862.15031778	507456.136451758
WET BDY	W22	48.1759637921	-116.8995807133	5335862.3465126	507466.35934638
WET BDY	W23	48.1759716191	-116.8994851574	5335863.22576028	507473.461974394
WET BDY	W24	48.1759874835	-116.8993493705	5335865.00228221	507483.554261218
WET BDY	W25	48.1759914138	-116.8991395691	5335865.4595713	507499.15062384
WET BDY	W26	48.1759841799	-116.8990149221	5335864.6676923	507508.418115183
WET BDY	W27	48.1759566874	-116.8989069033	5335861.62247482	507516.452405439
WET BDY	W28	48.175971001	-116.8988108266	5335863.22281637	507523.592794941
WET BDY	W29	48.1759174135	-116.8987418049	5335857.27336195	507528.731812661
WET BDY	W30	48.1758721434	-116.8985948905	5335852.25601931	507539.660290242
WET BDY	W31	48.1758459428	-116.8984524666	5335849.35781705	507550.252156378
WET BDY	W32	48.1758444025	-116.8983149039	5335849.20012998	507560.479018492

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WET BDY	W33	48.175829529	-116.8982213062	5335847.55615862	507567.43941294
WET BDY	W34	48.1758465128	-116.8981204246	5335849.45382784	507574.936616756
WET BDY	W35	48.1758049704	-116.8979935821	5335844.84892464	507584.372421213
WET BDY	W36	48.1757940328	-116.8978542573	5335843.64696993	507594.731677646
WET BDY	W37	48.1757774815	-116.897691642	5335841.82337923	507606.823224655
WET BDY	W38	48.1757672965	-116.8975826255	5335840.70211428	507614.929207984
WET BDY	W39	48.1757355642	-116.8974156149	5335837.19164573	507627.349773498
WET BDY	W40	48.1755734879	-116.8961073362	5335819.30758521	507724.633898508
WET BDY	W41	48.1756798708	-116.8961657742	5335831.12609415	507720.273530397
WET BDY	W42	48.1756427024	-116.8960567463	5335827.005807	507728.384453675
WET BDY	W43	48.1756150114	-116.8962446219	5335823.90910838	507714.42157323
WET BDY	W44	48.175631082	-116.8964049027	5335825.67927589	507702.503576722
WET BDY	W45	48.1753052073	-116.8955812354	5335789.54138686	507763.785795069
WET BDY	W46	48.1756084067	-116.8966494448	5335823.13446743	507684.327229818
WET BDY	W47	48.1761295156	-116.8971934481	5335881.00110462	507643.80750163
WET BDY	W48	48.1760847695	-116.8971479771	5335876.03213056	507647.194524562
WET BDY	W49	48.1761166691	-116.8967927869	5335879.61313117	507673.595061648
WET BDY	W50	48.1760909723	-116.8969172588	5335876.74453748	507664.345495544
WET BDY	W51	48.1761215585	-116.8969511569	5335880.1407923	507661.820910963
WET BDY	W52	48.1760891325	-116.8970394153	5335876.52787674	507655.264499072
WET BDY	W53	48.1761451385	-116.8970888843	5335882.74797757	507651.578578047
WET BDY	W54	48.1753359015	-116.8957122548	5335792.93980349	507754.040869146
WET BDY	W55	48.1753147415	-116.8958341617	5335790.57560027	507744.981207775
WET BDY	W56	48.1753723081	-116.89592507	5335796.96493112	507738.214205455
WET BDY	W57	48.1754163132	-116.8959912228	5335801.84940907	507733.289636507
WET BDY	W58	48.1754813226	-116.8959022456	5335809.0841058	507739.894618915
WET BDY	W59	48.1755323995	-116.8958463619	5335814.76689032	507744.041443258
WET BDY	W60	48.1755809384	-116.8959143879	5335820.15510323	507738.976944919
WET BDY	W61	48.17554502	-116.8960148437	5335816.15269551	507731.514257762
WET BDY	W62	48.1756347845	-116.8965579915	5335826.07548273	507691.122104265
WET BDY	W63	48.1755525648	-116.896688944	5335816.9237367	507681.399121277
WET BDY	W64	48.1755645322	-116.8968285664	5335818.23996615	507671.017520051
WET BDY	W65	48.1755683866	-116.8969560385	5335818.65567126	507661.540410064
WET BDY	W66	48.1756675034	-116.8970789157	5335829.660192	507652.390721370
WET BDY	W67	48.1757020823	-116.8971560645	5335833.4959356	507646.650193231

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<b>WET BDY</b>	W68	48.1757014829	-116.8972770141	5335833.41729245	507637.65866641
<b>WET BDY</b>	W69	48.1755781656	-116.8970779788	5335819.73045731	507652.473665209

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**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

**Project/Site:** Priest River Property (RPR00000250700A) **City/County:** Priest River **Sampling Date:** 27-Jul-22  
**Applicant/Owner:** City of Priest River (Welch Corner) **State:** ID **Sampling Point:** DP 1N  
**Investigator(s):** Tom Duebendorfer, PWS **Section, Township, Range:** S 25 T 56N R 5W  
**Landform (hillslope, terrace, etc.):** Lowland **Local relief (concave, convex, none):** convex **Slope:** 0.0% / 0.0°  
**Subregion (LRR):** LRR E **Lat.:** 48°10'42.0"N **Long.:** 116°54'05.1"W **Datum:** WGS 84  
**Soil Map Unit Name:** Mission silt loam **NWI classification:** none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/> <b>Hydric Soil Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/> <b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
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**Remarks:**  
None of three required parameters observed - plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: 30')	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Sapling/Shrub Stratum (Plot size: 20')</b>				<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>60</u> x 2 = <u>120</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>50</u> x 5 = <u>250</u> Column Totals: <u>150</u> (A) <u>510</u> (B)  Prevalence Index = B/A = <u>3.400</u>
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Herb Stratum (Plot size: 0.1 ac)</b>				
1. Phalaris arundinacea	60	<input checked="" type="checkbox"/> 40.0%	FACW	
2. Linaria vulgaris	50	<input checked="" type="checkbox"/> 33.3%	UPL	
3. Agrostis stolonifera	20	<input type="checkbox"/> 13.3%	FAC	
4. Tanacetum vulgare	15	<input type="checkbox"/> 10.0%	FACU	
5. Trifolium pratense	5	<input type="checkbox"/> 3.3%	FACU	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>150</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>0</b>				
<b>% Bare Ground in Herb Stratum: 0</b>				

**Remarks:**  
Vegetation is not hydrophytic - neither test met



**Soil**

Sampling Point: DP 1 N

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/></p>

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Remarks:  
No hydric indicators

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present? Yes  No       Depth (inches):

Water Table Present? Yes  No       Depth (inches):

Saturation Present? (includes capillary fringe) Yes  No       Depth (inches):

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
hydrology not expected - topography does not indicate ponding likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Corner) State: ID Sampling Point: DP 2 N  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48°10'41.0"N Long.: 116°54'07.6"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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**Remarks:**  
 Although vegetation is hydrophytic; soils do not show hydric indicators; and hydrology not observed nor likely. Plot located on higher mounded area and not in wetland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	0	<input type="checkbox"/> 0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Sapling/Shrub Stratum (Plot size: 20')</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>120</u> x 2 = <u>240</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>120</u> (A) <u>240</u> (B)  Prevalence Index = B/A = <u>2.000</u>
1. <i>Spiraea douglasii</i>	100	<input checked="" type="checkbox"/> 100.0%	FACW	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Herb Stratum (Plot size: 0.1 ac)</b>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Phalaris arundinacea</i>	20	<input checked="" type="checkbox"/> 100.0%	FACW	
2. _____		<input type="checkbox"/> 0.0%	_____	
3. _____		<input type="checkbox"/> 0.0%	_____	
4. _____		<input type="checkbox"/> 0.0%	_____	
5. _____		<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>% Bare Ground in Herb Stratum: 0</b>				

**Remarks:**  
 Vegetation is hydrophytic - both tests met



**Soil**

Sampling Point: **DP 2 N**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><input type="checkbox"/> Sandy Redox (S5)  <input type="checkbox"/> Stripped Matrix (S6)  <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)  <input type="checkbox"/> Loamy Gleyed Matrix (F2)  <input type="checkbox"/> Depleted Matrix (F3)  <input type="checkbox"/> Redox Dark Surface (F6)  <input type="checkbox"/> Depleted Dark Surface (F7)  <input type="checkbox"/> Redox depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks) <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
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**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 No hydric indicators

**Hydrology**

**Wetland Hydrology Indicators:**

<p><b>Primary Indicators (minimum of one required; check all that apply)</b></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p><b>Secondary Indicators (minimum of two required)</b></p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 hydrology not expected - topography does not indicate ponding likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River State: ID Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Comer) Section, Township, Range: S 25 T 56N R 5W Sampling Point: DP 3 N  
 Investigator(s): Tom Duebendorfer, PWS Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0 % / 0.0 °  
 Subregion (LRR): LRR E Lat.: 48°10'42.6"N Long.: 116°54'08.0"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: None of three required parameters observed. Plot not in a wetland.	

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
1. <u>Abies grandis</u>	40	<input checked="" type="checkbox"/> 80.0%	FACU	
2. <u>Pseudotsuga menziesii</u>	10	<input checked="" type="checkbox"/> 20.0%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
<b>50 = Total Cover</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>3</u> x 3 = <u>9</u> FACU species <u>103</u> x 4 = <u>412</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>116</u> (A) <u>471</u> (B) Prevalence Index = B/A = <u>4.060</u>
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				
1. <u>Symphoricarpos albus</u>	20	<input checked="" type="checkbox"/> 66.7%	FACU	
2. <u>Berberis repens</u>	10	<input checked="" type="checkbox"/> 33.3%	UPL	
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
<b>30 = Total Cover</b>				
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				
1. <u>Pteridium aquilinum</u>	30	<input checked="" type="checkbox"/> 83.3%	FACU	
2. <u>Hypericum perforatum</u>	3	<input type="checkbox"/> 8.3%	FACU	
3. <u>Cirsium arvense</u>	3	<input type="checkbox"/> 8.3%	FAC	
4. _____		<input type="checkbox"/> 0.0%		
5. _____		<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
<b>36 = Total Cover</b>				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
<b>0 = Total Cover</b>				
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



**Soil**

Sampling Point: **DP 3 N**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 No hydric indicators

**Hydrology**

**Wetland Hydrology Indicators:**

<p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 hydrology not expected - topography does not indicate ponding likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Comer) State: ID Sampling Point: DP 4 N  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48°10'48.2"N Long.: 116°54'07.2"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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**Remarks:**  
 Although vegetation is hydrophytic; soils do not show hydric indicators within 12" of surface; and hydrology not observed nor likely. Plot not located in wetland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	_____	<input type="checkbox"/> 0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>0 = Total Cover</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>100</u> x 2 = <u>200</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>140</u> (A) <u>340</u> (B)  Prevalence Index = B/A = <u>2.429</u>
<b>Sapling/Shrub Stratum (Plot size: 20')</b>				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
5. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>0 = Total Cover</b>				
<b>Herb Stratum (Plot size: 0.1 ac)</b>				
1. <u>Phalaris arundinacea</u>	<u>100</u>	<input checked="" type="checkbox"/> <u>71.4%</u>	<u>FACW</u>	
2. <u>Tanacetum vulgare</u>	<u>20</u>	<input type="checkbox"/> <u>14.3%</u>	<u>FACU</u>	
3. <u>Cirsium arvense</u>	<u>20</u>	<input type="checkbox"/> <u>14.3%</u>	<u>FAC</u>	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
6. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
7. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
8. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
9. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
10. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
11. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>140 = Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
2. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>0 = Total Cover</b>				
% Bare Ground in Herb Stratum: <u>0</u>				

**Hydrophytic Vegetation Indicators:**  
 1 - Rapid Test for Hydrologic Vegetation  
 2 - Dominance Test is > 50%  
 3 - Prevalence Index is ≤3.0 <sup>1</sup>  
 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 5 - Wetland Non-Vascular Plants <sup>1</sup>  
 Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes  No



**Remarks:**  
 Vegetation is hydrophytic - both tests met

\*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: DP 4 N

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><input type="checkbox"/> Sandy Redox (S5)  <input type="checkbox"/> Stripped Matrix (S6)  <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)  <input type="checkbox"/> Loamy Gleyed Matrix (F2)  <input type="checkbox"/> Depleted Matrix (F3)  <input type="checkbox"/> Redox Dark Surface (F6)  <input type="checkbox"/> Depleted Dark Surface (F7)  <input type="checkbox"/> Redox depressions (F8)</p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks) <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
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**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 No hydric indicators

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 hydrology not expected - topography does not indicate ponding likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Comer) State: ID Sampling Point: DP 5N  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0% / 0.0%  
 Subregion (LRR): LRR E Lat.: 48°10'48.4"N Long.: 116°54'08.1"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
<b>Remarks:</b> All three parameters met - area is in deep swale. Plot located in wetland.	

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	_____	<input type="checkbox"/> 0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>100</u> x 1 = <u>100</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>100</u> (B)  Prevalence Index = B/A = <u>1.000</u>
<b>Sapling/Shrub Stratum (Plot size: 20')</b>				
1. _____	_____	<input type="checkbox"/> 0.0%	_____	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Herb Stratum (Plot size: 0.1 ac)</b>				
1. <u>Typha latifolia</u>	100	<input checked="" type="checkbox"/> 100.0%	OBL	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>% Bare Ground in Herb Stratum: 0</b>				
<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>				

**Remarks:**  
 Vegetation is hydrophytic - both tests met



\*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: DP 5 N

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	2/1	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histic Solonchalep (A1) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Hydric indicators - low chroma in seasonally saturated conditions

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
<p><b>Field Observations:</b></p> <p>Surface Water Present?    Yes <input type="radio"/>    No <input checked="" type="radio"/>    Depth (inches): <input type="text"/></p> <p>Water Table Present?    Yes <input type="radio"/>    No <input checked="" type="radio"/>    Depth (inches): <input type="text"/></p> <p>Saturation Present? (includes capillary fringe)    Yes <input type="radio"/>    No <input checked="" type="radio"/>    Depth (inches): <input type="text"/></p>	<p><b>Wetland Hydrology Present?</b>    Yes <input checked="" type="radio"/>    No <input type="radio"/></p>

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 hydrology expected - topography indicates ponding is likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Comer) State: ID Sampling Point: DP 6 N  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48°10'47.7"N Long.: 116°54'05.6"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: None of three required parameters observed. Plot not in a wetland. In higher topography within forest.	

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. <i>Abies grandis</i>	20	<input type="checkbox"/> 16.7%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. <i>Pseudotsuga menziesii</i>	80	<input checked="" type="checkbox"/> 66.7%	FACU	
3. <i>Thuja plicata</i>	20	<input type="checkbox"/> 16.7%	FAC	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
		<b>120 = Total Cover</b>		
<b>Sapling/Shrub Stratum (Plot size: 20')</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>125</u> x 4 = <u>500</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>145</u> (A) <u>560</u> (B)  Prevalence Index = B/A = <u>3.862</u>
1. _____		<input type="checkbox"/> 0.0%		
2. _____		<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
		<b>0 = Total Cover</b>		
<b>Herb Stratum (Plot size: 0.1 ac)</b>				
1. <i>Aralia nudicaulis</i>	25	<input checked="" type="checkbox"/> 100.0%	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____		<input type="checkbox"/> 0.0%		
3. _____		<input type="checkbox"/> 0.0%		
4. _____		<input type="checkbox"/> 0.0%		
5. _____		<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
		<b>25 = Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
		<b>0 = Total Cover</b>		
% Bare Ground in Herb Stratum: <u>0</u>				

Remarks:  
Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 6 N**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)		<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)		

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
No hydric indicators

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
hydrology not expected - topography does not indicate ponding likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Comer) State: ID Sampling Point: DP 7 N  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48°10'46.4"N Long.: 116°54'06.3"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed. Plot not in a wetland. In higher topography within forest.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: 30')	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. <u>Pseudotsuga menziesii</u>	30	<input checked="" type="checkbox"/> 27.3%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. <u>Pinus ponderosa</u>	30	<input checked="" type="checkbox"/> 27.3%	FACU	
3. <u>Pinus monticola</u>	30	<input checked="" type="checkbox"/> 27.3%	FACU	
4. <u>Abies grandis</u>	20	<input type="checkbox"/> 18.2%	FACU	
		<b>110 = Total Cover</b>		<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>110</u> x 4 = <u>440</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>110</u> (A) <u>440</u> (B) Prevalence Index = B/A = <u>4.000</u>
<b>Sapling/Shrub Stratum (Plot size: 20')</b>				
1. _____		<input type="checkbox"/> 0.0%		
2. _____		<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
		<b>0 = Total Cover</b>		
<b>Herb Stratum (Plot size: 0.1 ac)</b>				
1. _____		<input type="checkbox"/> 0.0%		
2. _____		<input type="checkbox"/> 0.0%		
3. _____		<input type="checkbox"/> 0.0%		
4. _____		<input type="checkbox"/> 0.0%		
5. _____		<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
		<b>0 = Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
		<b>0 = Total Cover</b>		
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



\*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 7 N**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
No hydric indicators

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)	
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**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches): \_\_\_\_\_

Water Table Present?    Yes     No     Depth (inches): \_\_\_\_\_

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
hydrology not expected - topography does not indicate ponding likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Priest River Property (RPR00000250700A) City/County: Priest River Sampling Date: 27-Jul-22  
 Applicant/Owner: City of Priest River (Welch Comer) State: ID Sampling Point: DP 8 N  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): convex Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48°10'42.6"N Long.: 116°54'04.2"W Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
---	---

Remarks:  
 All three parameters met - area is in wet meadow. Plot located in wetland.

**VEGETATION - Use scientific names of plants.**

	Absolute % Cover	Rel.Strat. Cover	Indicator Status	
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				<b>Dominance Test worksheet:</b> Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. _____		<input type="checkbox"/> 0.0%		
2. _____		<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>20</u> x 1 = <u>20</u> FACW species <u>100</u> x 2 = <u>200</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>130</u> (A) <u>250</u> (B) Prevalence Index = B/A = <u>1.923</u>
1. _____		<input type="checkbox"/> 0.0%		
2. _____		<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Phalaris arundinacea</u>	100	<input checked="" type="checkbox"/> 76.9%	FACW	
2. <u>Carex nebrascensis</u>	20	<input type="checkbox"/> 15.4%	OBL	
3. <u>Cirsium arvense</u>	10	<input type="checkbox"/> 7.7%	FAC	
4. _____		<input type="checkbox"/> 0.0%		
5. _____		<input type="checkbox"/> 0.0%		
6. _____	0	<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
	130	<b>= Total Cover</b>		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>% Bare Ground in Herb Stratum:</b> <u>0</u>				

Remarks:  
 Vegetation is hydrophytic - both tests met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 8 N**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14	10YR	2/1	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
Hydric indicators - low chroma in seasonally saturated conditions

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
hydrology expected - topography indicates ponding is likely to occur



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 1 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0 % / 0.0 °  
 Subregion (LRR): LRR E Lat.: 48.177297 Long.: -116.902210 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
---	---

**Remarks:**

Although vegetation is hydrophytic, soils are marginal with respect to anaerobic conditions, and hydrology is likely not present. Plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
1. <u>Populus balsamifera</u>	20	<input checked="" type="checkbox"/> 100.0%	FAC	
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>			20	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>			0	
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>60</u> x 2 = <u>120</u> FAC species <u>70</u> x 3 = <u>210</u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>140</u> (A) <u>370</u> (B)  Prevalence Index = B/A = <u>2.643</u>
1. <u>Phalaris arundinacea</u>	60	<input checked="" type="checkbox"/> 50.0%	FACW	
2. <u>Elymus repens</u>	30	<input checked="" type="checkbox"/> 25.0%	FAC	
3. <u>Equisetum arvense</u>	10	<input type="checkbox"/> 8.3%	FAC	
4. <u>Poa pratensis</u>	10	<input type="checkbox"/> 8.3%	FAC	
5. <u>Carex microptera</u>	5	<input type="checkbox"/> 4.2%	FACU	
6. <u>Trifolium pratense</u>	5	<input type="checkbox"/> 4.2%	FACU	
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>			120	
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>			0	
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				

**Hydrophytic Vegetation Indicators:**  
 1 - Rapid Test for Hydrologic Vegetation  
 2 - Dominance Test is > 50%  
 3 - Prevalence Index is ≤ 3.0<sup>1</sup>  
 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 5 - Wetland Non-Vascular Plants<sup>1</sup>  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes  No



**Remarks:**  
 Vegetation is hydrophytic - both tests met

**Soil**

Sampling Point: **DP 1 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features					Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>			
0-2	10YR	2/2	100%					Silt Loam	
2-12	2,5Y	4/2	100%					Silt Loam	
12-20	2.5YR	4/2	70%	10YR	3/6	30%	C	M	Silt Loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
Soil is marginal - redox below 12"

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
Hydrology possible but if present, very short-duration



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 2 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.177221 Long.: -116.902085 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
---	---

Remarks:  
 None of three required parameters observed. Plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
1. _____		<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>110</u> (A) <u>420</u> (B)  Prevalence Index = B/A = <u>3.818</u>
1. <u>Symphoricarpos albus</u>	5	<input checked="" type="checkbox"/> 100.0%	FACU	
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>				
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Tanacetum vulgare</u>	80	<input checked="" type="checkbox"/> 76.2%	FACU	
2. <u>Elymus repens</u>	20	<input type="checkbox"/> 19.0%	FAC	
3. <u>Leucanthemum vulgare</u>	5	<input type="checkbox"/> 4.8%	FACU	
4. _____		<input type="checkbox"/> 0.0%		
5. _____		<input type="checkbox"/> 0.0%		
6. _____		<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
<b>= Total Cover</b>				
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 2 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR	2/2	100%				Silt Loam	
2-18	2,5Y	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p> <input type="checkbox"/> Sandy Redox (S5)  <input type="checkbox"/> Stripped Matrix (S6)  <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)  <input type="checkbox"/> Loamy Gleyed Matrix (F2)  <input type="checkbox"/> Depleted Matrix (F3)  <input type="checkbox"/> Redox Dark Surface (F6)  <input type="checkbox"/> Depleted Dark Surface (F7)  <input type="checkbox"/> Redox depressions (F8)         </p>	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
Soil is not hydric

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

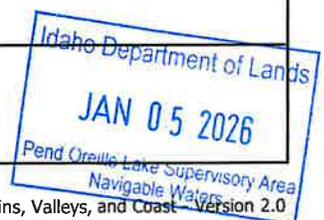
Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
Hydrologic indicators not observed.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 3 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.177295 Long.: -116.903411 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: PEM1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

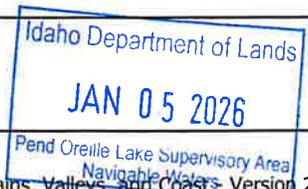
**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: None of three required parameters observed. Plot not in wetland.	

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
1. _____		<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>3</u> x 2 = <u>6</u> FAC species <u>30</u> x 3 = <u>90</u> FACU species <u>105</u> x 4 = <u>420</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>138</u> (A) <u>516</u> (B)  Prevalence Index = B/A = <u>3.739</u>
1. _____		<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Trifolium pratense</u>	50	<input checked="" type="checkbox"/> 36.2%	FACU	
2. <u>Tanacetum vulgare</u>	40	<input checked="" type="checkbox"/> 29.0%	FACU	
3. <u>Elymus repens</u>	30	<input checked="" type="checkbox"/> 21.7%	FAC	
4. <u>Leucanthemum vulgare</u>	15	<input type="checkbox"/> 10.9%	FACU	
5. <u>Phalaris arundinacea</u>	3	<input type="checkbox"/> 2.2%	FACW	
6. _____		<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
	138	<b>= Total Cover</b>		
<b>Woody Vine Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>% Bare Ground in Herb Stratum:</b> <u>0</u>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



**Soil**

Sampling Point: **DP 3 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-2	10YR	2/2	100%				Silt Loam	
2-17	2,5Y	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, not expected



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 4 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.176977 Long.: -116.902374 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
None of three required parameters observed. Plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )					Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)
1. <u>Pinus contorta</u>	20	<input checked="" type="checkbox"/>	50.0%	FAC	
2. <u>Pinus ponderosa</u>	20	<input checked="" type="checkbox"/>	50.0%	FACU	
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
<b>40 = Total Cover</b>					
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )					<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>85</u> x 4 = <u>340</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>105</u> (A) <u>400</u> (B)  Prevalence Index = B/A = <u>3.810</u>
1. <u>Symphoricarpos albus</u>	20	<input checked="" type="checkbox"/>	80.0%	FACU	
2. <u>Amelanchier alnifolia</u>	5	<input checked="" type="checkbox"/>	20.0%	FACU	
3. _____	0	<input type="checkbox"/>	0.0%		
4. _____	0	<input type="checkbox"/>	0.0%		
<b>25 = Total Cover</b>					
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )					<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Tanacetum vulgare</u>	40	<input checked="" type="checkbox"/>	100.0%	FACU	
2. _____		<input type="checkbox"/>	0.0%		
3. _____		<input type="checkbox"/>	0.0%		
4. _____		<input type="checkbox"/>	0.0%		
5. _____		<input type="checkbox"/>	0.0%		
6. _____		<input type="checkbox"/>	0.0%		
7. _____	0	<input type="checkbox"/>	0.0%		
8. _____	0	<input type="checkbox"/>	0.0%		
9. _____	0	<input type="checkbox"/>	0.0%		
10. _____	0	<input type="checkbox"/>	0.0%		
11. _____	0	<input type="checkbox"/>	0.0%		
<b>40 = Total Cover</b>					
<b>Woody Vine Stratum</b> (Plot size: _____)					
1. _____	0	<input type="checkbox"/>	0.0%		
2. _____	0	<input type="checkbox"/>	0.0%		
<b>0 = Total Cover</b>					
<b>% Bare Ground in Herb Stratum: 0</b>					

Remarks:  
Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 4 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR	2/2	100%				grey fill?	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

2 cm Muck (A10)  
 Red Parent Material (TF2)  
 Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes  No

Remarks:  
 Soil is not hydric

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present? Yes  No  Depth (inches):

Water Table Present? Yes  No  Depth (inches):

Saturation Present? (includes capillary fringe) Yes  No  Depth (inches):

**Wetland Hydrology Present?** Yes  No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected - plot in slight depression



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 5 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.176900 Long.: -116.901702 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed. Plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
1. <u>Pinus contorta</u>	20	<input checked="" type="checkbox"/> 40.0%	FAC	
2. <u>Pinus ponderosa</u>	30	<input checked="" type="checkbox"/> 60.0%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>50 = Total Cover</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>35</u> x 3 = <u>105</u> FACU species <u>80</u> x 4 = <u>320</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>115</u> (A) <u>425</u> (B)  Prevalence Index = B/A = <u>3.696</u>
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				
1. <u>Symphoricarpos albus</u>	10	<input checked="" type="checkbox"/> 100.0%	FACU	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>10 = Total Cover</b>				
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				
1. <u>Tanacetum vulgare</u>	40	<input checked="" type="checkbox"/> 72.7%	FACU	
2. <u>Elymus repens</u>	15	<input checked="" type="checkbox"/> 27.3%	FAC	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
6. _____	_____	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>55 = Total Cover</b>				
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>0 = Total Cover</b>				
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				
<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: DP 5 S

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	2/2	100%				Silt Loam	
10-18	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

2 cm Muck (A10)  
 Red Parent Material (TF2)  
 Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric.

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

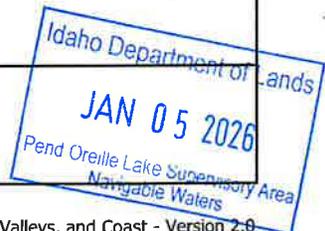
Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 6S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.1760915 Long.: -116.898839 Datum: WGS 84  
 Soil Map Unit Name: Wrencoe silty clay 0-2% slopes NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

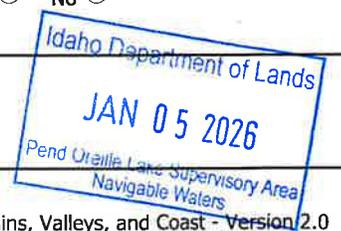
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed. Plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species? Ref.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
1. <u>Abies grandis</u>	40	<input checked="" type="checkbox"/> 50.0%	FACU	
2. <u>Populus balsamifera</u>	40	<input checked="" type="checkbox"/> 50.0%	FAC	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	80 = Total Cover
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>50</u> x 3 = <u>150</u> FACU species <u>125</u> x 4 = <u>500</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>185</u> (A) <u>670</u> (B) Prevalence Index = B/A = <u>3.622</u>
1. <u>Symphoricarpos albus</u>	60	<input checked="" type="checkbox"/> 85.7%	FACU	
2. <u>Cornus alba</u>	10	<input type="checkbox"/> 14.3%	FACW	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	70 = Total Cover
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Tanacetum vulgare</u>	25	<input checked="" type="checkbox"/> 71.4%	FACU	
2. <u>Alopecurus pratensis</u>	10	<input checked="" type="checkbox"/> 28.6%	FAC	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	35 = Total Cover
<b>Woody Vine Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
_____	0	<input type="checkbox"/> 0.0%	_____	0 = Total Cover
% Bare Ground in Herb Stratum: <u>0</u>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 6 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	2/2	100%				Silt Loam	
10-18	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
<p><b>Restrictive Layer (if present):</b></p> Type: _____ Depth (inches): _____	<p><b>Hydric Soil Present?</b>    Yes <input type="radio"/>    No <input checked="" type="radio"/></p>

Remarks:  
Soil is not hydric. Plot located on bench above wetland.

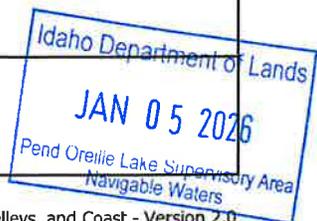
**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p><b>Primary Indicators (minimum of one required; check all that apply)</b></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p><b>Secondary Indicators (minimum of two required)</b></p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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<p><b>Field Observations:</b></p> Surface Water Present?    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <input type="text"/> Water Table Present?    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <input type="text"/> Saturation Present? (includes capillary fringe)    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): <input type="text"/>	<p><b>Wetland Hydrology Present?</b>    Yes <input type="radio"/>    No <input checked="" type="radio"/></p>
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Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 7 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.175845 Long.: -116.897820 Datum: WGS 84  
 Soil Map Unit Name: Wrencoe silty clay 0-2% slopes NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: None of three required parameters observed. Plot not in wetland.	

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. <u>Abies grandis</u>	30	<input checked="" type="checkbox"/> 100.0%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)
2. _____	0	<input type="checkbox"/> 0.0%	_____	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>30 = Total Cover</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>80</u> x 2 = <u>160</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>70</u> x 4 = <u>280</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>160</u> (A) <u>470</u> (B)  Prevalence Index = B/A = <u>2.938</u>
<b>Sapling/Shrub Stratum (Plot size: <u>20'</u>)</b>				
1. <u>Alnus incana</u>	40	<input checked="" type="checkbox"/> 57.1%	FACW	
2. <u>Symphoricarpos albus</u>	20	<input checked="" type="checkbox"/> 28.6%	FACU	
3. <u>Crataegus douglasii</u>	10	<input type="checkbox"/> 14.3%	FAC	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>70 = Total Cover</b>				
<b>Herb Stratum (Plot size: <u>0.1 ac</u>)</b>				
1. <u>Angelica arguta</u>	40	<input checked="" type="checkbox"/> 66.7%	FACW	
2. <u>Tanacetum vulgare</u>	20	<input checked="" type="checkbox"/> 33.3%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
6. _____	0	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>60 = Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>0 = Total Cover</b>				
% Bare Ground in Herb Stratum: <u>0</u>				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>				

Remarks:  
Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 7 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	2/2	100%				Silt Loam	
10-18	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric. Plot located on bench above wetland.

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 8S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.175682 Long.: -116.897581 Datum: WGS 84  
 Soil Map Unit Name: Wrencoe silty clay 0-2% slopes NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
---	---

Remarks:  
 All three parameters met - plot in wetland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	_____	<input type="checkbox"/> 0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Sapling/Shrub Stratum (Plot size: <u>20'</u>)</b>				<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>15</u> x 1 = <u>15</u> FACW species <u>140</u> x 2 = <u>280</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>155</u> (A) <u>295</u> (B)  Prevalence Index = B/A = <u>1.903</u>
1. <u>Alnus incana</u>	<u>40</u>	<input checked="" type="checkbox"/> 50.0%	<u>FACW</u>	
2. <u>Spiraea douglasii</u>	<u>40</u>	<input checked="" type="checkbox"/> 50.0%	<u>FACW</u>	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
5. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Herb Stratum (Plot size: <u>0.1 ac</u>)</b>				
1. <u>Phalaris arundinacea</u>	<u>60</u>	<input checked="" type="checkbox"/> 80.0%	<u>FACW</u>	
2. <u>Carex lenticularis</u>	<u>15</u>	<input checked="" type="checkbox"/> 20.0%	<u>OBL</u>	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
6. _____	_____	<input type="checkbox"/> 0.0%	_____	
7. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
8. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
9. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
10. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
11. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
2. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				

Remarks:  
 Vegetation is hydrophytic - both tests met



**Soil**

Sampling Point: **DP 8 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	2/1	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is hydric - low chroma and inundation.

**Hydrology**

**Wetland Hydrology Indicators:**

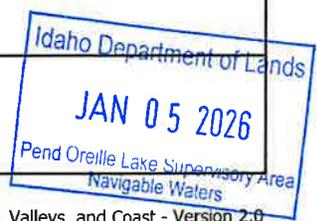
<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <input type="text" value="0"/>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="radio"/> No <input type="radio"/>
Water Table Present?	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <input type="text" value="0"/>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="radio"/> No <input type="radio"/>	Depth (inches): <input type="text" value="0"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrology observed



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 9 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0 % / 0.0 °  
 Subregion (LRR): LRR E Lat.: 48.175351 Long.: -116.895548 Datum: WGS 84  
 Soil Map Unit Name: Wrencoe silty clay 0-2% slopes NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: None of three required parameters observed - plot not in wetland.	

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. _____	_____	<input type="checkbox"/> 0.0%	_____	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>25.0%</u> (A/B)
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Sapling/Shrub Stratum (Plot size: <u>20'</u>)</b>				<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>35</u> x 3 = <u>105</u> FACU species <u>80</u> x 4 = <u>320</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>165</u> (A) <u>615</u> (B)  Prevalence Index = B/A = <u>3.727</u>
1. <u>Crataegus douglasii</u>	<u>30</u>	<input checked="" type="checkbox"/> <u>42.9%</u>	<u>FAC</u>	
2. <u>Symphoricarpos albus</u>	<u>20</u>	<input checked="" type="checkbox"/> <u>28.6%</u>	<u>FACU</u>	
3. <u>Cornus alba</u>	<u>10</u>	<input type="checkbox"/> <u>14.3%</u>	<u>FACW</u>	
4. <u>Alnus incana</u>	<u>10</u>	<input type="checkbox"/> <u>14.3%</u>	<u>FACW</u>	
5. _____	<u>0</u>	<input type="checkbox"/> <u>0.0%</u>	_____	
<b>= Total Cover</b>				
<b>Herb Stratum (Plot size: <u>0.1 ac</u>)</b>				
1. <u>Tanacetum vulgare</u>	<u>60</u>	<input checked="" type="checkbox"/> <u>63.2%</u>	<u>FACU</u>	
2. <u>Lupinus sulphureus</u>	<u>30</u>	<input checked="" type="checkbox"/> <u>31.6%</u>	<u>UPL</u>	
3. <u>Alopecurus pratensis</u>	<u>5</u>	<input type="checkbox"/> <u>5.3%</u>	<u>FAC</u>	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	_____	<input type="checkbox"/> 0.0%	_____	
6. _____	_____	<input type="checkbox"/> 0.0%	_____	
7. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
8. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
9. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
10. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
11. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
2. _____	<u>0</u>	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>				
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 9 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

2 cm Muck (A10)  
 Red Parent Material (TF2)  
 Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed - plot located near water, but not saturated (at high river flows).

Idaho Department of Lands  
 JAN 05 2026  
 Pend Oreille Lake Supervisory Area  
 Navigable Waters  
 Western Mountains, Valleys, and Coast Version 2.0

**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 10S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.175544 Long.: -116.895081 Datum: WGS 84  
 Soil Map Unit Name: Wrencoe silty clay 0-2% slopes NWI classification: PFO1C

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: None of three required parameters observed - plot not in wetland.	

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. <u>Pinus ponderosa</u>	40	<input checked="" type="checkbox"/> 100.0%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)
2. _____		<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
	40	= Total Cover		<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>26</u> x 3 = <u>78</u> FACU species <u>110</u> x 4 = <u>440</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>146</u> (A) <u>568</u> (B)  Prevalence Index = B/A = <u>3.890</u>
<b>Sapling/Shrub Stratum (Plot size: <u>20'</u>)</b>				
1. <u>Symphoricarpos albus</u>	30	<input checked="" type="checkbox"/> 37.5%	FACU	
2. <u>Crataegus douglasii</u>	20	<input checked="" type="checkbox"/> 25.0%	FAC	
3. <u>Amelanchier alnifolia</u>	20	<input checked="" type="checkbox"/> 25.0%	FACU	
4. <u>Berberis repens</u>	10	<input type="checkbox"/> 12.5%	UPL	
5. _____	0	<input type="checkbox"/> 0.0%		
	80	= Total Cover		
<b>Herb Stratum (Plot size: <u>0.1 ac</u>)</b>				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Pteridium aquilinum</u>	20	<input checked="" type="checkbox"/> 76.9%	FACU	
2. <u>Cirsium arvense</u>	3	<input type="checkbox"/> 11.5%	FAC	
3. <u>Equisetum arvense</u>	3	<input type="checkbox"/> 11.5%	FAC	
4. _____		<input type="checkbox"/> 0.0%		
5. _____		<input type="checkbox"/> 0.0%		
6. _____		<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
	26	= Total Cover		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
	0	= Total Cover		

Remarks:  
Vegetation is not hydrophytic - neither test met

Idaho Department of Lands  
**JAN 05 2026**  
 Pend Oreille Lake Supervisory Area  
 Navigable Waters

**Soil**

Sampling Point: DP 10 S

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b>		<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of two required)</b>
<b>Primary Indicators (minimum of one required; check all that apply)</b>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 11 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.176906 Long.: -116.895412 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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**Remarks:**  
 None of three required parameters observed - plot not in wetland (though appears to be topographically a dry swale)

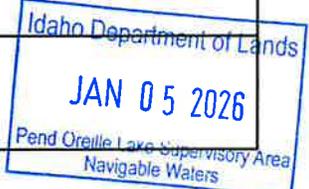
**VEGETATION - Use scientific names of plants.**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: 30')				Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)
1. <u>Abies grandis</u>	80	<input checked="" type="checkbox"/> 100.0%	FACU	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
2. _____		<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
	80 = Total Cover			
<b>Sapling/Shrub Stratum</b> (Plot size: 20')				<b>Prevalence Index worksheet:</b>
1. _____		<input type="checkbox"/> 0.0%		Total % Cover of: Multiply by:
2. _____		<input type="checkbox"/> 0.0%		OBL species <u>0</u> x 1 = <u>0</u>
3. _____		<input type="checkbox"/> 0.0%		FACW species <u>0</u> x 2 = <u>0</u>
4. _____		<input type="checkbox"/> 0.0%		FAC species <u>5</u> x 3 = <u>15</u>
5. _____	0	<input type="checkbox"/> 0.0%		FACU species <u>105</u> x 4 = <u>420</u>
	0 = Total Cover			UPL species <u>5</u> x 5 = <u>25</u>
<b>Herb Stratum</b> (Plot size: 0.1 ac)				Column Totals: <u>115</u> (A) <u>460</u> (B)
1. <u>Aralia nudicaulis</u>	20	<input checked="" type="checkbox"/> 57.1%	FACU	Prevalence Index = B/A = <u>4.000</u>
2. <u>Osmorhiza berteroi</u>	5	<input type="checkbox"/> 14.3%	FACU	
3. <u>Maianthemum stellatum</u>	5	<input type="checkbox"/> 14.3%	FAC	
4. <u>Adenocaulon bicolor</u>	5	<input type="checkbox"/> 14.3%	UPL	
5. _____		<input type="checkbox"/> 0.0%		
6. _____		<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
	35 = Total Cover			
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	0	<input type="checkbox"/> 0.0%		
2. _____	0	<input type="checkbox"/> 0.0%		
	0 = Total Cover			
<b>% Bare Ground in Herb Stratum: 0</b>				

**Remarks:**  
 Vegetation is not hydrophytic - neither test met

**Hydrophytic Vegetation Indicators:**  
 1 - Rapid Test for Hydrologic Vegetation  
 2 - Dominance Test is > 50%  
 3 - Prevalence Index is ≤ 3.0<sup>1</sup>  
 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
 5 - Wetland Non-Vascular Plants<sup>1</sup>  
 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Hydrophytic Vegetation Present?** Yes  No



\*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 11 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-10	10YR	4/2	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

**Wetland Hydrology Indicators:**

<p><b>Primary Indicators (minimum of one required; check all that apply)</b></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p><b>Secondary Indicators (minimum of two required)</b></p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 12S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0 % / 0.0 °  
 Subregion (LRR): LRR E Lat.: 48.176510 Long.: -116.898562 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed - plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:		
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)		
1. <u>Pinus ponderosa</u>	15	<input checked="" type="checkbox"/> 100.0%	FACU	Total Number of Dominant Species Across All Strata: <u>3</u> (B)		
2. _____		<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)		
3. _____	0	<input type="checkbox"/> 0.0%		<b>Prevalence Index worksheet:</b>		
4. _____	0	<input type="checkbox"/> 0.0%			Total % Cover of: Multiply by:	
	15 = Total Cover			OBL species <u>0</u> x 1 = <u>0</u>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				FACW species <u>0</u> x 2 = <u>0</u>		
1. _____		<input type="checkbox"/> 0.0%		FAC species <u>30</u> x 3 = <u>90</u>		
2. _____		<input type="checkbox"/> 0.0%		FACU species <u>98</u> x 4 = <u>392</u>		
3. _____		<input type="checkbox"/> 0.0%		UPL species <u>0</u> x 5 = <u>0</u>		
4. _____		<input type="checkbox"/> 0.0%		Column Totals: <u>128</u> (A) <u>482</u> (B)		
5. _____	0 = Total Cover			Prevalence Index = B/A = <u>3.766</u>		
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Hydrophytic Vegetation Indicators:</b>		
1. <u>Tanacetum vulgare</u>	80	<input checked="" type="checkbox"/> 70.8%	FACU		<input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation	
2. <u>Alopecurus pratensis</u>	30	<input checked="" type="checkbox"/> 26.5%	FAC		<input type="checkbox"/> 2 - Dominance Test is > 50%	
3. <u>Verbascum thapsus</u>	3	<input type="checkbox"/> 2.7%	FACU		<input type="checkbox"/> 3 - Prevalence Index is ≤ 3.0 <sup>1</sup>	
4. _____		<input type="checkbox"/> 0.0%			<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
5. _____		<input type="checkbox"/> 0.0%			<input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup>	
6. _____		<input type="checkbox"/> 0.0%			<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
7. _____	0	<input type="checkbox"/> 0.0%			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8. _____	0	<input type="checkbox"/> 0.0%			<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
9. _____	0	<input type="checkbox"/> 0.0%				Idaho Department of Lands <b>JAN 05 2026</b> Pend Oreille Lake Supervisory Area Navigable Waters
10. _____	0	<input type="checkbox"/> 0.0%				
11. _____	0	<input type="checkbox"/> 0.0%				
	113 = Total Cover					
<b>Woody Vine Stratum</b> (Plot size: _____)						
1. _____	0	<input type="checkbox"/> 0.0%				
2. _____	0	<input type="checkbox"/> 0.0%				
	0 = Total Cover					
<b>% Bare Ground in Herb Stratum:</b> <u>0</u>						

Remarks:  
 Vegetation is not hydrophytic - neither test met

<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 12 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR	3/4	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
Soil is not hydric

**Hydrology**

**Wetland Hydrology Indicators:**

<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?    Yes     No     Depth (inches):

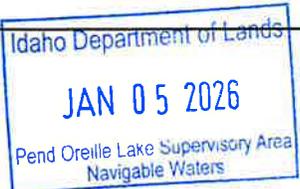
Water Table Present?    Yes     No     Depth (inches):

Saturation Present? (includes capillary fringe)    Yes     No     Depth (inches):

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 13 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.177263 Long.: -116.898180 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

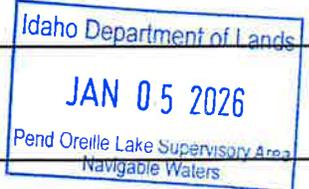
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed - plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
1. <u>Abies grandis</u>	20	<input checked="" type="checkbox"/> 100.0%	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
2. _____		<input type="checkbox"/> 0.0%		
3. _____	0	<input type="checkbox"/> 0.0%		
4. _____	0	<input type="checkbox"/> 0.0%		
		<b>20 = Total Cover</b>		
<b>Sapling/Shrub Stratum (Plot size: <u>20'</u>)</b>				
1. <u>Rubus ursinus</u>	20	<input checked="" type="checkbox"/> 44.4%	FACU	<b>Prevalence Index worksheet:</b> Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>3</u> x 3 = <u>9</u> FACU species <u>120</u> x 4 = <u>480</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>123</u> (A) <u>489</u> (B)  Prevalence Index = B/A = <u>3.976</u>
2. <u>Amelanchier alnifolia</u>	15	<input checked="" type="checkbox"/> 33.3%	FACU	
3. <u>Symphoricarpos albus</u>	10	<input checked="" type="checkbox"/> 22.2%	FACU	
4. _____		<input type="checkbox"/> 0.0%		
5. _____	0	<input type="checkbox"/> 0.0%		
		<b>45 = Total Cover</b>		
<b>Herb Stratum (Plot size: <u>0.1 ac</u>)</b>				
1. <u>Tanacetum vulgare</u>	30	<input checked="" type="checkbox"/> 51.7%	FACU	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Carex microptera</u>	10	<input type="checkbox"/> 17.2%	FACU	
3. <u>Pteridium aquilinum</u>	10	<input type="checkbox"/> 17.2%	FACU	
4. <u>Fragaria vesca</u>	5	<input type="checkbox"/> 8.6%	FACU	
5. <u>Ranunculus acris</u>	3	<input type="checkbox"/> 5.2%	FAC	
6. _____		<input type="checkbox"/> 0.0%		
7. _____	0	<input type="checkbox"/> 0.0%		
8. _____	0	<input type="checkbox"/> 0.0%		
9. _____	0	<input type="checkbox"/> 0.0%		
10. _____	0	<input type="checkbox"/> 0.0%		
11. _____	0	<input type="checkbox"/> 0.0%		
		<b>58 = Total Cover</b>		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. _____	0	<input type="checkbox"/> 0.0%		Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>
2. _____	0	<input type="checkbox"/> 0.0%		
	0	<b>= Total Cover</b>		
<b>% Bare Ground in Herb Stratum: <u>0</u></b>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



**Soil**

Sampling Point: **DP 13S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR	3/4	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b>
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Muck Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	

2 cm Muck (A10)  
 Red Parent Material (TF2)  
 Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

**Wetland Hydrology Indicators:**

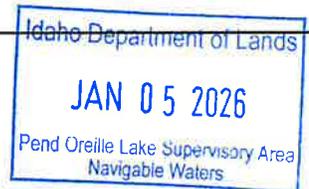
<b>Primary Indicators (minimum of one required; check all that apply)</b>		<b>Secondary Indicators (minimum of two required)</b>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 14 S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.177178 Long.: -116.896900 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed - plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
1. <u>Abies grandis</u>	60	<input checked="" type="checkbox"/> 75.0%	FACU	
2. <u>Pinus ponderosa</u>	20	<input checked="" type="checkbox"/> 25.0%	FACU	
3. _____	0	<input type="checkbox"/> 0.0%	_____	
4. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>			80	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of:      Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>3</u> x 3 = <u>9</u> FACU species <u>155</u> x 4 = <u>620</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>163</u> (A) <u>654</u> (B)  Prevalence Index = B/A = <u>4.012</u>
1. <u>Symphoricarpos albus</u>	20	<input checked="" type="checkbox"/> 100.0%	FACU	
2. _____	_____	<input type="checkbox"/> 0.0%	_____	
3. _____	_____	<input type="checkbox"/> 0.0%	_____	
4. _____	_____	<input type="checkbox"/> 0.0%	_____	
5. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>			20	
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrologic Vegetation <input type="checkbox"/> 2 - Dominance Test is > 50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants <sup>1</sup> <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Tanacetum vulgare</u>	40	<input checked="" type="checkbox"/> 63.5%	FACU	
2. <u>Dactylis glomerata</u>	10	<input type="checkbox"/> 15.9%	FACU	
3. <u>Hieracium pratense</u>	5	<input type="checkbox"/> 7.9%	UPL	
4. <u>Leucanthemum vulgare</u>	5	<input type="checkbox"/> 7.9%	FACU	
5. <u>Equisetum arvense</u>	3	<input type="checkbox"/> 4.8%	FAC	
6. _____	_____	<input type="checkbox"/> 0.0%	_____	
7. _____	0	<input type="checkbox"/> 0.0%	_____	
8. _____	0	<input type="checkbox"/> 0.0%	_____	
9. _____	0	<input type="checkbox"/> 0.0%	_____	
10. _____	0	<input type="checkbox"/> 0.0%	_____	
11. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>			63	
<b>Woody Vine Stratum</b> (Plot size: _____)				<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
1. _____	0	<input type="checkbox"/> 0.0%	_____	
2. _____	0	<input type="checkbox"/> 0.0%	_____	
<b>= Total Cover</b>			0	
<b>% Bare Ground in Herb Stratum:</b> <u>0</u>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



<sup>1</sup>Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 14S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR	3/4	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> 2 cm Muck (A10) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>

**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

**Wetland Hydrology Indicators:**

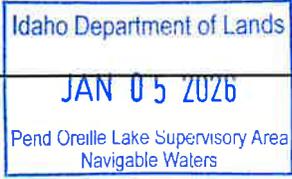
<p><b>Primary Indicators (minimum of one required; check all that apply)</b></p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<p><b>Secondary Indicators (minimum of two required)</b></p> <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches): <input type="text"/>	

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region**

Project/Site: Joslyn Property City/County: Priest Rver (City) Sampling Date: 12-Jun-23  
 Applicant/Owner: Tetra Tech State: ID Sampling Point: DP 15S  
 Investigator(s): Tom Duebendorfer, PWS Section, Township, Range: S 25 T 56N R 5W  
 Landform (hillslope, terrace, etc.): Lowland Local relief (concave, convex, none): flat Slope: 0.0% / 0.0°  
 Subregion (LRR): LRR E Lat.: 48.176967 Long.: -116.900689 Datum: WGS 84  
 Soil Map Unit Name: Mission silt loam NWI classification: none

Are climatic/hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.**

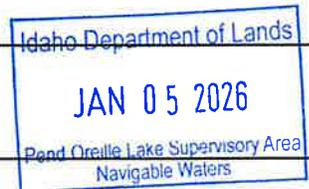
Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
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Remarks:  
 None of three required parameters observed - plot not in wetland.

**VEGETATION - Use scientific names of plants.**

Stratum	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status	Dominance Test worksheet:
<b>Tree Stratum</b> (Plot size: <u>30'</u> )				Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A)
1. _____		<input type="checkbox"/> 0.0%		Total Number of Dominant Species Across All Strata: <u>3</u> (B)
2. _____		<input type="checkbox"/> 0.0%		Percent of dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)
3. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
4. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
	<u>0</u>	<b>= Total Cover</b>		
<b>Sapling/Shrub Stratum</b> (Plot size: <u>20'</u> )				<b>Prevalence Index worksheet:</b>
1. <u>Amelanchier alnifolia</u>	<u>15</u>	<input checked="" type="checkbox"/> 100.0%	<u>FACU</u>	Total % Cover of: Multiply by:
2. _____		<input type="checkbox"/> 0.0%		OBL species <u>0</u> x 1 = <u>0</u>
3. _____		<input type="checkbox"/> 0.0%		FACW species <u>0</u> x 2 = <u>0</u>
4. _____		<input type="checkbox"/> 0.0%		FAC species <u>65</u> x 3 = <u>195</u>
5. _____	<u>0</u>	<input type="checkbox"/> 0.0%		FACU species <u>90</u> x 4 = <u>360</u>
	<u>15</u>	<b>= Total Cover</b>		UPL species <u>0</u> x 5 = <u>0</u>
<b>Herb Stratum</b> (Plot size: <u>0.1 ac</u> )				Column Totals: <u>155</u> (A) <u>555</u> (B)
1. <u>Tanacetum vulgare</u>	<u>75</u>	<input checked="" type="checkbox"/> 53.6%	<u>FACU</u>	Prevalence Index = B/A = <u>3.581</u>
2. <u>Elymus repens</u>	<u>60</u>	<input checked="" type="checkbox"/> 42.9%	<u>FAC</u>	
3. <u>Ranunculus acris</u>	<u>3</u>	<input type="checkbox"/> 2.1%	<u>FAC</u>	
4. <u>Poa pratensis</u>	<u>2</u>	<input type="checkbox"/> 1.4%	<u>FAC</u>	
5. _____		<input type="checkbox"/> 0.0%		
6. _____		<input type="checkbox"/> 0.0%		
7. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
8. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
9. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
10. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
11. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
	<u>140</u>	<b>= Total Cover</b>		
<b>Woody Vine Stratum</b> (Plot size: _____)				
1. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
2. _____	<u>0</u>	<input type="checkbox"/> 0.0%		
	<u>0</u>	<b>= Total Cover</b>		
<b>% Bare Ground in Herb Stratum:</b> <u>0</u>				

Remarks:  
 Vegetation is not hydrophytic - neither test met



\*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

**Soil**

Sampling Point: **DP 15 S**

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-18	10YR	3/4	100%				Silt Loam	

<sup>1</sup>Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Location: PL=Pore Lining. M=Matrix

<p><b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b></p> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Muck Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<p><b>Indicators for Problematic Hydric Soils<sup>3</sup>:</b></p> <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) (except in MLRA 1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox depressions (F8)	<p><input type="checkbox"/> 2 cm Muck (A10)  <input type="checkbox"/> Red Parent Material (TF2)  <input type="checkbox"/> Other (Explain in Remarks)</p> <p><sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
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**Restrictive Layer (if present):**  
 Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?**    Yes     No

Remarks:  
 Soil is not hydric

**Hydrology**

<p><b>Wetland Hydrology Indicators:</b></p> <p>Primary Indicators (minimum of one required; check all that apply)</p> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<p>Secondary Indicators (minimum of two required)</p> <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-neutral Test (D5) <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) <input type="checkbox"/> Frost Heave Hummocks (D7)
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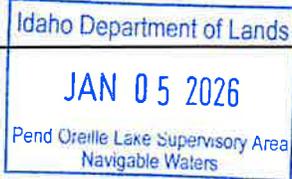
**Field Observations:**

Surface Water Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>
Water Table Present?	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>
Saturation Present? (includes capillary fringe)	Yes <input type="radio"/> No <input checked="" type="radio"/>	Depth (inches):	<input type="text"/>

**Wetland Hydrology Present?**    Yes     No

Describe Recorded Data (stream gauge, monitor well, aerial photos, previous inspections), if available:

Remarks:  
 Hydrologic indicators not observed, nor expected.



**Tom Duebendorfer - Professional Wetland Scientist (#000157), Biologist, Botanist**

**OBJECTIVE**

Provide botanical and ecological services to a wide range of organizations and individuals for projects involving land development, wetland delineation, vegetation mapping, rare plant surveys, resource inventories, Environmental Assessments, Biological Evaluations and Assessments, and research-level studies on specific habitats or species.

**EDUCATION**

WSPSS, SWS Hydric Soils Workshop, Soils and Hydrology, June 2009

Wetland Training Institute, Soils and Hydrology, August 1990

Humboldt State University, Arcata, California

M.A. Biology May 1987

California State Teaching Credential May 1987

B.A. Biology June 1977

University of California, Irvine (2 years - biology major)

**EMPLOYMENT**

• **Self-employed wetland and botanical consultant (1981 to present)**

Provided botanical and wildlife surveys, floristic research, habitat characterization, ecological sampling, synecological analysis, aerial photo mapping, wetland delineation, impact analysis, restoration and mitigation, resource planning, permitting, rare and endangered plant surveys, plant taxonomy, soil analysis, computer-aided multivariate analyses and statistics, computer-aided graphics and drafting. Involved with design (as part author/editor) of Washington Dept of Ecology Hydrogeomorphic approach to wetland function assessment program (Assessment Team). Trained in E WA DOE Assessment Methodology (assisted in development of the methodology). Wetland Mitigation Bank preparation. Teaches wetland delineation and plant identification courses to Tribes, agencies, and groups.

Project locations include rare plant surveys/studies and wetland work in southern, central, northern and coastal California; coastal, southwestern, and northeastern Oregon; north, east-central, and southwest Idaho; eastern and western Washington; and northwest Montana.

• **Senior Wetland Ecologist, Client/Project Manager, Corporate Botanist (1989-1994)**

David Evans and Associates, Inc. Bellevue, Washington

Provided wetland delineation, impact assessment, conceptual and final mitigation design, monitoring, cumulative impact assessment, wetland permitting, habitat characterization, rare plant and T&E animal surveys, Biological Evaluations and Assessments, as well as instruction and guidance in systematics and classification to staff in 7 west coast offices. Maintained excellent rapport with clients and other project team members (both in office and as field crew leader). Managed projects from proposals, contracting, budgeting, scheduling and invoicing, to collections.

Project locations include: Pacific Northwest, from central and coastal Oregon to eastern, western, and coastal Washington, and northwest Montana.

**CERTIFICATIONS**

Professional Wetland Scientist, Society of Wetland Scientists (#000157)

Certified Wetland Delineator, Corps of Engineers (Seattle District)

Qualified Wetland Specialist, Spokane County, Washington

Qualified Wetland Specialist, City of Spokane, Washington

Completed Training in NEPA/EPA Process

Completed Soils and Hydrology workshops (WTI); Hydric Soils (WSSPSS - Updates 2009)



#### SPECIFIC EXPERIENCE

Habitats include: dune coastline, coastal and inland forested, scrub, and marsh wetlands, oak woodlands, steppe scrubland, grasslands, sagebrush, agricultural areas (wetlands), coniferous and deciduous montane, alpine, bog (fen), and serpentine vegetation.

Permitting knowledge and direct use of wetland methodologies (USFWS, US Army Corps of Engineers, WA Dept of Ecology, and local county and city jurisdictions); knowledge of Corps Permit process. Restoration activities. Biological Assessments (BA), USFS Evaluations (BE), Environmental Assessments (EA); SEPA/NEPA; T&E species monitoring, Raptor Monitoring, Wetland Mitigation Bank Design.

Rare plant studies include approximately 45 sensitive plant and vegetation surveys on private, state, and federal lands for small to medium scale hydroelectric plants, stream corridors, sewage treatment facilities, water treatment facilities, prison site, seeding experiments, road and highway construction, transmission corridors (utilities), fiber optic cable routes, and mining companies. Biological Evaluations for USFS-listed sensitive species in four states.

Clients (independently and during tenure as employee) include:

##### *Small- and Large-scale Developers:*

Burlington-Northern, Puget Western, Glacier Park Company, Trillium Corporation, Quadrant, Blackhawk/Port Blakely Communities, Coldwater Creek, Valencia Wetlands Trust, Waterfront Property Mgmt., Kirk-Hughes Development, Fortress LLC, & others

##### *Public Entities:*

Washington Department of Ecology, Benewah County (through EDA), Federal Highways Administration, Bureau of Reclamation, King Co., US Army Corps of Engineers, Spokane County Engineering and Public Works, Oregon Nature Conservancy, Humboldt County Planning, Humboldt State University Research Program; Benewah County; Idaho Soil and Conservation District, City of Winchester, Idaho Transportation Department, Washington Department of Transportation, Kalispell Indian Tribe, City of Colville, Rathdrum

##### *Communications (fiber optic projects):*

AT&T, MCI/WorldCom, Cascade Utilities

##### *Exploratory and Active Mining Companies:*

Emerald Creek Garnet Company, American Gold Resources, Cal Nickel Corp., Baretta, Noranda

##### *Assisting other Consulting Firms and Numerous Private Landowners.*

The Soils Group, Intermountain Resources, Inc., Hart-Crowser, Inc., Welch-Comer Eng., Land Profile, Inc., Selkirk Environmental, David Evans and Associates, J.A. Sewell and Assoc., EarthTech, ALSC Architects; Ecological Resources, Forsgren Assoc., JUB Eng., Adolfsen Assoc. Copper Basin Constr., Toothman-Orton Eng., Rocky Point Investments, HAWKEFA, Tate Engineering.

#### PUBLICATIONS

- Duebendorfer, T.E. 1990. "An Integrated Approach to Enhancing Rare Plant Populations through Habitat Restoration: II. Habitat Characterization through Classification of Dune Vegetation." Pp. 478-487 in: Bonnicksen, T.M. and H.G. Hughes, eds. Proceedings of the first annual meeting of the Society for Ecological Restoration and Management. Also presented at Society of Wetland Scientists, May 1993.
- Pickart, A.J., L.M. Miller, and T.E. Duebendorfer. 1998. "Yellow bush lupine invasion in northern California coastal dunes. I. Ecological impacts and manual restoration techniques". Restoration Ecology Vol 6 No 1, pp59-68.
- Seattle Audubon Series, "Wetland Plants of the Western Washington and NW Oregon" (Cooke 1997, editor): My role was as a contributor and technical editor.
- Hruby, T., S. Stanley, T. Granger, T. Duebendorfer, R. Friesz, B. Lang, B. Leonard, K. March, and A. Wald. 2000. Methods for Assessing Wetlands Functions. Volume II, Part 1: Assessment Methods - Depressional Wetlands in the Columbia Basin of Eastern Washington, WA State Department of Ecology Publication #00-06-47.
- Fieldbook of Plant Uses (North Idaho) - self published field booklet (2019)

