



**EAST MORaine COMMUNITY FOREST
CONSERVATION EASEMENT
BASELINE DOCUMENTATION REPORT**



PREPARED BY

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WALLOWA LAND TRUST

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I. SUMMARY & BACKGROUND INFORMATION

Prepared by	Eric Greenwell for Wallowa Land Trust PO Box 516 Enterprise, Oregon 97828
Baseline Preparer's Title and Qualifications	Conservation Program Manager
Current Landowner	Wallowa County 101 South River Street Enterprise, OR 97828
Recordation Data	Recorded in Wallowa County, Oregon Date: _____ Recording Number: _____
Legal Description	Appendix X: Legal Description
Latitude, Longitude (approximate center of property)	-117.1910495, 45.3030985
Tax lot(s)	1500, 6000, 5900, and 7200; 6907
Acreage	1,824
Required Monitoring Frequency	Annually

II. PURPOSE OF THIS BASELINE DOCUMENTATION REPORT

Wallowa Land Trust has completed this Baseline Documentation Report (“**BDR**”) that includes an index of maps prepared prior to closing a conservation easement and signed by the Landowner by or at closing. A BDR is critical for establishing the condition of the property at the time the property and/or the easement is transferred and is the basis of future monitoring and enforcement. The report acts as a tool for comparing the results of adaptive management strategies as well as documents the important conservation values protected by the easement and the relevant conditions of the property as necessary to monitor and enforce the easement.

III. PURPOSE OF THE CONSERVATION EASEMENT

The East Moraine Community Forest is one contiguous parcel comprised of a primary acquisition the Ronald C. Yanke Family Trust East Moraine property of approximately 1,791 acres and a smaller, 33-acre adjacent parcel previously owned by Oregon Parks and Recreation Department (OPRD). Therefore, the East Moraine Community Forest is comprised of a total of approximately 1,824 acres of real property (“**Property**”) situated on the iconic and relatively undeveloped East Moraine of Wallowa Lake, approximately one mile southeast of the city of Joseph in Wallowa County, Oregon (see Appendix C: Road Map and Driving Directions). The Property is owned as one parcel by the government entity of Wallowa County (“**Landowner**”) and subject to a conservation easement co-held by Wallowa Land Trust and Oregon Department of Forestry (“**Conservation Easement**”).

The Property was acquired with funds provided, in part, under the United States Forest Service Forest Legacy Program (“**FLP**”). It is the purpose of the Conservation Easement to effect the Forest Legacy Program in accordance with the provisions of the Cooperative Forestry Assistance Act of 1978, Public Law 95-313 as amended (codified at 16 USC 2101 et seq), on the Conservation Property, which purposes include protecting environmentally important forest areas that are threatened by conversion to nonforest uses and for promoting forest land stewardship and other conservation opportunities. The purposes also include the protection of important scenic, cultural, fish, wildlife and recreational resources, riparian area, and other ecological values. The portion of the Property obtained with FLP funds (the “**FLP Area**”) is depicted in Appendix D: FLP Area and Non-FLP Area Map. Additional funders of the acquisition include the Nez Perce Tribe, Collins Foundation, Conservation Alliance, Yarg Foundation, Land Trust Alliance, Rose E. Tucker Charitable Trust, Oregon Community Foundation, Travel Oregon, Cycle Oregon, and private individuals. It is the purpose of the Conservation Easement to effect the various goals and protect the agreed-upon conservation values listed below, which were direct inducements to the many donations made by aforementioned funders that provided for the acquisition of the Property.

It is also the purpose of the Conservation Easement that the Property be retained forever in a relatively natural state, with the goal of maintaining natural, healthy and ecologically sustainable characteristics of range and forest habitats on the Property, and to ensure those habitats will be maintained for plant and wildlife species dependent on the Property for their existence while providing economic returns to the local economy through sustainable forestry and rangeland management. It is also a purpose of the Conservation Easement to maintain scenic, cultural, rangeland, and forestland open space uses and public recreation and education uses consistent with the protection of the Conservation Values of the Property.

As summarized from the Conservation Easement, the Conservation Values are:

1. The Property is a relatively unaltered community treasure. The Conservation Easement will protect open space pursuant to policies of Wallowa County’s Comprehensive Land Use Plan including Goal 5, Open Spaces, Scenic and Historic Areas, and Natural Resources and Goal 5, Open Spaces, Scenic and Historic Areas, and Natural Resources, Appendix 8 – Wallowa Lake Glacial Moraines adopted in 1996.

2. The Property includes diverse and critical habitats, which support and connect a complexity of species. The Conservation Easement protects wildlife habitat within Oregon Department of Fish and Wildlife's Conservation Opportunity Area 163: Wallowa Mountains and ecological systems, plant communities, and native grasslands pursuant with Oregon Department of Fish and Wildlife's 2016 Oregon Conservation Strategy; and a United States Fish and Wildlife Key Conservation Area, established in 2010, for the federally-listed threatened and state-listed endangered herbaceous wildflower, Spalding's catchfly.
3. The Property includes land of longstanding cultural significance to its original inhabitants. The Conservation Easement protects culturally significant land pursuant to policies of Wallowa County's Comprehensive Land Use Plan including Goal 5, Open Spaces, Scenic and Historic Areas, and Natural Resources, adopted in 1996, which states that Wallowa Lake's glacial moraines "encompass historical and cultural sites used by local and Native American communities" and "[a] disruption of the Scenic Resource may also weaken the cultural identity of the associated Native American groups who consider this resource sacred."
4. The Property includes land which provides returns to the local economy and maintains the rural culture of a working landscape. The Conservation Easement protects critical rangelands and forestlands pursuant with Wallowa County's Comprehensive Land Use Plan, adopted in 1977, including Goal 3, Agricultural Lands and Goal 4, Forest Lands as well as State of Oregon, 2017 ORS 215.243 and 2017 ORS 526.277.
5. The Property provides quality recreation and educational opportunities for the local community and visitors alike. The Conservation Easement protects opportunities pursuant with policies of the State of Oregon, Oregon Revised Statutes' Policy of State Toward Outdoor Recreation Resources, 2017 ORS 390.010.

IV. SUMMARY OF INVENTORY AND ANALYSIS PROCEDURES FOR THIS BASELINE REPORT

The information in this report is the result of several site visits to the Property. Visits recorded information regarding ecosystem composition, geology and topography, hydrology, cultural resources, and boundaries. Interviews with previous landowners, Wallowa County employees, relevant regulatory bodies, and resource specialists; as well as relevant reference documents provided additional information. Additionally, where reporting reveals data or information about the Property could be collected but has not, the BDR may identify these data for future collection if/when resources and capacity allow. See XV. References for an additional list of resources consulted.

Resource specialists and professionals consulted:

- Dr. Ellen Morris Bishop, writer and geologist
- David Bates, Oregon District 7 Water Master
- Nils Christoffersen, Executive Director of Wallowa Resources
- Christopher “Kit” Clark, Attorney for the Ronald C. Yanke Family Trust
- Dave Clough, Adjacent Property Owner
- Mac Freeborn, Park Manager, Wallowa Lake State Parks
- Gregory Fullem, attorney, Schwabe, Williamson & Wyatt
- Wendy Gerlach, attorney, Gerlach Law & Communications LLC
- Franz Goebel, Wallowa County Planning Director
- Mike Hansen, retired Assist. Dist. Wildlife Biologist with Oregon Department of Fish and Wildlife
- Jeff Hsu, Registered Professional Land Surveyor, BGB Surveyors
- Kendrick Moholt, Botanist and Wildlife Biologist, BioResources, Inc.
- Larry Nall, Forester
- Jerry Hustafa, Botanist, United States Forest Service
- Janet Hohmann, Wildlife Biologist
- Andrew Marcum, Wallowa County Vegetation Department Manager
- Heath Naughton, Naughton Weed Control
- Tara Porter, Contractor and Natural Resource Specialist, TRP Creative Services
- Garrett Stephenson, attorney, Schwabe, Williamson & Wyatt
- Ladd Whitcomb, Oregon Parks and Recreation Property Unit

Visits to the Property included:

- 2019-02-15 site visit by Eric Greenwell and Paul Flanders
- 2019-02-16 site visit by Eric Greenwell
- 2019-04-15 site visit by Eric Greenwell, Jeff Hsu/BGB Surveyors
- 2019-04-18 site visit by Eric Greenwell
- 2019-06-08 site visit by Eric Greenwell
- 2019-08-01 site visit by Eric Greenwell and Larry Nall
- 2019-08-31 site visit by Eric Greenwell
- 2019-09-16 site visit by Eric Greenwell

- 2019-11-16 site visit by Eric Greenwell and Tia Hatton
- 2019-11-22 site visit by Eric Greenwell, Tia Hatton, and Dave Clough
- 2019-11-14 site visit by Tara Porter
- 2019-11-15 site visit by Tara Porter
- 2019-11-18 site visit by Tara Porter
- 2020-05 through 2020-07 continued site visits by Larry Nall
- 2020-05-21, 2020-06-02, and 2020-06-18 site visits by Janet Hohmann
- 2020-07-10 and 2020-07-12 site visit by Eric Greenwell
- 2020-10-01 site visit by Eric Greenwell
- 2022-10-12 site visit by Kel Hoffman and Jacob Hasslacher
- 2022-10-13 site visit by Kel Hoffman
- 2022-11-09 site visit by Kel Hoffman, Kathleen Ackley, Katy Nesbitt, Nils Christoffersen, Larry Nall and Kirk Barham

V. LEGAL SUMMARY OF CONSERVATION EASEMENT

It is the purpose of the Conservation Easement that the Property be retained forever in a relatively natural state, with the goal of maintaining natural, healthy and ecologically sustainable characteristics of range and forest habitats on the Property, and to ensure those habitats will be maintained for plant and wildlife species dependent on the Property for their existence while providing economic returns to the local economy through sustainable forestry and rangeland management. It is also a purpose of the Conservation Easement to maintain scenic, cultural, rangeland, and forestland open space uses and public recreation and education uses consistent with the protection of the Conservation Values of the Property.

Wallowa County (“**Landowner**”) and Wallowa Land Trust and Oregon Department of Forestry (“**Co-Holders**”) intend that the Conservation Easement will prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property. Landowner and Co-Holders recognize that changes in economic conditions, in technologies, in accepted land management practices, and in the situation of Landowner may result in an evolution of land uses and practices related to the Property; provided, however, that such uses and practices must be consistent with the Conservation Easement and guided by the Management Plan (defined below).

Management Plan

The Multi-Use Management Plan (the “**Management Plan**”) was developed by natural resources professionals for the Property and approved by the Co-Holders and the Oregon State Forester as of September 21, 2022 (the “Effective Date”). The requirements of the Management Plan are set forth through the Oregon Forest Management Planning System (or future renditions thereof). The Management Plan is located on file at the respective offices of Landowner, 101 South River Street, Enterprise, OR 97828; ODF, 802 OR-82, Wallowa, OR 97885; and WLT, 117 E. Main St, Enterprise, OR 97828 in conjunction with the terms of the Conservation Easement and sets forth all forestry and range operations and recreational and cultural uses including the conservation, restoration, maintenance, and management of the Conservation Values on the Property. The Management Plan also sets forth a schedule and responsibilities regarding any revisions and approval of revisions to the Management Plan. In the event of any inconsistency or conflict between the provisions of the Conservation Easement and the Management Plan, the Conservation Easement shall control.

The following parameters shall apply:

1. The Management Plan shall be consistent with the provisions of section 5(f) of the Cooperative Forestry Assistance Act of 1978 as amended, 16 U.S. C. 2103a (f).
2. The initial Management Plan shall cover a period of at least 10 years following the Effective Date, and then shall be subsequently updated by the Co-Holders and Oregon State Forester using good faith upon expiration of such initial 10-year period and similarly updated every 10 years thereafter.
3. The Management Plan shall include a schedule of actions that constitute all of the forestry and rangeland operations and activities on the Property, including those operations and activities desired for wildlife, low impact recreational, educational, cultural, and water resource enhancements.

4. The Management Plan shall also include a schedule of actions to protect, maintain, and enhance the Conservation Values of the Property.
5. The Management Plan shall be a repository for all Conservation Values enhancement projects, including maintenance schedules.
6. The Management Plan shall be reviewed annually in consultation with Co-Holders to address any necessary changes/amendments, subject to the approval of Co-Holders and the Oregon State Forester.
7. In the event of conveyance of the Property in accordance with the terms of the Conservation Easement, the current Management Plan shall be assumed by new ownership until a new or updated Management Plan is approved by Co-Holders and the Oregon State Forester.

Restrictions and Prohibited Uses

1. Subdivision: The Property may not be divided, partitioned or subdivided, and may not be conveyed except as a single property.
2. Density and Development Rights: The use, exercise or transfer of development rights is prohibited with regard to the Property.
3. Industrial and Commercial Activities: There shall be no industrial or commercial activity undertaken on the Property, except for commercial activities that are consistent with, or do not materially conflict with, the Conservation Values and provisions of the Conservation Easement(s).
4. Structures: Landowner shall not construct any building or structure on the Property except as permitted by Number 1 in the Reserved Rights summary below.
5. Other Improvements: No windmills, wind turbines, cell towers, radio towers or other like utility features are permitted, except those existing on the Property as of the date the Conservation Easement(s) and recorded in this BDR as well as improvements permitted in Number 2 in the Reserved Rights below.
6. Maintaining Forest Cover: At any point in time, at least 75 percent of the portion of the Property obtained with FLP funds.
7. Mining and Mineral Development: Landowner shall not permit any mining, drilling, excavation or exploration for mineral development, natural gas, or oil upon or beneath the Property. Any gravel and rock removal or gravel and rock removal and redistribution activities on the Property must be from sources identified in the Management Plan.
8. Roads: Landowner shall not construct new roads upon the Property other than those Landowner deems necessary to conduct forestry, range, and recreation activities consistent with the Conservation Values, and which are listed as a planned action in the Management Plan.
9. Vehicles: Vehicle use is restricted to maintenance, emergency access, rangeland and forestland open space uses, and restoration in accordance with the Management Plan, a manner which will not adversely and materially impact the Conservation Values of the Property. Only non-motorized public access shall be permitted except as specifically permitted by the Public Access summary below.
10. Water: There shall be no manipulation or alteration of rivers, creeks, streams, surface and subsurface springs, except as permitted by Number 1 in the Reserved Rights summary below.

11. Water Rights: Landowner shall not separate any water rights from the Property or significantly change any appurtenant water rights without written approval by the Co-Holders. Landowner will also take affirmative action to avoid loss or forfeiture of water rights that are appurtenant to the Property.
12. Alteration of Land: The topography of the Property shall not be altered through the excavation or placing of soil except as permitted by Number 1 and Number 2 in the Reserved Rights summary below.
13. Dumping: No portion of the Property may be used for disposal of vehicles, trash, garbage, junk, hazardous or toxic substances, dumps, landfills, or storage or deposit of waste materials of any kind.
14. Rights-of-Way: No additional permanent rights-of-way or easements over the Property may be granted by Landowner without prior written approval of the Co-Holders.

Public Access

The public shall have the perpetual right to enter, traverse and otherwise use the Property for non-motorized recreational activities (with the exception of 1. Equitable Access below), except within those portions of the Property in which the Landowner or a third party authorized by Landowner is engaged in currently active operations consistent with an authorized use of the Property. Landowner nor Co-Holders shall charge the public or otherwise impose a fee for public use of the Property, except that Landowner reserves the right to charge a modest fee for permits associated with gathering forest products for personal use, such as firewood.

Notwithstanding the terms above, and in accordance with the Management Plan, the Landowner may reasonably regulate and restrict public use and access to areas of the Property to avoid interference where the Landowner and contractors and lessees authorized by Landowner are conducting management activities, and to promote public safety. Landowner, after consultation with Co-Holders, may decide to limit or restrict public access if it appears, based upon experience with public access to the Property, that such limitations or restrictions are necessary to protect Conservation Values of the Property.

1. Equitable Access: Due to its proximity to urban centers, spectacular views, and recreation opportunities, the Landowner and Co-Holders acknowledge an intrinsic value to the public to have equitable access to the Property. In the spirit of this acknowledgement, the Landowner reserves the right to use roads existing as of the Effective Date of the Conservation Easement and as documented in this BDR to allow limited motorized transportation via Limited Use Permit on the Property for individual members of the public with mobility challenges or group members of the public for noncommercial educational, cultural, or special events, as provided in the Terms of Limited Use Permits to predetermined sites identified by the Management Plan given that such access is in accordance with the Management Plan and does not materially impair the Conservation Values of the Property.

Reserved Rights

1. Structures: Landowner may erect structures designed for educational, forestry, grazing, equestrian, recreational, restoration, or water resource enhancement purposes that do not materially conflict with the Conservation Values and as scheduled as planned actions in the Management Plan.
2. Other Improvements: In addition to Paragraph 4.1. above, and as scheduled as planned actions in the Management Plan, Landowner may:
 - Develop, maintain, repair, and replace adequate and permeable outdoor parking areas and facilities at legal access points existing on the Property as of the Effective Date, as documented in this BDR and the Conservation Easement.
 - Erect or mount solar panels and utilities and infrastructure required for the harvest and use of renewable energy on the Property to serve and accommodate cultural, rangeland, and forestland open space uses and public recreation and education uses.
 - Landowner may maintain, repair, reconstruct, and replace trails existing on the Property as of the Effective Date, as documented in this BDR and the Management Plan. Landowner may also build, maintain, repair, reconstruct, and replace new trails for the purposes of non-motorized, low-impact recreation on the Property, which will not adversely and materially impact the Conservation Values.

Rights and Remedies Relating to Management

In order to accomplish the Purposes of the Conservation Easement, the Co-Holders shall have rights and remedies, which, with all other rights under the Conservation Easement, shall be held by the Co-Holders jointly but with each Co-Holder having the right to individually enforce each right and remedy. The rights and remedies are detailed in Section 6 of the Conservation Easement.

General Provisions

The Conservation Easement contains a number of General Provisions contained in Section 7 of the Conservation Easement.

VI. PROPERTY OWNERSHIP HISTORY; CURRENT AND HISTORIC LAND USES

The Property is currently owned by Wallowa County and is one contiguous parcel comprised of the acquisition of two adjacent parcels. The bulk of the Property is comprised of the Ronald C. Yanke Family Trust's East Moraine Property, which is approximately 1,791 acres in size and was acquired by Wallowa County on January 20, 2020. The remainder is comprised of an OPRD property of approximately 33 acres and was donated to Wallowa County on June 29, 2021. The entire Property is a total of approximately 1,824 acres (See Appendix E: Parcel Map and Appendix X: Legal Description).

The Ronald C. Yanke Family Trust's East Moraine Property

The Ronald C. Yanke Family Trust's East Moraine Property, an irregularly shaped parcel, is comprised of four tax lots—1500, 6000, 5900, and 7200—and was acquired in its current configuration by RY Timber, Inc. in 1990 from the KBL Company. Ronald and Linda Yanke then acquired the property from RY Timber, Inc. (a company owned by Ron and Linda Yanke) in 1992. The Ronald C. Yanke Family Trust then acquired the property from Ron and Linda Yanke in 1994. From aerial imagery, commercial harvesting of timber began between 1946 and 1953, and forestry and grazing have been the primary uses on the Property since that period. Any other commercial or agricultural uses on the Property prior to that period are not documented here, though surrounding properties were also used to graze sheep as far back as the early 1900s.

The Family Trust, who also managed the property for timber and grazing, indicated in 2011 they would seek to sell or develop several of their Wallowa County properties, including the East Moraine. However, the Trust had not changed their relationship to the property through the summer of 2018. Unfortunately, it was the passing of their local, longtime, trusted property manager, Bruce Dunn that shifted their approach to property management. The family agreed to sell the property to the Wallowa Lake Moraines Partnership—comprised of Wallowa County, Wallowa Land Trust, Wallowa Resources, and OPRD—in November of 2018. At the close of the sale, in January 2020, the property was conveyed to Wallowa County.

In terms of recent grazing and timber uses, Bruce Dunn drafted a management plan, the East Moraine Forest Stewardship Plan, in September of 2015. The Plan (on file at both Wallowa Land Trust and Wallowa Resources) guided management of the property. This passage perhaps best exemplifies Mr. Dunn's general and overarching management strategy:

“The timber stands have been managed as irregular shelterwoods since RY Timber has acquired the property. There are three or four (depending on the site) even aged stands occupying the same acre at the same time. This gives the appearance of uneven aged stands but has the [ease] of even age management. The spacing guidelines for the residual stand is approximately 10 foot between crowns (free thinning) after [a] thinning or harvest entry. The intent of all of the entries is to leave the best appearing tree no matter what size, removing insect and disease trees, and to leave seral species (ponderosa pine, western larch, Douglas-fir) as the first choice. All entries are accomplished by certified professional loggers under the direction of RY Timber and meet the criteria of the Sustainable Forest Initiative. The grass and forb component of the property is managed by grazing of 125

cow/calf pairs from approximately June 15 to November 15 yearly. The intent is to leave the grass and forb component 4 to 6 inches high after grazing. Five water sites were developed on the property to help disperse the grazing. The repair of water developments and boundary fences are the responsibility of the permittee. Noxious weeds are treated yearly by contract. Noxious weeds that are or have been present on the property include: spotted knapweed, meadow hawkweed, Scot[ch] thistle, sulfur cinquefoil, and common bugloss.” (Wallowa East Moraine Partnership 2015)

In addition to timber and grazing uses, the Yanke Family agreed to lease an area on the Property to a local telecommunications and networking company, Wallowa Valley Networks, for a radio tower to provide internet throughout the Wallowa Lake Basin (See “VIII. Manmade Features, Structures and Improvements” below). The Yanke Family, their land manager, and previous landowners allowed recreation on the property. They granted permission to access the property for various uses, including hiking, horseback riding, hunting, mountain biking, weddings, “fun runs” and other community events, portraits and photography, etc. Over time, many residents and tourists began accessing the property without permission, some with an inaccurate understanding that the property was publicly owned. Due to the property’s proximity to Joseph, its outstanding views from the crest of the East Moraine of Wallowa Lake, and its relative ease of access, it has become identified as an iconic community resource and, in recent years, due to the success of promotional campaigns like Travel Oregon’s “Seven Wonders of Oregon Campaign,” it has become increasingly identified as a state resource.

The Property also contains the largest portion of the “East Moraine Trail,” an informal through-hiking trail that runs the length of the East Moraine of Wallowa Lake and crosses several privately owned parcels. That trail, though not legally documented as a publically accessible trail, appears on alltrails.com, outdoorproject.com, and other online and print recreation and tourism guides to Eastern Oregon and Wallowa County.

Other uses have also helped to solidify the Yanke Family’s East Moraine Property as a source of rural identity. The Chief Joseph Days Rodeo, which has become a longstanding annual event, a community tradition, and draws thousands of people to Joseph, Oregon each year, was first held in 1946 on the Yanke Family’s East Moraine Property. Parallel to the rodeo grounds, a grass airstrip provided a place for pilots to land their planes and take off to sweeping views of the Wallowa Mountains and Wallowa Valley. The airstrip has not been in use in recent decades. An elk fence, which marks a northern property boundary, currently bisects its former location. The runway has returned to rangeland, and a copse of Ponderosa grows nearby.

Oregon Parks and Recreation Department

The OPRD property, an approximately 33-acre parcel shaped like a trapezoid, was donated to OPRD in 1988 by its then-owners, Duane L. Wiggins and Robert W. Wiggins. The property sits at the head of Wallowa Lake, a popular commercial and residential area which includes lodges, condos, resorts, public campgrounds and picnic grounds, a marina and associated facilities, summer cabins, and restaurants. The property itself, though, is undeveloped timber ground. This is due in part or in whole to its challenging topography and location on a severe western slope of Mt. Howard, which limits access. In the 1988 appraisal of the property, appraiser George L. Bertels classified the Highest and Best Use of the property as “recreation land, with timber growth as a

secondary use,” due again to costs associated with timber harvest on such a steep slope and limited access (1989). The Property is adjacent the Yanke Family Trust’s East Moraine Property at its Eastern Boundary, on the west face of Mt. Howard in the Wallowa Mountains.

Pre-Euroamerican Settlement

Some of the early United States government patents for private property around Wallowa Lake, including patents for the Yanke Family’s East Moraine Property, date back to the early 1890s. Prior to the arrival of Euroamerican settlers in the Wallowa Valley in the mid-to-late 1800s, the Wallowa Band of the Nez Perce people (Nimi’ipuu) inhabited the Wallowa Valley, which was part of the Nez Perce people’s traditional territory. Wallowa Lake and the land surrounding it, including the Yanke Family and OPRD parcels, were considered an essential part of “a larger historical/traditional subsistence, economic, family, political and religious life” for the Wallowa Band of Nez Perce people and their relatives (Marshall 2006).

After a controversial treaty in 1863 and removal of the Wallowa Band from the valley in 1877 during The Nez Perce War, descendants of the Wallowa Band became enrolled and are currently enrolled members of the Nez Perce Tribe in Idaho, The Confederated Tribes of the Umatilla Indian Reservation in Oregon, and the Colville Confederated Tribes in Washington. Today, the “cultural and religious significance of Wallowa Lake and Wallowa County has continued for the Nez Perce people” (Chadez 2017).

Of the ways Nez Perce people and the Wallowa Band held relationship with the land, Jennifer Chadez, Field Archeologist of the Nez Perce Tribe, describes a “seasonal subsistence cycle:”

“The people lived in permanent winter villages along streams and rivers. By early spring, the storage pits had been emptied of the foods they had kept for the winter months. At this time, women traveled to the lower valleys to dig root crops. The men traveled to the Snake and Columbia rivers to intercept the early salmon runs. After the arrival of the horse, travel to these places was much easier. Earlier travel was by foot and canoe. The men still hunted, but much less during the salmon runs. By mid-summer, all the people of the village moved to higher mountainous areas setting up temporary camps to gather later root crops, fish the streams, and do more hunting of big game.”

The Yanke Family’s East Moraine property and the OPRD parcels do not include perennial rivers or streams, apart from a small stream on the eastern boundary of the Yanke Family’s East Moraine property, which is unlikely to bear significant fish. These parcels may not have provided suitable places with moving water for traditional villages or fishing sites. However, the parcel’s elevational diversity from the Wallowa Valley floor to the slope of the Wallowa Mountains includes an array of habitats for flora and fauna, including potential roots, berries, and big game like deer and elk. These parcels are part of a larger, interconnected landscape in the Wallowa Lake Moraines Basin, where the Wallowa Band practiced culture and religion, including hunting big game and gathering and cultivating roots and berries, depending upon the seasons.

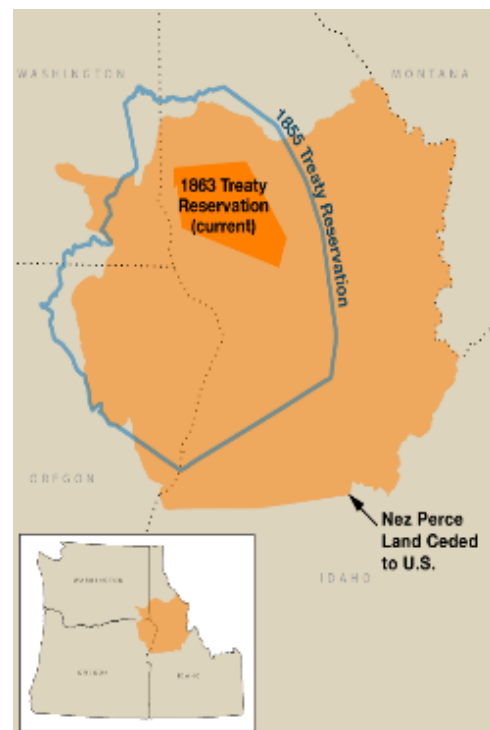
Treaty Rights, Legal Precedents and Advocacy

In more recent decades, the Nez Perce Tribe of the Nez Perce Indian Reservation, with its current boundaries located in present-day Idaho, have worked to uphold traditional treaty rights. These rights were negotiated in two treaties in 1855 and 1863 between the United States government and the Nez Perce Tribe.

In Article 3 of the Nez Perce Treaty, 1855, the Nez Perce Tribe reserved the rights of taking fish from any streams bordering or crossing through the reservation and at usual and accustomed places, as well as hunting, collecting roots and berries, and pasturing cattle and horses on open and unclaimed land. These reserved rights were tested in a 1953 court case between David Arthur and the State of Idaho, in which Mr. Arthur was charged with hunting on federal land out of season.

In a precedent-setting verdict, the Nez Perce Tribe's right to hunt on "open and unclaimed land" within their ceded territory and usual and accustomed areas was upheld by the Idaho Supreme Court. Additionally, "open and unclaimed land" was further defined as land not settled and occupied by whites under possessory rights or patent or otherwise appropriated to private ownership and does not exclude lands where title rests with the federal government. Finally, the verdict further solidified that the addition of a state to the Union—in this case, Idaho—does not operate to repeal rights reserved by tribes in treaties with the federal government.

Subsequent litigation across the region has further defined Nez Perce treaty rights, intents and definitions agreed upon in the 1855 and 1863 treaties. These treaties remain the legal mechanisms through which the Tribe and its citizens expend time and resources to uphold their traditional rights on traditional lands, which extend beyond the current boundaries of the Nez Perce Indian Reservation. These areas include Nez Perce ceded territory, which includes the present-day Wallowa Valley and the Property, and usual and accustomed areas, which extend beyond the boundaries of ceded territory.



More Information

More information regarding Cultural Resources will be also documented in this Baseline Documentation Report in Section XI: Community and Culture below.

VII. LAND USE ZONES AND RESOURCE OVERLAYS

The Property is subject to various and sundry land use designations as well as regulations those designations affect. They have been developed over time by the Wallowa County Planning Department and Wallowa County citizens and adopted by the Wallowa County Board of Commissioners in order to protect the custom, culture, and community stability of the county; maintain the agricultural and timber basis of the county; accommodate anticipated development; and make provisions for those uses which may be needed by the county, but which may have such undesirable characteristics as noise, smoke, and odor (Wallowa County Planning Department 2019).

This section identifies land use and zoning designations which apply to the Property. It is not intended to act as a guide to which uses are compatible or permissible. Summaries of zone designations below are neither exhaustive nor authoritative. The full ordinance Articles which define and regulate land use are included in Wallowa County's Comprehensive Land Use Plan: <https://co.wallowa.or.us/community-development/land-use-planning/comprehensive-plan/>. Any questions regarding land use should be directed to the Wallowa County Planning Department.

The Property itself is zoned **Exclusive Farm Use, Timber/Grazing** and **Recreation Residential** (also known as the **Parks Restricted**). These zones do not overlap. They apply to different areas of the Property. However, the Property is also subject to the **Goal 5 Resource Overlay Zone**, which includes the entire Property and applies in addition to the underlying land-use zones. For maps of these zones, see Appendixes F-H.

Exclusive Farm Use (EFU): The purpose of the EFU zone is “to protect and maintain agricultural lands for farm use, consistent with existing and future needs for agricultural products;” “to allow other uses that are compatible with agricultural activities, to protect forests, scenic resources and fish and wildlife habitat, and to maintain or improve the quality of air, water and land resources of the county;” and “to qualify farms for farm use valuation under the provisions of ORS Chapter 308” (Wallowa County, 2019). Regulations affected by this land-use designation are contained primarily in ordinance Article 15: Exclusive Farm Use of Wallowa County's Comprehensive Land Use Plan and are intended to “guarantee the preservation of the areas classified as farm use free from conflicting non-farm uses.”

Timber/Grazing (T/G): The purpose of the T/G zone is “to protect and maintain forest lands for grazing, and rangeland use and forest use, consistent with existing and future needs for agricultural and forest products” and “to allow other uses that are compatible with agricultural and forest activities, to protect scenic resources and fish and wildlife habitat, and to maintain or improve the quality of air, water and land resources of the county” (Wallowa County, 2019). Regulations affected by this land-use designation are contained primarily in ordinance Article 16: Timber Grazing of Wallowa County's Comprehensive Land Use Plan and are intended “to guarantee the preservation of the areas so classified for farm and forest use free from conflicting non-farm, non-forest use.”

Parks Restricted (R-2): The purpose of the R-2 zone is “to provide minimum standards for residential development and recreational uses in areas of Wallowa County that visitors from

outside the County are attracted to for natural and man-made amenities (Wallowa County, 2019)” Regulations affected by this land-use designation are contained primarily in ordinance Article 18: Recreation Residential (R-2).

Wallowa Lake Moraines Goal 5 Resource Overlay (Goal 5) – Goal 5 is intended to regulate conflicting uses which “may be prohibited, limited, or allowed, depending upon the impact on the resource.” The ordinance Article 44: Wallowa Lake Moraines Goal 5 Resource Overlay contains regulations affected by Goal 5 status and identifies 4 resources within Goal 5:

- Scenic
- Natural/Geological
- Wildlife Habitat
- Historical

Article 44 identifies conflicting uses as “anything which may alter the existing character of [the Wallowa Lake Moraines]. Conflicting uses include but are not limited to: development of residential, non-residential, or commercial structures, roads, agricultural practices and forest practices which are intensive or nontraditional, and other activities which would require any facilities, structural or otherwise, to be developed.” In order to protect these resources, Article 44 imposes “levels of protection” within Goal 5. While some levels have exceptions, the following are the basic levels:

- 3A Protection Area (No Conflicting Uses). Scenic Integrity: Very High (Preservation).
- 3C Protection Area – More Restrictive (No conditional uses allowed, permitted uses allowed, with restrictions). Scenic Integrity: High (Retention).
- 3C Protection Area – Less Restrictive (Permitted and conditional uses allowed, with restrictions). Scenic Integrity: Moderate (Partial Retention).

VIII. MANMADE FEATURES, STRUCTURES AND IMPROVEMENTS

The majority of the Property is primarily undeveloped rangeland and timberland, aside from improvements which have traditionally provided access for management and timber harvest. For a map and locations of all following improvements, including access roads, see Appendix I: Manmade Features and Improvements Map.

Roads and Trails

There is a network of primitive roads, trails, and livestock trails running through the Property, providing motorized or non-motorized access (see Appendix J: Roads and Trails Map). This network also provides recreational access to several loops and through-hikes that are appropriate for a variety of users and user groups from the east side of the Wallowa Lake's East Moraine at an access point where the County road, Turner Lane, ends, to the west side of the East Moraine at a gate and entry point along the Wallowa Lake Highway, colloquially referred to as the "Green Gate." The network also connects to the social "East Moraine Trail" mentioned above, which provides a relatively accessible hike north and south along the crest of the East Moraine, along the length of Wallowa Lake below.



Timber road near Turner Lane



East Moraine Trail



Cow Trail/Road Intersect

Traditionally, the road network through the property provided access for property maintenance, range and timber management, including access to different stands for harvest. The condition of the roads varies from maintained gravel to packed dirt. The grade of gravel depends upon the road. Some roads on the Property are well maintained with a bed of $\frac{3}{4}$ minus gravel, while others have been compacted or eroded with large, baseball and softball-sized chunks of shale. Some roads are overgrown and not currently accessible with a passenger vehicle, but may be accessible on an ATV or side by side. Culverts have been installed in areas and at various locations where drainage and erosion present issues.

Livestock trails and the East Moraine Trail appear well traveled. Mountain bikers, hikers, and equestrians can use these trails with relative ease, though some are cut into steep slopes and may present erosion hazards if use continues. A more in-depth analysis of trail integrity and viability for safety is recommended in areas where recreation will continue.

Water Resources

A network of streams flows throughout the Property, however a majority of these streams are intermittent, fed by runoff and other sources that dry up in the late season (for more information

about hydrology, see Section VIII: Physical Features below). Previous landowners, lease holders, and operators over the years have developed springs and installed troughs and stock water ponds in various places throughout the Property. These help store water for livestock. However, these may also dry up during dry years, when snowpack and precipitation are low (See Appendix I: Manmade Features and Improvements Map):



Developed well



Nearby trough

Other water developments include a spring on the west face of the East Moraine, near the shore of Wallowa Lake. This spring was developed for residential use for a pair of privately owned cabins along Highway 82. The development appears to be limited to a pipe sticking up from the ground in a dammed area that has since overgrown. While the spring is on the Property, those cabins still retain the right, through an easement, to draw water from the spring and maintain a pipeline to the spring. While there is a pipeline running to the spring, it has been disconnected and appears to have been nonoperational for some time. The recorded easement states that should the current pipeline be replaced, the cabin owners can reconnect it and replace it with no bigger than 1/2 inch pipe at their own cost. The only Water Rights attached to the Property are associated with this spring (See Appendix K: Water Rights Certificate and Appendix L: Water Rights Map)



Developed spring



Spring pipe



Spring Pipe disconnection

Gates and Fences

Fences are present around the perimeter of the Property for multiple purposes, most notably to mark property boundaries, manage the movement of wildlife, and to keep livestock on the property. These fences vary in construction and state. Some of the fences are new—primarily those along the Wallowa Lake Highway, in the southwest corner of the Property—installed by a local contractor, Cory Miller Fencing, Inc., in the last decade. New fencing has also been erected at the two entrance points on the east and west sides of the Property. Other fences are in various states of age and disrepair.

Fence line constructed of traditional 3- or 4-strand barbed wire fence and anchored with metal T-posts, treated wood posts or rock jacks mark a majority of the west, north and east property boundaries. To the south, the steep slope of Mt. Howard acts as a natural boundary, though lessees and operators have reported cattle leaving the Property and entering residential and commercial areas at the head of Wallowa Lake.

In addition to traditional barbed wire fences, an 8–10' tall elk fence extends 2-2.5 miles around a northeast corner of the Property (for location, see Appendix I: Manmade Features and Improvements). This elk fence was built in partnership between the Oregon Department of Fish and Wildlife, who provided the materials, and local landowners and farmers, who provided the labor. The elk fence, now many decades old, is designed to keep elk in the mountains and timber to the south and out of hayfields in the valley below. A vast majority of the fence is still standing, and the galvanized wire appears in good condition, though closer inspection of treated posts may reveal significant need for repairs. During a site visit on 2019-11-16, the author of this report noted that a 20-30' section of the fence on the crest of the East Moraine was laid down completely. That section was repaired by an adjacent landowner and a contractor in the spring of 2020. Another challenge to keeping the elk fence intact is those recreating and accessing the crest of the East Moraine. As the East Moraine Trail has seen more access and traffic, landowners have reported vandalism to that fence and other fences.



Elk fence



Barbed wire fence and spring-loaded gate

There are no functioning internal fences on the property. A dilapidated, four-strand fence runs parallel to the crest of the East Moraine for approximately two-thirds of a mile (3,529 ft), starting near 45°18'5.2" N, 117°11'33.8" W and ending near 45°18'40.3" N, 117°11'38.9" W. Although largely collapsed, it is still capable of limiting wildlife and cattle in its current condition.

In the spring and summer of 2022, public access improvements were made on the east, Turner Lane, side of the Property and the west, Wallowa Lake, side of the Property with funding from the Oregon Parks and Recreation Department's Recreational Trails Program. On the east side, a 120' x 180' parking lot was created. The area was excavated and leveled, with two culverts installed to encourage drainage. Pit run rock was laid initially with gravel spread on top. Buck and rail fencing was constructed around each culvert and along ditches to prevent vehicles from running off the parking lot and into the ditches/culverts. Fence was taken down and replaced to allow for new parking area. A total of 355' of 8' tall fencing was installed. The disturbed area around the finished parking lot was reseeded. A new vehicle gate and pedestrian gate along with an informational kiosk and hitching post for horses were installed. On the west side, the old "Green Gate" was replaced with two new gates – one for vehicles and one for pedestrians. An informational kiosk was also installed on the west side entrance.

The pullout in front of the west side entrance is permitted for commercial timber operations by the Oregon Department of Transportation (ODOT). Wallowa Land Trust confirmed with ODOT that it could function for the capacity as recreational parking as well. Finally, a spring loaded pedestrian gate (pictured above) provides pedestrian access in the more residential, northwest corner of the property.

Other Improvements

There are several other pieces of human-constructed infrastructure present on the Property. These include a collapsing 8'x 6' shed near the West Fork of Prairie Creek, a small creek that runs along the Property's east boundary, as well as a rock pit (50' x 50') where previous landowners mined shale and rock for roads on the Property.



Shed along West Fork of Prairie Creek



Rock pit

A final improvement of note is a solar- and propane-powered radio relay tower and shed on concrete footings, owned and operated by a local telecommunications company, Wallowa Valley Networks. The tower is operational and provides internet to residents around Wallowa Lake. The company holds an active lease to place and operate the tower. An access road leads to a point about 150-200' from the tower, where a foot trail provides access the rest of the way.



Radio relay tower, propane tanks



Solar panels



Generator and foundation

IX. PHYSICAL FEATURES

Topography and Geology

The Property is situated along the crest of the east moraine complex of Wallowa Lake. The east moraine complex is a series of ridges which extend eastward from Wallowa Lake that are composed of glacial till and rock material deposited during a series of glacial track advances and retreats, each leaving their own impressions on landscape. Geologists estimate this period of glacial activity occurred from approximately 300,000 - 19,000 years ago. Erratics, or rocks and boulders moved and deposited by glaciers, are commonly found on the Property. These rocks are most commonly granites from the Lakes Basin and Aneroid Basin of the nearby Wallowa Mountains, though can also be composed of greenstone and basalt (Bishop 2016).

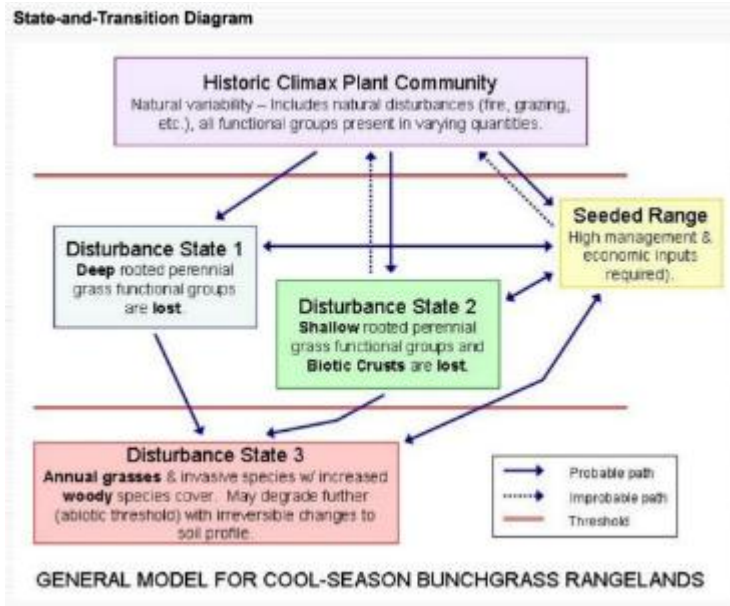
The Property spans both the east and west side of Wallowa Lake's East Moraine, the tallest and most prominent ridgeline within the moraine complex. It has a predominately north-facing aspect. Slopes vary from flat to 60%. The topography ranges in elevation from 4,300' at the shore of Wallowa Lake on the west side of the East Moraine and 4,600' on the east side of the East Moraine to 6,500' in the southern portion of the property, where the Property rises two-thirds of the way up the slope of Mount Howard. Mount Howard is a peak rising 8,255' at the northern edge of the Wallowa Mountain range. The Property also contains four additional lateral moraines, which decrease in elevation at their crests from 5,180' to 4,800', forming several crests and draws from east to west across the greater landscape.

Soils (see Appendix M: Soils Map)

The Property is comprised of an assortment of soil types, including silt, sand, and stony loams. Commonly referred to as "a big rock pile," the greater east moraine complex is primarily composed of loosely consolidated glacial till, though some areas on the Property show compaction in shallow layers. Whether this is natural or the result of human activity is unknown.

Rondowa series soils are prevalent on the northern grassland portions of the Property. These soils contain a mix of mostly granitic and basaltic glacial till with small amounts of loess and volcanic ash on the surface. Rondowa series soils are well-drained and moderately permeable. They are unstable and highly erodible on steeper slopes. This can present management challenges if activities require equipment or damage vegetation or the soil surface. Moving south, into the timbered portions of the Property, soils are highly variable. They range from deep and well drained silts and fine sandy loams on slopes of 0-15% to shallow soils on 60% slopes composed of stony clay loams. Land managers should consult the NRCS Web Soil Survey or a like soil survey tool as well as references and descriptions for more detail.

In general, soils on the Property are coarse, unsorted, and loosely consolidated supra-glacial melt-out till. Where slopes are steep, these soils are highly erodible if disturbed. Disturbance has, and will continue to, promotes exotic and invasive plant establishment. Further, annual nonnative brome and mat-forming grasses can intensify losses of perennial natives. Losses of deep-rooted perennial natives can reduce soil stability and increase risks of soil loss via rill and gully formation on steep slopes. The below table illustrates this model:



Hydrology

Several intermittent streams are present on the Property early in the spring (See Appendix N: Habitat Map), but most dry up when the snowpack in the Wallowa Mountains melts in the summer. The only perennial stream is the West Fork of Prairie creek. This is a shallow stream that meanders along the eastern boundary of the Property. As the ground levels out, the stream feeds a shallow wetland before flowing off the property to the southeast.

There are several perennial springs on the west side of the Property that drain from the steeper slopes of the East Moraine. Due to the severe topography of the Property, these springs flow directly downhill, and through culverts under the highway to Wallowa Lake. There is a developed spring near the center of the Property, at a higher elevation and in a level valley just south of the elk fence. This spring fed a stock pond and provided surface water for livestock at one time. However, due to a water rights dispute, the previous operators had to drain the pond.

X. Ecological and Biological Features

The Property ranges in elevation from 4,300' at the shore of Wallowa Lake on the west side of the East Moraine and 4,600' on the east side of the East Moraine to 6,500' in the southern portion, where the Property rises and includes a portion of the slope of Mount Howard in the Wallowa Mountains. The Property includes four major habitat types: freshwater emergent wetland, bunchgrass prairie, ponderosa pine woodland, and mixed conifer forest (See Appendix N: Habitat Map). The entire western border of the property is the shore of Wallowa Lake. An array of flora and fauna utilize the habitat diversity that results from the elevation and aspect variation present on the Property.

Wildlife (See Appendix O: Mammal and Bird Species List)

The Property is within Conservation Opportunity Area 163, Wallowa Mountains, of the Oregon Department of Fish & Wildlife's (ODFW) Oregon Conservation Strategy. Three of the four habitat types found on the Property are identified as *Strategy Habitats*, which are "habitats of conservation concern within Oregon that provide important benefits to *Strategy Species*," or species in greatest need of conservation. (Oregon Department of Fish and Wildlife, 2016). Broadly speaking, the Property provides important habitat for a variety of mammals, insects, and grasslands birds. It is also a link in a wildlife corridor of undeveloped land for mule deer which extends from the Wallowa Valley floor, along the crest of the East Moraine, onto Mount Howard, to the Wallowa-Whitman National Forest and eventually to the largest contiguous wilderness area in Oregon, the Eagle Cap Wilderness.

ODFW has designated the Property and its adjacent properties as winter range and critical habitat for mule deer (*Odocoileus hemionus*). The bunchgrass prairie and Ponderosa pine woodland below 5,000 feet on the Property sustain forage longer in colder months, when mule deer increase browsing of grasses and forbs in these habitats and are most vulnerable, especially during severe winters. Mule deer numbers have dwindled in recent decades. Impacts include modification in vegetative species structure and composition, decrease in nutritional quality, and loss and fragmentation of habitat across the landscape due to human encroachment and associated activities. Winter range is especially critical, as mule deer utilize it at a time when they are most vulnerable. Other mammals on the landscape range in size from squirrels to some of the biggest game animals in Oregon, including elk and bear.

The Property also provides nesting, resting, and feeding habitat for a variety of raptors and grassland birds, including the state-listed sensitive species: common nighthawk (*Chordeiles minor*), grasshopper sparrow (*Ammodramus savannarum*), ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni*), Oregon vesper sparrow (*Pooecetes gramineus affinis*), streaked horned lark (*Eremophila alpestris strigata*), western bluebird (*Sialia mexicana*), and western meadowlark (*Sturnella neglecta*). Grassland birds in particular require large patch sizes and diversity in the grasslands for nesting. This is achieved by protecting the Property along with four other adjacent properties that are already encumbered by conservation easements: the Ham Family Conservation Easement (52 acres), the Quint Conservation Easement (175 acres), the Perry Farm Conservation Easement (482 acres), and the Lola Hasslacher Easement (40 acres). These easements add nearly 300 acres of native grasslands to the 600 acres on the Property.

The Property's proximity to Wallowa Lake also makes it suitable habitat for large raptors to nest, roost and hunt. Species commonly sighted in the basin include bald eagle (*Haliaeetus leucocephalus*) and osprey (*Pandion haliaetus*). In higher elevations and timbered areas, sensitive species include Lewis's woodpecker (*Melanerpes lewis*) and the pileated woodpecker (*Dryocopus pileatus*). Finally, annual surface water, wetlands, and riparian vegetation, particularly on the east boundary of the Property, could provide potential habitat and nesting sites for a wider array of mammals, reptiles, amphibians, invertebrates and birds, though these areas have not been surveyed. Streams on the Property are not fish-bearing.

Vegetation (See Appendix P: Botanical Inventory)

Located at the southernmost extent of the Zumwalt Prairie, where the grasslands meet the Wallowa Mountains, one-third of the Property (approximately 600 acres) is composed of high to mid-elevation temperate plant communities typically found in remnant Palouse bunchgrass prairies. In these plant communities, native bunchgrasses like Idaho fescue (*Festuca idahoensis*) and bluebunch wheatgrass (*Pseudoroegneria spicata*) provide as much as 50% of vegetative cover in late seral stands, and in early seral stands, other species such as arrowleaf balsamroot (*Balsamorhiza sagittata*), creamy buckwheat (*Eriogonum heracleoides* var. *heracleoides*), and yarrow (*Achillea millefolium*) are a significant component (Pohs 2000). This is consistent with the Property, though conversion to nonnative and invasive species is occurring and degrading these habitats (see Weeds and Introduced Species below). Additional shrubs species include patches of serviceberry (*Amelanchier*) and hawthorn (*Crataegus*), while trees in this habitat are scattered and consist most notably of ponderosa pine (*Pinus ponderosa*) and juniper (*Juniperus*) as well as remnant aspen (*Populus tremuloides*) with no evident reproduction (Hohmann 2020).

The remaining two-thirds of the Property, or approximately 1,200 acres, is dominated by a coniferous overstory, transitioning from ponderosa pine woodlands at lower and dryer elevations to mixed conifer forests at higher elevations where slopes become more severe and moisture increases. This portion of the Property also contains the only wetland within the Property boundary.

The ponderosa pine woodlands are characterized by widely spaced ponderosa pine (*Pinus ponderosa*) trees with occasional Douglas-fir (*Pseudotsuga menziesii*) and western larch (*Larix occidentalis*) trees and a relatively open understory of grasses and forbs. Shrubs, which can be thick in locations, include oceanspray (*Holodiscus discolor*) and snowberry (*Symphoricarpos*) as well as various ribes (currants) and wild rose (Hohmann 2020). Where shade-tolerant forbs and grasses are present, pinegrass (*Calamagrostis rubescens*) and other species introduced to supplement forage dominate.

The mixed conifer forests have a higher tree density of ponderosa pine, Douglas-fir, western larch, Englemann spruce (*Picea engelmannii*), lodgepole pine (*Pinus contorta*), grand/white fir (*Abies grandis*), and subalpine fir (*Abies lasiocarpa*). Broadleaf tree species are not common in these forests, but rocky mountain maple (*Acer glabrum*) and willows (*Salix*) do occur along with white alder (*Alnus rhombifolia*), aspen, and mountain mahogany (*Cercocarpus ledifolius*) in the understory. Near the southern boundary of the Property, at a higher altitude, there is a grove of mountain mahogany (*Cercocarpus ledifolius*) which is unique due to its old age (Hohmann 2020). Ground cover in the mixed conifer forest includes pinegrass, various forbs, and kinnickinnick

(*Arctostaphylos uva-ursi*) as well as significant infestations of the noxious meadow hawkweed (*Hieracium caespitosum*) and common bugloss (*Anchusa officinalis*). Roads also act as a vector for noxious weeds and other invasive species (see Weeds and Introduced Species below).

The wetland has its own designation within the ponderosa pine habitat type and consists of wet meadows and riparian vegetation surrounding the west fork of Prairie Creek, which flows annually near the eastern boundary of the Property. The upper branch of the stream descends through Engelmann spruce, western larch, grand and Douglas fir before flowing to more level ground, where alders and willow begin to appear and the stream joins tail water from an irrigation ditch, braiding out and eventually leaving the Property to the southeast. The vegetation along the lower portion of the stream includes thin-leaf alder (*Alnus incana*), willows and black cottonwood (*Populus trichocarpa*) as well as a variety of sedges. Introduced species notable in the wetland are oxeye daisy (*Leucanthemum vulgare*), buttercup (*Ranunculus*) and houndstongue (*Cynoglossum officinale*).

The Forest Legacy Program (FLP) Area of the Property qualified for funding because it meets the FLP requirement of at least 75% forest cover. At the time the Conservation Easement is conveyed, the FLP Area is comprised of approximately 80% forest cover and includes the entirety of the mixed conifer, ponderosa pine, and wetland habitat types on the Property. The FLP Area also includes a small portion of the grassland habitat type. (See Appendix D: FLP Area and Non-FLP Area Map)

Weeds and Introduced Species

On the Yanke Family Trust portion of the Property, the owners traditionally contracted weed inventories and treatments, though an inventory has not been conducted since 2013. A variety of introduced and non-native, invasive plants are present on the Property and pose significant threats to the conservation values if left unmanaged. Currently, the Wallowa County Vegetation Department manager, Andrew Marcum, has begun inventory and spot-spraying to gain a current understanding of the extent of noxious weeds.

Mr. Marcum conducted a 2020 inventory of weeds listed as Target species (“T-listed”) on the 2019 Wallowa County Noxious Weed List. He has confirmed that noxious weeds have continued to spread significantly since 2013 (See Appendix Q-1: 2013 Weed Map and Appendix Q-2: 2020 T-Listed Noxious Weed Map). Weeds with the most notable concentration, and which pose the most significant threats, are meadow hawkweed (*Hieracium caespitosum*), common bugloss (*Anchusa officinalis*), and spotted knapweed (*Centaurea stoebe*). While meadow hawkweed and common bugloss have largely infested but are contained to the southern, forested portion of the Property, spotted knapweed occurs most prominently on the east shore of Wallowa Lake.

Mr. Marcum also noted that his 2020 inventory did not track “B-listed” species on the 2019 Wallowa County Noxious Weed List, such as hounds tongue (*Cynoglossum officinale*), Canada thistle (*Cirsium arvense*), and scotch thistle (*Onopordum acanthium*). These species occur on the property and are spreading, concentrated primarily around trails and roads. Scotch thistle in particular poses a significant threat to the northern grassland portion if left unmanaged.

On the grassland portion of the Property, annual invasive grasses, including cheatgrass (*Bromus tectorum*) and ventenata grass (*Ventenata dubia*) also threaten the integrity of the existing native bunchgrass communities. Ventenata grass is also a “B-listed” species on the 2019 Wallowa County Noxious Weed List. Invasive, non-native annual grasses, especially ventenata grass, prove difficult to eradicate or even control. In addition to having little or no forage value for wildlife or livestock, they have a shallow root system. Over time, they can exacerbate risks of soil instability and erosion. An inventory of ventanata grass and invasive annuals on the Property has not been conducted but is recommended.

Currently, Mr. Marcum estimates an annual cost of up to \$20,000 for the first several years for land managers to contract labor and utilize controls to stop the spread of noxious weeds and begin reducing numbers to a healthy and manageable frequency.

Endangered Species

Since 2011, Wallowa Land Trust has partnered with the United States Fish and Wildlife Service (USFWS) to conduct presence/absence surveys and trend monitoring for the ESA- and state-listed species Spalding’s catchfly (*Silene spaldingii*) on Wallowa Lake’s East, West and Terminal Moraines. A portion of the Property lies within a USFWS-designated “Key Conservation Area” for this threatened species. Largely removed from its native range in the Palouse regions of Eastern Washington and Northern Idaho due to fragmentation and habitat loss, particularly till farming, this herbaceous wildflower now lives at the edges of its historical distribution. Wallowa County is the only county where the plant is known to grow in Oregon. A large concentration of the plant occurs on the grassland portion on the Property. For a map of known Spalding’s catchfly locations on the Property, see Appendix R: Spalding’s Catchfly Individual Locations.

The Oregon Department of Agricultural (ODA) has classified the plant as endangered in Oregon. Since the Property is conveyed from a private entity to a public entity, appropriate and legally-required management actions, including when to graze livestock, weed control methods, and restricting access must be taken to ensure the viability of the population. Wallowa Land Trust and Wallowa County confirmed that a consultation with ODA is also required.

XI. Rangeland and Timber Condition

As noted in ODFW's Conservation Strategy, wood products and cattle production are cornerstone industries in the Blue Mountains ecoregion. This is true in Wallowa County. In addition to the array of flora and fauna that depend upon the Property, the same habitats have also provided revenue to support the local economy.

Rangeland

The grasslands on the Property have provided forage for livestock for a century or more. Historically the landowner has issued two separate leases for cattle operations on the property – divided between the northern most portion and the southern portion. The bunchgrass meadows on the Property have been degraded by invasive species over time but have retained remnants of bunchgrasses and bunchgrass associated forbs. Examples of some of these plant community remnants include western needlegrass (*Achnatherum occidentale*), Idaho fescue (*Festuca idahoensis*), bluebunch wheatgrass (*Pseudoroegneria spicata*), threadleaf sedge (*Carex filifolia*), Sandberg's bluegrass (*Poa secunda*), basin wildrye (*Leymus cinereus*), prairie June grass (*Koeleria macrantha*), silky lupine (*Lupinus sericeus*), tarragon (*Artemisia dracunculus*), prairie sage (*Artemisia ludoviciana*), yellow alyssum (*Alyssum alyssoides*), hairy purslane speedwell (*L. Veronica peregrine*), sagebrush mariposa lily (*Calochortus macrocarpus*), Columbia puccoon (*Lithospermum ruderalis*), green rabbitbrush (*Chrysothamnus viscidiflorus*), streambank wheatgrass (*Elymus lanceolatus*), and parsnip-flowered buckwheat (*Eriogonum heracleoides*). The dominant invasive species in these communities are annual bromes, meadow hawkweed (*Hieracium caespitosum*), knapweed (*Centaurea diffusa*), yellow salsify (*Tragopogon dubius*), tumble mustard (*Sisymbrium altissimum*), and absinthe wormwood (*Artemisia absinthium*). According to current and past lessees, and as evidenced on the Property, the forested areas have also historically been inter-planted with introduced species like timothy (*Phleum pretense*) and orchard grass (*Dactylis glomerata*) after timber harvest to supplement the livestock forage base.

Annual precipitation for the Property is estimated at approximately 17-28 inches per year, with the majority of that precipitation arriving in winter and spring. Forage production can vary disparately depending on soil types and condition as well as timing and the amount of annual precipitation. The grassland areas are likely to have a higher capacity to produce forage than the forested areas. Conversely, though, the seeding of orchard grass and timothy in the forested areas on the Property may increase forage production in those areas. Additionally, there is considerable value in shaded forage within the forested areas, as they retain moisture and nutrient value longer into the summer. Finally, it is important to note that, with risks of erosion and longer cold seasons, forage on the Property takes longer to establish itself and provide stability to soils, which also remain wet, soft, and erodible long into the spring season.

Traditionally, one operator turns out livestock on the southern portion of the Property (south of the elk fence) and another operator turns out livestock on the northern portion in early or mid-June and rounds them up in mid-October, though cattle have been left out as late in to the fall as November. Records of past lessees indicated that stocking rates have varied from 80 – 120 on the larger southern portion and 40-50 on the northern portion. The Property currently lacks infrastructure such as interior fencing and sufficient water resources to spread utilization out across the landscape and support a rotation or rest-rotation grazing system. This results in livestock

frequenting similar areas, such as the wetlands along the eastern boundary, while avoiding other areas. Varying topography also provides access and logistical challenges as well as limited forage in steep areas, such as the west face of the East Moraine, and rocky areas with denser forests to the south.

Timber

The Property has been managed primarily for timber through an uneven age system that relies on natural reproduction. This history of management is evidenced by the health and condition of the stands, especially in the lower elevation ponderosa pine woodlands. Core samples taken in 2019 indicate that some ponderosas have reached ages of 150+ years.

Bruce Dunn, the Property's most recent manager, practiced methods that, at the time, might have been considered unconventional across the industry. He would leave diversity in the stands by retaining large trees that would otherwise be considered most valuable for harvest. Increasingly, some of Mr. Dunn's practices are embodied in the field of Restoration Forestry, where a general aim is to return the stand through active management to a semblance of its natural state, before practices of fire suppression and intensive harvesting. These practices have the potential to produce timber of higher volume with faster growth rates while reducing the risk of mortality events due to crown fires and infestation.

At higher elevations, however, in mixed conifer forests stands become denser and windfall and infestation become more common. This was noted during a 2019 timber cruise on the Property conducted by forester Arvid Anderson and again in a stand delineation conducted by forester Larry Nall. The delineation prescribes the best course of action in most stands, given their current stocking rates and market conditions, is to continue monitoring and let them grow. Stand 2 received pre-commercial thinning and mulching in October 2022. Stand 6 is overstocked with grand fir and suffering from scolytus, making it the likely next target for thinning and restoration. For more information, see Appendix S: Stand Map and Stand Delineation. In addition to the stand delineation, a full forest inventory would provide a better understanding of current conditions in more detail.

XII. COMMUNITY AND CULTURE

The geographical and geological setting, human history, and past uses have imbued the East Moraine of Wallowa Lake and the Property with a depth and diversity of cultural significance today.

Nez Perce People

The Nez Perce people, or Nimi'ipuu, have inhabited the present-day Inland Northwest since time immemorial, including areas on and around the middle Snake River, the Clearwater River, and the northern portion of the Salmon River basin, and extending into Oregon and Washington. These areas include the Wallowa Valley and the Property. Nimi'ipuu can be translated to "the people" (Nimiipuu Language Program 2018).

Writer and geologist Ellen Morris Bishop noted that one of the oldest known human habitations in the Pacific Northwest is located at the site of an ancient Nez Perce village known as Nipéhe, near the confluence of the Snake and Salmon Rivers. This village site was on the border of present-day Oregon and Idaho, north of the Property, and dated back more than 16,000 years. In an interview with Dr. Bishop, Nakia Williamson, director of the Nez Perce Tribe Cultural Resources Program (CRP), elaborated: "Nipéhe is an ancient village founded by a young couple after a flood destroyed their previous home...Our stories already tell us how long we've been here...this is not just something that happened 16,000 years ago. It's something that is still important to us today." (Bishop 2018)

Thus, the importance of the Property to Nez Perce people includes specific events which have occurred and people and important locales in history as well as *nimiipuu'neewit*, traditional Nez Perce life-ways which are handed down from generation to generation and practiced today (Cultural Resources Program 2018). The land throughout the region and in the Wallowa Valley, especially for Wallowa Band descendants, is integral to the life-ways. Preservation of the native natural setting; the documentation and preservation of archeological and historical sites; and consultation and documentation integral to perpetuating traditional life-ways today are comprehensive parts of preserving cultural resources important to Nez Perce people on the Property and across the greater landscape.



Chief Joseph's Gravesite, the Property in the background

Contextually, one can stand on the crest of the East Moraine of Wallowa Lake, on the Property, and see the near entirety of Wallowa Lake as well as the Nez Perce Historical Park, Old Chief Joseph's Gravesite, and Iwetemlaykin State Heritage Site at the foot of Wallowa Lake. "Iwetemlaykin" is the Nez Perce name for the foot of the Wallowa Lake basin, where the Lateral Moraine terminates. It translates in English to "at the edge of the lake"

(Oregon Parks and Recreation Department 2019). In 2015, Anthony Johnson, the then-Chairman of the Nez Perce Tribal Executive Committee, stated, “The Tribe has a particularly extraordinary interest in the protection of the aesthetic and natural beauty of Wallowa Lake and its environs because of the cultural, historical and religious importance of Wallowa Lake to the Tribe and its people. It is no over statement to say that Wallowa Lake and its surrounding moraines, as an integrated whole, are a sacred place for Nez Perce people” (Johnson 2015).

In terms of specific cultural resources existing on the Property, Wallowa Land Trust contracted CRP to conduct a cultural resources survey of approximately 80-90% of the East Moraine Trail corridor in 2017. Approximately half of that trail lies on the Property. This report, conducted by Jenifer Chadez (Field Archaeologist), Jackie Jim, and Gabrielle Miller of the Nez Perce Tribe Cultural Resources Program, “found no significant archaeological resources within the APE (Area of Potential Effect)” (Chadez 2017). However, only 13 – 14 acres of the surveyed area was on the Property.

In October of 2020, the CRP completed a more intensive pedestrian survey and cultural resource inventory which included limited subsurface sampling. Funding and resource limitations prevented a survey of the entire Property. The survey focused on areas of the highest potential impact, primarily along roadways, existing livestock trails, springs, and proposed parking and livestock holding areas at common access points. The survey was conducted by field archeologists and technicians as well as cultural specialists and encompassed 318 acres.

The 2020 survey recorded four archeological sites and two isolated finds. Of the four sites, the CRP has recommended a possible housepit, identified as “20-NPT-15-S3,” for listing on the National Register of Historic Places (NHRP) (Wallen and Chadez 2020). The location of this site will not be disclosed in this report, however its location is documented in the survey, entitled “Phase I Cultural Resource Inventory for the Wallowa County East Moraine Conservation Easement Survey Project,” which is on file with the Nez Perce Tribe, Wallowa Land Trust and Wallowa County. The Cultural Resources Program does not recommend the additional sites or isolated finds, whose locations are also recorded in the survey, for inclusion on the National Register of Historic Places. The CRP recommends that site “20-NPT-15-S3” not be altered and be avoided during any project implementation by a 30-meter buffer.

Additionally, the survey notes there remains potential for undiscovered archeological resources on the Property, so care should be taken during project planning and implementation. If any cultural or archaeological materials are inadvertently discovered during project implementation, work in the find location should halt immediately and Nez Perce Tribe and the Oregon State Historic Preservation Office (SHPO) should be contacted.

Rural and Natural Resources

Euroamerican people arrived and began settling the Wallowa Valley in the mid-to-late 1800s. Due to its remote and relatively isolated geographic location, the Wallowa Valley has remained a rural part of the United States and the State of Oregon, and many ways in which Euroamerican people lived and made a living in the Wallowa Valley then remain associated

with rural American life today. As the Wallowa County Natural Resources Advisory Committee notes, a “rural lifestyle is inherently different from an urban lifestyle” (2018).

Local jobs and the economy in the Wallowa Valley are driven primarily by natural resources, including forestry, agriculture, and livestock. According to Johnson Economics and a 2019 Economic Opportunities Analysis, prepared for the City of Joseph, Oregon, “The forestry industry has been a significant economic driver in Wallowa County, with natural resources’ local employment levels almost six times the national average.” The Report also states that “Agriculture has been a historic mainstay of the regional economy that continues to be a major contributor.” Raising livestock, in particular, was an ongoing practice even when Euroamerican people arrived. In 2017, Mary Jane Miles, then-Chairman of the Nez Perce Tribe Executive Committee, noted, “The Nimiipuu has some of the largest horse and cattle herds in the northwest, so the grazing and water resources that were plentiful in the Wallowa Valley is what sustained us” (Miles 2017).

The rural culture in Wallowa County is much intact today, and past and present uses on the Property have associated it with the ways and values of contemporary rural American and Western life. In recent history, the Property has been owned and managed for timber harvest, most notably by KBL Company and RY Timber Company. Additionally, these owners have allowed ranchers and livestock operators to lease the property and run cattle for grazing. They have also allowed equestrian use, both for the sake of managing livestock and for horseback riders to enjoy the open space and bucolic scenery on existing roads, trails, and along the crest of East Moraine.

Additionally, the Property is the origin of rural traditions which have lasted through the years. The first Chief Joseph Days Rodeo, organized by the Tucker family in 1946, took place on the Property, and it was the only Chief Joseph Days Rodeo to take place on the East Moraine and the Property (Holden Films 2019). The site of the original Rodeo is located in a relatively flat draw between the crest of the East Moraine and the crest of the next lateral moraine to the east. After 1946, the Rodeo moved eventually to the fairgrounds and Harley Tucker Memorial Arena west of the town of Joseph, where it continues today. A point of pride for residents, the Rodeo is a boon for the local economy and draws vendors, descendants of the Wallowa Band of Nez Perce, and thousands of visitors annually.



First Chief Joseph Day’s Rodeo site, original corrals

Scenery and Geology

The Property’s undeveloped and relatively pristine, natural, and open-space condition have deeply associated it with a sense of identity throughout human history, including Wallowa Valley’s original inhabitants, Euroamerican settlers, and residents and visitors living today. For more information, see XII. Scenic Resources below.

XIII. SCENIC RESOURCES

As the Property is located on the East Moraine of Wallowa Lake, a stunning geological landform, it has distinct and significant open space values important to Wallowa County and its residents and visitors. This is evident by the inclusion of the Property in Wallowa County's Comprehensive Land Use Plan Goal 5, Wallowa Land Moraines Protection Area, which defines the Moraines as a Scenic Resource, and Article 44, which defines standards for the Goal 5 overlay zone.

Specifically, the Property includes portions of Goal 5's 3A protection status area of the moraines' scenic area, which means no conflicting uses are allowed (Wallowa County, 2002). A portion of the Property is also located within the 3C protection status area of the moraines' natural resource, wildlife habitat, and historical significance (Wallowa County, 2002). These classifications place additional protective measures on the Property above and beyond standard protections for properties with the same zoning elsewhere in Wallowa County.

The Property is visible from Oregon State Highway 82 / 351 (Wallowa Lake Highway), Oregon State Highway 350 (Little Sheep Creek-Imnaha Highway) and additional public roads within the Wallowa Lake Basin. The Wallowa Lake Highway and Little Sheep Creek-Imnaha Highway are part of the Hells Canyon Scenic Byway which was designated a National Forest Scenic Byway in 1992. It was later made an Oregon State Scenic Byway in 1996 and was designated an All-American Road in 2000.

As mentioned above, the Property is also highly visible from public lands, including Wallowa Lake County Park at the foot of the lake; Wallowa Lake State Recreation Area, Nez Perce Historical Park – Old Chief Joseph Gravesite, and Iwetemlaykin State Heritage Site at the north end of Wallowa Lake; and Wallowa-Whitman National Forest and the Eagle Cap Wilderness south of Wallowa Lake.

Because the Property and much of the land around Wallowa Lake has remained undeveloped, the landscape presents one of the most intact and pristine examples of glacially formed moraines in the United States and around the world. The landscape and scenery are often referred to as unparalleled and wholly unique, and the moraines have been featured in science and geology textbooks, thus they have also been referred to as “textbook examples” of glacial moraines.

Conversely, anyone standing on the crest of the East Moraine on the Property on a clear day can see a variety of stunning features in one 360-degree view, including the Wallowa Mountains to the south and west; the Wenahas, near the border of Washington, to the northwest; the largest intact native bunchgrass prairie in the West, Zumwalt Prairie, to the north; Hells Canyon, the deepest river gorge in North America, to the east; and the Seven Devils Mountains in Idaho, beyond Hells Canyon.

XIV. MANAGEMENT PLANS

As noted previously, the previous property manager Bruce Dunn authored a forest stewardship plan in 2015 for timber on a majority of the Property. This plan is on file at Wallowa Land Trust and Wallowa Resources. In 2016, The Nature Conservancy's Eastern Oregon Program Manager, Jeff Fields, authored a potential rangeland management plan. This plan is also on file at Wallowa Land Trust and Wallowa Resources.

Under Wallowa County ownership, a management plan, also known as the Multiple-Use Resource Management Plan, was created for the Property in collaboration with the Landowner and representatives from Wallowa Land Trust, Wallowa Resources, Oregon Department of Forestry, OSU Extension, Oregon Department of Fish Wildlife, Oregon Parks and Recreation Department and the Nez Perce Tribe. This Multi-Use Management Plan is the culmination of the work of these entities and their representatives, and the public, to balance multiple traditional uses across the Property. The Plan was formally approved by the Wallowa County Board of Commissioners on September 21, 2022.

XV. ENVIRONMENTAL SITE ASSESSMENT

In order to document any hazardous materials or substances, Wallowa Land Trust completed an in-house Hazardous Waste Assessment. The assessment included:

- a site inspection in 2019-02-15 and 2019-02-16;
- an interview with the current owner;
- interviews with adjacent landowners;
- retrieval and review of records from the Oregon Department of Environmental Quality;
- a review of current and historic aerial photographs and topographic maps; and
- an exhaustive database search into federal, state and local regulatory agencies' lists of hazardous sites.

The Land Trust's Hazardous Waste Assessment resulted in a determination that there is no apparent contamination on the Property. A full Phase One Environmental Site Assessment was not necessitated.

XVI. REFERENCES

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- Wallowa East Moraine Partnership. (2015). East Moraine Management Plan. Enterprise, OR: Unpublished Management Plan on file with Wallowa Trust and Wallowa Resources.

XVI. ACKNOWLEDGEMENT OF BASELINE DOCUMENTATION REPORT

This acknowledgement is made by Wallowa County, located at 101 South River Street in Enterprise, Oregon 97828 (referred to in this acknowledgement as “Landowner”), and Wallowa Land Trust and Oregon Department of Forestry, whose addresses are 117 E Main Street, Enterprise, Oregon 97828 and 2600 State Street, Salem, OR 97310 (referred to in this acknowledgment as "Co-Holders") respectively.

Baseline Declaration

Landowner has made the Property available to the Co-Holders for the purpose of gathering information and data about the condition of the Conservation Values identified in the Conservation Easement as of the date of the grant. This information and data has been compiled into a Baseline Report titled Wallowa County East Moraine Conservation Easement Baseline Documentation Report dated [insert date] (the “Baseline Report”).

The Baseline Report consists of [x] pages of text including the Table of Contents, [x number of] appendices which includes [x] maps and [x] pages of photographs for the Wallowa County East Moraine Conservation Easement located in Wallowa County, Oregon, and dated [insert date].

Baseline Report Preparer

Eric Greenwell, Conservation Program Manager
Wallowa Land Trust

Location of the Original Baseline Report

The original signed Baseline Report is stored in a fireproof cabinet located in Wallowa Land Trust’s office in Enterprise, Oregon and archived with Oregon Department of Forestry per current policy. This original document was placed in this location on the ____ day of _____ 2022 by Wallowa Land Trust staff.

Acceptance

In accordance with Treasury Regulation Section 1.170A-14(g)(5)(i), the Landowner and the Co-Holders hereby acknowledge, declare, and agree that they have reviewed the information contained in the Baseline Report and that the Baseline Report provides an accurate representation of the current condition of the Conservation Values to be protected by the Conservation Easement.

LANDOWNER REPRESENTATIVE:

Date

Date

Date

CO-HOLDER REPRESENTATIVES:

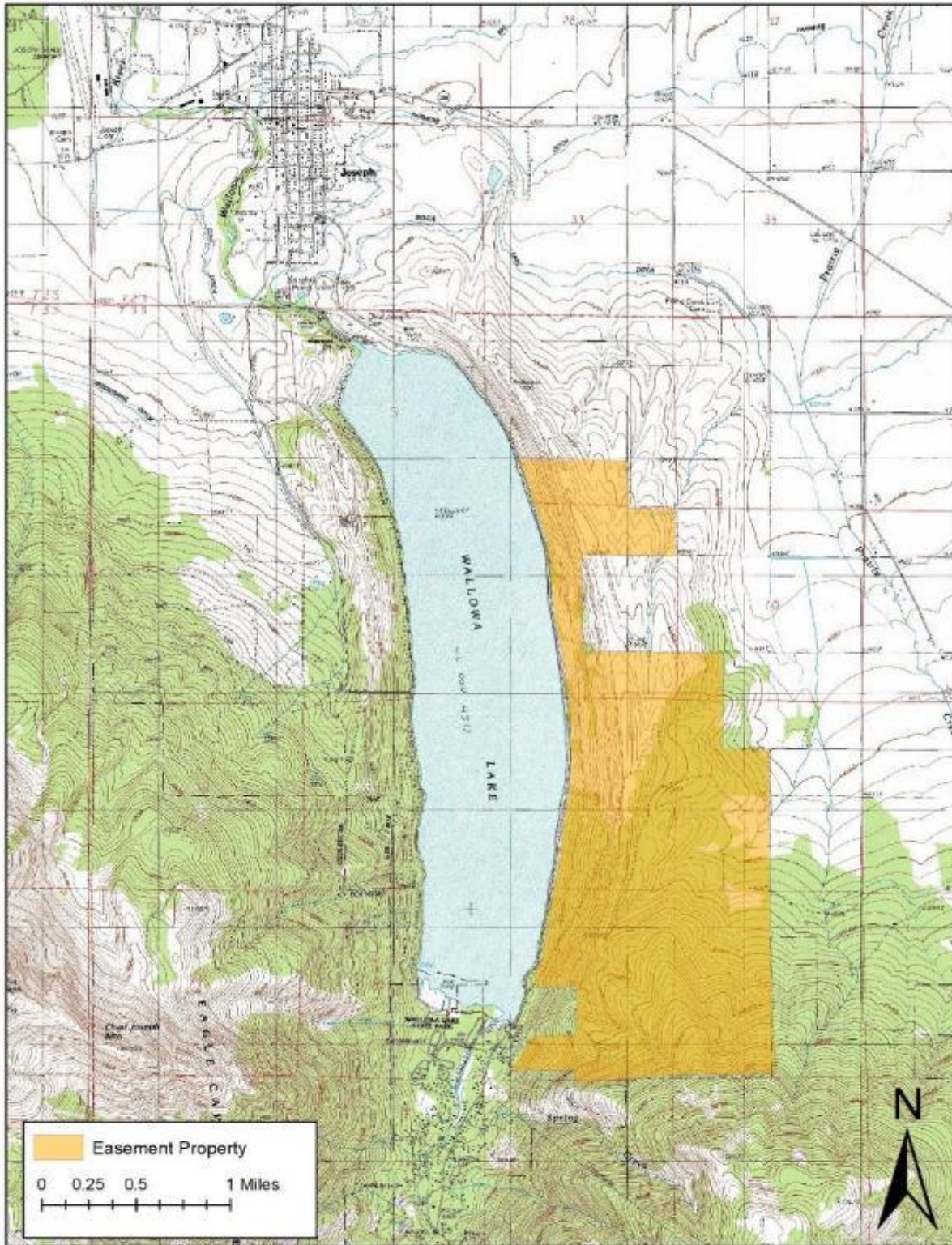
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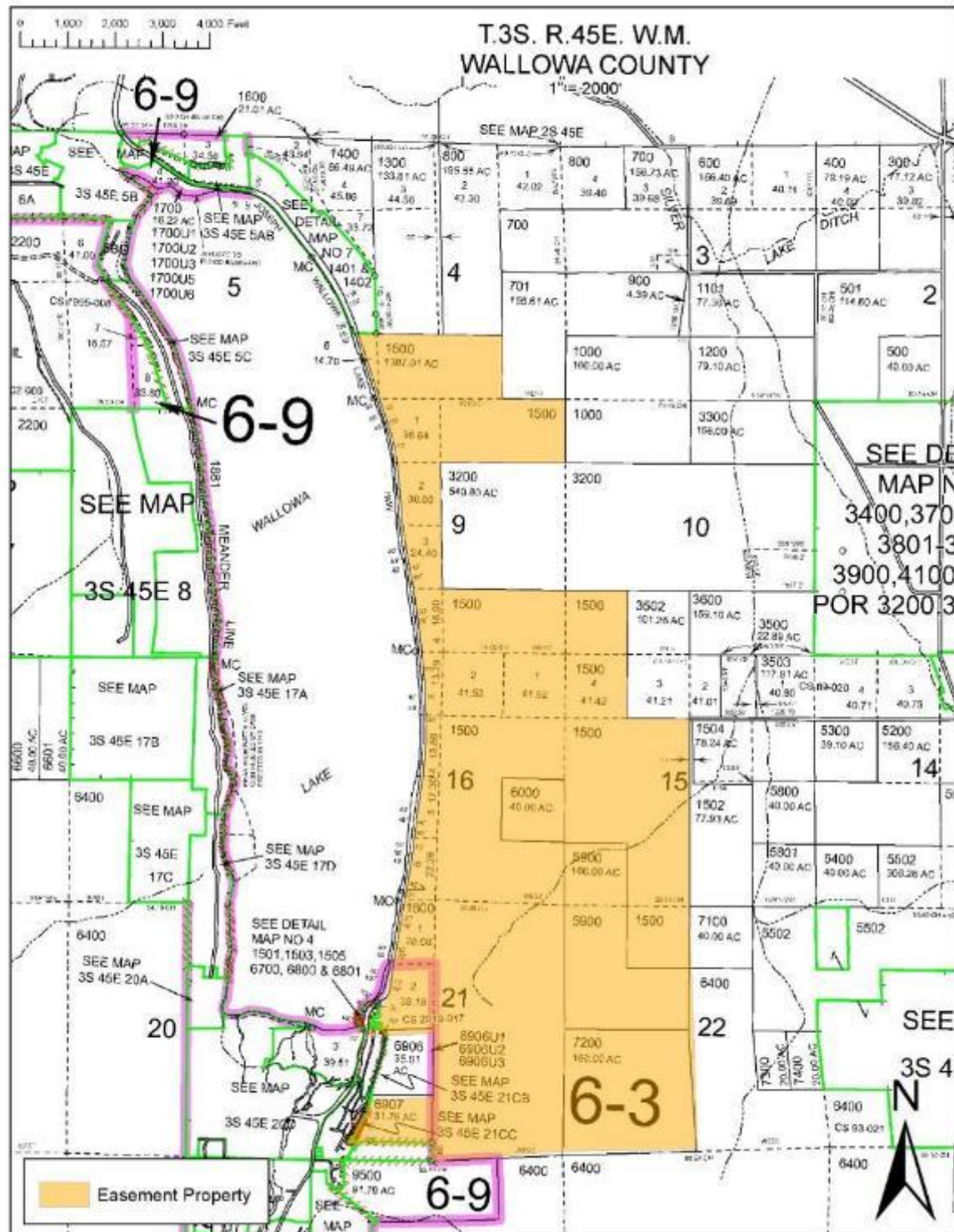
APPENDICES

- 1. Appendix A: USGS topographic map**
- 2. Appendix B: County Tax Assessor Map**
- 3. Appendix C: Road Map and Driving Directions**
- 4. Appendix D: FLP Area and Non-FLP Area Map**
- 5. Appendix E: Parcel Map**
- 6. Appendix F: Land Use Zones**
- 7. Appendix G: Goal 5 Resource Areas**
- 8. Appendix H: Goal 5 Protection Status**
- 9. Appendix I: Goal 5 Species & Habitats of Concern Map**
- 10. Appendix J: Manmade Features and Improvements**
- 11. Appendix K: Roads and Trails Map**
- 12. Appendix L: Water Rights Certificate**
- 13. Appendix M: Water Rights Map**
- 14. Appendix N: Soils Map**
- 15. Appendix O: Habitat Map**
- 16. Appendix P: Mule Deer Winter Range Map**
- 17. Appendix Q: Mammals and Birds Species List**
- 18. Appendix R: Botanical Inventory**
- 19. Appendix S: Weed Map**
- 20. Appendix T: Spalding's Catchfly Individual Locations Map**
- 21. Appendix U: Stand Map and Stand Delineation**
- 22. Appendix V: Aerial Photo**
- 23. Appendix W: Photopoint Monitoring Map and Photo Database**
- 24. Appendix X: Documentation Photos**
- 25. Appendix Y: Recorded Copy of the Conservation Easement**
- 26. Appendix Z: Legal Description**
- 27. Appendix AA: Title Report**

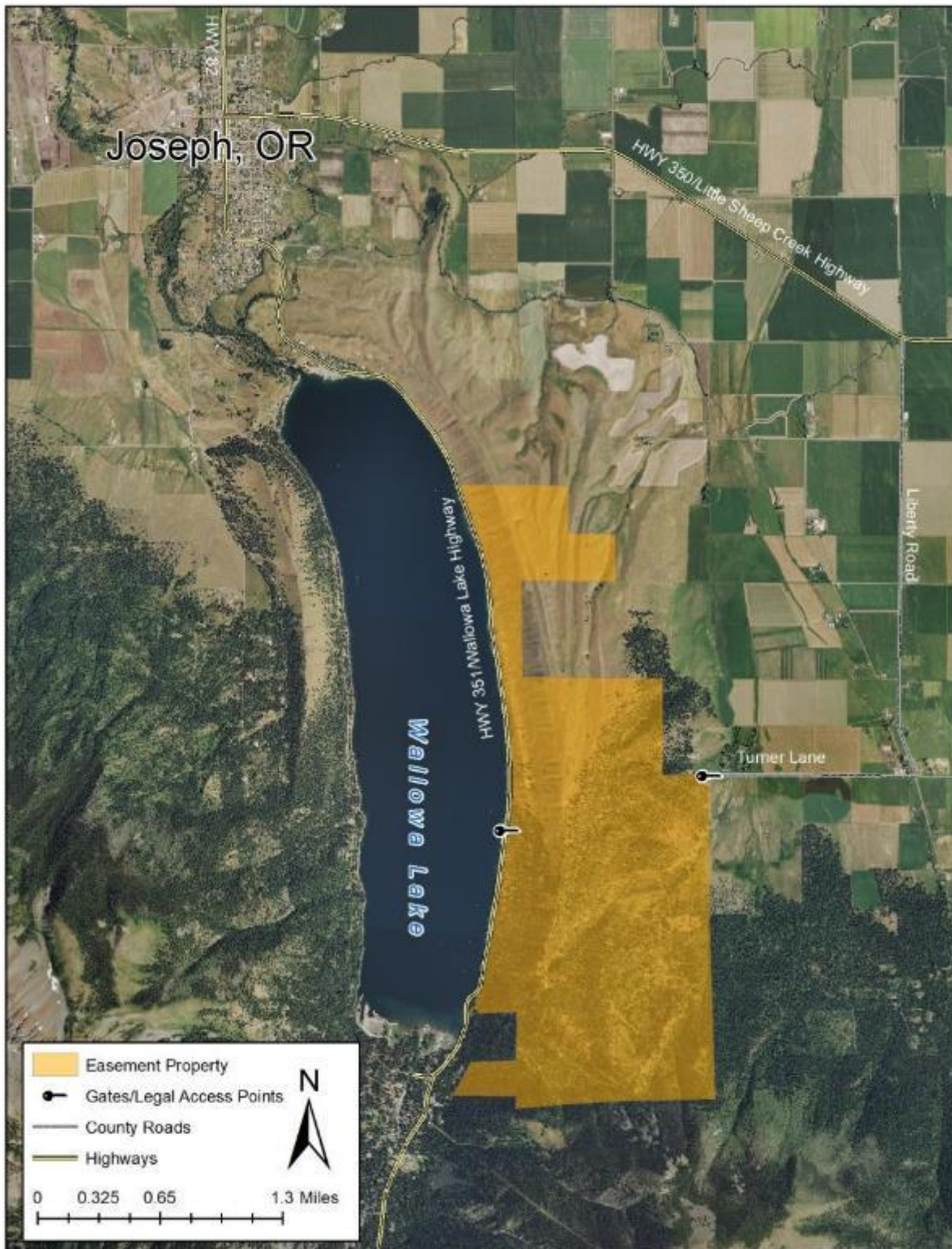
Appendix A: USGS topographic map



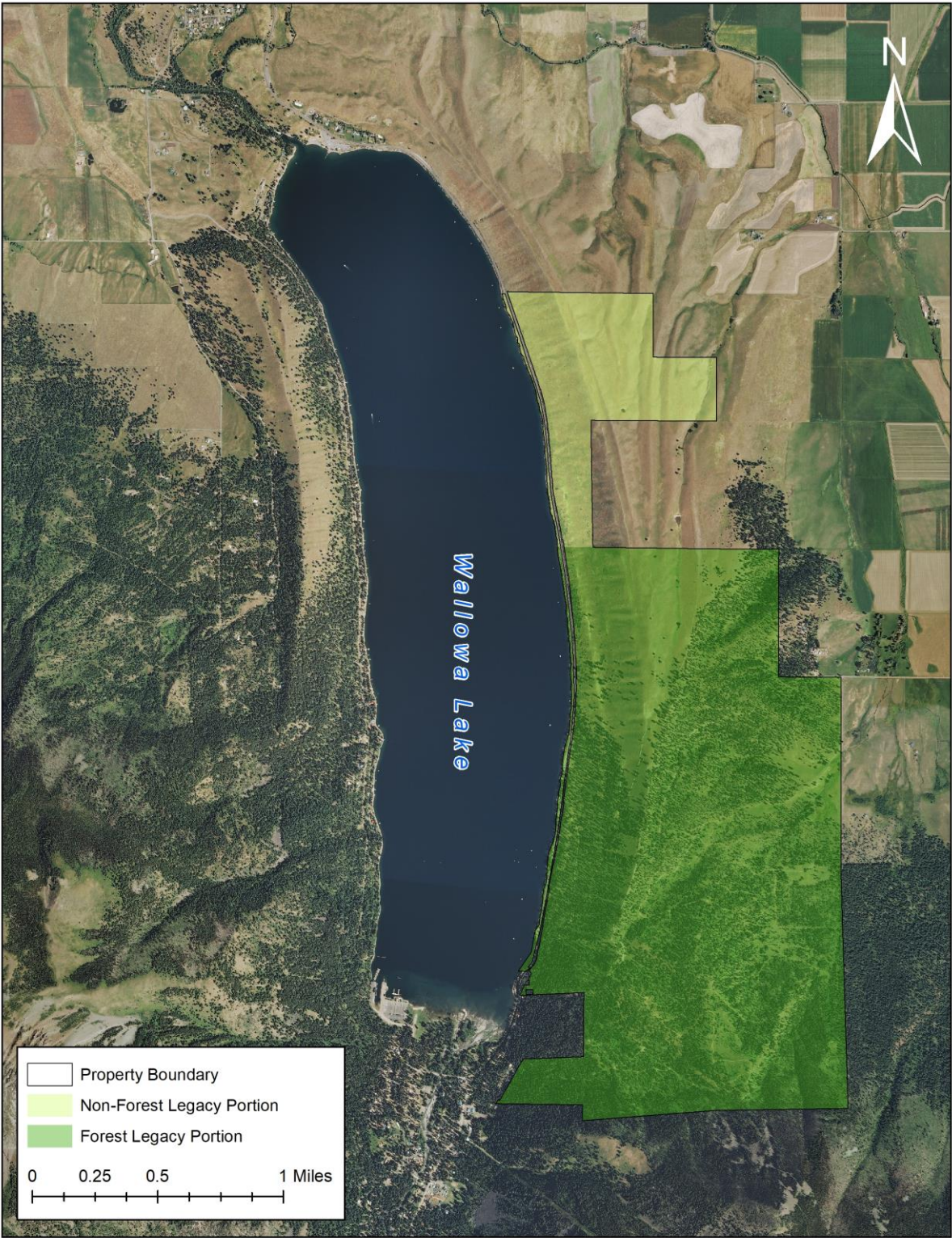
Appendix B: County Tax Assessor Map



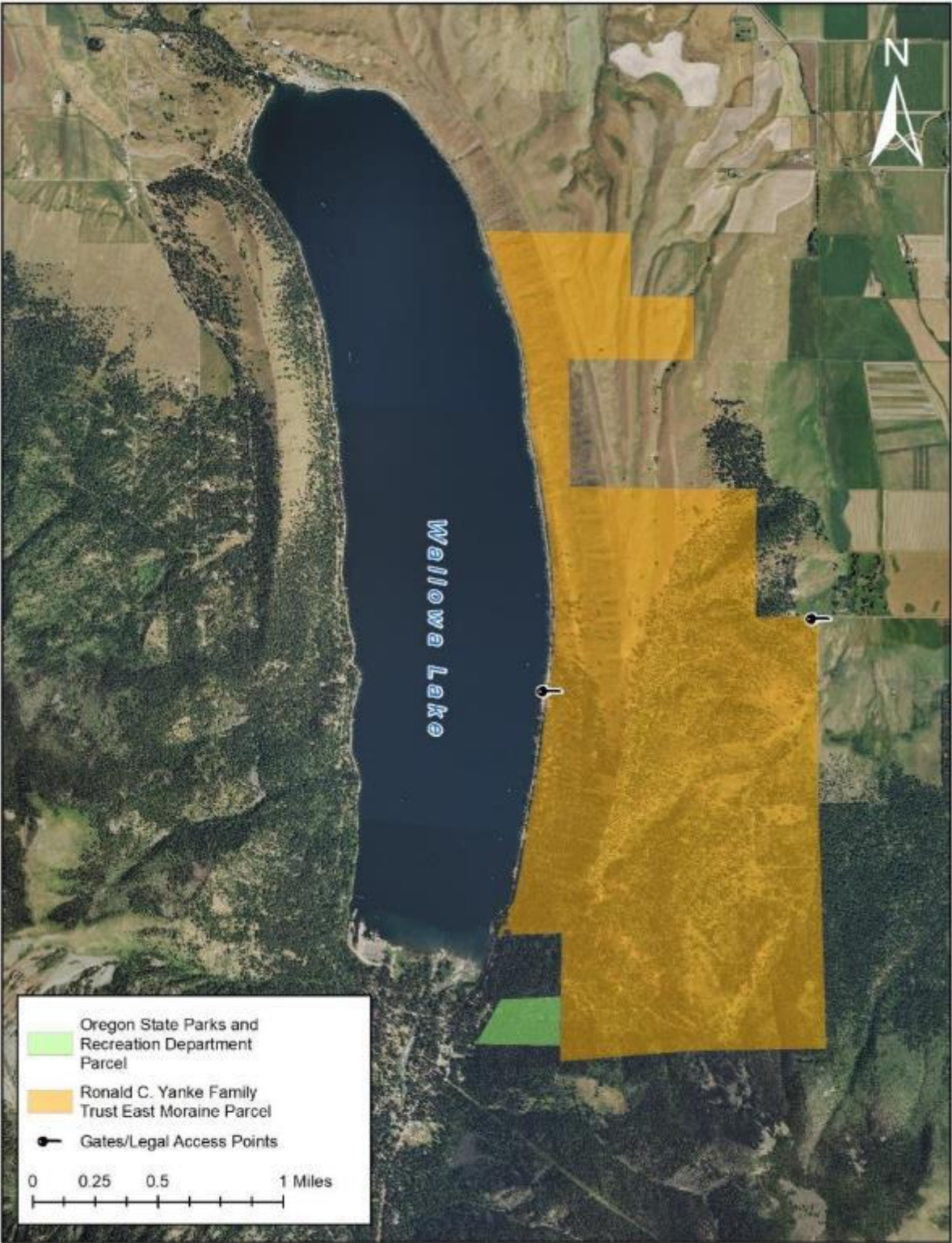
Appendix C: Road Map and Driving Directions



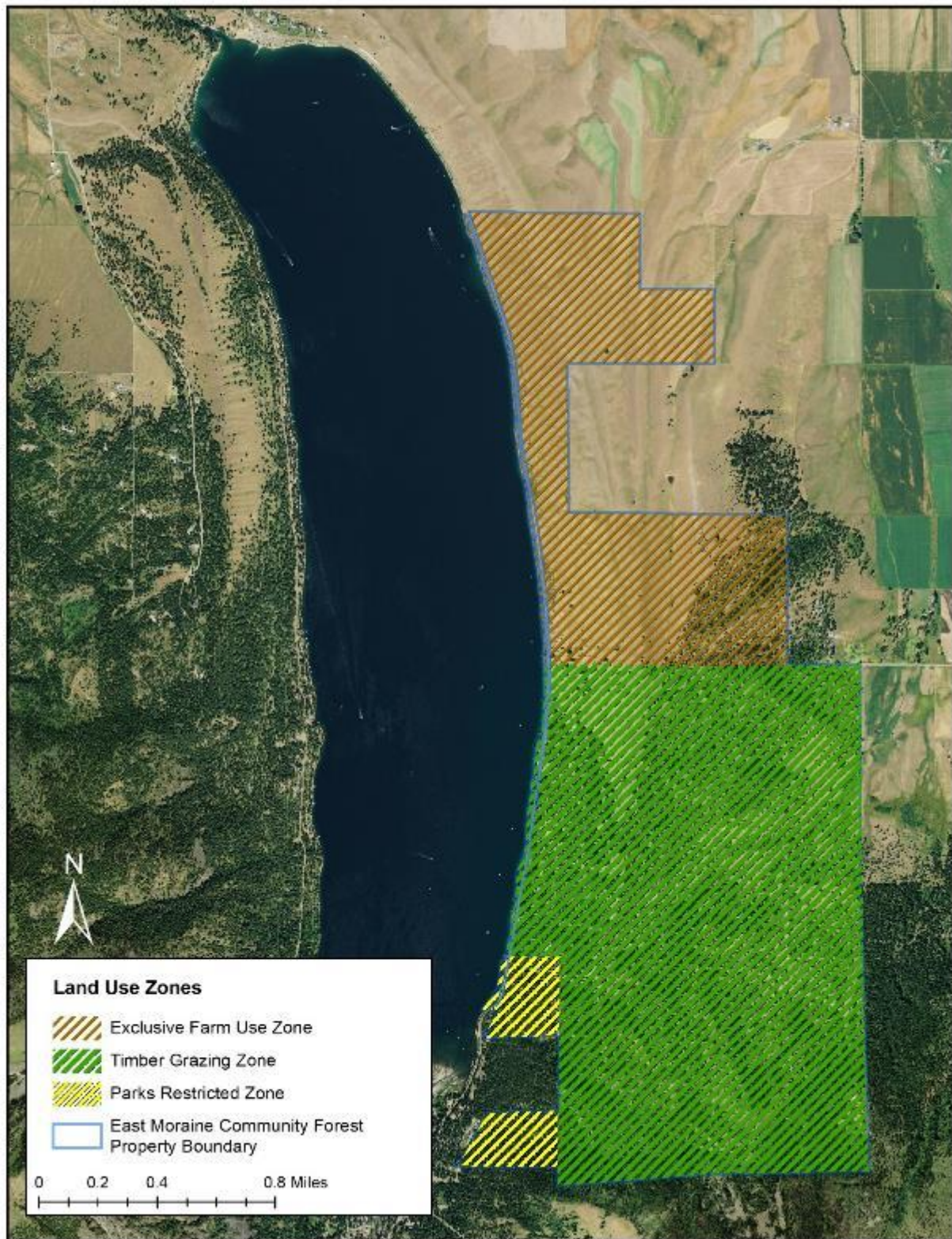
Appendix D: FLP Area and Non-FLP Area Map



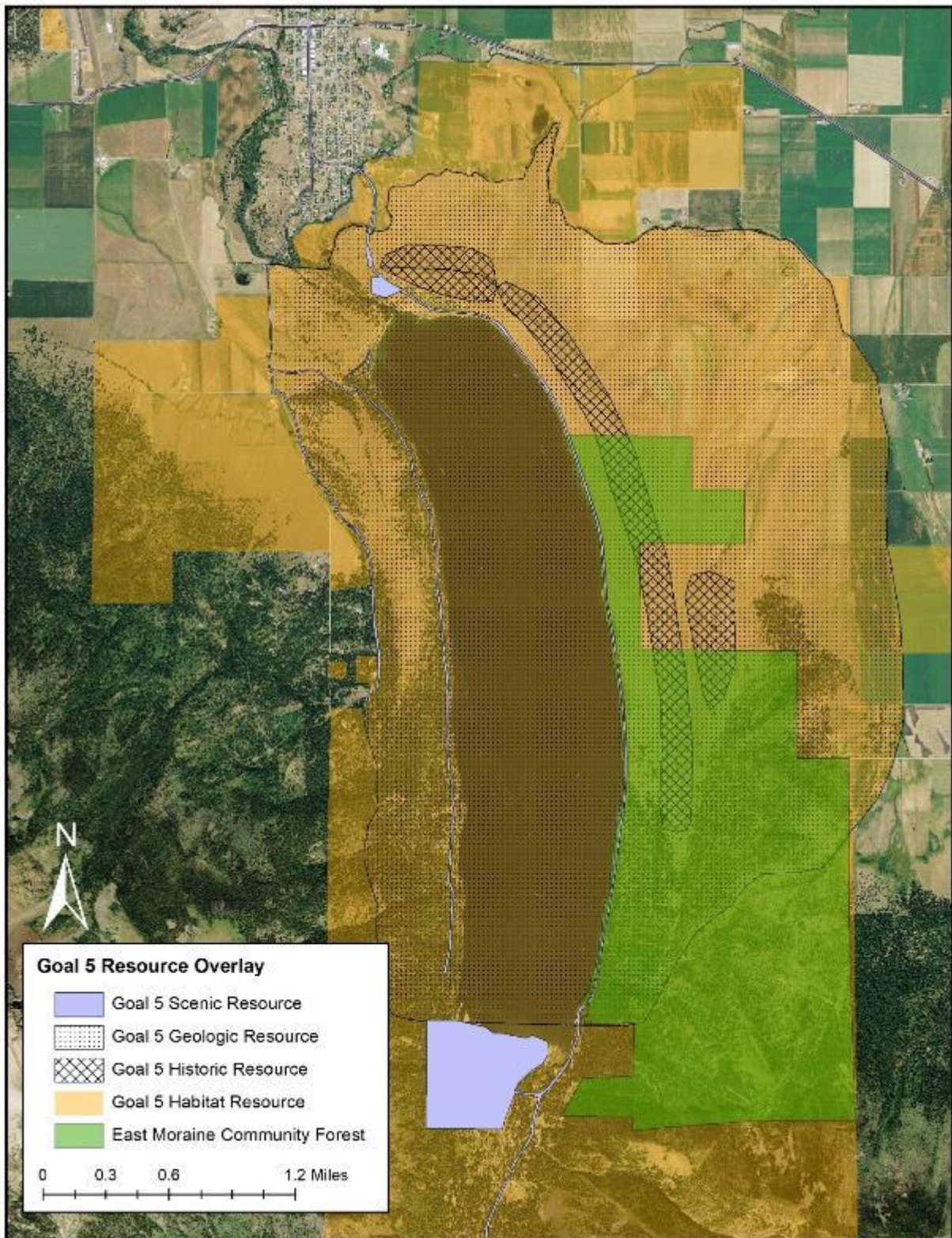
Appendix E: Parcel Map



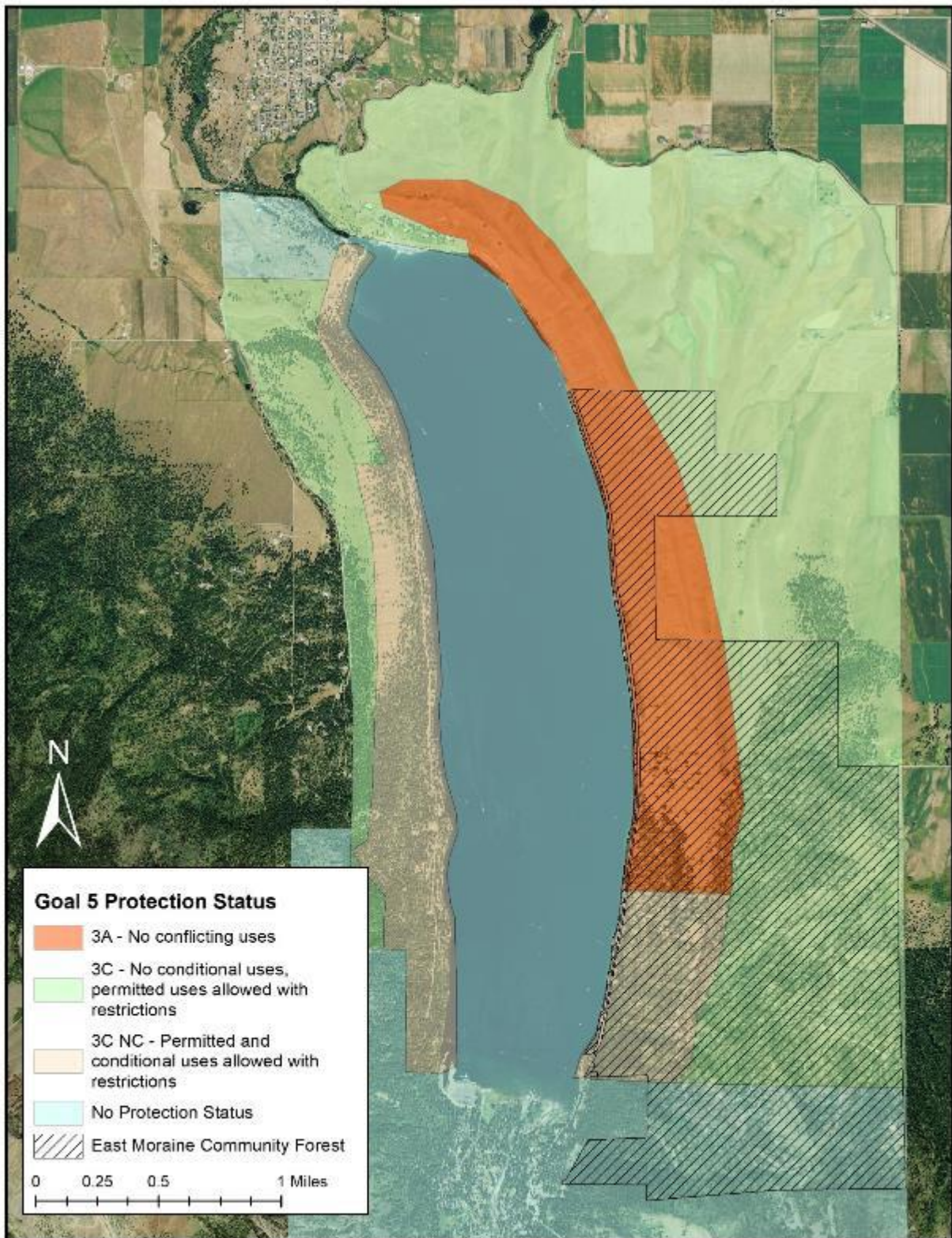
Appendix F: Land Use Zones



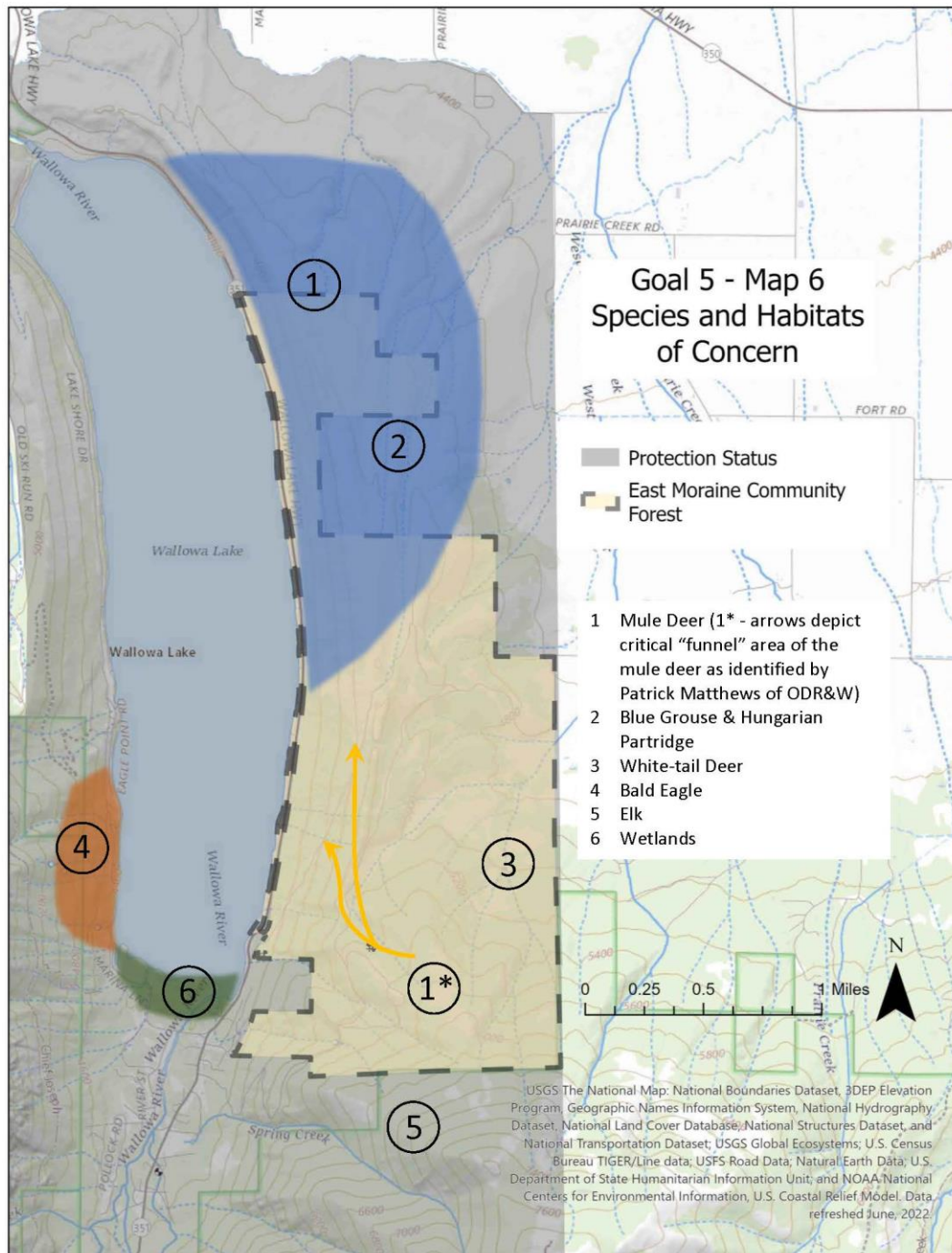
Appendix G: Goal 5 Resource Areas



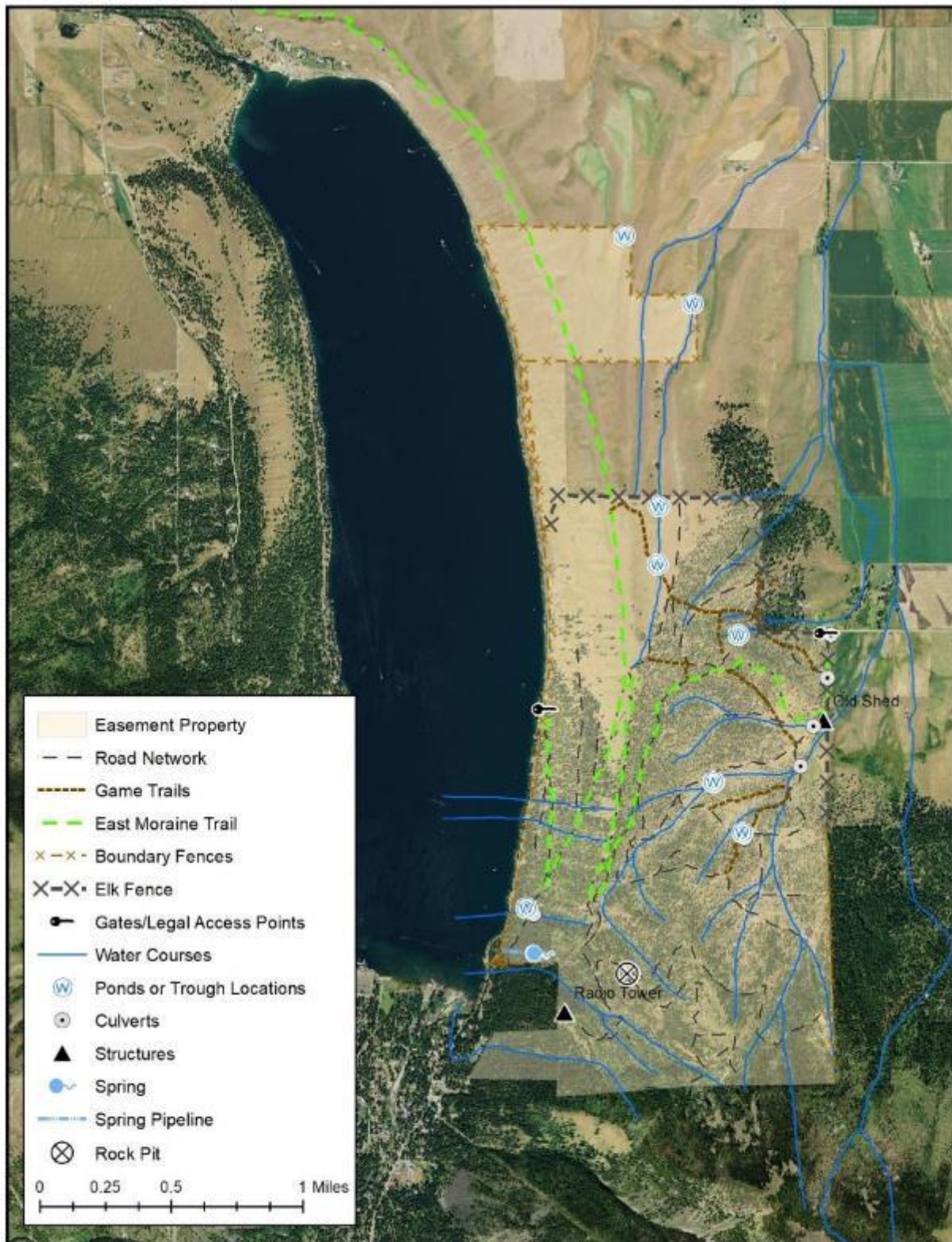
Appendix H: Goal 5 Protection Status



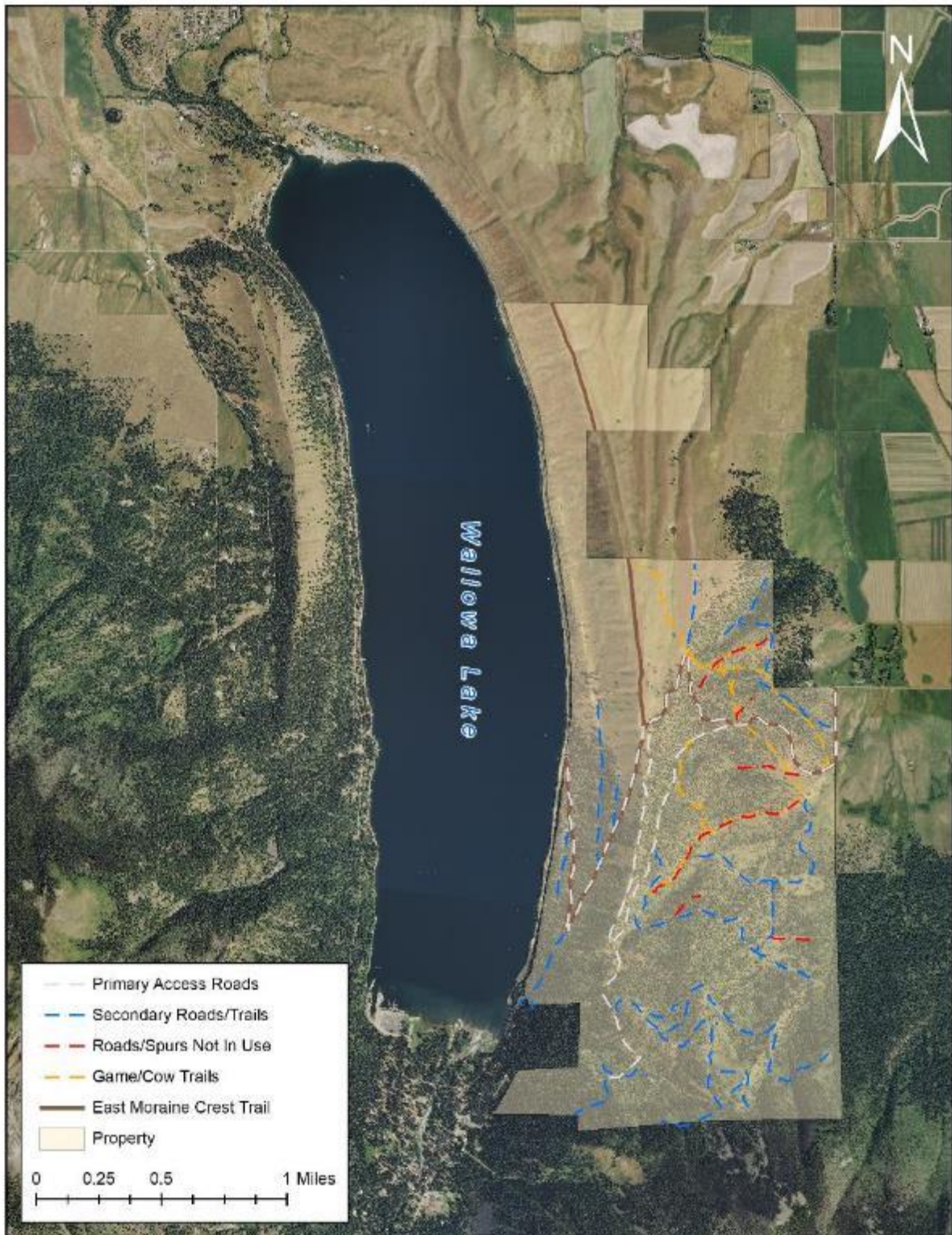
Appendix I: Goal 5 Species & Habitats of Concern Map



Appendix J: Manmade Features and Improvements



Appendix K: Roads and Trails Map



Appendix L: Water Rights Certificate

Permit—C-8770—900—5-27

STATE OF OREGON COUNTY OF WALLOWA

CERTIFICATE OF WATER RIGHT

This is to Certify, That **M. V. Knight**

of **Joseph**, State of **Oregon**, has made proof to the satisfaction of the STATE ENGINEER of Oregon, of a right to the use of the waters of **Unnamed Springs** a tributary of **Wallowa Lake** for the purpose of **Domestic and Irrigation** under Permit No. **6847** of the State Engineer, and that said right to the use of said waters has been perfected in accordance with the laws of Oregon; that the priority of the right hereby confirmed dates from **July 31, 1925**;

that the amount of water to which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount actually beneficially used for said purposes, and shall not exceed **0.5 cubic foot per second**;

The point of diversion is located in the **SW 1/4** of Section **21**, Township **3S**, Range **45E** W. M. The use hereunder for irrigation shall conform to such reasonable rotation system as may be ordered by the proper state officer.

The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, shall be limited to one-eightieth of one cubic foot per second per acre, or its equivalent in case of rotation.

A description of the lands irrigated under the right hereby confirmed, and to which such right is appurtenant (if for irrigation or any other purpose), is as follows: **10 acres in the NW 1/4, 10 acres in the SW 1/4, and 5 acres in the NE 1/4, Section 21, Township 3 South, Range 45 East of the Willamette Meridian, in Wallowa County, Oregon.**

The right to the use of the water for any purpose is restricted to the lands or place of use herein described.

After the expiration of fifty years from the date of this certificate or on the expiration of any federal power license issued in connection with this right, and after not less than two years notice in writing to the holder hereof, the State of Oregon, or any municipality thereof, shall have the right to take over the dams, plants and other structures and all appurtenances thereto which have been constructed for the purpose of devoting to beneficial use the water rights specified herein, upon condition that before taking possession the State or municipality shall pay not to exceed the fair value of the property so taken, plus such reasonable damages, if any, to valuable, serviceable and dependable property of the holder of this certificate, not taken over, as may be caused by the severance therefrom of the property taken in accordance with the provisions of section 5728, Oregon Laws.

WITNESS the signature of the State Engineer,

affixed this **28th** day

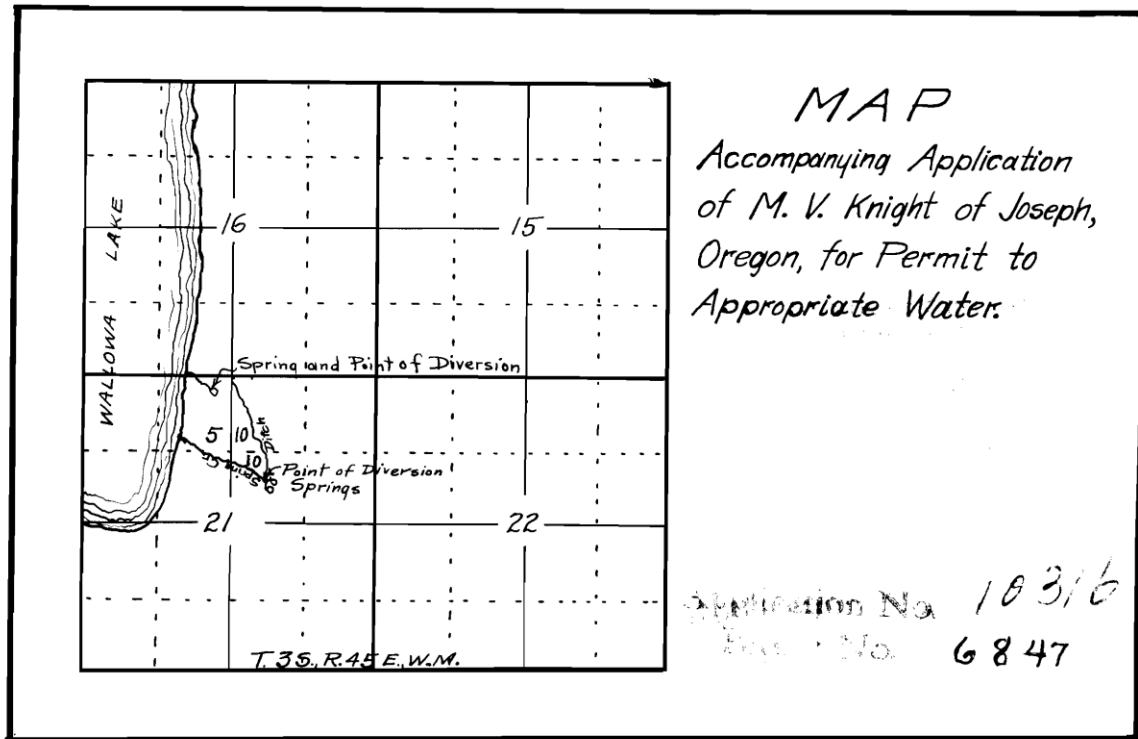
of **November**, 1928

Rhea Luper

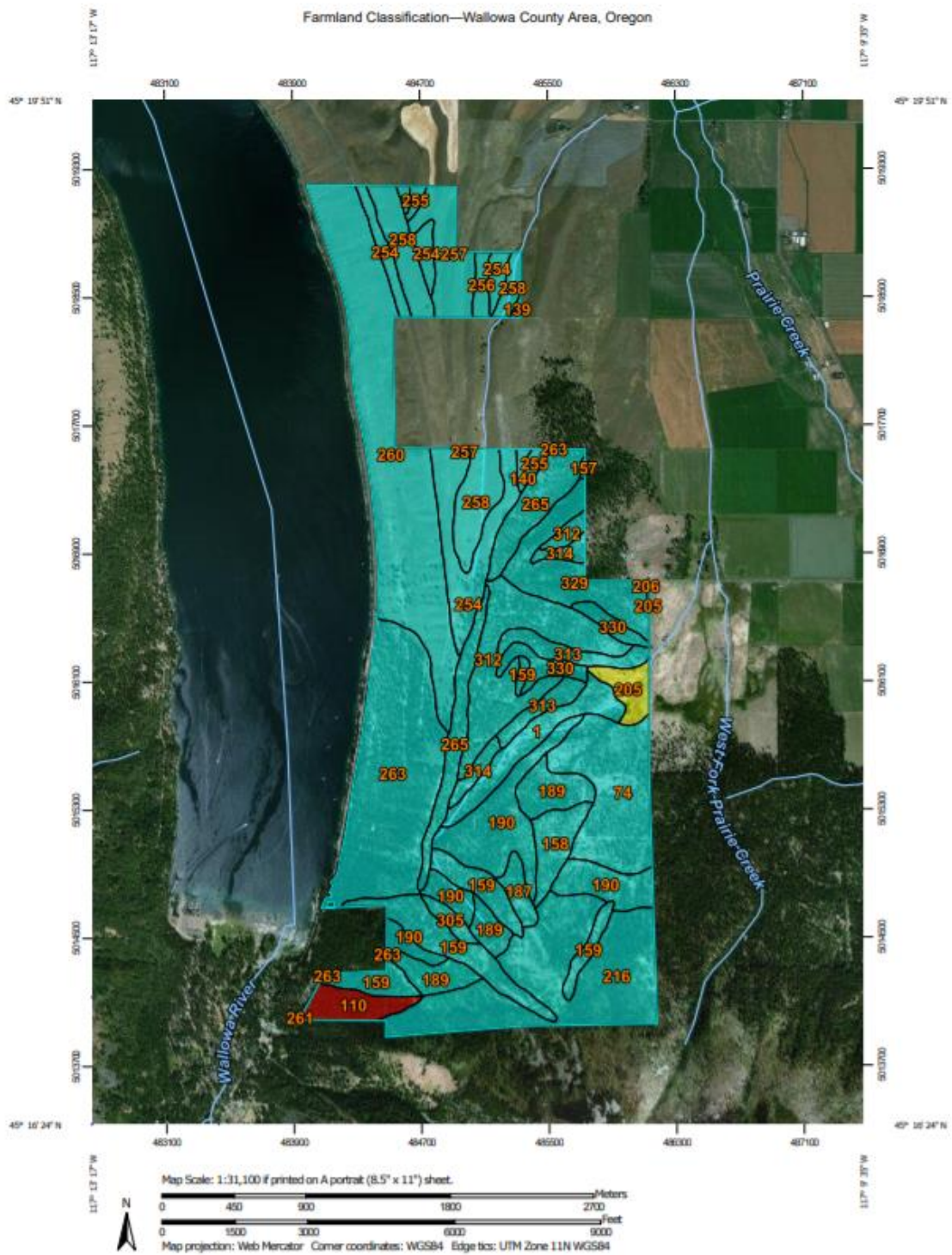
State Engineer.

Recorded in State Record of Water Right Certificates, Volume **7**, page **7788**.

Appendix M: Water Rights Map



Appendix N: Soils Map



Appendix N: Soils Map, continued

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Akerite silt loam, 2 to 8 percent slopes	Farmland of statewide importance	46.3	2.6%
74	Ferguson very fine sandy loam, 2 to 15 percent slopes	Farmland of statewide importance	109.8	6.1%
110	Harl-Anatone-Rock outcrop complex, 60 to 90 percent north slopes	Not prime farmland	27.1	1.5%
139	Hurwal silt loam, moist, 8 to 15 percent slopes	Farmland of statewide importance	1.4	0.1%
140	Hurwal silt loam, moist, 15 to 30 percent north slopes	Farmland of statewide importance	3.6	0.2%
157	Klicker-Anatone complex, 2 to 15 percent slopes	Farmland of statewide importance	1.0	0.1%
158	Klicker-Anatone complex, 15 to 30 percent south slopes	Farmland of statewide importance	29.4	1.6%
159	Klicker-Anatone complex, 30 to 60 percent south slopes	Farmland of statewide importance	106.6	5.9%
187	Limberjim silt loam, 2 to 15 percent slopes	Farmland of statewide importance	14.1	0.8%
189	Limberjim-Syrupcreek complex, 15 to 30 percent north slopes	Farmland of statewide importance	63.0	3.5%
190	Limberjim-Syrupcreek complex, 30 to 60 percent north slopes	Farmland of statewide importance	126.5	7.0%
205	Minam loam, 2 to 8 percent slopes	Prime farmland if irrigated	20.6	1.1%
206	Minam loam, 8 to 15 percent slopes	Farmland of statewide importance	0.7	0.0%
216	Mountemily-Troutmeadows complex, 30 to 60 percent north slopes	Farmland of statewide importance	195.9	10.9%
254	Rondowa silt loam, 2 to 8 percent slopes	Farmland of statewide importance	99.8	5.5%
255	Rondowa silt loam, 8 to 15 percent slopes	Farmland of statewide importance	8.5	0.5%
256	Rondowa stony loam, 2 to 15 percent slopes	Farmland of statewide importance	9.3	0.5%

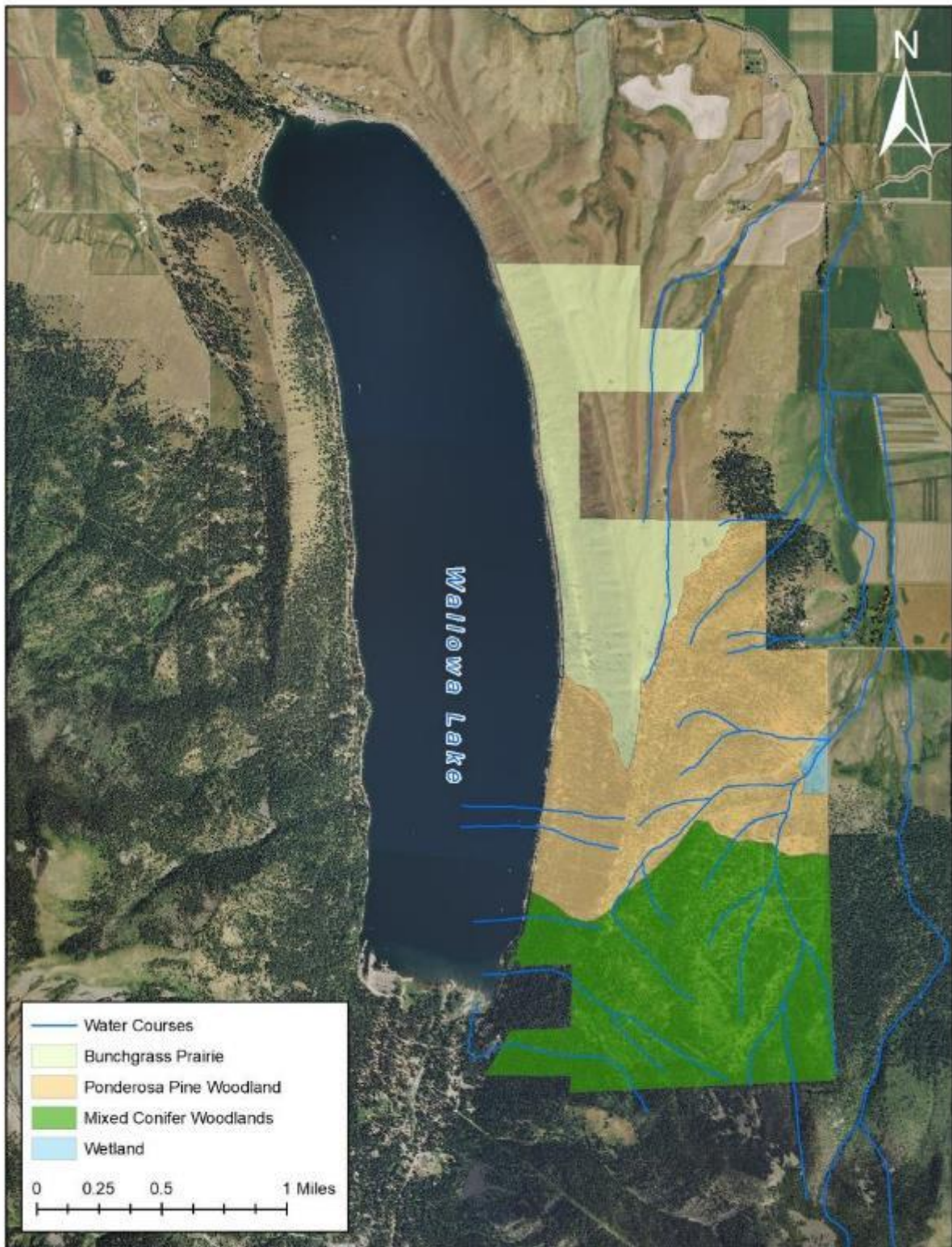
Appendix N: Soils Map, continued

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
257	Rondowa stony loam, 15 to 30 percent north slopes	Farmland of statewide importance	49.3	2.7%
258	Rondowa stony loam, 30 to 60 percent north slopes	Farmland of statewide importance	80.2	4.5%
260	Rondowa stony loam, 30 to 60 percent south slopes	Farmland of statewide importance	250.1	13.9%
261	Rondowa bouldery loam, 2 to 15 percent slopes	Farmland of statewide importance	0.1	0.0%
263	Rondowa bouldery loam, 30 to 60 percent north slopes	Farmland of statewide importance	202.2	11.2%
265	Rondowa bouldery loam, 30 to 60 percent south slopes	Farmland of statewide importance	80.6	4.5%
305	Syrupcreek-Anatone complex, 0 to 15 percent slopes	Farmland of statewide importance	9.3	0.5%
312	Tamarackcanyon-Lowerbluff complex, 2 to 15 percent slopes	Farmland of statewide importance	109.2	6.1%
313	Tamarackcanyon-Olot-Harlow complex, 15 to 30 percent south slopes	Farmland of statewide importance	39.3	2.2%
314	Tamarackcanyon-Olot-Harlow complex, 30 to 60 percent south slopes	Farmland of statewide importance	17.3	1.0%
329	Tolo-Getaway complex, 15 to 30 percent north slopes	Farmland of statewide importance	71.0	3.9%
330	Tolo-Getaway complex, 30 to 60 percent north slopes	Farmland of statewide importance	27.7	1.5%
Totals for Area of Interest			1,799.9	100.0%

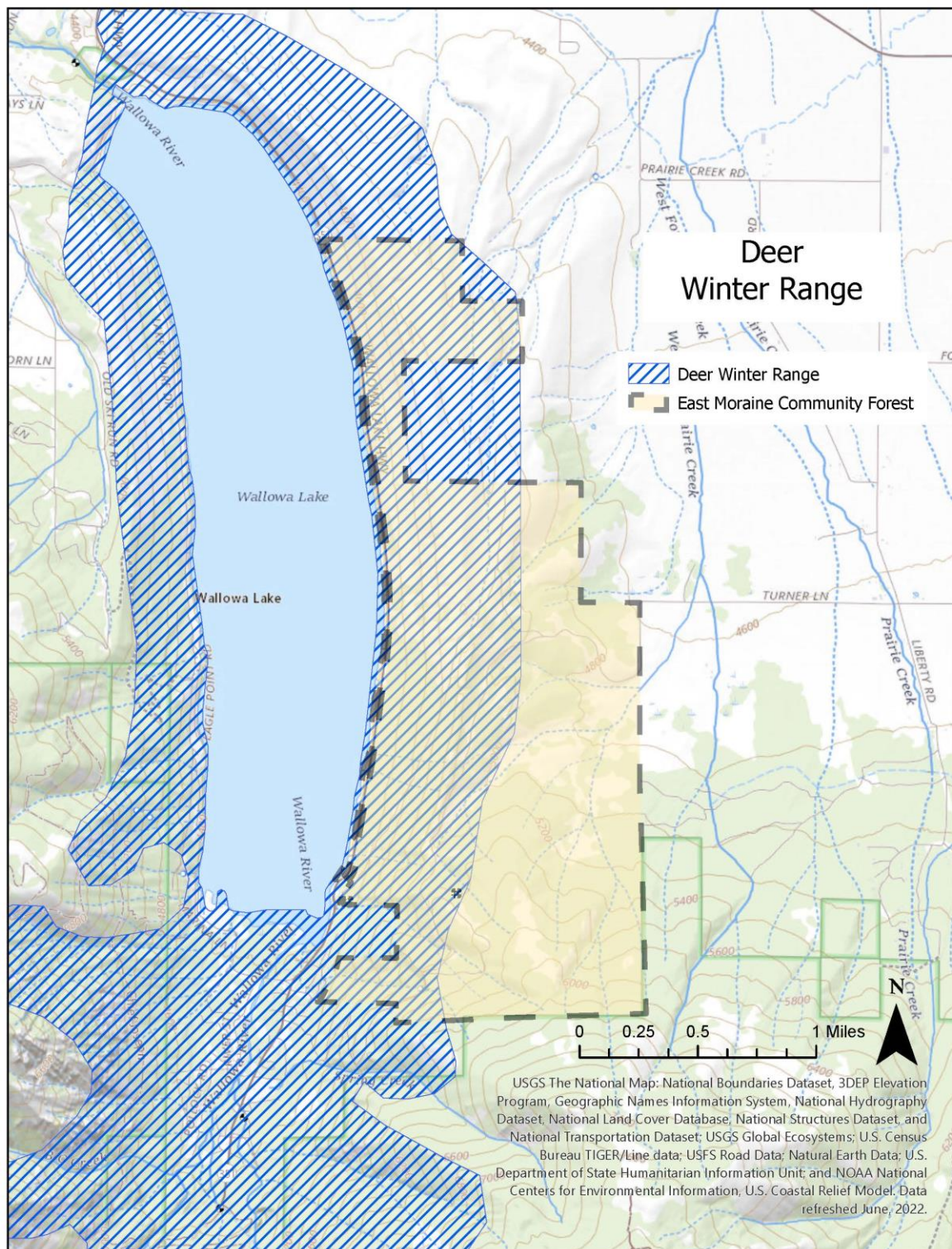
Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Appendix O: Habitat Map



Appendix P: Mule Deer Winter Range Map



Appendix Q: Mammals and Birds Species List

List of Mammals					
Common Name	Scientific Name	Status	Common Name	Scientific Name	Status
American Badger	<i>Taxidea taxus</i>	Resident	Montane Vole	<i>Microtus montanus</i>	Resident
American Black Bear	<i>Ursus americanus</i>	Occasional	Mountain Cottontail	<i>Sylvilagus nuttalli</i>	Resident
American Marten	<i>Martes Americana</i>	Occasional	Mule Deer	<i>Odocoileus hemionus</i>	Resident
Belding's Ground Squirrel	<i>Spermophilus beldingi</i>	Resident	North American/Common Porcupine	<i>Erethizon dorsatum</i>	Occasional
Big Brown Bat	<i>Eptesicus fuscus</i>	Occasional	Northern Flying Squirrel	<i>Glaucomys sabrinus</i>	Resident
Bobcat	<i>Lynx rufus</i>	Resident	Northern Pocket Gopher	<i>Thomomys talpoides</i>	Resident
Bushy-tailed Woodrat	<i>Neotoma cinerea</i>	Resident	Northern Raccoon	<i>Procyon lotor</i>	Resident
California Myotis	<i>Myotis californicus</i>	Occasional	Preble's Shrew	<i>Sorex preblei</i>	Resident
Columbian Ground Squirrel	<i>Spermophilus columbianus</i>	Resident	Red Fox	<i>Vulpes vulpes</i>	Resident
Cougar	<i>Puma concolor</i>	Occasional	Red Squirrel	<i>Tamiasciurus hudsonicus</i>	Resident
Coyote	<i>Canis latrans</i>	Resident	Silver-haired Bat	<i>Lasiorycteris noctivagans</i>	Occasional
Deer mouse	<i>Peromyscus maniculatus</i>	Resident	Snowshoe Hare	<i>Lepus americanus</i>	Resident
Elk	<i>Artiodactyla Cervus elaphus</i>	Resident	Striped Skunk	<i>Mephitis mephitis</i>	Resident
Ermine	<i>Mustela erminea</i>	Resident	Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	Occasional
Fringed Myotis	<i>Myotis thysanodes</i>	Occasional	Vagrant Shrew	<i>Sorex vagrans</i>	Resident
Golden-mantled Ground Squirrel	<i>Spermophilus lateralis</i>	Resident	Western Harvest Mouse	<i>Reithrodontomys megalotis</i>	Resident
Gray Wolf	<i>Canis lupus</i>	Occasional	Western Jumping Mouse	<i>Zapus princeps</i>	Occasional
Hoary Bat	<i>Lasiurus cinereus</i>	Occasional	Western Small-footed Myotis	<i>Myotis ciliolabrum</i>	Occasional
Least Chipmunk	<i>Tamias minimus</i>	Resident	Western Spotted Skunk	<i>Spilogale gracilis</i>	Occasional
Little Brown Bat	<i>Myotis lucifugus</i>	Resident	White-tailed Deer	<i>Odocoileus virginianus</i>	Resident
Long-eared Myotis	<i>Myotis evotis</i>	Occasional	White-tailed Jackrabbit	<i>Lepus townsendii</i>	Occasional
Long-legged Myotis	<i>Myotis Volans</i>	Occasional	Yellow-bellied Marmot	<i>Marmota flaviventris</i>	Resident
Long-tailed Vole	<i>Microtus longicaudus</i>	Occasional	Yellow-bellied Marmot	<i>Marmota flaviventris</i>	Resident
Long-tailed Weasel	<i>Mustela frenata</i>	Resident	Yellow-bellied Marmot	<i>Marmota flaviventris</i>	Resident
Mink	<i>Mustela vison</i>	Occasional			
List of Birds					
Common Name	Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name
American crow	<i>Corvus brachyrhynchos</i>	Grasshopper sparrow	<i>Ammodramus savannarum</i>	Red crossbill	<i>Loxia curvirostra</i>
American goldfinch	<i>Spinus tristis</i>	Gray jay	<i>Perisoreus canadensis</i>	Red-breasted nuthatch	<i>Sitta canadensis</i>
American kestrel	<i>Falco sparverius</i>	Gray catbird	<i>Dumetella carolinensis</i>	Red-naped sapsucker	<i>Sphyrapicus nuchalis</i>
American Three-toed Woodpecker	<i>Picoides dorsalis</i>	Gray partridge	<i>Perdix perdix</i>	Red-tailed hawk	<i>Buteo jamaicensis</i>
American robin	<i>Turdus migratorius</i>	Gray-crowned rosy-finch	<i>Leucosticte tephrocotis</i>	Red-winged blackbird	<i>Agelaius phoeniceus</i>
American tree sparrow	<i>Spizelloides arborea</i>	Great gray owl	<i>Strix nebulosa</i>	Ring-necked pheasant	<i>Phasianus colchicus</i>
Bald eagle	<i>Haliaeetus leucocephalus</i>	Great horned owl	<i>Bubo virginianus</i>	Rock dove	<i>Columba livia</i>
Bank swallow	<i>Riparia riparia</i>	Green-tailed towhee	<i>Pipilo chlorurus</i>	Rock wren	<i>Salpinctes obsoletus</i>
Barn owl	<i>Tyto alba</i>	Gyr Falcon	<i>Falco rusticolus</i>	Rough-legged hawk	<i>Buteo lagopus</i>
Barn swallow	<i>Hirundo rustica</i>	Hairy woodpecker	<i>Picoides villosus</i>	Ruby-crowned kinglet	<i>Regulus calendula</i>

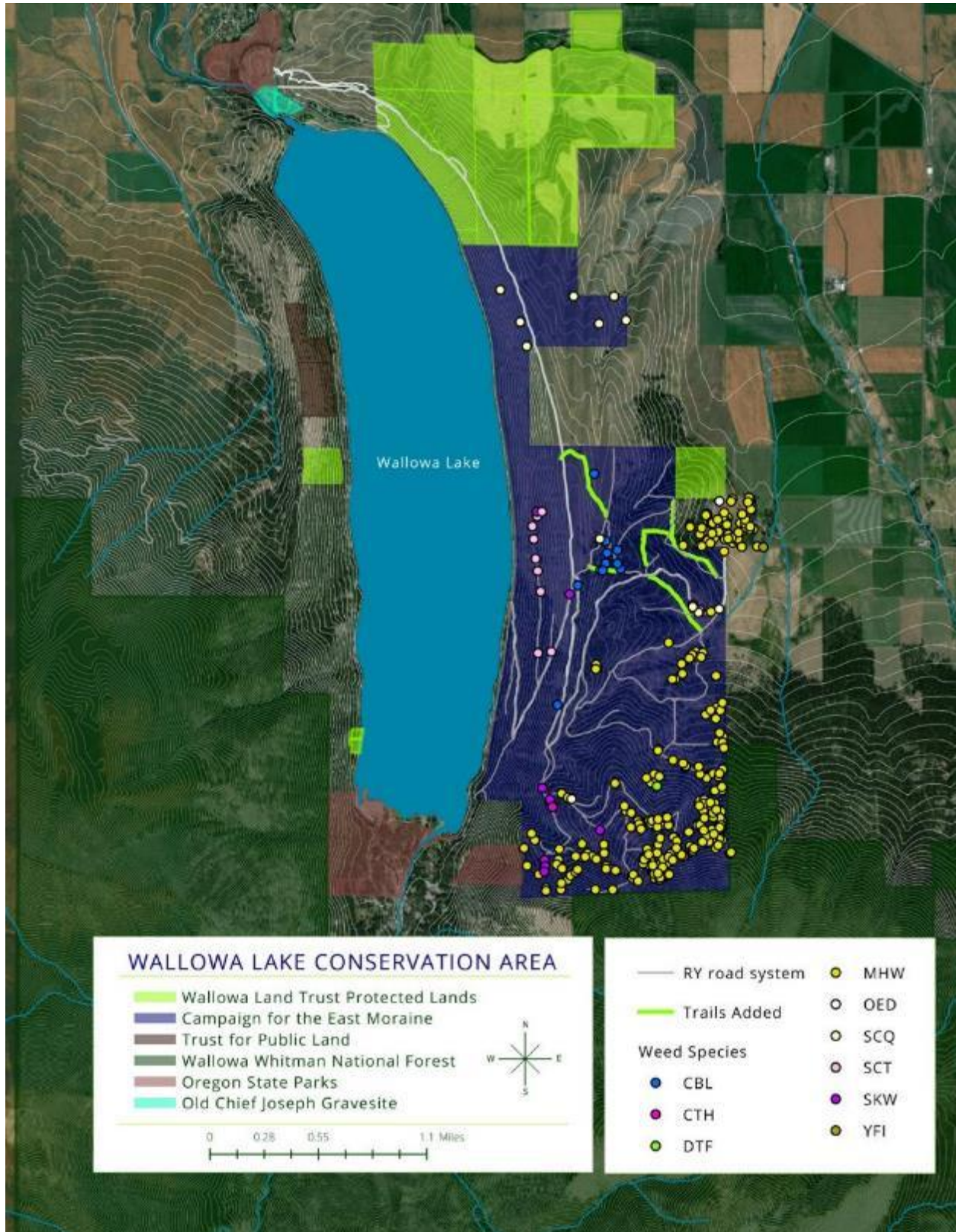
Belted kingfisher	<i>Megaceryle alcyon</i>	Hammond's flycatcher	<i>Empidonax hammondii</i>	Ruffed grouse	<i>Bonasa umbellus</i>
Bewick's wren	<i>Thryomanes bewickii</i>	Hermit thrush	<i>Catharus guttatus</i>	Rufous hummingbird	<i>Selasphorus rufus</i>
Black-backed Woodpecker	<i>Picoides arcticus</i>	Horned lark	<i>Eremophila alpestris</i>	Savannah sparrow	<i>Passerculus sandwichensis</i>
Black-billed magpie	<i>Pica hudsonia</i>	House finch	<i>Haemorhous mexicanus</i>	Say's phoebe	<i>Sayornis saya</i>
Black-capped chickadee	<i>Poecile atricapillus</i>	House wren	<i>Troglodytes aedon</i>	Sharp-shinned hawk	<i>Accipiter striatus</i>
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	Killdeer	<i>Charadrius vociferus</i>	Short-eared owl	<i>Asio flammeus</i>
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>	Lapland longspur	<i>Calcarius lapponicus</i>	Snow bunting	<i>Plectrophenax nivalis</i>
Bohemian waxwing	<i>Bombycilla garrulus</i>	Lazuli Bunting	<i>Passerina amoena</i>	Snowy owl	<i>Bubo scandiacus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	Lark sparrow	<i>Chondestes grammacus</i>	Song sparrow	<i>Melospiza melodia</i>
Brewer's sparrow	<i>Spizella breweri</i>	Lesser goldfinch	<i>Spinus psaltria</i>	Spotted towhee	<i>Pipilo maculatus</i>
Brown creeper	<i>Certhia Americana</i>	Lewis's woodpecker	<i>Melanerpes lewis</i>	Steller's jay	<i>Cyanocitta stelleri</i>
Brown-headed cowbird	<i>Molothrus ater</i>	Lincoln's sparrow	<i>Melospiza lincolni</i>	Swainson's hawk	<i>Buteo swainsoni</i>
Bullock's oriole	<i>Icterus bullockii</i>	Loggerhead shrike	<i>Lanius ludovicianus</i>	Swainson's thrush	<i>Catharus ustulatus</i>
California quail	<i>Callipepla californica</i>	Long-billed curlew	<i>Numenius americanus</i>	Townsend's solitaire	<i>Myadestes townsendi</i>
Calliope Hummingbird	<i>Stellula calliope</i>	Long-eared owl	<i>Asio otus</i>	Townsend's warbler	<i>Setophaga townsendi</i>
Cassin's finch	<i>Haemorhous cassinii</i>	MacGillivray's warbler	<i>Geothlypis tolmiei</i>	Tree swallow	<i>Tachycineta bicolor</i>
Cassin's Vireo	<i>Vireo cassinii</i>	Merlin	<i>Falco columbarius</i>	Turkey vulture	<i>Cathartes aura</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>	Mountain bluebird	<i>Sialia currucoides</i>	Varied thrush	<i>Ixoreus naevius</i>
Chestnut-backed chickadee	<i>Poecile rufescens</i>	Mountain chickadee	<i>Poecile gambeli</i>	Vaux's swift	<i>Chaetura vauxi</i>
Chipping sparrow	<i>Spizella passerine</i>	Mourning dove	<i>Zenaida macroura</i>	Vesper sparrow	<i>Poocetes gramineus</i>
Clark's nutcracker	<i>Nucifraga Columbiana</i>	Nashville warbler	<i>Oreothlypis ruficapilla</i>	Violet-green swallow	<i>Tachycineta thalassina</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>	Northern flicker	<i>Colaptes auratus</i>	Warbling vireo	<i>Vireo gilvus</i>
Common nighthawk	<i>Chordeiles minor</i>	Northern goshawk	<i>Accipiter gentilis</i>	Western bluebird	<i>Sialia mexicana</i>
Common raven	<i>Corvus corax</i>	Northern harrier	<i>Circus cyaneus</i>	Western kingbird	<i>Tyrannus verticalis</i>
Common redpoll	<i>Acanthis flammea</i>	Northern pygmy-owl	<i>Glaucidium gnoma</i>	Western meadowlark	<i>Sturnella neglecta</i>
Cooper's hawk	<i>Accipiter cooperii</i>	Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	Western screech-owl	<i>Megascops kennicottii</i>
Cordilleran flycatcher	<i>Empidonax occidentalis</i>	Northern saw-whet owl	<i>Aegolius acadicus</i>	Western tanager	<i>Piranga ludoviciana</i>
Dark-eyed junco	<i>Junco hyemalis</i>	Northern shrike	<i>Lanius excubitor</i>	Western wood-pewee	<i>Contopus sordidulus</i>
Downy woodpecker	<i>Picoides pubescens</i>	Olive-sided Flycatcher	<i>Contopus cooperi</i>	White-breasted nuthatch	<i>Sitta carolinensis</i>
Dusky flycatcher	<i>Empidonax oberholseri</i>	Orange-crowned warbler	<i>Oreothlypis celata</i>	White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Dusky grouse	<i>Dendragapus obscurus</i>	Osprey	<i>Pandion haliaetus</i>	White-headed woodpecker	<i>Picoides albolarvatus</i>
Eastern kingbird	<i>Tyrannus tyrannus</i>	Pacific-slope flycatcher	<i>Empidonax difficilis</i>	White-throated swift	<i>Aeronautes saxatalis</i>
Eurasian collared-dove	<i>Streptopelia decaocto</i>	Pacific wren	<i>Troglodytes pacificus</i>	Wild turkey	<i>Meleagris gallopavo</i>
European starling	<i>Sturnus vulgaris</i>	Pileated woodpecker	<i>Dryocopus pileatus</i>	Williamson's sapsucker	<i>Sphyrapicus thyroideus</i>
Evening grosbeak	<i>Hesperiphona vespertina</i>	Pine grosbeak	<i>Pinicola enucleator</i>	Willow flycatcher	<i>Empidonax traillii</i>
Ferruginous hawk	<i>Buteo regalis</i>	Pine siskin	<i>Spinus pinus</i>	Wilson's snipe	<i>Gallinago delicata</i>
Flammulated owl	<i>Psiloscops flammeolus</i>	Prairie falcon	<i>Falco mexicanus</i>	Wilson's warbler	<i>Cardellina pusilla</i>
Fox sparrow	<i>Passerella iliaca</i>	Purple finch	<i>Haemorhous purpureus</i>	Yellow warbler	<i>Setophaga petechia</i>
Golden eagle	<i>Aquila chrysaetos</i>	Pygmy nuthatch	<i>Sitta pygmaea</i>	Yellow-rumped warbler	<i>Setophaga coronate</i>
Golden-crowned kinglet	<i>Regulus satrapa</i>	**Lists of potential mammal and bird species developed by Mike Hansen for Yanke Property Baseline Report, December 2019.			

Appendix R: Botanical Inventory

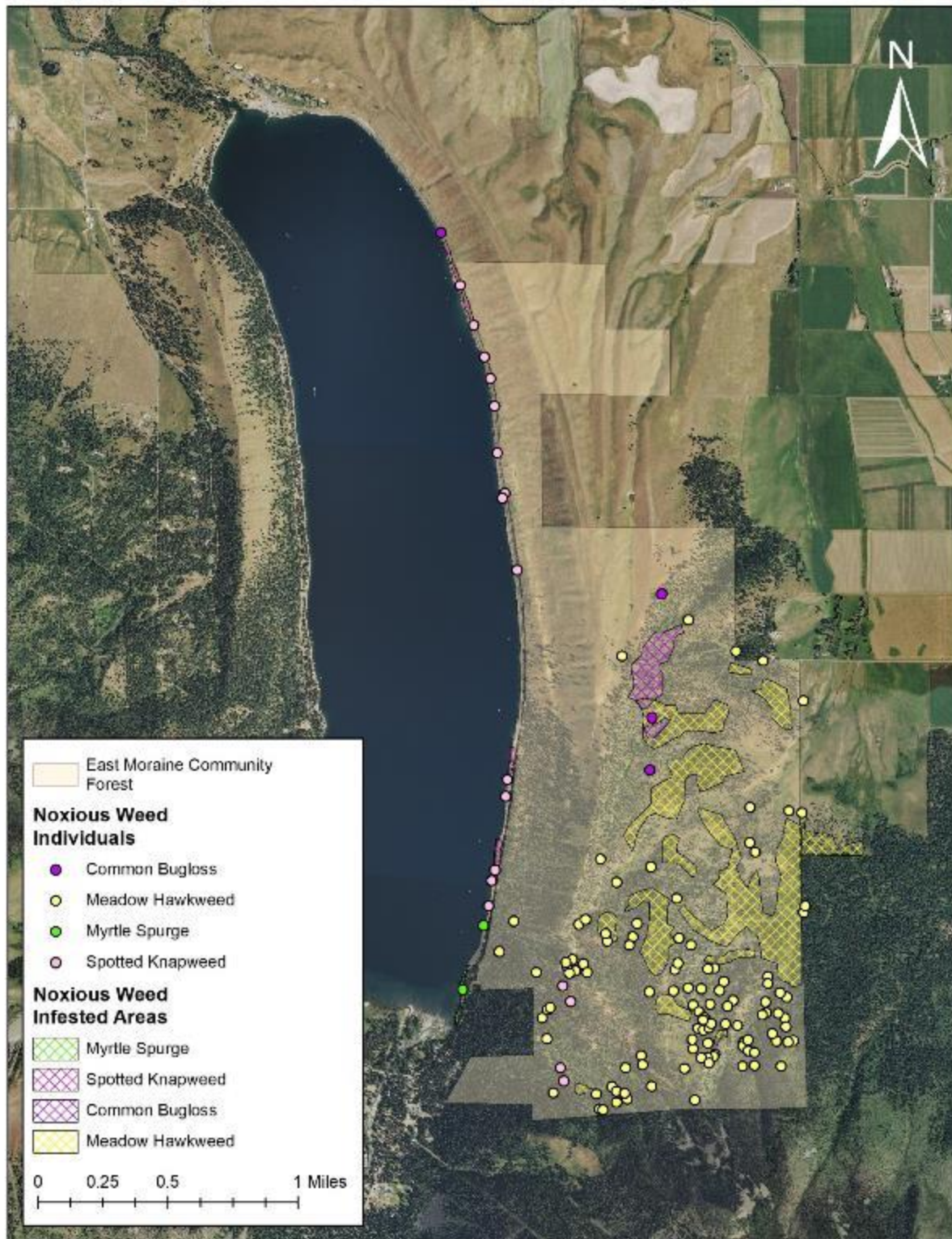
<u>Grassland Native Species</u>	<u>Ponderosa Pine Woodland Native Species</u>
Ponderosa pine (<i>Pinus ponderosa</i>)	Ponderosa pine (<i>Pinus ponderosa</i>)
Western juniper (<i>Juniperus occidentalis</i>)	Douglas fir (<i>Pseudotsuga Menziesii</i>)
Douglas fir (<i>Pseudotsuga Menziesii</i>)	Western juniper (<i>Juniperus occidentalis</i>)
Aspen (<i>Populus tremuloides</i>)	Western serviceberry (<i>Amelanchier alnifolia</i>)
Columbia hawthorn (<i>crataegus Columbiana</i>)	Ocean Spray (<i>Holodiscus discolor</i>)
Western serviceberry (<i>Amelanchier alnifolia</i>)	Prickly Currant (<i>Ribes lacustre</i>)
Wild rose-various species (<i>Rosa</i> sp.)	Wax currant (<i>Ribes cereum</i>)
Bluebunch wheatgrass (<i>Pseudoregnia spicatum</i>)	Wild rose var. species (<i>Rosa</i> sp.)
Idaho fescue (<i>Festuca idahoensis</i>)	Snowberry (<i>Symphoricarpos albus</i>)
Prairie junegrass (<i>Koeleria cristata</i>)	Ninebark (<i>Physocarpus malvaceus</i>)
Grass-widow (<i>Sisyrinchium douglasi</i>)	Pinegrass (<i>Calamagrostis rubescens</i>)
Sage buttercup (<i>Ranunculus gladderimus</i>)	Bluebunch wheatgrass (<i>Pseudoregnia spicatum</i>)
Prairie star (<i>Lithophragma parviflora</i>)	Prairie junegrass (<i>Koeleria cristata</i>)
Larkspur (<i>Delphinium</i> sp)	Idaho fescue (<i>Festuca idahoensis</i>)
Yellowbell (<i>Fritillaria pudica</i>)	Timothy (<i>Pleum</i> sp.)
Sticky geranium (<i>Geranium viscosissimum</i>)	Prairie Star (<i>Lithophragma parviflora</i>)
Creamy buckwheat (<i>Eriogonum heraclides</i>)	Larkspur (<i>Delphinium</i> sp.)
Alumroot (<i>Heuchera cylindrical</i>)	Heartlead Arnica (<i>Arnica cordifolia</i>)
Wormwood (<i>Artemesia absinthum</i>)	Wild strawberry (<i>Fragaria virginiana</i>)
Besseyia (<i>Besseyia rubra</i>)	Penstemon var. species (<i>Penstemon</i> sp.)
Yarrow (<i>Achillea millefolium</i>)	Panicked death camas (<i>Zigadenus paniculata</i>)
Arrowleaf balsamroot (<i>Balsamorhiza sagittata</i>)	Western Hawkweed (<i>Hieracium albertinum</i>)
Narrowleaf sedum (<i>Sedum stenopetalum</i>)	Slender potentilla (<i>Potentilla gracilis</i>)
Gromwell (<i>Lithospermum ruderales</i>)	Sender pussytoes (<i>Antennaria racemosa</i>)
Blanketflower (<i>Gaillardia aristata</i>)	Wallowa paintbrush (<i>Castilleja chrysantha</i>)
Penstemon var. species (<i>Penstemon</i> sp)	Brodiea (<i>Brodiea douglasi</i>)
<u>Grassland Nonnative Species</u>	<u>Ponderosa Pine Woodland Nonnative species</u>
Scotch thistle (<i>Onopordum acanthium</i>)	Meadow Hawkweed (<i>Pilosella caespitosa</i>)
Bulbous bluegrass (<i>Poa bulbosa</i>)	Common Bugloss (<i>Anchusa officinalis</i>)
Cheatgrass (<i>Bromus tectorum</i>)	Scotch thistle (<i>Onopordum acanthium</i>)
Bur Buttercup (<i>Ranunculus</i>)	Canada thistle (<i>Cirsium arvense</i>)
Houndstongue (<i>Marrubium vulgare</i>)	Houndstongue (<i>Marrubium vulgare</i>)
Tumble mustard (<i>Sisymbrium altissimum</i>)	Bulbous bluegrass (<i>Poa bulbosa</i>)
Ventenata (<i>Vetenata dubia</i>)	Orchardgrass (<i>Dactylis glomerata</i>)
	Dandelion (<i>Tanacetum vulgare</i>)
	Sulfur Cinquefoil (<i>Potentilla recta</i>)
	Dutch clover (<i>Trifolium repens</i>)
	Flannel mullein (<i>Verbascum thapsis</i>)

<u>Mixed Conifer Forest Native Species</u>	<u>Wetland Native Species</u>
Douglas fir (<i>Pseudotsuga Menziesii</i>)	Bluegrass var. species (<i>Poa</i> sp.)
Grand fir	Sedges var. species (<i>Carex</i> sp.)
Engleman spruce	Rosy Pussytoes (<i>Antennaria rosea</i>)
Western larch (<i>Larix occidentalis</i>)	Brodiea (<i>Brodiea douglasi</i>)
Aspen (<i>Populus tremuloides</i>)	Lupine var species (<i>Lupinus</i> sp.)
Snowberry (<i>Symphoricarpos albus</i>)	Sticky geranium (<i>Geranium viscosissimum</i>)
Alder (<i>Alnus incana</i>)	Windflower (<i>Arenaria deltoidea</i>)
Kinnickinnick (<i>Arctostaphylos uva-ursi</i>)	Heartleaf arnica (<i>Arnica cordifolia</i>)
Pinegrass (<i>Calamagrostis rubescens</i>)	Prickly currant (<i>Ribes laeustre</i>)
Elk Sedge (<i>Carex geyeri</i>)	Snowberry (<i>Symphoricarpos albus</i>)
Wallowa paintbrush (<i>Castilleja chrysantha</i>)	Wild rose-various species (<i>Rosa</i> sp.)
Ballhead waterleaf (<i>Hydrophyllum capitatum</i>)	Ninebark (<i>Physocarpus malvaceus</i>)
Calypso orchid (<i>Calypso bulbosa</i>)	Thinleaf alder (<i>Alnus tenuifolia</i>)
Monument plant (<i>Frasera speciosa</i>)	Willow var. species (<i>Salix</i> sp.)
Lupine var species (<i>Lupinus</i> sp.)	Black cottonwood (<i>Populus trichocarpa</i>)
Western columbine (<i>Aquilegia formosa</i>)	Grand fir (<i>Abies grandis</i>)
Mountain Mahogany (<i>Cercocarpus ledifolius</i>)	Engleman spruce (<i>Picea engelmanni</i>)
Currant var. species (<i>Ribes</i> sp.)	Ponderosa pine (<i>Pinus ponderosa</i>)
Scouler's willow (<i>Salix scouleriana</i>)	Douglas fir (<i>Pseudotsuga Menziesii</i>)
	Western larch (<i>Larix occidentalis</i>)
<u>Mixed Conifer Forest NonNative Species</u>	
Dutch clover (<i>Trifolium repens</i>)	<u>Wetland Native Fungus</u>
Houndstongue (<i>Marrubium vulgare</i>)	Slippery jack fungus (<i>Suillus</i> sp.)
Meadow Hawkweed (<i>Pilosella caespitosa</i>)	Puffball (<i>Calvatia</i> sp.)
	<u>Wetland Nonnative Species</u>
	Houndstongue (<i>Marrubium vulgare</i>)
	Timothy (<i>Pleum</i> sp.)
	Orchardgrass (<i>Dactylis glomerata</i>)
	Oxeye daisy (<i>Leucanthemum vulgare</i>)
	Pasture buttercup (<i>Ranunculus acris</i>)
	Dutch clover (<i>Trifolium repens</i>)
	Red clover (<i>Trifolium pretense</i>)
	Canada thistle (<i>Cirsium arvense</i>)
This inventory was based on site visits and species identified on 04-21-2020, 06-02-2020, and 6-18-2020. The author of this inventory acknowledges that a more thorough inventory at varying times and sites could reveal additional species.	

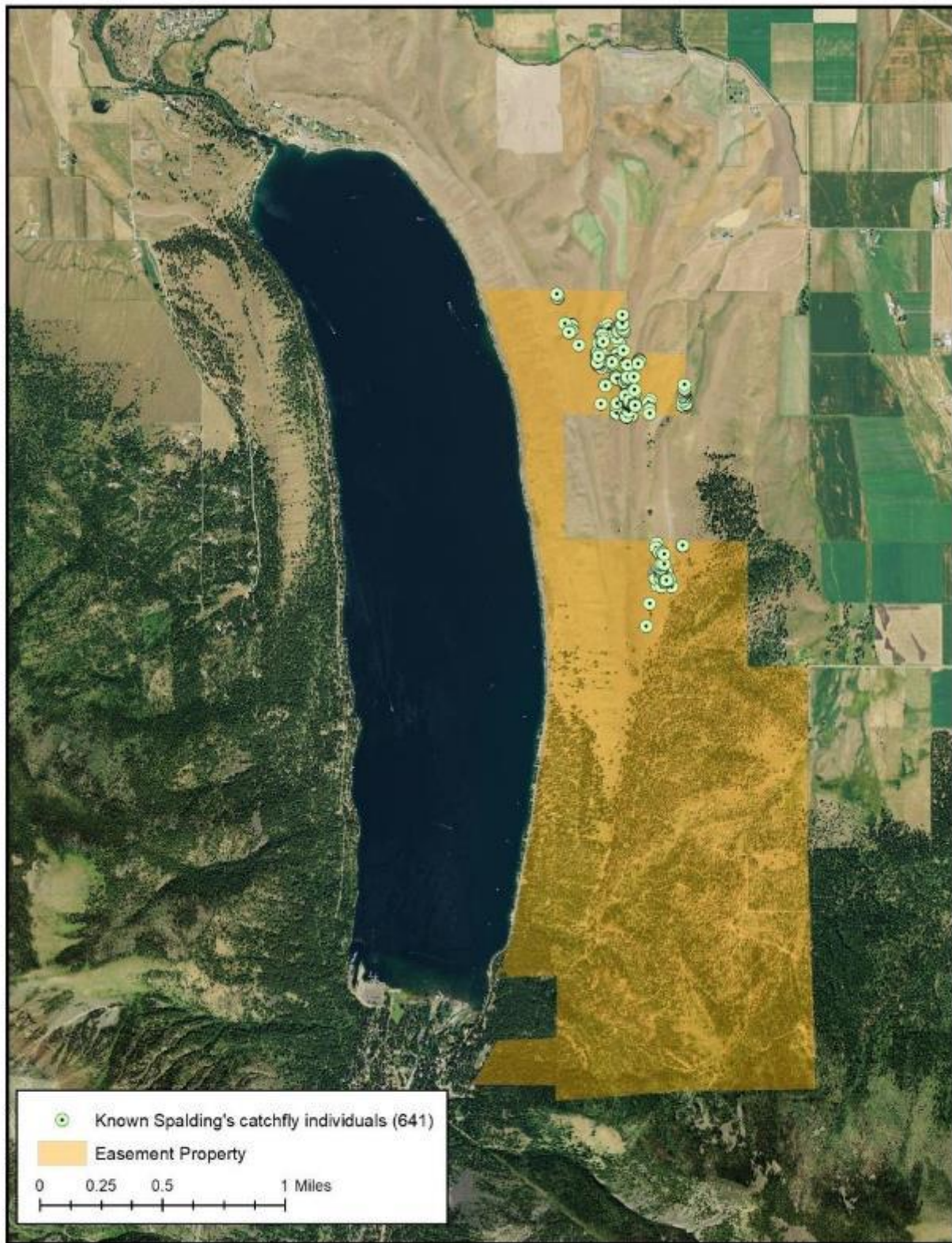
Appendix S-1: 2013 Weed Map



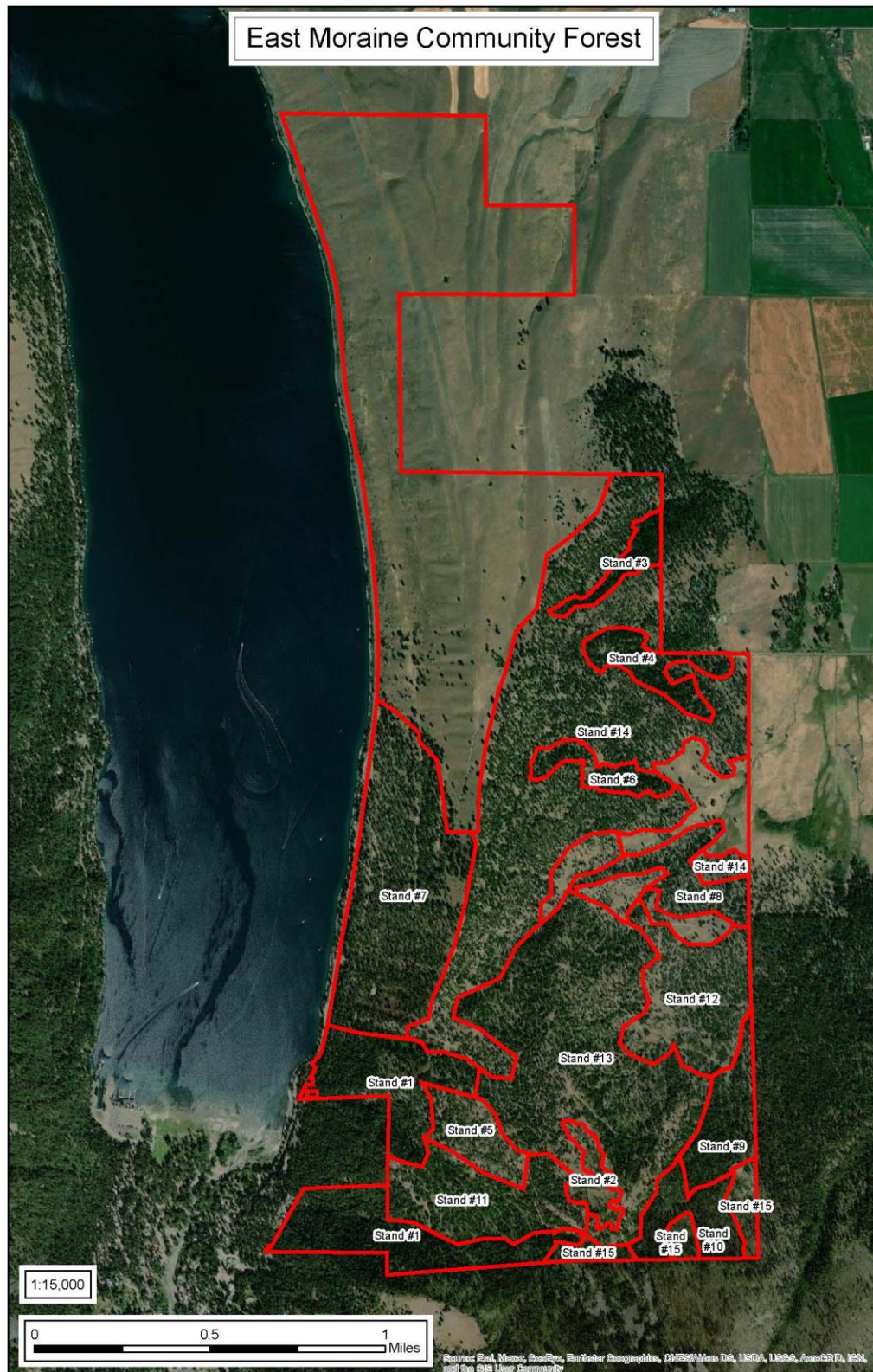
Appendix S-2: 2020 T-Listed Noxious Weed Map



Appendix T: Spalding's Catchfly Individual Locations Map



Appendix U: Stand Map and Stand Delineation



Stand 1

The stand consists of two polygons, totaling 125 acres. Dominated by Douglas fir (80% of stocking), other minor species are western larch, grand fir, and ponderosa pine. Basal area is 130 square feet per acre, consisting of 120 trees per acre (tpa), with an average diameter of 14". There is no discernible component of trees <7" diameter at breast height (dbh). A heavy cover of tall shrubs dominates the understory. Gross volume is 15.9 MBF per acre, estimated to grow to 20.4 MBF/acre in a decade. Scolytus (bark beetle) is active in the grand fir, with heavy mortality. Douglas fir and western larch have a moderate to heavy mistletoe infestation. Growth is moderate for codominant and dominant Douglas fir and ponderosa pine, and very slow for intermediate Douglas fir, ponderosa pine; and all western larch. Slopes average 60%, soils are rocky. Elevation ranges from 4470' to 6000'. Part of this stand is the parcel that OPRD contributed which is adjacent to the primary RY property. This 33-acre parcel has a residual component of large old ponderosa pine with an understory 100-120 year old Douglas fir and grand fir. There is evidence of historic fire throughout the parcel. Stand 1 lies adjacent to and above the highway to the head of Wallowa Lake

Recommendation: This stand is declining and overstocked. Recommended treatment is a restoration prescription, retaining approximately 80 square feet of basal area per acre, favoring ponderosa pine, western larch, and dominant Douglas fir with no higher than a moderate mistletoe infestation. Estimated volume recover is 9.5 MBF/acre, or 998 MBF considering the openings and lightly stocked ridgetop portions of the stand. There will have to be some road upgrading to allow equipment access to haul uphill with a cable system. Following the whole-tree yarding operation, it is expected that the understory tall shrub component will increase, with some establishment of natural regeneration, regenerating this stand is not the purpose of the restoration treatment. This will likely not be a site that can be burned following harvest activity, since it is adjacent to a high-use area at the head of the lake. Several homeowners border the western boundary of the former State Parks parcel, and at least one homeowner borders the southwestern boundary of the county property. Interaction with all bordering parties will be essential, from agreeing on boundary locations, to seeking to educate on why a harvest is happening in their backyards.

STAND 1 UPDATE 11/11/22:

A lack of capacity for long cable logging contractors has effectively put plans to commercially thin this stand on hold. Wallowa Land Trust now owns the 34-acre parcel surrounded on three sides by Stand 1. If the county can interest a contractor with tether capacity, or equipment capable of high lead yarding up to 2300', the Land Trust will be approached to determine whether they want to participate in the thinning operation.

Priority - High priority for restoration thinning via skyline logging. Will yield considerable volume.

Stand 2

This 15-acre stand consists of scattered residual trees following a heavy overstory harvest approximately 20 years ago, with a regeneration layer that is clumpy, but vigorous. The residuals consist primarily of grand fir, with scattered western larch, Douglas fir, and ponderosa pine, at a stocking of 30 trees per acre, clumpy, and 34 square feet of basal area. Gross volume per acre is an average of 3.0 MBF. The regeneration layer, also clumpy, consists of an average 775 trees per acre, of which an average of 200 tpa will likely thrive to merchantability. Growth in the regeneration layer is good to excellent. In the residual layer, the Douglas fir and western larch have a moderate to heavy dwarf mistletoe infestation. Slopes are less than 35%. The stand is in the Grand fir/Pinegrass plant association. Elevation ranges from 5670' to 6100'.

Recommendation: A pre-commercial thinning treatment in the regeneration layer would be beneficial, and should be done before the trees become tall enough to require a more expensive treatment. The residual overstory provides a structural component that is more valuable standing than harvested. A 15.3-acre pre-commercial thinning unit has been flagged and mapped. Recommended stocking target is 175 tpa, or 16' spacing, with an emphasis on retaining fire resistant, shade intolerant species (western larch, ponderosa pine) as first priority, Douglas fir and lodgepole pine as second priority, grand fir as third priority. Specs should be formulated to favor dominant and codominant trees of the preferred species, with provisions for grouping while retaining average trees per acre target.

Priority – high for pre-commercial thinning, particularly if cost-share funding is available.

STAND 2 UPDATE 11/10/2022:

The precommercial thinning and mulching was completed by Mike Witherrite, Mr. Timber Inc, and accepted by Larry Nall, Wallowa County representative, on October 16, 2022. After the ODF cost-share reimbursement, the county share of the cost is \$2486. There were no administrative or supply expenses, as they were donated.

The thinning specifications called for a nominal 16'x16' spacing, with a leave tree priority of western larch, ponderosa pine, Douglas fir, lodgepole pine/spruce, grand fir, in that order. Trees over 6" dbh were to be left, and older trees surviving from the original stand were to be left and ignored in the spacing, no matter the size of the tree. The acceptable residual range was specified as 160-215 tpa, with a target of 180 tpa. 29-1/100th ac plots were measured to evaluate contractor compliance and to describe the new residual stand.

The resulting primary stand has 193 tpa with an average diameter of 3.9". Species composition is western larch 43%, Douglas fir 26%, grand fir 17%, lodgepole pine 9%, Engelmann spruce 4%, subalpine fir 1%. The scattered older overstory consists of 30 tpa, with an average diameter of 14", dominated by grand fir (60% of stocking) of poor form and vigor. Western larch, Douglas fir, and ponderosa pine combine for 40% of the overstory stocking. The Douglas fir and western larch sustain a moderate to heavy dwarf mistletoe infestation. While the scattered overstory does not consist of vigorous, healthy trees, we still have a two-aged stand of diverse species stocking, with tremendous growth potential in the understory, and a much higher percentage of

fire-resistant species than that prior to treatment. The residual stand has a small representation of fairly open forestland (gaps), and small thickets of more tightly spaced trees (skips), lending to a more diverse stand structure and wildlife habitat.

Slash has been mulched.

Recommendation: Evaluate the stand in 25 years for suitability for commercial thinning.

Stand 3

The 14-acre stand is two-story, consisting of a light ponderosa pine/western larch overstory, with a ponderosa pine/grand fir understory that is largely commercial-sized. Total stocking is 85 square feet per acre, consisting of 85 tpa over 7" dbh, and 925 tpa under 7" dbh. Average commercial size is 11.8" dbh, but this is skewed higher by the overstory diameters. Gross volume per acre is 6.1 MBF, projected to grow to 10.1 MBF in a decade, reflecting the entry into commercial size of a significant proportion of the understory. The crop trees in the understory average 200 per acre, with an average dbh of 4", and are growing well. There is an active *Scolytus* infestation in the grand fir. The western larch has a light to heavy dwarf mistletoe infestation. Slopes are gentle. Elevation averages 4800'. The stand lies within the Grand fir/spiraea plant association. An intermittent stream runs through the stand.

Recommendation: There is some significant natural thinning due to the *Scolytus*, and growth is excellent. A commercial thinning treatment should be conducted in about ten years when the stand grows into a more commercially viable size.

Priority – Very low. Let grow. Reassess in ten years.

Stand 4

The stand is a 28-acre mix of predominantly ponderosa pine and Douglas fir, with a minor component of surviving grand fir from an active *Scolytus* infestation. The stand had a significant overstory removal 18 years ago. The commercial component of the stand averages 74 square feet, with 85 trees per acre, averaging 12.4" dbh. Total basal area, including trees <7" dbh is 86 sq ft per acre. Growth is excellent. Gross volume is 4.9 MBF per acre, with a projected decadal volume of 9.6 MBF. Trees less than 7" dbh average a clumpy 250 trees per acre, with crop trees averaging 50 tpa, at 2" average dbh. Elevation averages 4800', with a gentle slope. The stand lies within the Grand fir/pinegrass plant association.

Recommendation: Examine this stand in ten years for a commercial thinning treatment, when gross volume will support a revenue-positive operation. Growth will continue to be excellent, since the stand is not overstocked.

Priority – Very low. Let grow. Reassess in ten years.

Stand 5

This 29-acre stand is approximately 60 years old, and was commercially thinned approximately 11 years ago. Trees >7" average 60 tpa, with an average diameter of 10.8", and a basal area of 39 sq ft/acre. Volume per acre is indeterminate because so few trees yield a 32' log, and therefore no tariff value in the OSU cruise program. Trees <7" average 112 tpa, of which 25 tpa are DF 6" dbh crop trees. Looked at a little differently then, 85 tpa are over 6" dbh crop trees, with an average BA of 44 sq ft/acre. Growth is excellent. There appears to be some recent mortality in the Douglas fir, with some signs of root rot. The stand is in the Grand fir/Pinegrass plant association. Elevation is 5500'.

Recommendation: This stand has undergone stocking control and should be left to grow for 20 years. Monitor root rot mortality and consider favoring ponderosa pine in root rot pockets.

Priority – Very low. Let grow. Reassess in 15-20 years.

Stand 6

This 8-acre stand consists of an older layer of ponderosa pine, western larch, and Douglas fir, averaging 45 trees per acre, with an overstocked understory (0-7" dbh) of grand fir and Douglas fir, averaging 725 tpa". Trees likely to thrive to merchantability in the understory number 150 trees/acre, with an average diameter of almost 3". Basal area per acre for trees >7" is 80 square feet, with an average diameter of 13.0", with another 30 square feet for trees 1-7" dbh. Volume per acre is 9.2 MBF gross, 1.2 MBF of which is understory grand fir. There is a light mistletoe infestation in the western larch. Slopes are gentle. Growth in the understory is still very good, while overstory growth has slowed in the last five years. There is an active Scolytus infestation in the grand fir. The stand has been commercially thinned within the last 20 years. The stand is in the Grand fir/pinegrass plant association. Elevation is 4800'.

Recommendation: Re-evaluate in the next three years to assess grand fir mortality on overall stocking and the potential release of more fire-resistant species. A significant proportion of the grand fir less than 7" is close to becoming merch as pulp. The decision process should be based on pulp value and how much mortality has occurred. Pre-commercial thinning would be prohibitively expensive due to the size of the excess stocking.

Priority – Moderate. Reassess in three years for a commercial thin, and explore potential for costshare of simultaneous pre-commercial thinning.

STAND 6 UPDATE 11/10/2022

Stand 6 in the original reconnaissance for the East Moraine Community Forest Management Plan was estimated to be 8 acres, with a notation that the stand should be checked in three years to determine how grand fir mortality from Scolytus was progressing, and if the small component of grand fir trees less than 8" DBH was merchantable as pulp under present economic conditions.

Larry Nall has been monitoring the stand since that reconnaissance in May 2020, and have found that the Scolytus infestation has continued, probably due to the overstocking documented in the original stand volume estimates, and the continuing warming and drying we are experiencing.

He determined by mapping that the actual stand size is 18.7 acres, adding approximately 11 acres to the originally described stand. The added acreage is less dense, but fits better silviculturally with Stand 6 than Stand 14.

The stand was heavily harvested approximately 85 years ago, after which a heavy component of natural regeneration of mixed species became established. Remnant pole sized trees were left because they were not merchantable, and these trees, averaging about 140 years of age, comprise a light overstory dominated by western larch, Douglas fir, and ponderosa pine. The middle story, approximately 85 years old, is dominated by grand fir, with lesser stocking of Douglas fir, western larch, and ponderosa pine. This story was dramatically released following a commercial thinning in the early 1990's, allowing the understory to put on excellent diameter increment for the last 28 years. The understory, 15-50 years of age, is dominated by grand fir, but there is a viable stocking of Douglas fir, western larch, and ponderosa pine, which are more fire resistant and better adapted to a warming climate. 184 trees per acre were determined to be crop trees in the third story, but 90 of those crop trees are grand fir, with another 30 Douglas fir, 60 western larch, and 4 ponderosa pine per acre.

Larry sampled the expanded Stand 6 with much better cruising software than during the formulation of the FMP. Merchantable basal area is 65 sq ft, with an additional 15 sq ft in the third layer, but that third layer has a stocking of 720 trees per acre. Grand fir averages 2.9 MBF/acre. Douglas fir, western larch, and ponderosa pine average 3.0 MBF/acre.

Prescription

Harvest merchantable grand fir that is competing with viable overstory and middle story western larch, Douglas fir, and ponderosa pine. Harvest merchantable grand fir if a viable understory crop tree is within 20 feet and can be left undamaged by the operation. Harvest Douglas fir middle story trees only if they are within 8 feet of another desirable species (western larch, Douglas fir, ponderosa pine). Harvest will be by prescription at the discretion of the feller/buncher operator, with near daily supervision by the prescribing forester. The harvest operation will be restricted to winter, prior to the March breakup, when the soil is protected by snow. Allow tree length yarding to bring limbs and tops to the landing, so long as damage to understory crop trees is minimized. Burn slash piles the following fall/winter after curing.

The resulting stand is intended to have a reduced stocking level, a higher percentage of desirable fire and drought resistant species, and an optimal three-age structure. Further mortality by *Scolytus* in the grand fir should be minimized by a significant reduction in vulnerable grand fir stocking. This will be a revenue-positive harvest treatment.

Evaluate the need for precommercial thinning by sampling the remnant stand after the operation is complete.

Stand 7

The stand, 156 acres, is composed of Douglas fir and ponderosa pine, 33 trees per acre, with an average DBH of 23". Basal area is 93 square feet per acre. The understory is very clumpy, with an

average of 225 trees per acre, primarily Douglas fir seedlings and small saplings. Only 50 trees per acre under 7" dbh were considered crop trees, indicating that in openings, seedlings and small saplings are densely grouped, and most are excess due to crowding. Gross volume per acre is 14 MBF, with a decadal projection to 16.5 MBF. Growth is excellent. There is a light mistletoe infestation in the Douglas fir. Slopes average 55%. The stand is in the Douglas fir/Rocky Mountain maple-ninebark plant association, and has a heavy component of tall shrubs. Elevation ranges from 4470' to 5200'. The stand lies adjacent to and above the highway to the head of Wallowa Lake.

Recommendation: Current growth is excellent and the structure is optimal. The stand is not overstocked. Re-examine the stand in ten years.

Priority – Very low. Let grow. Reassess in ten years.

Stand 8

This 36-acre stand consists of a Douglas fir, western larch, and ponderosa pine overstory, with a grand fir/Douglas fir understory of poles and saps/seedlings. The total merchantable basal area is 77 sq ft/acre, with 64 tpa. Average diameter is 14". The 0-7" dbh understory averages 240 tpa, of which 120 will probably thrive to merchantability, with an average dbh of 2". Gross volume per acre is 7.4 MBF, growing to 12.5 MBF in ten years due to the excellent growth in both stories. There is a light mistletoe infestation in the western larch, and light mortality in the grand fir due to Scolytus. The stand was commercially thinned approximately 10 years ago. The stand is in the Grand fir/spiraea plant association. Slopes are gentle. A red-tailed hawk obviously nests in the stand. A non-fish bearing perennial stream runs through the stand which would require a buffer. Elevation is 4850'.

Recommendation: The stand is growing very well, with very good stocking and structure. Re-evaluate in 10 years for another commercial thinning if basal area exceeds 100 sq. ft.

Priority – Very low. Let grow. Reassess in ten years.

Stand 9

This 35-acre stand was high-graded approximately 30 years ago, leaving a mixed species stand composed of grand fir and Douglas fir, with scattered western larch, lodgepole pine, and ponderosa pine. Basal area of trees >7" is 77 sq ft, with an average of 113 trees per acre. Average stand diameter is 11.1". Average gross volume is 6.9 MBF per acre. Douglas fir and larch have a moderate/heavy mistletoe infestation. Slopes average 55%, so any harvesting would be by cable system. Growth is slow to moderate. The stocking of trees <7" DBH is grouped, with an average of 1000 trees per acre, 10 sq ft of basal area, of which 25 tpa would likely make it to maturity, the remainder being suppressed. The stand is in the Grand fir/twinflower plant association. Elevation ranges from 5300' to 5850'.

Recommendation: Only approximately 3.5 MBF per acre would be available for harvest under a restoration prescription, which is light for a cable unit. The stand should be left to grow for ten

years, at which time volume per acre is projected to be 9.0 MBF, with around 4.5 available for harvest.

Priority – Low. Reassess in ten years for restoration treatment.

Stand 10

This 33-acre stand is mixed-species, consisting primarily of lodgepole pine and grand fir, with western larch, Engelmann spruce, Douglas fir, and subalpine fir, and has not been harvested. Stocking of trees >7" is an average 130 trees per acre, with an average basal area of 111 square feet. Average stand diameter is 12" dbh. Average gross volume per acre is 10.8 M, with a decadal growth to 14.5 MBF gross. The lodgepole pine is fading due to over-maturity and a moderate to heavy mistletoe infestation. Stocking of trees <7" dbh is 875 tpa, with an impressive 250 tpa likely to reach merchantable size. Total basal area per acre is 120 sq ft, including the trees <7" dbh. There is a heavy tonnage of down woody material. The slope averages 45%. The stand is in the Subalpine fir/Grouse huckleberry-skunk leaved polemonium plant association. Elevation is 5750' to 6400'.

Recommendation: A stocking control harvest, be it a commercial thinning or a restoration treatment, would not be financially feasible at current timber prices, due to higher costs of cable logging, and the lower value of the primary species to be removed (lodgepole pine and grand fir). While the lodgepole pine mortality is a toss-up, other species are growing well, including trees <7". Re-evaluate if timber prices for lodgepole pine and grand fir, or pulp, improve by 35-50%.

Priority – Moderate. Reassess periodically for a commercial thin if log markets improve.

Stand 11

This 69-acre stand is clumpy and overstocked, regenerating from a heavily cutover harvest more than thirty years ago, and consists of a mix of western larch, grand fir, ponderosa pine, Douglas fir, and an occasional lodgepole pine. Stocking of trees greater than 7" is 125 tpa, with an average basal area of 76 sq ft. Average diameter is 10.5". Gross volume per acre is 5.5 MBF, with a predicted ten-year growth to 8.7 MBF. Growth is good to excellent. Trees less than 7" are stocked at 750 tpa, with a crop tree stocking of 100 tpa, primarily in clumps of pre-commercial size. Considering the 15 sq ft in the pre-commercial size, total stocking is 91 sq ft/acre. The stand age of commercial-sized trees averages 55 years of age. Slopes range from gentle to 60%. The stand is in the Grand fir/twinflower plant association. Elevation ranges from 5200' to 6050'.

Recommendation: There are significant clumps of pre-commercial trees intermixed with a light stocking of commercial-sized trees. These clumps are intermingled with clumps of trees over 7". Because the stocking is growing well, waiting ten years until the pre-commercial clumps are commercial makes sense economically. This would also benefit the overall stand condition and growth. Commercially thinning now would only yield about 2 MBF per acre, and would leave large portions of the stand in need of pre-commercial thinning, when many of those excess trees would be commercial in ten years.

Priority – Low. Plan for commercial thin in ten years.

Stand 12

Apparently regenerated following fire, this 74-acre stand is well-stocked with some holes, dominated by grand fir, with 20% lodgepole pine and 20% Douglas-fir/western larch. Trees over 7" DBH average 103 per acre, with an average BA of 50 sq ft. Volume is 1.8 MBF/acre. Average diameter is 9.4". Diameter growth is vigorous, averaging close to 4" per decade. Projected decadal growth is to a volume of 4.7 MBF/acre. The stocking of trees <7" is dominated by grand fir, averaging 75 tpa, all excess. Dead grand fir (*Scolytus* mortality) average 28 trees per acre. The stand is in the Grand fir/Rocky Mountain mapleninebark plant association. Elevation is 4940' to 5200'.

Recommendation: Growth is excellent in all species, and the stand is not overstocked. Further mortality in grand fir is expected, which is a de facto self-thinning. Reassess in ten years for feasibility of a commercial thin.

Priority – Low. Reassess for commercial thin in ten years.

Stand 13

This 227-acre stand consists of mostly Douglas fir and grand fir stocking, with an occasional ponderosa pine, Engelmann spruce, western larch, and lodgepole pine. With an average diameter of 11", the stand is residual from a high grade operation approximately 20-30 years ago. Douglas fir and western larch has light to heavy mistletoe, while grand fir has a high cull component from stem rot and poor form, as well as an active *Scolytus* infestation. BA is 48 sq ft per acre, with 73 trees per acre >7". There is an average of 312 trees <7" per acre, with only 71 tpa rated as likely to survive to merchantability, mostly DF seedlings. About half of the residual stand is rated acceptable to leave. Gross volume per acre is 3.0 MBF, with a decadal growth to an estimated 4.0 MBF/acre gross. The stand ranges from the Grand fir/Pinegrass to the Grand fir/Twinflower plant associations depending on aspect and cover. Elevation ranges from 4970' to 6020'. Slopes average around 40%. The site was tractor logged in the prior entry, with no apparent erosion after approximately 30 years.

Recommendation: There is not enough volume to harvest at this point. The scattered pine, Douglas fir, and western larch would be left as residual trees and would not contribute to harvest volume per acre. This stand may best serve as wildlife habitat, and allow further natural regeneration to stock the stand as the older trees decline. It may be that small pockets of group selection (up to 5 acres) can be found upon more intensive surveillance that would pay for harvesting, and would provide early seral microsites which are in short supply over the forest. It is an example of the negative long-term effects of high grading.

Priority – Very low. Let grow. Reassess in ten years.

STAND 13 UPDATE 11/22/22

This 231-acre stand consists of mostly Douglas fir and grand fir stocking, with an occasional ponderosa pine, Engelmann spruce, western larch, and lodgepole pine. With an average diameter of 11", the stand is residual from a high grade operation approximately 20-30 years ago. Douglas fir and western larch has light to heavy mistletoe, while grand fir has a high cull component from stem rot and poor form, as well as an active Scolytus infestation. BA is 48 sq ft per acre, with 73 trees per acre >7". There is an average of 312 trees <7" per acre, with only 71 tpa rated as likely to survive to merchantability, mostly DF seedlings. About half of the residual stand is rated acceptable to leave. Gross volume per acre is 3.0 MBF, with a decadal growth to an estimated 4.0 MBF/acre gross. The stand ranges from the Grand fir/Pinegrass to the Grand fir/Twinflower plant associations depending on aspect and cover. Elevation ranges from 4970' to 6020'.

Slopes average around 40%. The site was tractor logged in the prior entry, with no apparent erosion after approximately 30 years.

Recommendation: There is not enough volume to harvest at this point. The scattered pine, DF, and larch would be left as residual trees, so would not contribute to harvest volume per acre. The best prescription for this stand may be to leave it as wildlife habitat, and allow further natural regeneration to stock the stand as the older trees decline. It may be that small pockets of group selection (up to 5 acres) can be found upon more intensive surveillance that would pay for harvesting, and would provide early seral micro-sites which are in short supply over the forest. Another example of the negative long-term effects of high grading.

Stand 14

Two stands, 344 and 7 acres, totaling 351 acres, consist of PP and DF, 96 sq ft per acre, with 26 tpa 17" or over. PP comprises 67% of the basal area, DF 33%. Trees over 17" are in the 110-140 year range, with the trees under 17" generally in the 40-80 year old range. Total 7"+ stocking is 75 tpa. Trees are in good condition and growing very well, with diameter growth averaging around 2.6" per decade. Grand fir, while a very small percentage of stocking, is dead or dying of Scolytus. Average volume of the commercial trees is 10.0 MBF per acre. Projected decadal growth is to a volume of 14.2 MBF/acre. The stand is in the Grand fir/spiraea plant association. Elevation ranges from 4580' to 5460'. 1-7" stocking is light, with a total of 188 tpa, averaging 3", averaging 9 sq ft of basal area per acre. Of this stocking, acceptable crop tree stocking is 62 tpa with an average dbh of 4". Excess trees are largely due to spacing rather than site conditions.

Recommendation: Let the stand grow and increase volume for the next ten years. Structure is ecologically optimal, with three general age classes, and a healthy component of large-diameter trees older than 120 years.

Priority – Low. Plan for selective harvest in ten years.

STAND 14 UPDATE 11/11/2022

Two stands, 333 and 7 acres, totaling 340 acres, consist of PP and DF, 96 sq ft per acre, with 26 tpa 17" or over. PP comprises 67% of the basal area, DF 33%. Trees over 17" are in the 110-140-year range, with the trees under 17" generally in the 40-80 year-old range. Total 7"+ stocking is 75 tpa. Trees are in good condition and growing very well, with diameter growth averaging around 2.6" per decade. Grand fir, while a very small percentage of stocking, is dead or dying of Scolytus. Average volume of merch trees is 10.0 MBF per acre. Projected decadal growth is to a volume of 14.2 MBF/acre. The stand is in the Grand fir/spiraea plant association. Elevation ranges from 4580' to 5460'.

1-7" stocking is light, with a total of 188 tpa, averaging 3", averaging 9 sq ft of basal area per acre. Of this stocking, acceptable crop tree stocking is 62 tpa with an average dbh of 4". Excess trees are largely a spacing rather than condition issue.

Recommendation: Let the stand grow and increase volume for the next ten years. Structure is ecologically optimal, with three general age classes, and a healthy component of large-diameter trees older than 120 years.

Stand 15

The stand consists of three patches totaling 24 acres that burned approximately 30 years ago, and is in the first stage of restoration. Scattered western larch and Douglas fir overstory survived the fire, with an understory of stocked regeneration dominated by grand fir, western larch, and Douglas fir seedlings and saplings. Tall shrubs are a significant part of the understory. There is no appreciable volume left, and the overstory survivors are important for seed and shelter. Slopes average around 50%. The stand is in the Grand fir/Rocky Mountain maple/ninebark plant association. Elevation is 6100' at its midpoint.

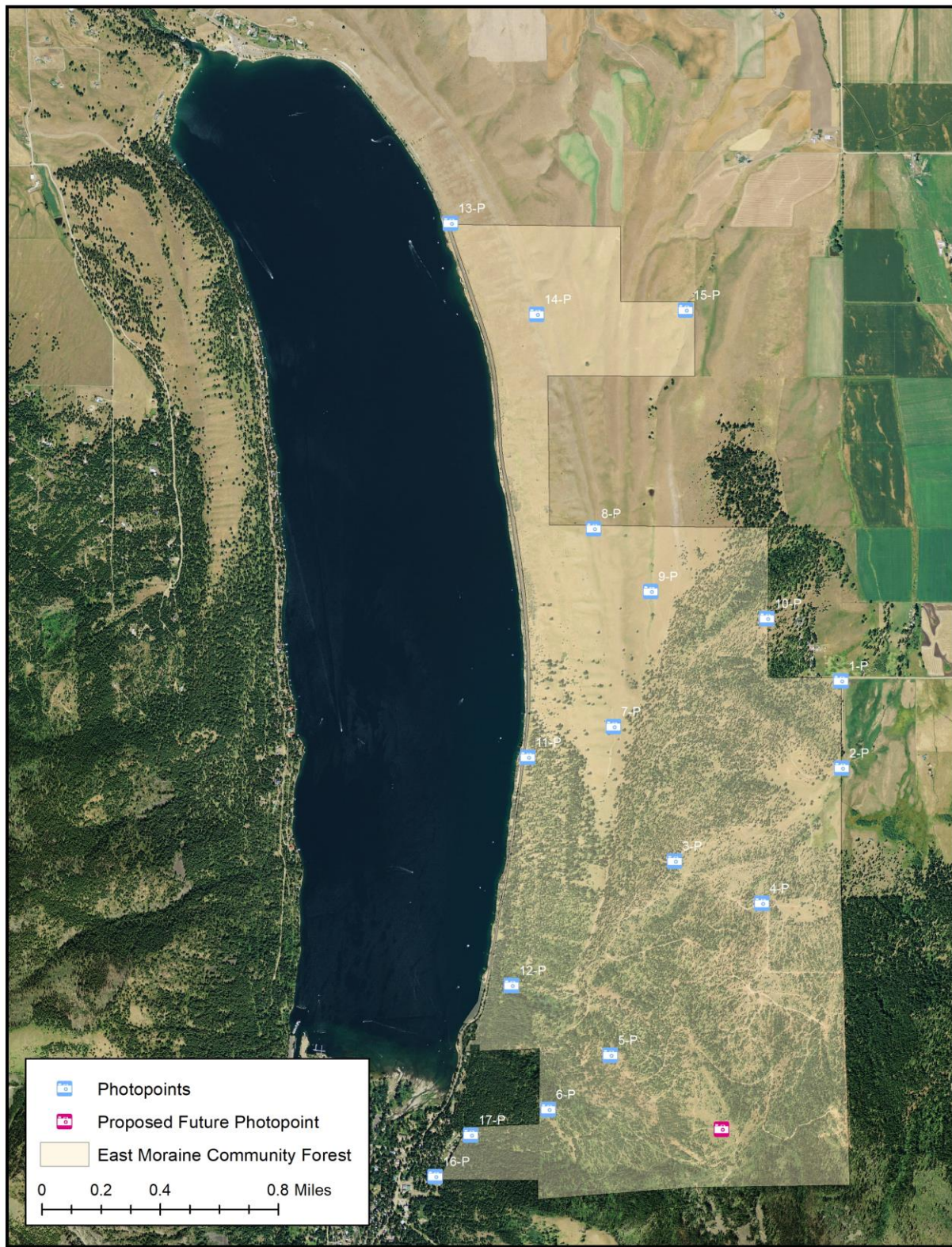
Recommendation: These stands are early seral, which is an under-represented structural stage on the forest. No management activity recommended.

Priority – Very low. Let grow. Reassess in ten years.

Appendix V: Aerial Photo



Appendix W: Photopoint Monitoring Map and Photo Database



Photopoint	Direction	Latitude, Longitude Description of Photo Point Location	Description of view
1-P	SW 234°	Lat: 45.3037182° Long: -117.17687029° 5-10ft from photopoint location (green post) in center of main road/trail	Green post (5ft away from main trail/road); Large field eventually meeting forest of conifers (moved photopoint from center of field to green post)
1-1	SW 236°	Lat: 45.30362174° Long: -117.17705716° Final Green post from large/main gate on west side of trail/main road	Large field meets forested area (conifers)
1-2	W 94°	Lat: 45.30362174° Long: -117.17705716° Final Green post from large/main gate on west side of trail/main road	Large field with main fence line on the north west side; field meets forest of conifers
1-3	S 208°	Lat: 45.30362174° Long: -117.17705716° Final Green post from large/main gate on west side of trail/main road	Southern part of field meets forested area; 5-10ft from trail/road
1-4	S 190°	Lat: 45.30362174° Long: -117.17705716° Final Green post from large/main gate on west side of trail/main road	Main road/trail; fence line on the east side of trail/road and forest line on west side
1-5	NE 46°	Lat: 45.30362174° Long: -117.17705716° Final Green post from large/main gate on west side of trail/main road	Main trail/road and main entrance/large gate; fence line on east side
2-P	NE 56°	Lat: 45.29942866° Long: -117.17678974° Small boulder 20-30ft W/SW of point (cottonwood)	3ft from base of Cottonwood tree; W side of fence line
2-1	S 182°	Lat: 45.29945275° Long: -117.17679653° On the S side 3ft from base of Cottonwood tree	Upstream view of prairie creek; Property fence line along stream on E side; mountains in background
2-2	N 12°	Lat: 45.29945275° Long: -117.17679653° On the S side 3ft from base of Cottonwood tree	Downstream view as prairie creek crosses property line; fence line in back ground
2-3	SW 218°	Lat: 45.29945275° Long: -117.17679653° On the S side 3ft from base of Cottonwood tree	Open field area; forest line and main trail in background
3-P	SE 148°	Lat: 45.29484195° Long: -117.18842030° 20-30ft NW of stumps (below spruce tree) on west side of trail	Cluster of cut down stumps, 3ft from base of conifer (spruce); 5-10ft from S/SE side of main trail/road
3-1	W/NW 308°	Lat: 45.29480379° Long: -117.18839616° Cluster of cut down stumps (below spruce tree) on west side of trail/road	Uphill view through thin forested area
3-2	N 16°	Lat: 45.29480379° Long: -117.18839616° Cluster of cut down stumps (below spruce tree) on west side of trail/road	Main trail/road through forested area heading north
3-3	S/SW 224°	Lat: 45.29480379° Long: -117.18839616° Cluster of cut down stumps (below spruce tree) on west side of trail/road	Main trail/road through forested area heading S/SW
3-4	S 180°	Lat: 45.29480379° Long: -117.18839616° Cluster of cut down stumps (below spruce tree) on west side of trail/road	Small field south of photopoint/trail; forested area surrounding
4-P	S 174°	Lat: 45.29275989° Long: -117.18234711° 30ft North from point; North side of trail	Large stump; 10-15ft from main road/trail; conifer forest in background
4-1	W 276°	Lat: 45.29271006° Long: -117.18248678° Large stump surrounded by conifer forested area; 10-15ft S from main road/trail	Main road/trail heading west; Forested area surrounding
4-2	NW 324°	Lat: 45.29271006° Long: -117.18248678° Large stump surrounded by conifer forested area; 10-15ft S from main road/trail	Field with stumps of trees scattered throughout; forest line in background
4-3	NE 74°	Lat: 45.29271006° Long: -117.18248678° Large stump surrounded by conifer forested area; 10-15ft S from main road/trail	Main road/trail heading east; forested area surrounding

5-P	W 292°	Lat: 45.28527149° Long: -117.19287453° 20-30ft NE from main trail/road; 20-30ft SE of point	Pistol butt tree (Larch); 5-10ft NE from Main trail/road; view of main trail/road
5-1	E 106°	Lat: 45.28527244° Long: -117.19292085° Base of J-shaped tree (Larch); 5-10ft from main trail/road	Small land slide area; conifer forest line in background
5-2	N 32°	Lat: 45.28527244° Long: -117.19292085° Base of J-shaped tree (Larch); 5-10ft from main trail/road	Small field area (base of land slide area); conifer forested area in background
5-3	SE 158°	Lat: 45.28527244° Long: -117.19292085° Base of J-shaped tree (Larch); 5-10ft from main trail/road	Main road/trail heading East; conifer forested are and mountains in background
5-4	W 302°	Lat: 45.28527244° Long: -117.19292085° Base of J-shaped tree (Larch); 5-10ft from main trail/road	Main road/trail heading West; conifers surrounding trail
6-P	NW 348°	Lat: 45.28260391° Long: -117.19716866° 10-15ft from point; south side of road leading to radio tower	Small boulder 5ft from the base of Larch tree; uphill view; radio tower in background
6-1	E 126°	Lat: 45.28272579° Long: -117.19706534° Small boulder 5ft from base of Larch tree; along road up to radio tower	Downhill view of "road" leading to tower; conifers surrounding
6-2	S 178°	Lat: 45.28272579° Long: -117.19706534° Small boulder 5ft from base of Larch tree; along road up to radio tower	View across road to radio tower; line of conifers; large forested area in back ground
6-3	NW 316°	Lat: 45.28272579° Long: -117.19706534° Small boulder 5ft from base of Larch tree; along road up to radio tower	Uphill view of radio tower and surrounding conifers
7-P	W 270°	Lat: 45.30143889° Long: -117.19271645° 10-15ft from East side of photopoint ; 10-15ft from west side of main road/trail	Fence post with boulder directly at base overlooking lake and mountains
7-1	E 106°	Lat: 45.30154580° Long: -117.19285132° East side of lake/highway and east side of fence line; about 20ft from main road/trail	Main road/trail; large boulder in field directly across from photopoint as focal point with surrounding conifers
7-2	SE 150°	Lat: 45.30154580° Long: -117.19285132° East side of lake/highway and east side of fence line; about 20ft from main road/trail	Main road/trail; large shrubbery and surrounding boulders; mountains as background
7-3	NE 54°	Lat: 45.30154580° Long: -117.19285132° East side of lake/highway and east side of fence line; about 20ft from main road/trail	Cluster of boulders toward left side of image (going north on trail) and conifers to right side of image (going south on trail)
8-P	NW 344°	Lat: 45.31118230° Long: -117.19412888° 5ft from last standing fence post; 20-30ft S from point	Fallen fence post surrounded by cluster of boulders; Property fenceline and lake in background
8-1	S 172°	Lat: 45.31096532° Long: -117.19404101° Fallen fence post surrounded by cluster of boulders; NW from main trail	Old fence line along the E. Moraine; Fielded area with mountains in background
8-2	SW 222°	Lat: 45.31096532° Long: -117.19404101° Fallen fence post surrounded by cluster of boulders; NW from main trail	Fielded area; downhill view leading up to edge of E. Moraine; lake and mountains in background
8-3	W 272°	Lat: 45.31096532° Long: -117.19404101° Fallen fence post surrounded by cluster of boulders; NW from main trail	Downhill view along property fence line on N/NW side; lake, W. Moraine and mountains in background
8-4	E 86°	Lat: 45.31096532° Long: -117.19404101° Fallen fence post surrounded by cluster of boulders; NW from main trail	Property fenceline heading E; large fielded area on SE side

8-5	SE 130°	Lat: 45.31096532° Long: -117.19404101° Fallen fence post surrounded by cluster of boulders; NW from main trail	Fielded area; cluster of boulders throughout; mountains in background
9-P	NW 336°	Lat: 45.30810116° Long: -117.19014019° 10-15 ft SE of point	Large water trough; uphill view of back side (East side) of E. Moraine in background
9-1	S 180°	Lat: 45.30817421° Long: -117.18968597° Water trough; W corner of water trough closest to main trail	South
9-2	N 0°	Lat: 45.30817421° Long: -117.18968597° Water trough; W corner of water trough closest to main trail	North
9-3	W 270°	Lat: 45.30817421° Long: -117.18968597° Water trough; W corner of water trough closest to main trail	West- up hill
9-4	E 90°	Lat: 45.30817421° Long: -117.18968597° Water trough; W corner of water trough closest to main trail	East-up hill
10-P	E 98°	Lat: 45.30676655° Long: -117.18204235° 10-15ft from base of ponderosa pine; 40-50ft W of point	Fence line of property; Yellow property sign posted E side of fence
10-1	S 182°	Lat: 45.30681700° Long: -117.18204314° "X" shaped crossboard to the fence on west side of fence line	Fence line on East side heading South; forested area and mountains in background
10-2	SW 232°	Lat: 45.30681700° Long: -117.18204314° "X" shaped crossboard to the fence on west side of fence line	Small fielded area with surrounding conifers
10-3	W 304°	Lat: 45.30681700° Long: -117.18204314° "X" shaped crossboard to the fence on west side of fence line	West side of small fielded area with surrounding conifers
10-4	N 358°	Lat: 45.30681700° Long: -117.18204314° "X" shaped crossboard to the fence on west side of fence line	Fence line on East side heading North; low hanging ponderosa pine on west side
11-P	SE 140°	Lat: 45.29992612° Long: -117.19866592° Second boulder from gate on south side of trail	Ponderosa used as the photo point location
11-1	SW 217°	Lat: 45.29987081° Long: -117.19868550° West of tree (ponderosa) 3ft from base of trunk	Powerline and main trail
11-2	NW 335°	Lat: 45.29987081° Long: -117.19868550° West of tree (ponderosa) 3ft from base of trunk	Green gate and main trail
12-P	SW 200°	Lat: 45.28870518° Long: -117.19977108° Side of road/trail just north of water crossing	Photopoint 15 with lake in background
12-1	SE 110°	Lat: 45.28897613° Long: -117.19982877° East side of road/trail (pink flagging) to Photopoint 15	Spring/creek over road
12-2	NE 42°	Lat: 45.28897613° Long: -117.19982877° East side of road/trail (pink flagging) to Photopoint 15	Road/trail & cut bank
12-3	SW 240°	Lat: 45.28897613° Long: -117.19982877° East side of road/trail (pink flagging) to Photopoint 15	Road/trail & lake in background
13-P	NW 336°	Lat: 45.32617225° Long: -117.20414316° 5-10ft S/SE from point; fence line on west side	Large boulder along east side of fence line; Wallowa highway on SW side; meeting point of fence lines (perpendicular); slight uphill view of E. Moraine in background

13-1	NE 78°	Lat: 45.32583940 Long: -117.20384057° First large boulder from meeting point of fenceline; E side of fence line along Wallowa Lake highway	Uphill view; neighboring fence line on NW side
13-2	SE 160°	Lat: 45.32583940 Long: -117.20384057° First large boulder from meeting point of fenceline; E side of fence line along Wallowa Lake highway	Fence line and Wallowa highway on SW side; cluster of boulders E/NE of fence line; slight uphill view of E. Moraine in background
13-3	E 106°	Lat: 45.32583940 Long: -117.20384057° First large boulder from meeting point of fenceline; E side of fence line along Wallowa Lake highway	Uphill view of E. Moraine; cluster of boulders directly in front (east) of point
14-P	SW 246°	Lat: 45.32170360° Long: -117.19812739° Center of main trail; 5-10ft SW of fence line; 40- 50ft NE/E of point (boulder)	Large boulder, 50ft from fence line; Lake and mountains/ W. Moraine in background
14-1	NE 76°	Lat: 45.32162287° Long: -117.19766433° Large boulder 50ft SW of fence line	Fence line NE of point; main trail slightly visible directly below fence; private land view in background
14-2	SE 160°	Lat: 45.32162287° Long: -117.19766433° Large boulder 50ft SW of fence line	Fence line along main trail heading SE; Mountains in background
14-3	N 358°	Lat: 45.32162287° Long: -117.19766433° Large boulder 50ft SW of fence line	Fence line along main trail heading North
14-4	NW 322°	Lat: 45.32162287° Long: -117.19766433° Large boulder 50ft SW of fence line	Open field area along E. Moraine drop-off; Lake in side ground
15-P	NE 32	Lat: 45.32193729° Long: -117.18774851 Galvanized fence post at northwest corner	Galvanized fence post at northwest corner - NOTE: PHOTO TAKEN FALL 2020
15-1	W 255°	Lat: 45.32193729° Long: -117.18774851 Galvanized fence post at northwest corner	north fence line near cattle watering area - NOTE: PHOTO TAKEN FALL 2020
15-2	SW 212°	Lat: 45.32193729° Long: -117.18774851 Galvanized fence post at northwest corner	cattle watering area and slop toward the crest of the East Moraine - NOTE: PHOTO TAKEN FALL 2020
15-3	SE 160°	Lat: 45.32193729° Long: -117.18774851 Galvanized fence post at northwest corner	east fence line near cattle watering area in the northwest corner of property NOTE: PHOTO TAKEN FALL 2020
16-P	NE 88°	Lat: 45.27928845° Long: -117.20505847° 5-10ft East of State Park boundary stake	State park boundary stake with slight uphill view
16-1	E 124°	Lat: 45.27919297° Long: -117.20492945° State park boundary stake; 5-10ft from housing on the east side of point indicator	Uphill view of cut bank; fallen rocks and debris
16-2	NE 77°	Lat: 45.27919297° Long: -117.20492945° State park boundary stake; 5-10ft from housing on the east side of point indicator	Slight uphill view; fallen debris and snag north of photopoint
16-3	S 183°	Lat: 45.27919297° Long: -117.20492945° State park boundary stake; 5-10ft from housing on the east side of point indicator	Cliff side, slight uphill view; orange flagged conifer as focal point, surrounded by conifers
17-P	SE 156°	Lat: 45.28133154° Long: -117.20258790° 40ft N of snag- above access road	Photopoint location: Used a large snag as we could not find any property boundary markers or good land mark.
17-1	N 0°	Lat: 45.2816335° Long: -117.20272197° N side of tree - moved around tree for photos	North
17-2	E 90°	Lat: 45.2816335° Long: -117.20272197° E side of tree - moved around tree for photo	East- up hill
17-3	S 180°	Lat: 45.2816335° Long: -117.20272197° S side of tree - moved around tree for photo	South
17-4	W 270°	Lat: 45.2816335° Long: -117.20272197° W side of tree - moved around tree for photo	West

Appendix X: Documentation Photos

Photographer: Kel Hoffman	Date: 10/12/2022 – 10/13/2022
	
Photopoint (number and direction): 1-P SW 234°	Photopoint: 1-1 SW 236°
	
Photopoint: 1-2 W 94°	Photopoint: 1-3 S 208°
	

Photopoint: 1-4 S 190°	Photopoint: 1-5 NE 46°
	
Photopoint: 2-P NE 56°	Photopoint: 2-1 S 182°
	
Photopoint: 2-2 N 12°	Photopoint: 2-3 SW 218°
	
Photopoint: 3-P SE 148°	Photopoint: 3-1 W/NW 308°



Photopoint: 3-2 N 16°



Photopoint: 3-3 S/SW 224°



Photopoint: 3-4 S 180°



Photopoint: 4-P S 174°



Photopoint: 4-1 W 276°



Photopoint: 4-2 NW 324°



Photopoint: 4-3 NE 74°



Photopoint: 5-P W 292°



Photopoint: 5-1 E 106°



Photopoint: 5-2 N 32°



Photopoint: 5-3 SE 158°



Photopoint: 5-4 W 302°

	
Photopoint: 6-P NW 348°	Photopoint: 6-1 E 126°
	
Photopoint: 6-2 S 178°	Photopoint: 6-3 NW 316°
	
Photopoint: 7-P W 270°	Photopoint: 7-1 E 106°



Photopoint: 7-2 SE 150°



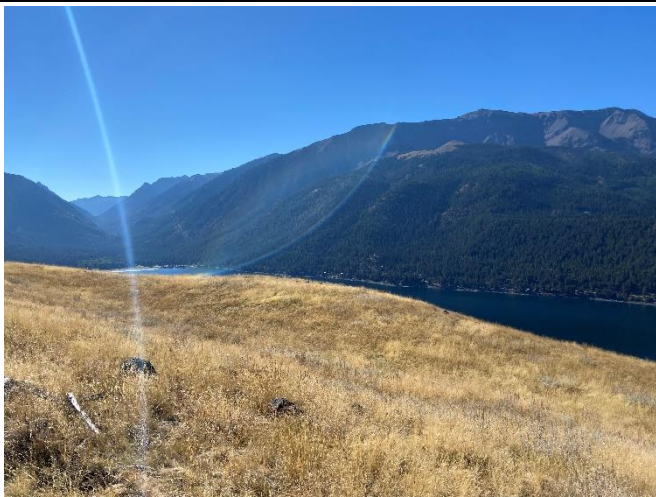
Photopoint: 7-3 NE 54°



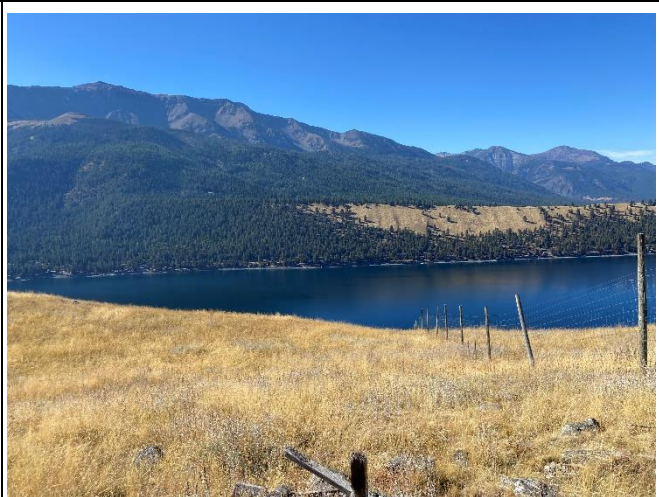
Photopoint: 8-P NW 344°



Photopoint: 8-1 S 172°



Photopoint: 8-2 SW 222°



Photopoint: 8-3 W 272°



Photopoint: 8-4 E 86°



Photopoint: 8-5 SE 130°



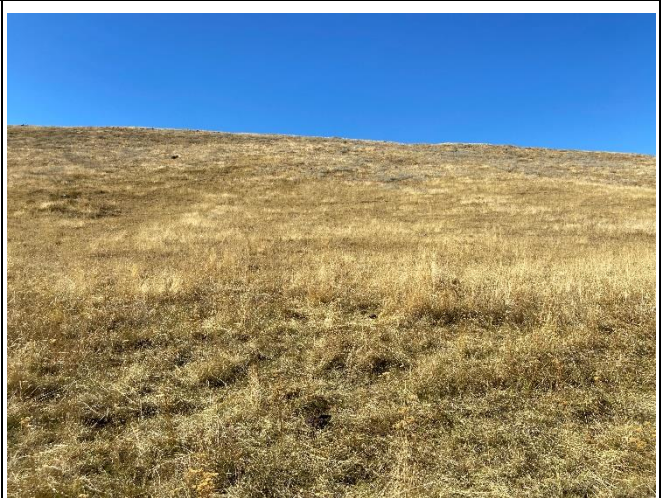
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Photopoint: 9-1 S 180°



Photopoint: 9-2 N 0°



Photopoint: 9-3 W 270°



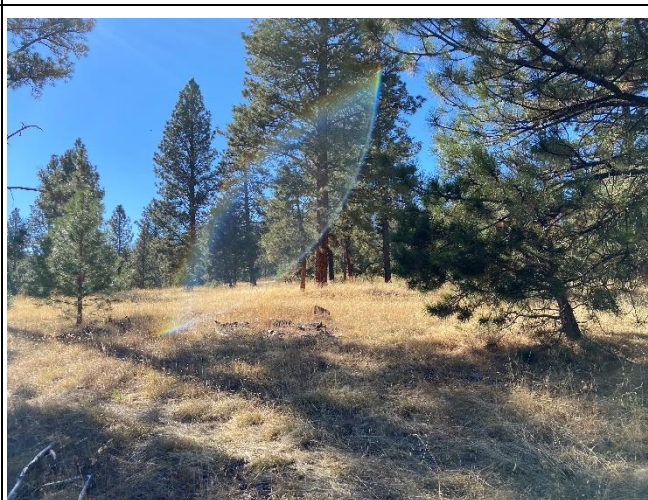
Photopoint: 9-4 E 90°



Photopoint: 10-P E 98°



Photopoint: 10-1 S 182°



Photopoint: 10-2 SW 232°



Photopoint: 10-3 W 304°



Photopoint: 10-4 N 358°



Photopoint: 11-P SE 140°



Photopoint: 11-1 SW 217°



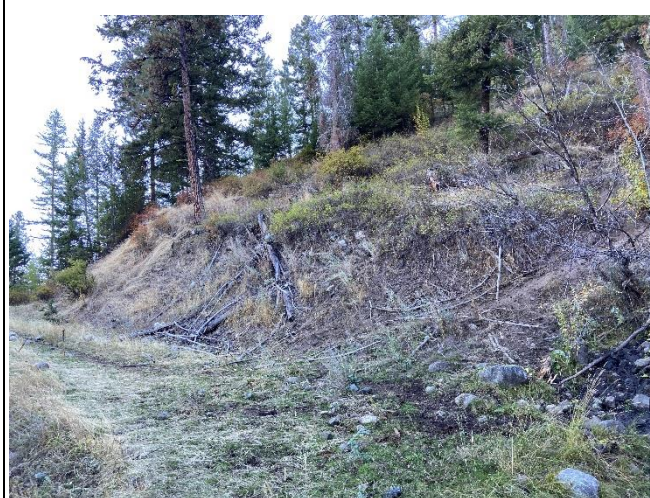
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Photopoint: 12-P SW 200°



Photopoint: 12-1 SE 110°



Photopoint: 12-2 NE 42°



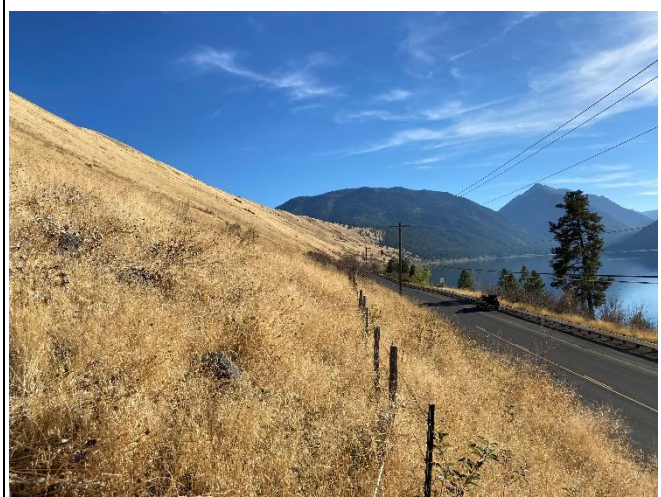
Photopoint: 12-3 SW 240°



Photopoint: 13-P NW 336°



Photopoint: 13-1 NE 78°



Photopoint: 13-2 SE 160°



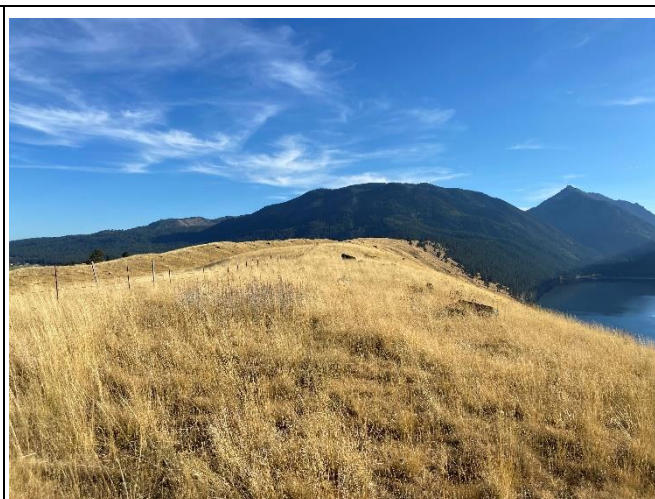
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Photopoint: 14-P SW 246°



Photopoint: 14-1 NE 76°



Photopoint: 14-2 SE 160°



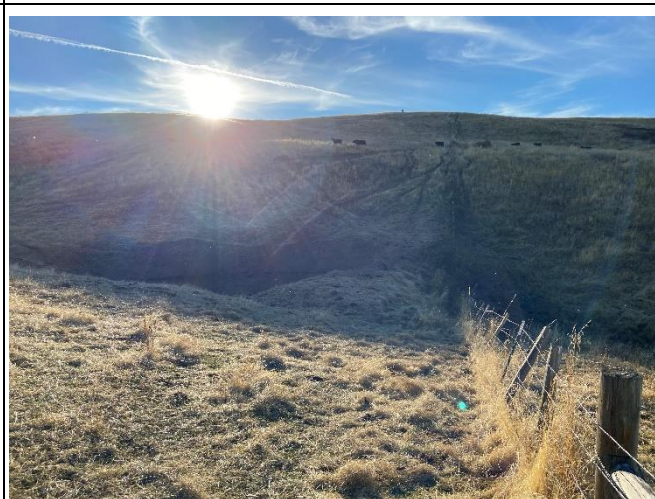
Photopoint: 14-3 N 358°



Photopoint: 14-4 NW 322°



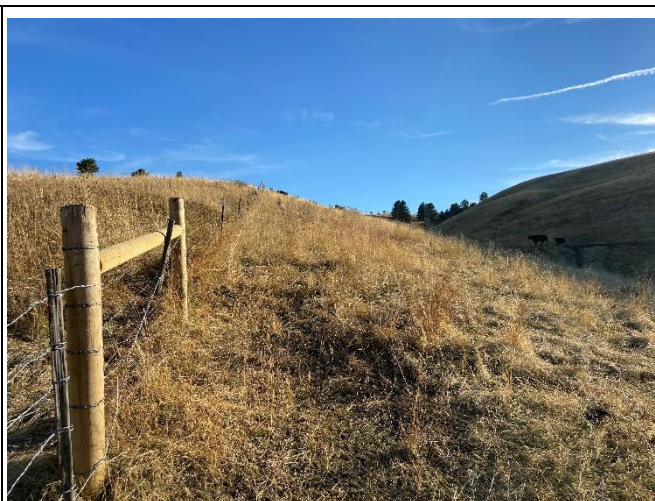
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Photopoint: 15-1 W 255°



Photopoint: 15-2 SW 212°



Photopoint: 15-3 SE 160°



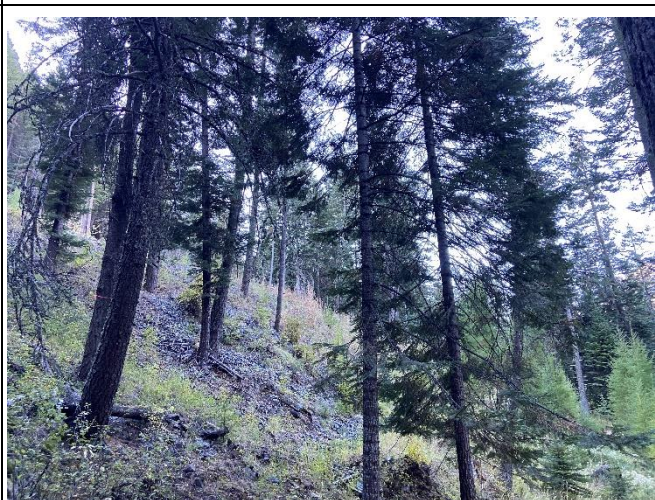
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Photopoint: 16-1 E 124°



Photopoint: 16-2 NE 77°



Photopoint: 16-3 S 183°



Photopoint: 17-P SE 156°



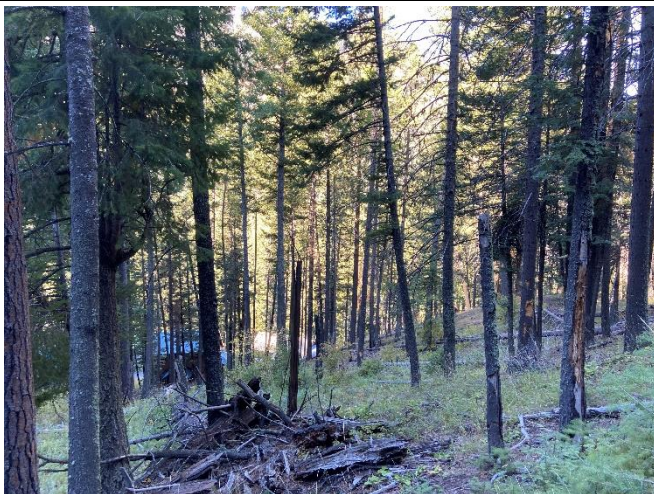
Photopoint: 17-1 N 0°



Photopoint: 17-2 E 90°



Photopoint: 17-3 S 180°



Photopoint: 17-4 W 270°

Appendix Y: Recorded Copy of the Conservation Easement

[To be updated and inserted.]

Appendix Z: Legal Description

TRACT 1 - 3S45 TL5900

Township 3 South, Range 45 East of the Willamette Meridian, Wallowa County, Oregon

Section 15: SW $\frac{1}{4}$ SW $\frac{1}{4}$

Section 22: SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$

TRACT 2 - 3S45 TL1500 & TL6000

Township 3 South, Range 45 East of the Willamette Meridian, Wallowa County, Oregon

Section 4: Lot 6, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$

Section 9: Lots 1, 2, 3, 4, N $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$

Section 10: SW $\frac{1}{4}$ SW $\frac{1}{4}$

Section 15: N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, Lot 4, S $\frac{1}{2}$ NW $\frac{1}{4}$

Section 16: Lots 1, 2, 3, 4, 5, 6, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$

Section 21: Lots 1, 2, E $\frac{1}{2}$

Section 22: NE $\frac{1}{4}$ NW $\frac{1}{4}$

EXCEPTING THEREFROM the following tracts:

1) Tract conveyed by Deed recorded in Book 46 of Deeds, Page 523, described as: Beginning at a point formerly described as: Power Pole 'G' of the Enterprise Electric Company, said point being 2943.7 feet North and 1348.4 feet East of the Southwest corner of Section 21, T3S, R45 EWM; thence West 50.0 feet; thence South 100.0 feet; thence East 100.0 feet; thence North 100.0 feet; thence West 50.0 feet to the point of beginning, being in Lot 2 of said Section 21.

2) Tract conveyed by Deed recorded in Book 86 of Deeds, Page 430, described as: Beginning at a point on the South line of the NW $\frac{1}{4}$, Section 21, T3S, R45 EWM, which point bears North 27°08'15" East 3282.60 feet from the Southwest corner of said Section 21; thence North 2°08' East 100 feet; thence South 87°52' East 150 feet; thence South 2°08' West 100 feet to the South line of said NW $\frac{1}{4}$; thence North 87°52' West 150 feet along the South line of said NW $\frac{1}{4}$ to the point of beginning.

3) Tract conveyed by Deed recorded in Book 73 of Deeds, Page 511, described as: Beginning at a point which bears North 25°07'30" East 3445.01 feet from the Southwest corner of Section 21, T3S, R45 EWM; thence North 33°03' East 200 feet; thence North 56°57' West 100 feet; thence South 33°03' West 200 feet; thence South 56°57' East 100 feet to the point of beginning.

4) Tract conveyed by Deed recorded in Book 73 of Deeds, Page 513, described as: Beginning at a point which bears North 25°07'30" East 3445.012 feet from the Southwest corner of Section 21, T3S, R45 EWM; thence North 56°57' West 100 feet; thence North 33°03' East 200 feet; thence South 56°57' East 100 feet; thence North 23°46' East 91.50 feet; thence North 34°28' West 78 feet to a point on the Easterly right of way line of the Oregon State Highway; thence in a Southerly direction along said Easterly right of way line to its intersection with the South line of said Lot 2; thence North 22°49' East 236.99 feet to the point of beginning.

5) Tract conveyed by Deed recorded in Book 73 of Deeds, Page 513, described as: Beginning at a point on the Westerly right of way line of the Wallowa Lake-La Grande Highway, which point bears West from the Northern most point of the above described tract; thence West to the low water line of Wallowa Lake; thence in a Southerly direction along water line of Wallowa Lake to its intersection with the South line of said Lot 2; thence South 87° 52' East along the South line of said Lot 2 to its intersection with the Westerly right of way line of said Wallowa Lake-La Grande Highway; thence in a Northerly direction along the Westerly right of way line of said Wallowa Lake-La Grande Highway to the point of beginning.

6) Any portion lying within the right of way of the Oregon State Highway, and tract conveyed by Deed recorded in Book 63 of Deeds, Page 101.

TRACT 3 - 3S45 TL7200

Township 3 South, Range 45 East of the Willamette Meridian, Wallowa County, Oregon

Section 22: SW¼

TRACT 4 – 3S45 TL6907

A tract of land situate in SW¼, Section 21, Township 3 South, Range 45 East of the Willamette Meridian, Wallowa County, Oregon, described as follows:

BEGINNING at the Northeast corner of the SE¼SW¼, Section 21, T3S, R45 EWM; thence West along the North line of said SE¼SW¼ to the Northwest corner thereof; thence Southwesterly to the Northeast corner of Division No.1, Chief Joseph Resort, at the Head of Wallowa Lake, Wallowa County, Oregon as shown by the Plat thereof on file and of record in the Office of the County Clerk of said County and State in Book 2 of Plats, Page 26; thence South 29° 13' West along said Chief Joseph Resort Est boundary to the North line of property heretofore conveyed to H.A. Haugerud by instrument recorded in Book 86 of Deeds, Page 571 and 572; thence East along said North line of said Haugerud tract to the intersection of the East boundary of said SEY¼W¼ of said Section 21; thence North along said subdivision line to the point of beginning, as described in instrument recorded in Book 105 of Deeds, Page 499 and replacement Deed recorded in Book 106 of Deeds, Page 189.

Appendix AA: Title Report