2023 Noxious Weed Control Plan Annual Report

Wallowa Falls Hydroelectric Project FERC Project No. 308





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1.0 Introduction

The Wallowa Falls Hydroelectric Project (FERC Project No. 308) received a new operating license from the Federal Energy Regulatory Commission (Commission) on January 5, 2017 (FERC 2017). Article 415 of the FERC license required PacifiCorp to file a noxious weed control plan (NWCP) with FERC within 6 months from the date of the license issuance (July 5, 2017):

Article 415. Noxious Weed Control Plan. The revised Noxious Weed Control Plan required by Appendix B, condition 6, must be developed after consultation with the Oregon Department of Fish and Wildlife and U.S. Fish and Wildlife Service. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

The United States Department of Agriculture (USDA), Forest Service Final Section 4(e) Conditions were filed on February 16, 2016, and included as Appendix B in FERC license (FERC 2017). The following conditions apply to the NWCP (PacifiCorp 2017):

<u>Condition No. 6 – Noxious Weed Management Plan (NWMP)</u> The Licensee shall, within six months following License issuance, revise the Noxious Weed Management Plan (NWMP), Appendix K, Volume III of the FLA [Final License Application] (February 2015), in consultation with the USDA Forest Service. The NWMP shall include measures A through D below and must meet USDA Forest Service standards, guidelines, methods, and monitoring protocols for actions undertaken on National Forest Service (NFS) lands. The NWMP shall be filed with the Commission for approval. After Commission approval, the Licensee shall immediately implement the NWMP.

A. The Licensee shall implement applicable noxious weed control measures found in invasive plant management direction for the Pacific Northwest Region and/or the Wallowa-Whitman National Forest Land and Resource Management Plan, as amended for the period of the License. Future changes or modifications to the management direction will require the Licensee to coordinate with the USDA Forest Service at the Annual Resource Coordination Meeting required in Condition 5 to ensure the Licensee's implementation activities comply with those changes or modifications.

- B. The Licensee shall survey and treat noxious weeds on NFS lands within the FERC Project Boundary for three (3) consecutive years between June 1 and July 31 following construction or maintenance activities described in the FLA. If for three consecutive years, no noxious weeds are detected during the annual surveys, then survey intervals shall shift to a biennial schedule until a noxious weed infestation is detected. Control methods that will effectively control all Class A and other target weeds shall be implemented the same year as detection as allowed by U.S. Forest Service Pacific Northwest Region Invasive Plant Program, Preventing and Managing Invasive Plants (April 2005a) and Record of Decision (ROD) (October 2005b).
- C. The exact timing between June 1 and July 31 are recommended to implement control methods for optimal effectiveness in association with the guidelines provided by U.S. Forest Service Pacific Northwest Region Invasive Plant Program, Preventing and Managing Invasive Plants (April 2005a) and Record of Decision (ROD) (October 2005b). Manual control methods shall include measures including but not limited to reseeding, mulching and supplemental irrigation to ensure establishment of non-noxious vegetation in treated areas.
- D. The Licensee shall ensure that: a) ground cover in treated areas equals or exceeds 80 percent of that in an undisturbed control area with similar vegetation and is adjacent to the Project area and b) species composition in disturbed areas equals or exceeds 75 percent non-weedy species. If the standards above are not feasible or achievable, the Licensee shall consult and coordinate with the USDA Forest Service to develop suitable alternatives.
- E. The Licensee shall include a status report in its Annual Report, required by Condition No. 5 Resource Coordination, describing activities related to weed control, assessment of weed areas, and identification of future efforts to control noxious weed spread and colonization within the Project boundary.

PacifiCorp submitted the Noxious Weed Control Plan (NWCP) to the Commission on June 1, 2017, pursuant to Article 415 and the Forest Service Final Section 4E Conditions included as Appendix B of the FERC license. A FERC order approving NWCP was issued by the Commission on July 25, 2017.

This report complies with the FERC License Appendix B USDA, Forest Service Final Section 4(e) Condition No. 5- Resource Coordination requiring PacifiCorp to provide an Annual Report to Wallowa Whitman National Forest (WWNF) on the status of the NWCP activities for that year (FERC 2017). The status report should be completed by December 1 each year to allow for at least a 30-day review prior to the Annual Resource Coordination meeting. This status report will only apply to the Project Boundary as described in Section 2.0 and shown in Appendix A and includes the following information:

- The current year Invasive Plant Inventory Forms
- A description of the control methods, operation and maintenance, and success of the control methods conducted that year and the accompanying treatment forms [Herbicide Application (2510), Insect Release (2550), and/or Mechanical/Physical Treatment (2530)
- Future anticipated soil disturbing activities, noxious weed prevention methods to be conducted, and identification of future efforts to control noxious weed spread and colonization for the following year within the Project Boundary
- Future expected efforts and a schedule for monitoring
- Compliance with the current Wallowa Whitman National Forest, State and Local regulations for weed management activities
- Results of revegetation success for all ground disturbance activities

2.0 Project location

The Wallowa Falls Hydroelectric Project is located on the East Fork Wallowa River near the town of Joseph, Oregon in Wallowa County. The project powerhouse discharges into the West Fork Wallowa River upstream of Wallowa Lake (Figure 1).

The Project Boundary is an estimated 26 acres and encloses project operations, such as Royal Purple Creek Diversion Dam, the pipeline and open channel conveying water from the Royal Purple Creek Diversion Dam to the East Fork Dam and impoundment, penstock, powerhouse, transmission line, and non-project substation (FERC 2017). Portions of the access road, tailrace, and Pacific Park Campground are also included within the Project Boundary (FERC 2017). Approximately half of the lands within the Project Boundary are owned by PacifiCorp and the other half are on federal lands managed by WWNF. Appendix A shows the Project Boundary and the associated features.

Areas within the Project Boundary may be more susceptible to noxious weeds due to exposed soils and/or are adjacent to frequent human activity. Therefore, the Project Boundary is differentiated into three noxious weed priority areas to prioritize monitoring, prevention, and control methods accordingly. Noxious weed priority areas are defined as follows:

High Priority: areas with frequent or continued soil disturbance, frequent or constant exposure to weed seed vectors, or is known to have existing noxious weeds. These areas include the campground, forebay area, and portions of the WWNF trail within the Project Boundary.

Medium Priority: areas with prior or frequent soil disturbance but low exposure to weed seed vectors. Examples of this would include the access road and penstock.

Low Priority: areas that have intact soils and a low exposure to weed seed vectors. Examples of this would include talus slopes and forested areas away from high use areas.

These areas may be modified as needed to adjust for changes in the Project Boundary or public use (e.g., new trails etc.). In 2019 the new tailrace location was identified as a High Priority Noxious Weed area due to the construction and expected exposure to weed seed vectors.

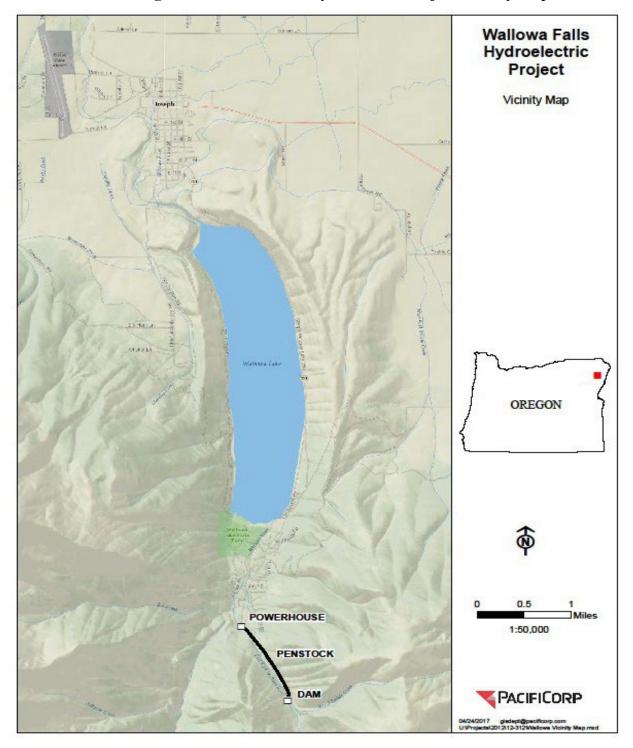


Figure 1: Wallowa Falls Hydroelectric Project Vicinity Map

3.0 Regulation and Compliance

A comprehensive review of current and applicable WWNF, State and local regulations was completed. The laws are as follows and PacifiCorp complied with these regulations and guidelines for all noxious weed monitoring and management in 2023:

3.1 USFS and WWNF regulations guidelines

The following USFS documents were used as guidelines and reference for all noxious weed monitoring and control methods implemented in 2023:

- Land and Resource Management Plan Wallowa-Whitman National Forest, as amended (USFS 1990).
- Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants Final Environmental Impact Statement (USFS 2005a).
- Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants Record of Decision. (USFS 2005b).
- Wallowa-Whitman National Forest Invasive Plants Treatment Project Final Environmental Impact Statement. (USFS 2010a).
- Wallowa-Whitman National Forest Invasive Plant Treatment Project Record of Decision. (USFS March 2016).

3.2 Oregon Revised Statues

The following Oregon Revised Statues (ORS) are chapter 569 Weed Control that provide state and county authority to manage noxious weeds and are applicable to NWCP:

2015 ORS 569.175 applicable definitions:

- (1) "Noxious weed" means a terrestrial, aquatic or marine plant designated by the State Weed Board under ORS 569.615 as among those representing the greatest public menace and as a top priority for action by weed control programs.
- (2) "Person" means a person as defined in ORS 174.100 (Definitions), the federal government or any of its agencies, the State of Oregon or any of its agencies, or any city, county, district or municipal corporation of this state

2015 ORS 569.185 State Department of Agriculture authority:

(13) Request any person owning or controlling land within this state to control, prevent the spread of or, when feasible, eradicate noxious weeds, and to supervise such activities.

2015 ORS 569.350 Necessity of eradication of weeds:

Noxious weeds have become so thoroughly established and are spreading so rapidly on state, county and federally owned lands, as well as on property in individual ownership and in transition to county ownership through tax delinquency, that they hereby are declared a menace to the public welfare. While it is recognized that complete eradication may not be practicable, it hereby is established that steps leading to eradication and control are

necessary and that responsibility rests not only on the individual landowner and operator but also on the county, state and federal government, and that the county, state and federal government should cooperate with individual owners in the control and eradication of noxious weed pests.

3.3 Noxious Weed Monitoring List

State of Oregon and Wallowa County maintain a list of target Noxious Weeds that are separated into the following three categories for prioritizing management (Oregon Department of Agriculture 2022):

A listed Weed: A weed of known economic importance which occurs in the state in small enough infestations to make eradication or containment possible; or is not known to occur, but its presence in neighboring states make future occurrence in Oregon seem imminent.

Recommended action: Infestations are subject to eradication or intensive control when and where found.

B listed Weed: A weed of economic importance, which is regionally abundant, but which may have limited distribution in some counties.

Recommended action: Limited to intensive control at the state, county or regional level as determined on a site specific, case-by-case basis. Where implementation of a fully integrated statewide management plan is not feasible, biological control (when available) shall be the primary control method.

T Designated Weed: A designated group of weed species that are selected and will be the focus for prevention and control by the Noxious Weed Control Program. Action against these weeds will receive priority. T designated noxious weeds are determined by the Oregon State Weed Board and directs Oregon Department of Agriculture to develop and implement a statewide management plan. T designated noxious weeds are species selected from either the A or B list.

The following table is a list of species included in the 2023 NWCP monitoring:

Table 1: 2023 Oregon State and Wallowa County Listed Noxious Weeds

Common Name ^{2,3}	Scientific Name ^{1,2}	Oregon State Category ²	Wallowa County Category ³		
Absinthe Wormwood*	Artemisia absinthium		В		
African Rue	Peganum harmala	A (T)			
Annual Bugloss*	Anchusa officialis		В		
Armenian blackberry (Himalayan blackberry) *	Rubus armeniacus	В	В		
Atlantic Ivy	Hedera hibernica	В			

Table 1: 2023 Listed Oregon and Wallowa County Listed Noxious Weeds (continued)

Common Name ^{2,3}	Scientific Name ^{1,2}	Oregon State Category ²	Wallowa County Category ³
Bachelor Button*	Centaurea cyanus		В
Barbed goatgrass	Aegilops triuncialis	A(T)	
Biddy-biddy	Acaena novae-zelandiae	В	
Bigseed dodder	Cuscata indecora	В	
Bohemian Knotweed	Polygonum behemicum	В	A
Buffalobur	Solunum rostratum	В	
Bull thistle**	Cirsium vulgare	В	
Bur Buttercup*	Ceratocephala testiculata		В
Butterfly bush	Buddleja davidii	В	
Camelthorn	Alhagi pseudalhag	A	
Canada thistle**	Cirsium arvense	В	В
Cape Ivy	Delairea odorata	A(T)	
Chicory*	Cichorium intybus		В
Coltsfoot	Tussilago farfara	A	
Common Bugloss*	Anchusa officinalis	B(T)	A(T)
Common Burdock**	Arctium minus		В
Common cordgrass	Spartina anglica	A	
Common crupina*	Crupina vulgaris	В	В
Common frogbit	Hydrocharis morsus- range	A	
Common reed	Phragmites australis	В	
Common Tansy	Tanacetum vulgare		A
Common Teasel	Dipsacus fullonum		В
Creeping yellowcress	Rorippa sylvestris	В	
Cut-leaf Teasel	Dipsacus laciniatus	В	
Dalmatian Toadflax*	Linaria dalmatica	B (T)	В
Delta arrowhead	Sagittaria platyphyla	A (T)	
Dense flowered cord grass	Spartina densilfora	A(T)	
Diffuse Knapweed*	Centaurea diffusa	В	В
Dog Rose	Rosa canina	В	
Dyer's Woad*	Isatis tinctoria	В	T
English hawthorn	Crataegus monogyna	В	
English Ivy	Hedera helix	В	
Eurasian watermilfoil	Myriophyllum spicatum	В	

Table 1: 2023 Listed Oregon and Wallowa County Listed Noxious Weeds (continued)

Common Name ^{2,3}	Scientific Name ^{1,2}	Oregon State Category ²	Wallowa County Category ³
European water chestnut	Trapa natans	A	
False Brome	Brachypodium sylvaticaum	В	
False Hoary Alyssum *	Berteroa incana	A(T)	
Field Bindweed*	Convolvulus arvensis	В	В
Five-angled Dodder	Cuscata pentagona	В	
Floating Primrose Willow	Ludwigia peploides	B (T)	
Flowering Rush	Butomus umbellatus	A (T)	
French Broom	Genista monspessulana	В	
Garden yellow loosestrife	Lysimachia vulgaris	A (T)	
Garlic Mustard	Alliaria petiolata	B (T)	A(T)
Giant hogweed	Heracleum mantegazzianum	A (T)	
Giant Knotweed	Polygonum sachalinense	В	A
Giant reed	Arundo donax	B (T)	
Goatsrue	Galega officinalis	A (T)	
Gorse	Ulex europaeus	B (T)	
Hairy whitetop *	Lepidium pubescens	В	A
Halogeton	Halogeton glomeratus	В	
Herb Robert	Geranium robertianum	В	
Himalayan knotweed	Polygonum polystachum	В	
Hoary Alyssum	Berteroa incana	A (T)	A(T)
Hoary cress whitetop*	Lepidium draba	В	
Houndstongue**	Cynoglossum officinale	В	В
Hydrilla	Hydrilla verticillata	A	
Iberian star-thistle	Centaurea iberica	A (T)	A
Indigo bush	Amorpha fruticosa	В	
Italian Thistle	Carduss pycnocephalus	В	A(T)
Japanese dodder	Cuscuta japonica	A	
Japanese knotweed*	Polygonum cuspidatum	В	T
Johnsongrass	Sorghum halepense	В	
Jointed goatgrass*	Aegilops cylindriva	В	B (T)

Table 1: 2023 Listed Oregon and Wallowa County Listed Noxious Weeds (continued)

Common Name ^{2,3}	Scientific Name ^{1,2}	Oregon State Category ²	Wallowa County Category ³
Jubata grass	Cortaderia jubata	В	
King devil hawkweed	Pilosella piloselloides	A	
Kochia*	Kochia scoparia	В	В
Kudzu	Pueraria lobata	A(T)	
Large-flower Primrose Willow	Ludwigia grandiflora	B (T)	
Leafy Spurge*	Euphorbia esula	B(T)	A (T)
Lens podded whitetop*	Cardaria chalapensis	В	
Lesser celandine	Ranunculus ficaria	В	
Long-Spine sandbur	Cenchrus longispinus		В
Matgrass	Nardus stricta	A (T)	
Meadow Hawkweed*	Hieracium pratense	B (T)	T
Meadow Knapweed*	Centaurea pratensis	В	A
Mediterranean Sage	Salvia aethiopis	В	A(T)
Medusahead Rye*	Taeniatherum canput- medusae	В	B(T)
Milk thistle	Silybum marianum	В	
Mouse-ear hawkweed	Pilosella pilosella	A (T)	
Musk thistle	Carduus nutans	В	A(T)
Myrtle Spurge	Euphorbia myrsinites	В	A(T)
Oblong spurge	Euphorbia oblongata	A (T)	
Old man's beard	Clematis vitalba	В	
Orange Hawkweed*	Pilosella aurantiacum	A (T)	A(T)
Oregano	Origanum vulgare		A(T)
Ovate goatgrass	Aegilops ovata	A	
Oxeye Daisy**	Leucanthemum vulgare		В
Parrot's feather	Myriophyllum aquaticum	В	
Paterson's curse	Echium plantagineum	A (T)	
Perennial peavine	Lathyrus latifolius	В	
Perennial Pepperweed*	Lepdium latifolium	В	A(T)
Pheasanteye (Blooddrop) *	Adonis aestivalis	В	
Pine echium	Echium pininana	В	
Plumeless Thistle*	Carduus acanthoides	A(T)	A
Poison Hemlock*	Conium maculatum	В	В
Policeman's Helmet	Impatiens glandulifera	В	

Table 1: 2023 Listed Oregon and Wallowa County Listed Noxious Weeds (continued)

Common Name ^{2,3}	Scientific Name ^{1,2}	Oregon State Category ²	Wallowa County Category ³
Portuguese broom	Cytisus striatus	B(T)	
Puncturevine*	Tribulus terrestris	В	A
Purple Loosestrife*	Lythrum salicaria	В	A
Purple nutsedge	Cyperus rotundus	A	
Purple Star-thistle	Centaurea calcitrapa	A(T)	T
Ragweed	Ambrosia artemisifolia	В	
Ravennagrass	Saccharum ravennae	A(T)	A
Reed Canarygrass (Ribbon grass)	Phalaris arundinaceae var. Picta	B (T)	В
Rose campion	Lychnis coronaria		A
Rush Skeletonweed*	Chondrilla juncea	B(T)	B(T)
Russian Knapweed*	Acroptilon repens	В	A(T)
Salt meadow cordgrass	Spartina patens	A (T)	
Saltcedar*	Tamarix ramoissima	В	
Scotch Broom*	Cytisus scoparius	В	A(T)
Scotch Thistle*	Onopordium acanthium	В	B(T)
Shiny leaf geranium	Geranium lucidum	В	
Silverleaf nightshade	Solanum elaeagnifolium	A	
Slender flowered thistle	Carduss tenuiflorus	В	
Small broomrape	Orobranche minor	В	
Smooth Cordgrass	Spartina alterniflora	A (T)	
Smooth distaff thistle	Carthamus baeticus	A	
Smoothseed alfalfa (Dodder)	Cuscuta approximata	В	
South American waterweed	Egeria densa	В	
Spanish Broom	Spartium juneceum	В	
Spanish Heath	Erica lusitanica	В	
Spiny cocklebur	Xanthium spinosum	В	
Spotted Cats Ear	Hypochoeris maculata		T
Spotted Knapweed**	Centaurea maculosa	B (T)	A(T)
Spurge laurel	Daphne Laureola	В	
Squarrose knapweed	Centaurea virgata	A (T)	
St. Johnswort**	Hypericum perforatum	В	
Sulfur Cinquefoil*	Potentilla recta	В	B (T)
Swainsonpea	Sphaerophysa salsula	В	

Table 1: 2023 Listed Oregon and Wallowa County Listed Noxious Weeds (continued

Common Name ^{2,3}	Scientific Name ^{1,2}	Oregon State Category ²	Wallowa County Category ³
Sweetbriar Rose*	Rosa rubiginosa	В	В
Syrian bean-caper	Zygophyllum fabago	A	
Tall Buttercup*	Ranunculus acris		В
Tansy Ragwort*	Senecio jacobaea	B (T)	A(T)
Tree of Heaven*	Ailanthus altissima	В	
Tuarian thistle	Onopordum tauricum	A(T)	
Turkish Thistle	Carduss cinerus	A(T)	
Velvetleaf	Abultilon theophrasti	В	
Ventenata (North Africa grass)*	Ventenata dubia	В	В
Water soldier	Stratiotes aloides	A	
Waterprimrose	Ludwigia hexapetala	B (T)	
Welted Thistle*	Carduus crispis	A(T)	A(T)
West Indian spongeplant	Limnobium laevigatum	A	
White bryonia (white bryony)	Bryonia alba	A	A
White Campion	Siline latifolia		В
Wooly distaff thistle	Carthamus lanatus	A(T)	
Yellow archangel	Lamiastrum galeobdolon	В	
Yellow flag iris*	Iris psuedoacorus	В	A(T)
Yellow floating heart	Nymphoides peltata	A(T)	
Yellow hawkweed*	Pilosella floribundum	A(T)	
Yellow nutsedge	Cyperus esculentus	В	
Yellow starthistle*	Centuarea solstitialis	В	A
Yellow toadflax*	Linaria vulgaris	В	В
Yellowtuft	Alyssum coriscan	A(T)	

^{*}Noxious weeds are known to exist within Wallowa County 1,2

4.0 2023 Monitoring and Management

The following is description of noxious weed monitoring, control and other management strategies that occurred in 2023 within the Project Boundary.

^{**}Noxious weeds are known to exist within the Project Boundary (Bio-Resources 2023)

¹ Natural Resources Conservation Service 2018 ² Oregon Department of Agriculture 20223

³ Wallowa County 2022

4.1 Prevention

Activities that disturb soils through the removal of native vegetation result in exposed ground that promotes the establishment of noxious weeds. Therefore, noxious weeds will be controlled prior to conducting any soil disturbing activity and the area will be revegetated to prevent noxious weed establishment. No ground disturbing activities occurred within the Project Boundary in 2023.

4.2 Noxious Weed Monitoring

PacifiCorp contracted with local contractor, Kendrick Moholt (Bio-Resources, Inc.) to implement the NWCP monitoring and oversee control methods. The noxious weed monitoring surveys were completed by Kendrick on July 14 and 25, 2023, and included all high and medium priority noxious weed areas. A record of each noxious weed infestation has been documented on Invasive Plant Inventory Forms are provided in Appendix B. The table below provides a list of the noxious weeds' location and status.

No Scotch thistle or meadow hawkweed plants were located in 2023.

Table 2: Noxious Weeds Located in 2023 within the Project Boundary.

Table 2. Ivalous Weeds Elecated in 2020 Within the Hofeet Boundary.										
Common Name	Scientific Name	Oregon State Category	Wallowa County Category	Location						
Bull thistle	Cirsium vulgare	В		Campground						
Canada thistle	Cirsium arvense	В		Campground						
Common Burdock	Arctium minus		В	Campground						
Houndstongue	Cynoglossum officinale	В	В	Trail						
Oxeye daisy	Leucanthemum vulgare		В	Campground						
Spotted knapweed	Centaurea maculosa	B (T)	A (T)	Campground						
St. John's Wort	Hypericum perforatum	В		Access Road						

4.3 Control Methods

On July 14, 15, and 25 and August 16, 2023 a Bio-Resources, Inc. botanist (Mr. Moholt) performed a manual removal control operation targeting weeds within the Project Area. These techniques consisted of hand pulling individual plants, digging plants with a shovel, and the use of a string trimmer in the campground area and lower wetland areas. Manual control techniques were exclusively used on both PacifiCorp property and property managed by the US Forest Service to remove target noxious weeds. The Mechanical/Physical Treatment (2530) Data form is provided in Appendix B.

On June 28, 2023, a PacifiCorp maintenance crew applied Glyphosate (Roundup) to US Forest Service lands in the proximity of the Wallowa Falls dam. The application was done as part of annual Project maintenance activity. Though intentional, this activity did not follow protocol and company policy. It has been documented on Herbicide Application (2510) Data Form in Appendix B. In the future, all PacifiCorp maintenance in these areas will use a string trimmer to manage vegetation.

On September 20, 2023, Mr Moholt, reseed the treated area with a weed free, native seed mix previously provided to the Project by US Forest Service botanist Jerry Hustafa.

The reclamation seed, Blue Wildrye (*Elymus glaucus*), was applied using a broadcast method. Seven pounds of seed was applied to the treated area (estimated to be about one third acre) resulting in an approximately 21 pounds per acre application rate. The Project has had excellent results using this seed with fall broadcast applications. The seed was applied in the third week of September during a light misty rain that was followed by heavy rain through the night and morning. These conditions are very desirable for wild seed broadcast applications. Good germination is expected.

4.4 Revegetation Success

All areas of prior ground disturbance within Project Boundary will be evaluated during the annual noxious weed monitoring to determine if the following criteria have been met:

- a) ground cover in treated areas equals or exceeds 80 percent of that in an undisturbed control area with similar vegetation and is adjacent to the area of ground disturbance and
- b) species composition in disturbed areas equals or exceeds 75 percent non-weedy species.

These areas will be monitored until the above criteria is met for 3 consecutive years. If the criteria cannot be met and is not feasible or achievable, then PacifiCorp will consult and coordinate with the US Forest Service at the Annual Resource Coordination Meeting.

5.0 2024 Monitoring and Management

The construction of the tailrace reroute and royal purple pipe extension began in 2019 and was completed in 2020. The royal purple pipe extension is currently within a high priority portion of the current Noxious Weed Monitoring Area. The portion of the new tailrace reroute has been included in the high priority area in the Noxious Weed Monitoring Area.

The planned 2024 noxious weed monitoring will include all high and medium priority areas within the Project Boundary and noxious weed control will occur as needed. In 2022, the royal purple pipe was repaired following an eroding slope. Soil stabilization is being evaluated for the area and may require additional soil disturbance. As a result, this area will be a high priority for noxious weed monitoring and control in 2024. The USFS made the following recommendations that will be incorporated into the 2024 noxious weed monitoring and management:

- Photo points of noxious weed treatment sites will be established and taken at each Noxious Weed Monitoring survey to document the changes over time.
- Implement manual control, where possible, to minimize the use of chemicals.

We also recommend continuing post-construction weed monitoring and control efforts in the late summer/early fall through 2024. Particular attention should be paid to any meadow hawkweed that may germinate. Though never seen along the access road in past surveys, Scotch thistle

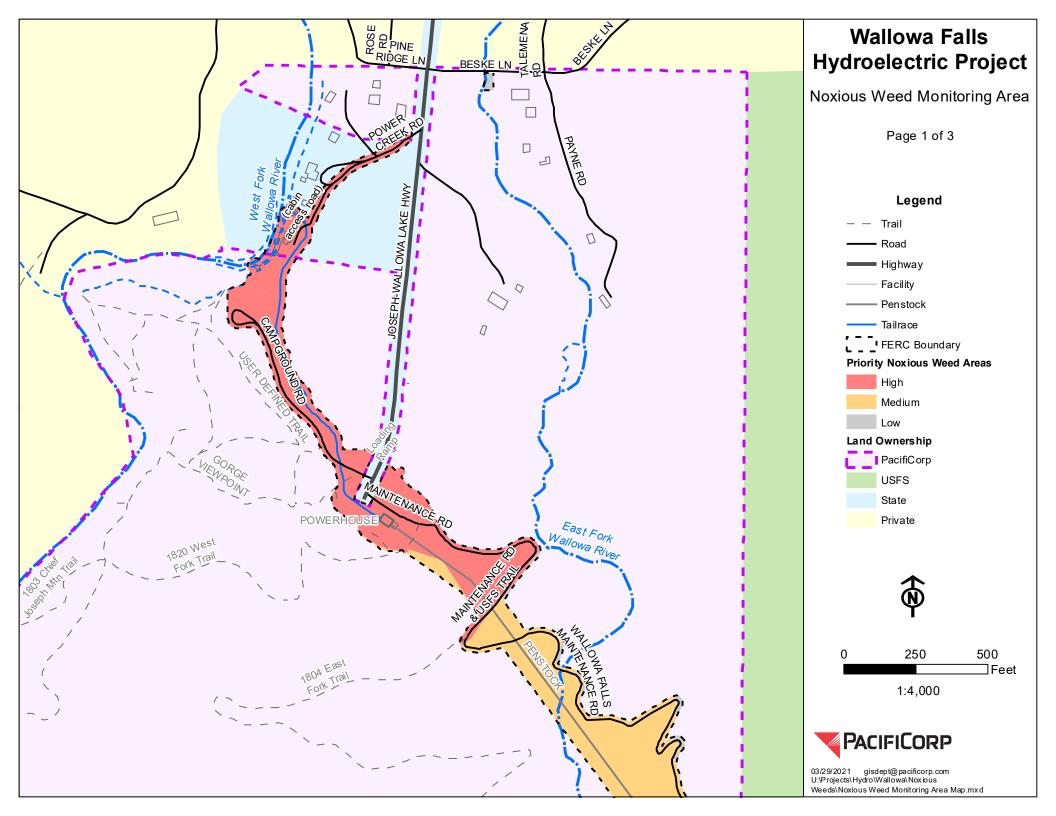
(*Onopordum acanthium*) has been observed recently invading the valley below the Project boundary. If either meadow hawkweed or Scotch thistle are found, they should be aggressively treated with a chemical control. Other, less aggressive species may be more appropriately treated with mechanical methods.

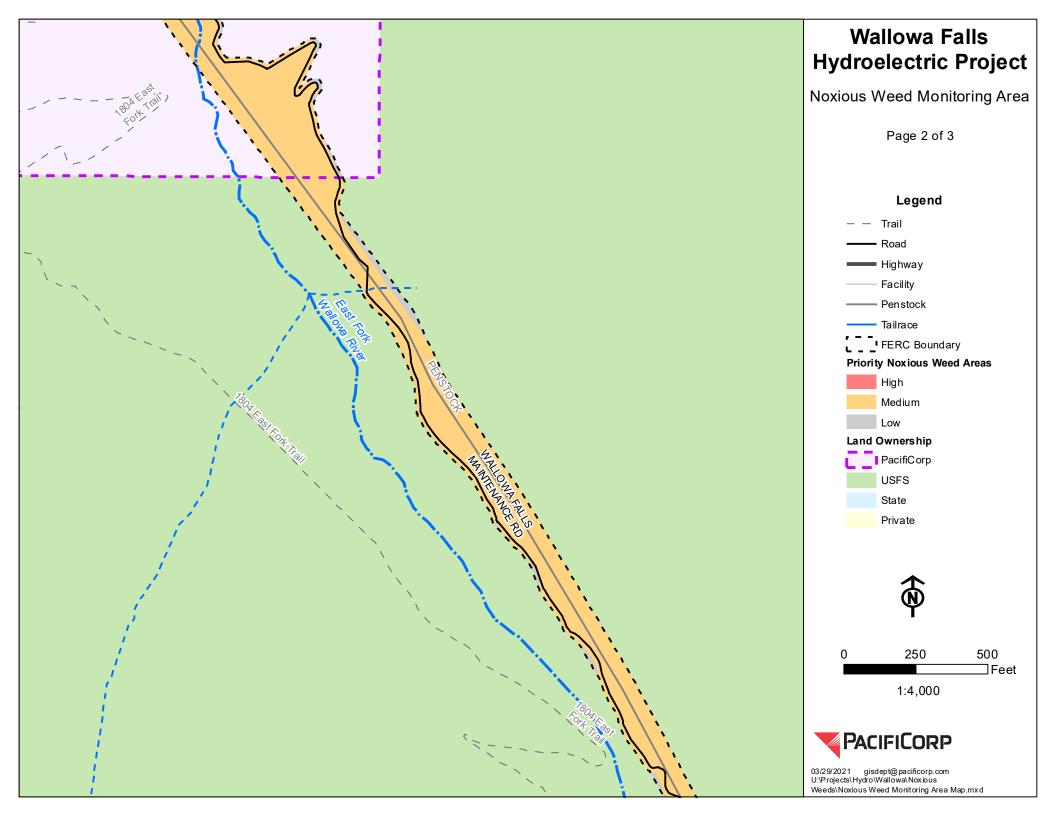
6.0 References

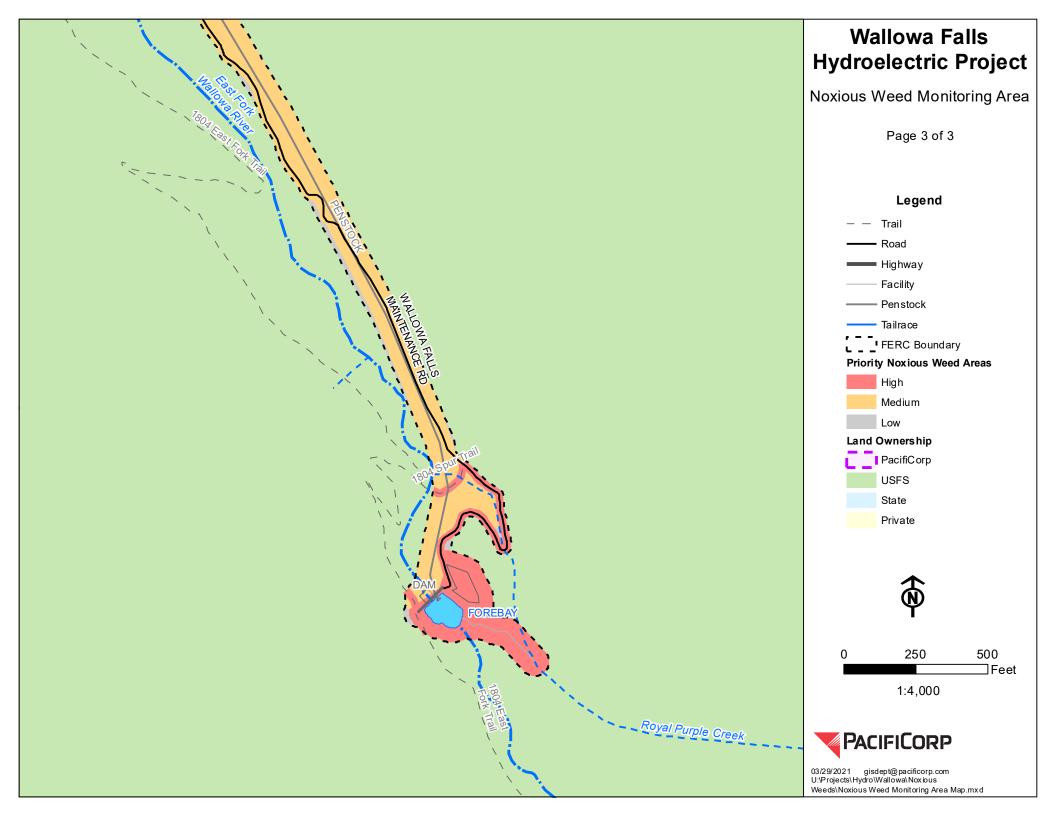
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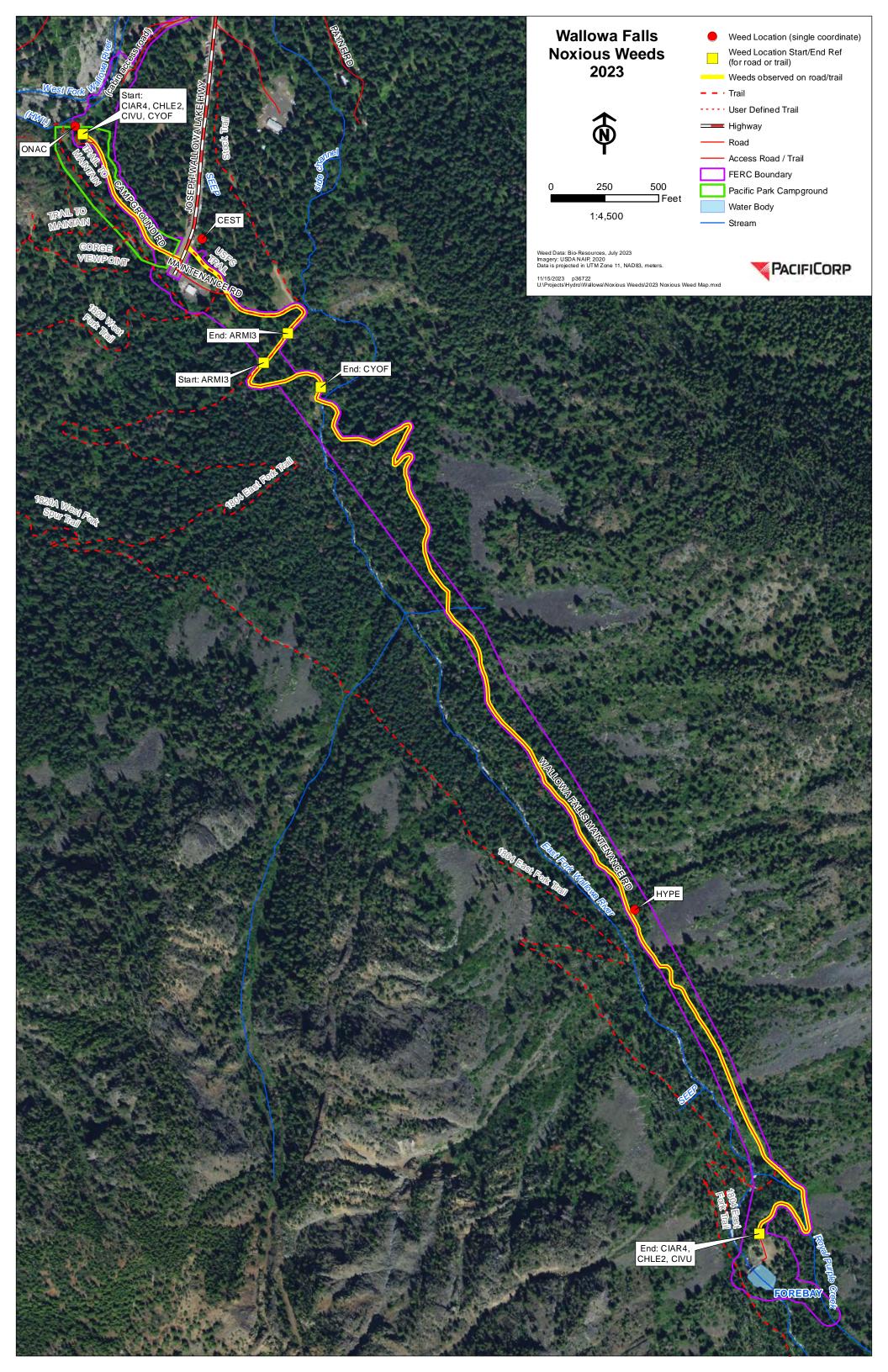
Appendix A

Noxious Weed Monitoring Area and 2023 Wallowa Falls Noxious Weeds Maps









Appendix B

Invasive Plant Inventory Form and Herbicide Application (2510) and Mechanical/Physical Treatment (2530) Form

Appendix 2 Noxious Weed Forms

General Site Information

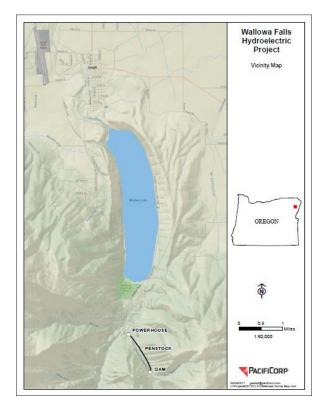
Site Name:			Date: 25 July 2023					
Wallowa Falls Hydroelectr	ic Project		Date. 23 July 2023					
Photo Point (GPS):			Ownership/District: USFS, WWNF, Eagle Cap					
			and PacifiCorp					
Photo Name:			Examiner: Kendrick M	oholt, Bio-Resources, Inc.				
Botanist Initial:	Elevation:	_	PS Coordinates:	Datum:				
Wildlife Biologist:	4700'-	04	483259 E 5012652N	UTM (NAD 27)				
Whalife Blologist.	5800'	to	•	Zone 11				
		04	484159E 5011062N					
EDRR:_Y_N GPS	File Name:		Other Observations:					
Agassi Daad Twail V	Divon Othon	2012	nanaund					
Access: Road Trail_X	Kiver_ Other C	Jan	ipground					
Township: <u>3S</u> Range: <u>45E</u>	Section: 33 NW1	⁄4 of	SNW ¹ / ₄ , SW ¹ / ₄ of NW ¹ / ₄ , NW ¹	/4 of SW ¹ /4, SE ¹ /4 of SW ¹ /4				
Township: 3SRange: 45E Section: 29 SW 1/4								
Township: <u>3S</u> Range: <u>45E</u>	Township: 3SRange: 45E Section: 32 NE¼ of NE¼							

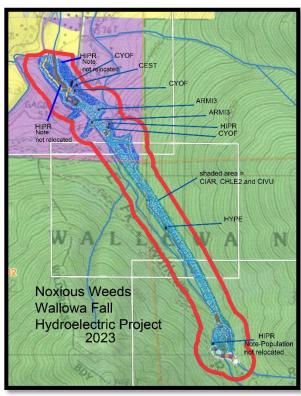
Site Data Information

Target Species Code: CIVI	Common Name: Bull Thistle							
Scientific Name: Cirsium vulgare					P	Phenology: R B FL X_ S		
Distribution: CLumpedLinearSE Scattered even SP Scattered Patchy X_ Continuous								
Total Acres: 26	Percent 1	Infested:	<1% Infested Acres: ~0.10			fested Acres: ~0.10		
% Cover or Count (weeds):	~25		Understory Cover % (all):40-90%					
Potential to Spread: High_	Med x	Low		Dista	ance	e to Water: >30m		
Water Type: Perennial Ephemeral			System: Lake River Spring Stream					
Soil Types: sandy loam				Slope % aspect: 2-20%, Aspect variable				
Other Species on Site:	Other Species on Site:							

Comments

Map of Site







Bull Thistle

Cirsium vulgare

General Site Information

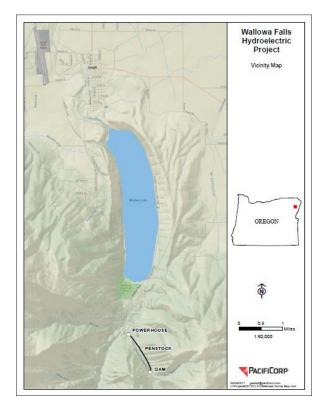
Site Name: Wallowa Falls Hydroelectric P	roject		Date: 25 July 2023			
Photo Point (GPS):			Ownership/District:USFS	5, WWNF, Eagle Cap		
			and PacifiCorp			
Photo Name:			Examiner: Kendrick Mo	holt, Bio-Resources, Inc.		
Botanist Initial:	Elevation:		PS Coordinates:	Datum:		
Wildlife Biologist:	4700'-	04	483259 E 5012652N	UTM (NAD 27)		
Wilding Biologist.	5800'	to	r	Zone 11		
		04	484159E 5011062N			
EDRR:YN GPS Fil	e Name:	Other Observations:				
Access: Road Trail X Riv	er_ Other c	an	pground			
Township: <u>3S</u> Range: <u>45E</u> Sec	tion: 33 NW ¹ /2	4 of	of NW1/4, SW1/4 of NW1/4, NW1/4 of SW1/4, SE1/4 of SW1/4			
Township: <u>3S</u> Range: <u>45E</u> Sec	tion: 29 SW 1/2					
Township: 3SRange: 45E Section: 32 NE ¹ / ₄ of NE ¹ / ₄						

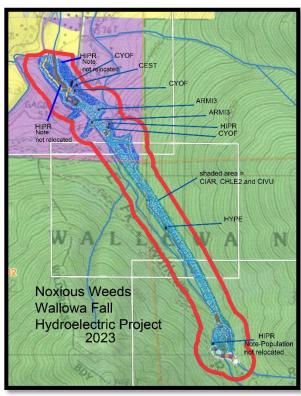
Site Data Information

Target Species Code: CIA	Commo	nmon Name: Canada Thistle							
Scientific Name: Cirsium arvense					Phe	enology:	R	B	FLX S
Distribution: CLumpedLinearSE Scattered evenSP Scattered Patchy_X_ Continuous							-		
Total Acres: 26	Percent 1	infested:	<1% Infested Acres: ~0.3						
% Cover or Count (weeds):	~1000		Understory Cover % (all):40-90%						
Potential to Spread: High_	Med x l	Low		Dista	ance to	Water	>30	m	
Water Type: Perennial Ephemeral			System: Lake River Spring Stream						
Soil Types: sandy loam				Slope % aspect: 2-20%, Aspect variable					
Other Species on Site:									

Comments

Map of Site







Canada Thistle

Cirsium arvense

General Site Information

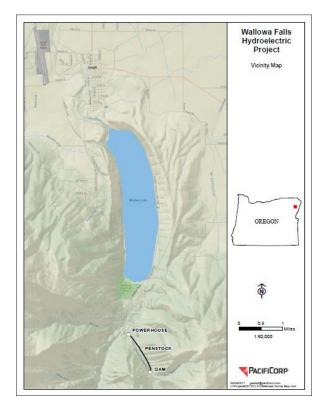
Site Name: Wallowa Falls Hydroelectric Project		Date: 25 July 2023					
Photo Point (GPS):		Ownership: PacifiCorp					
Photo Name:		Examiner: Kendrick Mo	Examiner: Kendrick Moholt, Bio-Resources, Inc.				
Botanist Initial: Wildlife Biologist:	4700'- 5000'	GPS Coordinates: 0483488E 5012298N and 0483529E 5012336N	Datum: UTM (NAD 27) Zone 11				
	le Name:	Other Observations:					
Access: Road Trail_X River_ Other Campground							
Township: <u>3S</u> Range: <u>45E</u> Sec	etion: 29 1/4 sec	c: <u>SE</u> of ½ sec: <u>SE</u>					

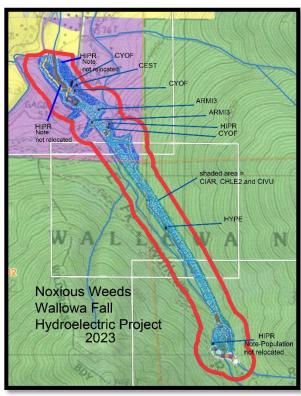
Site Data Information

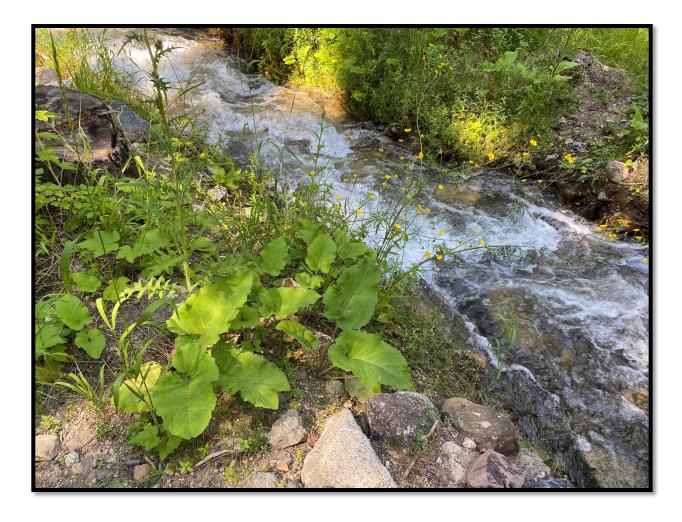
Target Species Code: ARMI3 Common		n Name: Common Burdock						
Scientific Name: Arctium minu	us		Phe	Phenology: R B FL X_ S				
Distribution: CLumpedLinearSEScattered evenSPScattered Patchy_X_Continuous								
Total Acres: 26 Percent Infested: <1% Infested Acres: ~0.1								
% Cover or Count (weeds): ~5 Understory Cover % (all):60-90%)%				
Potential to Spread: High Med x_Low Distance to Water: >30m								
Water Type: Perennial Eph	hemeral	System:	Lake_	_RiverSp	pring_	Stream		
Soil Types: sandy loam		Slope % aspect: 2-10%, Aspect variable						
Other Species on Site:								

Comments

Map of Site







Common Burdock

Arctium minus

General Site Information

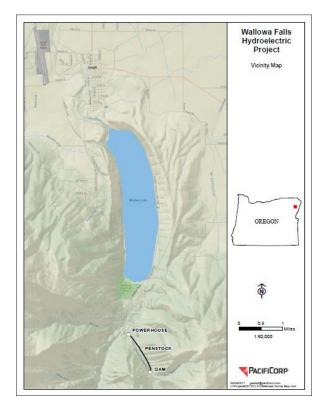
Site Name: Wallowa Falls Hydroe	te Name: Vallowa Falls Hydroelectric Project		Date: 25 July 2025					
Photo Point (GPS):			Ownership: PacifiCorp					
Photo Name:	noto Name:		Examiner: Kendrick Moholt, Bio-Resources, Inc.					
Botanist Initial:		Elevation:	GPS Coordinates:	Datum:				
Wildlife Biologist:		4700'- 5000'	0483297 5012651N and 0483577E 5012260N	UTM (NAD 27) Zone 11				
EDRR:YN	GPS Fil	le Name:	Other Observations:					
Access: Road_ Tra	nil <u>X</u> Riv	ver_ Other	#					
Township: 38Range:	45E Sec	etion: 29 1/4 sec:	: <u>NW</u> of ½ sec: <u>SE</u>					
Township: 38Range:	4 <u>5E</u> Sec	tion: 29 1/4 sec:	<u>SE</u> of ½ sec: <u>SE</u>					

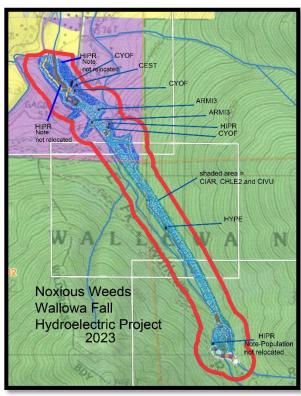
Site Data Information

Target Species Code: CYOF Common Name: Houndstongue									
Scientific Name: Cynoglossum officinale				Phenology: R B FL X_ S					
Distribution: CLumped Linear SEScattered even SPScattered Patchy X Continuous									
Total Acres: 26	Percent Infested: <1% Infested Acr			ed Acre	s: ~0.15	;			
% Cover or Count (weeds): ~60			Und	erstory Cover % (all):40-90%					
Potential to Spread: High x Med Low Dista			ance to Water: >30m						
Water Type: Perennial_	Ephemera	al	Sys	tem:	Lake_	River	_ Sprin	ıg_	Stream
Soil Types: sandy loam		Slope % aspect: 2-10%, Aspect variable				iable			
Other Species on Site:									

Comments

Map of Site







Houndstongue *Cynoglossum officinale*

General Site Information

No meadow hawkweed *Hieracium caespitosum* (Synonym: *Hieracium pratense*) were located during the initial survey nor during control efforts in 2023.

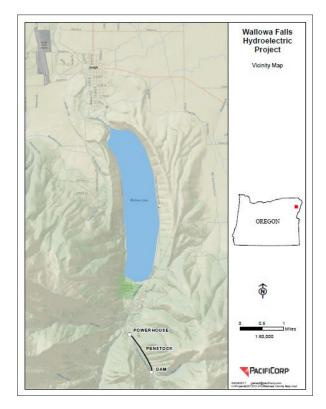
General Site Information

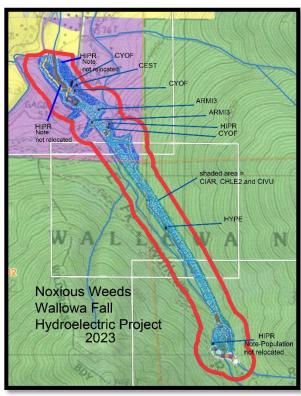
Site Name:				Date: 25 July 2023	
Wallowa Falls Hydroele	ectric Pr	oject		2000 20 0013 2020	
Photo Point (GPS):				Ownership/District: USF	S, WWNF, Eagle Cap
				and PacifiCorp	
Photo Name:				Examiner: Kendrick Mo	pholt, Bio-Resources, Inc.
Botanist Initial:		Elevation:		PS Coordinates:	Datum:
Wildlife Biologist:		4700'-	04	83259 E 5012652N	UTM (NAD 27)
Whalle Blologist.		5800'	to		Zone 11
			04	84159E 5011062N	
EDRR:YN G	PS File	e Name:		Other Observations:	
	77 D:	0.0			
Access: Road Trail_	X Riv	er_ Other c	am	pground	
Township: 3SRange: 45	<u>5E</u> Sect	tion: 33 NW ¹ /	4 of	NW ¹ / ₄ , SW ¹ / ₄ of NW ¹ / ₄ , NW ¹ / ₄	of SW1/4, SE1/4 of SW1/4
Township: 3SRange: 45	<u>5E</u> Sect	tion: 29 SW ½	4		
Township: 38Range: 45	5E Sect	tion: 32 NE ¹ / ₄	of N	NE½	

Site Data Information

Target Species Code: CHL	E2 Commo	on Name: Oxeye Daisy					
Scientific Name: Leucanthe	emum vulgare		Phenology: R B FL X S				
(Synonym- Ca	hrysanthemum leu	canthemum					
Distribution	i: CLumped]	Linear	inearSE Scattered even				
SP Scattered Patchy X Continuous							
Total Acres: 26	Percent Infested:	: <1%	Infested Acres: ∼1.0				
% Cover or Count (weeds):	~1000	Understory Cover % (all):40-90%					
Potential to Spread: High_	Med x_Low	_ Dista	ance to Water: >30m				
Water Type: Perennial_	Ephemeral	System: Lake River Spring Stream					
Soil Types: sandy loam		Slope % aspect: 2-20%, Aspect variable					
Other Species on Site:							

Comments







Oxeye Daisy Leucanthemum vulgare

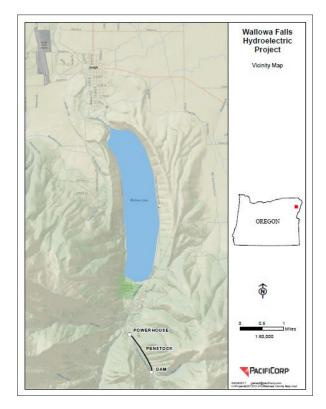
General Site Information

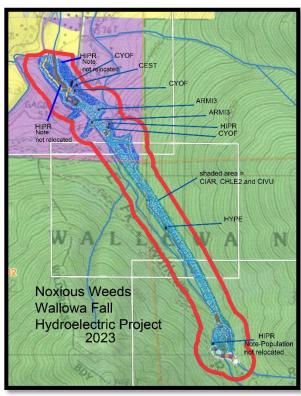
Site Name: Wallowa Falls Hydroelectric P	roject		Date: 25 July 2023	
Photo Point (GPS):			Ownership: PacifiCorp	
Photo Name:			Examiner: Kendrick Mol	nolt, Bio-Resources, Inc.
Botanist Initial:			PS Coordinates:	Datum:
Wildlife Biologist:	4700'- 5000'	0483409E 5012480N		UTM (NAD 27) Zone 11
EDRR:YN GPS Fil	e Name:		Other Observations:	
Access: Road X Trail Riv	er_ Other C	npground		
Township: <u>3S</u> Range: <u>45E</u> Sec	tion: 29 1/4 se	ec:	NW of 1/4 sec: SE	

Site Data Information

Target Species Code: CEST Commo			on Name: Spotted Knapweed					
Scientific Name: Centaurea stoebe				Phenology: R B FL X_ S				
Synon	ym (Centau	rea macu	losa)					
Distribution	: CLump	edL	LinearSEScattered even					
SP Scattered Patchy X_ (Contin	nuous			
Total Acres: 26	Percent Infested: <1%			Infested A	Acres: ~	0.25		
% Cover or Count (weeds):	dozens		Understory Cover % (all):40-90%					
Potential to Spread: High x	MedI	Low		Dist	ance to W	ater: >30	0m	
Water Type: Perennial_	Ephemera	ıl	Sys	tem:	Lake_ Ri	iver S _l	pring	g_ Stream
Soil Types: sandy loam			Slop	e % :	aspect: 2-1	10%, Asp	pect v	ariable
Other Species on Site:								

Comments







Spotted Knapweed (rosette)
Centaurea stoebe

General Site Information

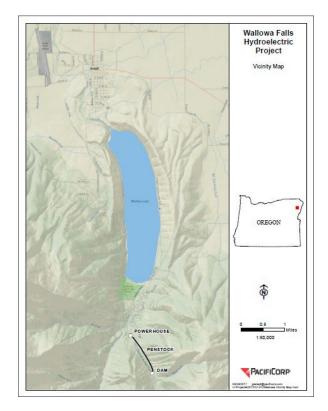
Site Name: Wallowa Falls Hydroelectric P	roject		Date: 25 July 2023			
Photo Point (GPS):			Ownership: PacifiCorp			
Photo Name:			Examiner: Kendrick Moholt, Bio-Resources, Inc.			
Botanist Initial:			PS Coordinates:	Datum:		
Wildlife Biologist:	4700'- 5000'	0483122E 5012854N		UTM (NAD 83) Zone 11		
EDRR:YN GPS Fil	e Name:		Other Observations:			
Access: Road Trail_ River_ Other: Campground						
Township: <u>3S</u> Range: <u>45E</u> Sec	tion: <u>29</u> 1/4 se	ec:	NW of 1/4 sec: SE			

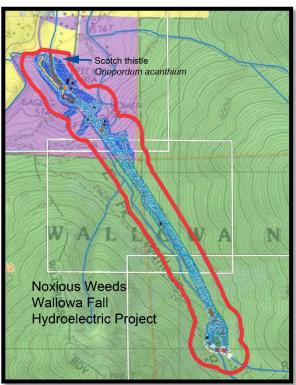
Site Data Information

Target Species Code: CEST Con			ommon Name: Scotch Thistle				
Scientific Name: Onopordum acanthium					Phenology:	R B	FL X S
Distribution: CLumpedL SPScattered Patchy_X					•	even	-
Total Acres: 26 Percent Infested: 0%			Infested Acres: ~0.00				
% Cover or Count (weeds): 1	Not reloca	ted		Under	story Cover %	% (all): %	
Potential to Spread: High_	Medl	Low		Dista	nce to Water:	m	
Water Type: Perennial	Ephemera	al	Sys	tem: L	ake River_	_ Spring_	_ Stream
Soil Types: sandy loam			Slop	pe % as	spect: %,		
Other Species on Site:							

Comments

No plants were relocated in 2023.





No plants were relocated in 2023.



Scotch Thistle (rosette)

Onopordum acanthium

General Site Information

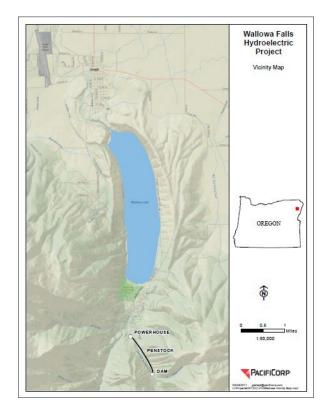
Site Name: Wallowa Falls Hydroelectric Project			Date: 25 July 2023				
Photo Point (GPS):			Ownership/District:USFS, WWNF, Eagle Cap				
Photo Name:				Examiner: Kendrick Moholt, Bio-Resources, Inc.			
Botanist Initial: Wildlife Biologist:		Elevation: 5500'	GPS Coordinates: 0484018E 5011521N		Datum: UTM (NAD 27) Zone 11		
EDRR:YN	GPS Fil	le Name:		Other Observations:			
Access: Road_ Tra	ail <u>X</u> Riv	er_ Other_		#			
Township: 3SRange	: <u>45E</u> Sec	etion: $3\overline{3}$ 1/4 se	c: <u>N</u>	NW			

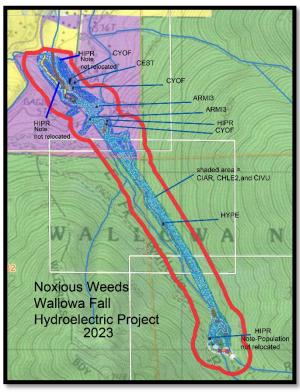
Site Data Information

Target Species Code: HIPE Commo			on Name: St. John's Wort				
Scientific Name: Hypericum perforatum				Phenology: R	R B FL <u>X</u> S		
Distribution: CLumpedLine SPScattered Patchy X_					en		
Total Acres: 26	Percent Infested: <1%			Infested Acres:	~0.1		
% Cover or Count (weeds):	~25		Under	rstory Cover %	(all): 90%		
Potential to Spread: High_	MedLo	w <u>X</u>	Dista	nce to Water: >	>30m		
Water Type: Perennial Ephemeral			stem: L	ake River	Spring_ Stream		
Soil Types: sandy loam			Slope % aspect: 2%, 230°				
Other Species on Site:							

Comments

Approximately 1 mile from trailhead on Wallowa Falls Maintenance Road (NE of the FS1804 trail switchback on the Sec. 32/33 border).





Mechanical/Physical Treatment (2530) Data Form

General Treatment Area

ORG (RRFFDD)	FACTS_ID	Subunit #	Treatment A	Treatment Area Name		Project	
			Wallowa Falls Hydroelectric Project access road		USFS	Wallowa Falls Hydroelectric Project	
Equipment	Fund Code	Acres Treat	ed Date Treated		Comments		
By hand and shovel		~1.3 acres	July 14, 15, and 25 and August 16, 2023				

Infestation/Target Species

INFESTATION_ID	Weed Code	Species Name	Infested Area Treated	Phenology
		St. John's Wort (Hypericum perforatum)	30 square feet	Vegetative
		Bull thistle (Cirsium vulgare)	Scattered in 20 x 3000 foot area (~30 individuals)	Vegetative, flowering
		Canada thistle (Cirsium arvense)	Scattered in 20 x 3000 foot area (~100 individuals)	Vegetative, flowering

Herbicide Application (2510) Data Form

General Treatment Data

Treatment Area Name	Owner	FACTS ID #	Subunit	Project			
Wallowa Falls Hydroelectric Project	USFS			Wallowa Falls Hydroelectric Project			
Equipment (Dealmook, 712 LITY, 721)	Fund Code	Comments					
Equipment (Backpack – 712, UTV – 721)	runa Code	Application was to remove all vegetation within in dam operations area.					

Infestation/Target Species

INFESTATION_ID	Species Name	% Infested	Infested Area Treat	Phenology
NA- all vegetation control	NA- all vegetation control	NA	0.25 acre	Flowering

Daily Log

Application Site		Licensed Applicator Name and License # (Circle Applicators)						Applicators (other)					
Wallowa Falls	s Forebay Area	BJ – AG-L10 JR – AG-L10	,	AC – AG-L107	0133PPA,		PacifiCor	p Operator					
Application Date	Application Area (Ac Applied ÷ Calibrated		Time Star	rt Time Stop	Temp (F)	Wind Speed (MPH)				Cloud Cover		Water Distance	
June 28, 2023	0.25 acre	,	9:00	10:00	65°	1-5		South	Fair		50%	O feet	
Calibrated Volume		UOM V		Volume Applied		UOM		Mix (oz/gal)		Dilutent			
		Gal/Acre					Ga	1			Wate	r	
Herb Product Name		EPA Reg #		<mark>#</mark>	Product Rate			Additives		Rate UOM		I	
Round-Up (Glyphosate)		524-529			80 oz	Oz/Ac					Oz/A	С	
						Oz/Ac					Oz/A	c	
						Oz/Ac					Oz/A	c	

Remarks	This herbicide application was discovered after the application. Exact details were not recorded at the time of the application. Future treatments will be with weed						
trimmer only.							
Wildlife/Botany Input for EDRR Sites							