

# EAST MORAINE

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COMMUNITY FOREST



*Photo: Leon Werdinger*

## **MULTI-USE MANAGEMENT PLAN**

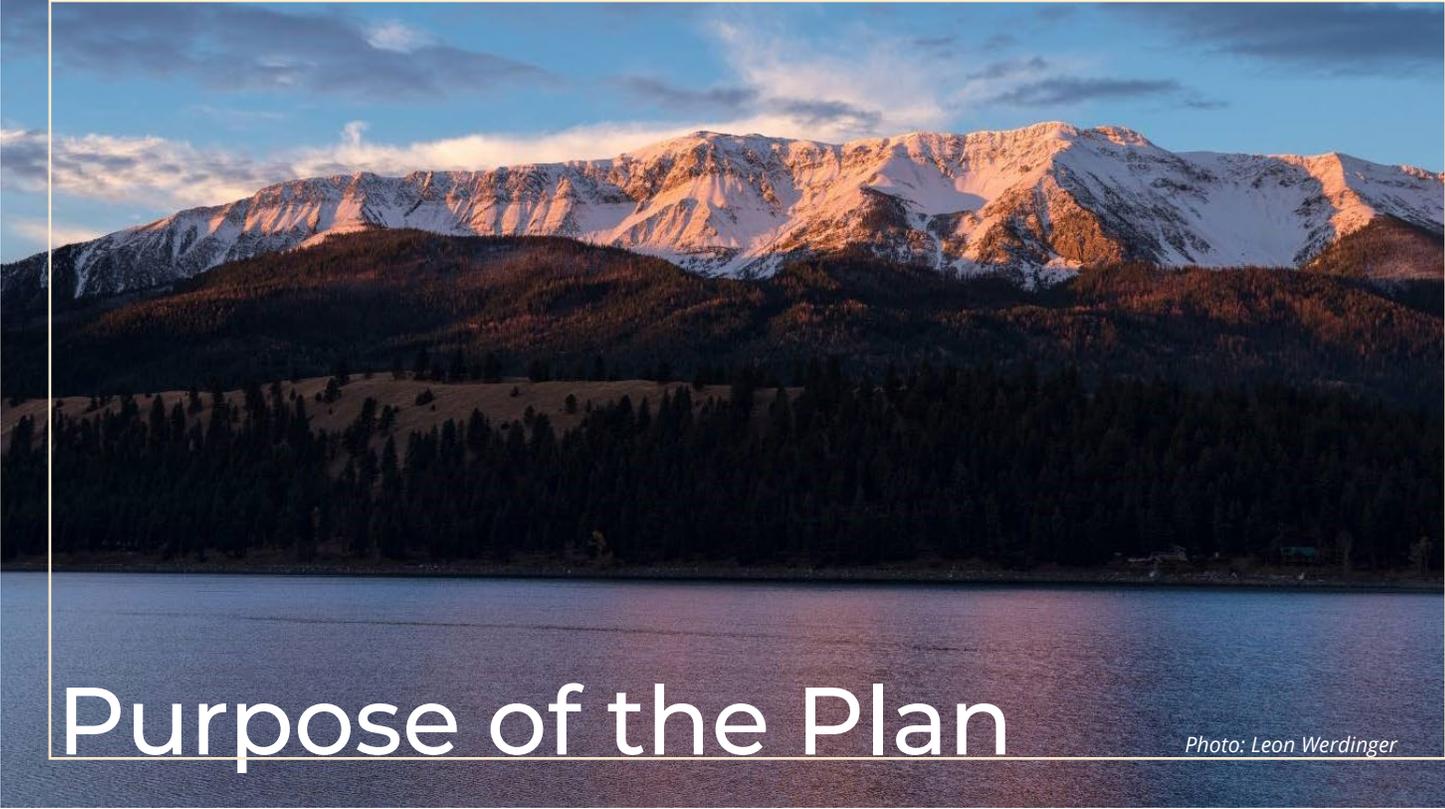
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July 2022

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# Purpose of the Plan

*Photo: Leon Werdinger*

In 2011, The Wallowa Lake Moraines Partnership (Partnership)—comprised of Wallowa County, Wallowa Resources, Wallowa Land Trust, and Oregon Parks and Recreation Department—formally committed to protect the East Moraine from development so that it may continue to be a cornerstone of Wallowa County culture, nourishing both people and nature. This management plan continues the long tradition of stewarding Wallowa County’s natural resources in a manner that provides multiple benefits to the land and the community.

A conservation easement (Appendix A: Conservation Easement) will be placed over the tax lots that collectively make up the East Moraine Community Forest (Community Forest, Appendix B: Property Map). Wallowa Land Trust will update the East Moraine Community Forest Baseline Documentation Report (Appendix C: Baseline Documentation Report). The Report contains the acquisition history of the Community Forest and establishes the condition of the property at the time the easement is transferred as well as documents the important

conservation values protected by the easement and the relevant conditions of the property as necessary for monitoring and enforcement. It also serves as a tool for comparing the results of adaptive management strategies. This management plan will not restate the information contained in the Report; however, some maps and other information are included where relevant to explain management actions.

This management plan affirms the history of the property as well as the conservation values for which it was acquired and outlines the actions needed to sustain and enhance those values and their overall balance across the property. The management plan also describes the governance structure and organizational roles established to manage the property. While the values protected by the easement are defined for perpetuity, this is a living document that recognizes that science and culture continue to evolve and adapt. Management of the property is expected to adapt with science and cultural changes and this plan will be updated at least every ten years.

## LAND, HISTORY & CONTEXT

The Partnership acknowledges that the singular relationship between people, culture, and the harvest of resources on the property and across the surrounding landscape predate Euro-American settlement when Nez Perce people inhabited the land prior to the Nez Perce War of 1877.

Nez Perce people, or Nimi'ipuu, were the first stewards of the Wallowa Valley. Practicing their seasonal round, they would travel across terrain and elevation in pursuit of an abundance of resources dependent on the land. They managed these resources through a variety of traditions and techniques including timed harvests, cultivation through consistent harvesting, raising livestock, and prescribed fire. The present-day order in which resources are harvested and consumed, and the timing and care with which they are cultivated and prepared correlate with the order in which Nez Perce people believe plants and animals offered themselves in preparation for the arrival of people to the land. Natural resources on the property and

surrounding landscape are central to the lifeways, or Nimiipuu'neewit, of Nez Perce people, including diet, language, beliefs, ceremony and traditions.

In the years leading up to and after the Nez Perce War of 1877, Euro-American settlement increased. Settlers developed traditions, economics and culture derived from the abundance of natural resources here as well as a management system of private land ownership. Since that time, economy and culture have been shaped predominately by tillage farming, ranching and timber management by a combination of private and public landowners.

Because of this history, the Nez Perce Tribe Cultural Resources Department played an integral part in the origin of this multi-use management plan, working with Wallowa County and partners.

*Below Photo:  
Wallowa Lake Basin – Nez Perce camp on shore of Wallowa Lake. Photo taken by J.H. Romig in early 1900s. Courtesy of Wallowa County Museum.*

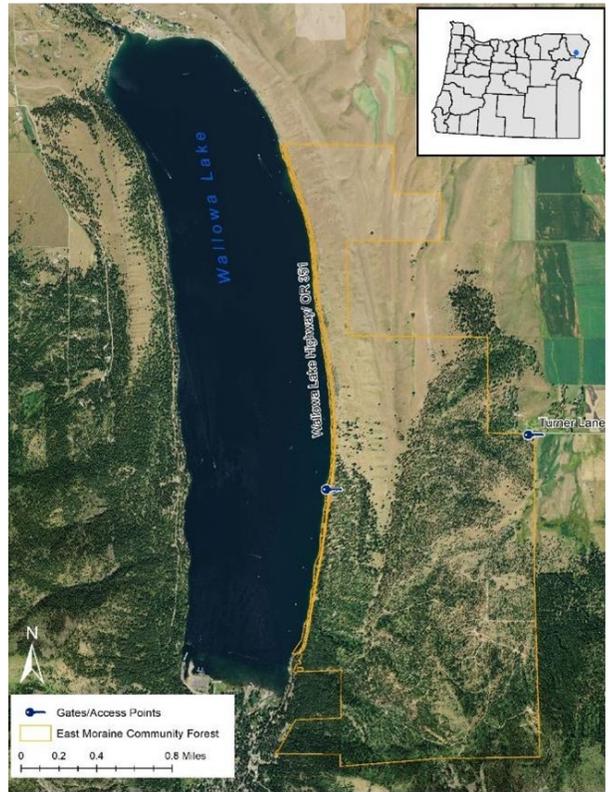


# CONSERVATION VALUES

The purpose of acquiring the Community Forest was so that it be retained forever in a relatively natural state with the goal of maintaining natural, healthy and ecologically sustainable characteristics of range and forest habitats. Deed restrictions and a conservation easement will ensure these goals are upheld. Habitats will be maintained for plant and wildlife species dependent on the Community Forest while providing economic returns to the local economy through sustainable forestry and rangeland. It is also a purpose of the easement to maintain scenic, cultural, rangeland, and forestland open space uses; public recreation; and educational uses consistent with the protection of the conservation values of the Community Forest. To summarize, we value the East Moraine and this property:

- As a relatively unaltered community treasure, providing unparalleled scenic views;
- For its diverse and critical habitats, which support and connect a complexity of species;
- For the longstanding cultural significance of the East Moraine and the Community Forest to its original inhabitants;
- For its cultural history and the returns it provides to the local economy as a working landscape;
- For its recreation and educational opportunities for the local community and visitors alike.

The Partnership is united in its desire to ensure balance across all uses and these conservation values.





# Governance

Photo: Kendrick Moholt

The Community Forest, in its current configuration, was conveyed on January 19, 2020 and June 29, 2021 to Wallowa County, who owns it in fee title. Final authority regarding use, permissions and management is vested with Wallowa County, led by the Board of Commissioners, a publicly elected body. That authority is bound by federal, state and county land use laws, as well as specific terms and conditions attached to the title including, but not limited to, the statutory warranty deed and the conservation easement.

## MANAGEMENT COMMITTEE

The Management Committee is appointed by the Wallowa County Board of Commissioners to support their management of the Community Forest and ensure such management advances the Conservation Values described above. It is currently made up of the Nez Perce Tribe, Oregon Parks and Recreation Department, Oregon Department of Forestry, Oregon Department of Fish and Wildlife, Oregon State University Extension, Wallowa

County Board of Commissioners, Wallowa Land Trust, and Wallowa Resources. The structure of the Committee, member roles and responsibilities and the management actions described herein represent the best social construct and science available at the time of development or plan update. As science and individual partner capabilities change, this management plan will be updated to reflect the changes.

Regardless of the Committee specifics, the goal of the Committee shall remain as follows:

***To work collaboratively to maintain and enhance the natural, cultural, economic and recreational values of the East Moraine Community Forest for the greater public benefit.***

The Committee hereby affirms their joint vision for the East Moraine Community Forest to:

- Maintain sustainable working landscapes of farms, forests and rangeland to contribute to the local economy and rural ways of life;
- Provide public access respectful of the landscape and its scenic beauty; and,
- Protect open space for wildlife, recreation, and natural resources.

## ROLES & RESPONSIBILITIES

Each member brings unique expertise, resources, and abilities to the Committee and these inform their roles and responsibilities in the Committee. Below, the roles and responsibilities of each partner are described.

**The Nez Perce Tribe** provides input on management plan updates, including desired habitat and ecosystem function for the enhancement of cultural resources as well as protocols in the event cultural resources are discovered. The Tribe does not disclose types or locations of significant cultural places or resources. At their sole discretion, the Tribe provides additional management and implementation resources as available.

During acquisition, **Wallowa Land Trust and Wallowa Resources** served as co-buyers for the Community Forest by signing the purchase and sale agreement dated January 29, 2019 until such time that the agreement could be assigned to Wallowa County. They developed, managed and executed a comprehensive funding strategy, inducing gifts from donors and grantors to acquire the property and secure its Conservation Values. Wallowa Land Trust completed all other activities necessary to complete the transaction to acquire the Community Forest.

Post-acquisition, **Wallowa Land Trust and Oregon Department of Forestry** will jointly hold the conservation easement, conduct easement monitoring, assist with stewardship fundraising, and provide technical assistance. Easement monitoring documents changes to the Community Forest over time and ensures that the terms of the conservation easement are not violated. Stewardship fundraising includes assisting with grant applications and implementation. Technical assistance includes review and approval of annual management plans and Limited Use Permits.

During management, **Wallowa Resources** assists with stewardship fundraising and provides technical assistance similarly to Wallowa Land Trust as described above. They also provide training and support to personnel hired to manage the Community Forest. Wallowa Resources will have a lead role in managing forestry actions on the property.

**Oregon Parks and Recreation Department (OPRD)** leads recreation planning and contributes to other components of the overall management plan. They also provide training and support to personnel hired to manage the Community Forest. In general, OPRD provides technical assistance to Wallowa County, allowing them to successfully manage the Community Forest.

**Oregon Department of Fish and Wildlife (ODFW)** provides technical recommendations for wildlife habitat improvement and contributes to other components of the management plan. They conduct fall and spring annual surveys of wintering mule deer and other wildlife on the moraine as time and resources allow. Wallowa Land Trust will facilitate the annual survey of Spalding's catchfly.

**Oregon State University Extension** provides technical recommendations for forest and rangeland management improvement and contributes to other components of the management plan. They accompany rangeland lessees and pertinent parties on spring entry and fall exit evaluations.

**Wallowa County, led by the Board of Commissioners**, holds title to the Community Forest, provides staffing resources to manage the Community Forest, and is ultimately responsible for property management. WC serves as the official governmental entity for state-local transactions and processes, contributes technical and legal expertise, and identifies potential contributing partners and funding sources for the management of the Community Forest.

# MANAGEMENT COORDINATION & DECISION MAKING

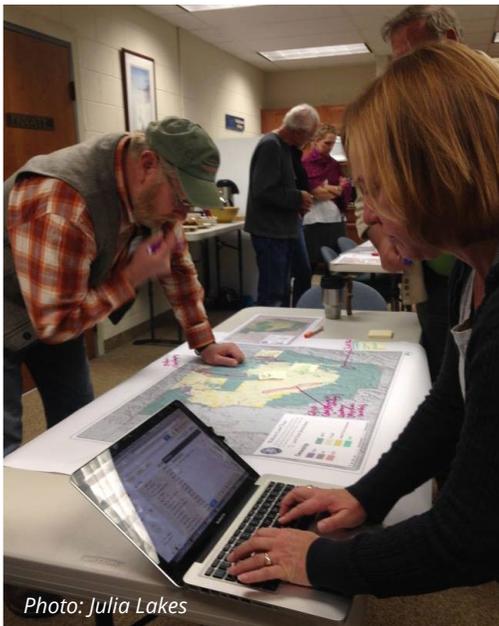


Photo: Julia Lakes

Ongoing stewardship of the Community Forest will require a dynamic and informed approach to management decision making. Uses will change, new information will be gathered and conflicts will arise. While uses continue and change, establishing clear priorities is essential to resolving conflicts and providing direction for future management decisions.

As conditions change, more information is gathered and science and management practices adapt, management goals and objectives will be revised. These revisions will also reflect changing community context, values and needs while aiming to protect and advance the conservation values.

The Management Committee is tasked by the Board of Commissioners to lead the development of a management plan for its final approval. This process includes initial review and approval by Management Committee members and the eventual adoption of the management plan by Wallowa County through the public process. If needed during review, the Commissioners will send the plan back to the Management Committee to resolve specific issues prior to approval. The Commissioners will not independently revise and approve a plan submitted to it from the Management Committee.

The Management Committee will also support Wallowa County by administering a property manager position (see below) to implement the management plan. The Management Committee chair, as appointed by the Management Committee, will approve the disbursement of funds for the property manager position and serve as the primary point of contact to the property manager. The Management Committee will update the management plan at least every ten years (as required by the Forest Legacy Program), and meet at least twice annually, once in March/April and once in September/October.

The Management Committee may create and retire sub-committees on an as-needed basis to address specific management challenges and implementation activities. Additional stakeholders and experts can be appointed to these sub-committees.

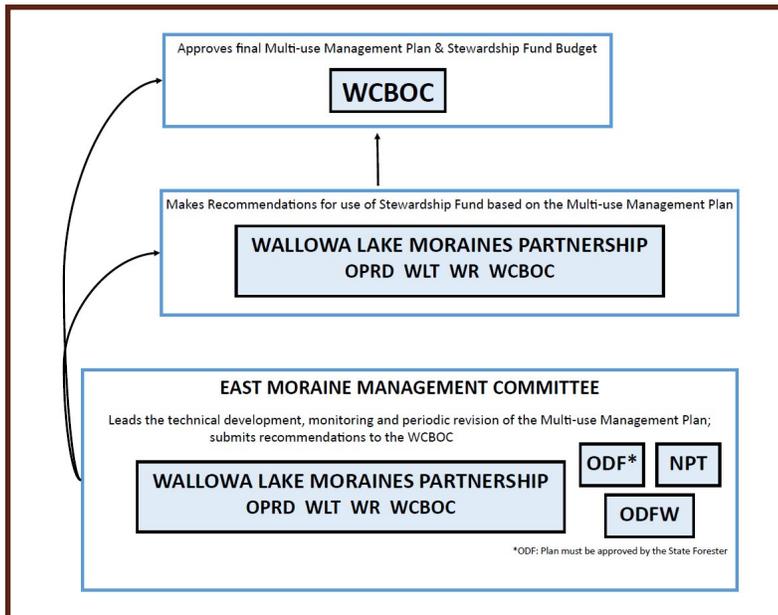
## FUTURE REPRESENTATION

The Board of Commissioners and the current Management Committee acknowledges that Wallowa County hosts several unique associations, agencies, clubs, and experienced professionals that speak to the culture of Wallowa County. Examples include trails and stock growers' associations, educational organizations, bike clubs, and equestrian clubs. Working relationships and/or future membership of these groups with the Management Committee would be beneficial to the management of the Community Forest and maintaining its conservation values. When considering the addition of new members or entities to the Management Committee, the Wallowa Lake Moraines Partnership and Oregon Department of Forestry, as joint holders of the conservation easement, must vote to mutually approve.

# STEWARDSHIP FUND

In addition to funds raised to acquire the Community Forest in 2020, a stewardship fund was established by the Partnership to begin funding management activities. Ongoing fundraising efforts by the Partnership and revenue from activities on the property will continue to replenish and bolster this fund into the future.

The fund will be invested, managed, and tracked with Wallowa County's greater pool of municipal monies in order to maximize returns. Once deposited into this greater pool, Wallowa County's Treasurer will manage and track the funds, noting how much of the greater pool is restricted for stewardship and management activities on the East Moraine Community Forest. To access stewardship funds annually for the upcoming year, the Management Committee will submit technical recommendations for management to the Commissioners, who will then approve or deny those annual recommendations. In the event that recommendations are denied, the Commissioners will return recommendations to the Management Committee for revision. Once the Management Committee and Commissioners are in agreement, the Partnership must pass a resolution for the Wallowa County Treasurer to release funds for management purposes.



*Over the long-term, the annual adaptive management cycle for the Community Forest is as follows:*

- MAR APR** Management Committee meets at the Community Forest to observe Community Forest conditions and make final adjustments to the annual operating plan for the year.
- SEP OCT** Management Committee meets at the Community Forest to observe conditions, review any management actions that have occurred, and update the annual operating plan for the next year.
- NOV** Management Committee recommends the annual operating plan with budget to the Commissioners.
- DEC** Board of Commissioners sends the Management Committee and Partnership any feedback on the updated annual operating plan and budget for review and revision.
- JAN** Management Committee submits final annual operating plan with budget to the Commissioners for approval. Once approved, Partnership votes on resolution for stewardship fund request and funds are disbursed by Wallowa County Treasurer.

# PROPERTY MANAGER

As part of the larger stewardship fund, \$80,000 will be allocated as an initial 5-year investment in a property manager position. Long-term this position will be supported by management revenue (grazing and other leases, timber sales, etc.) and potentially some combination of grants and donations. The property manager will be an employee of Wallowa County, and the position will be administered by the Management Committee.

As administrators of the position, the Management Committee will create a job description, work with the Commissioners to select candidates and approve the disbursement of funds and any associated benefits per Wallowa County personnel policies and procedures.

The property manager's position description will likely change and adapt over time, with the exception of the following, overarching and foundational responsibilities:

- Be liaison between the Commissioners and the public, acting as the point of contact and the reference for questions and concerns regarding day-to-day use;
- Work with Commissioners to contract services and manage contracts and services on the Community Forest;
- Work with the Commissioners to negotiate leases and manage relationships with lessees and operators;
- Work with the Management Committee to inform, draft and carry out annual work plans, including attending Management Committee meetings;
- Act as the manager of and central location for storing any monitoring and management data collected on the Community Forest for ongoing, adaptive management
- Work with the Commissioners and partners to coordinate and organize volunteer management activities

## PUBLIC INPUT

In meetings, news articles and other venues the public has expressed strong support to conserve the East Moraine for many decades. By and large, the public has communicated a desire to keep the Community Forest “the way it is” - an open and working landscape that has preserved its unique geologic, cultural, aesthetic and spiritual values while contributing to a diverse range of local uses. In 2019, private individuals contributed over \$1 million to support the purchase of the Community Forest and the vision of the Partnership to secure its conservation values.

The Community Forest also possesses a unique history of public access through verbal consent from landowner/s or landowner/s allowing general public access. Oregon’s recreational immunity laws have protected the landowner from liability. This dynamic resulted in visitors and residents developing individual and lasting connections to the Community Forest as an unparalleled place to recreate and learn. Their desire to have public access and recreational and educational opportunities protected is reflected in the conservation values. Oregon Parks and Recreation Department also issued a \$1 million Local Government Grant in 2019 to Wallowa County to acquire the Community Forest under the condition that public access continues.

Public input is crucial to understanding how Wallowa County and the Management Committee will balance recreation respectful of other uses the Partnership has committed to sustain on the Community Forest. It is also essential to understanding how the public values and uses the Community Forest, including those activities they perform and where they perform them. Many participants understand that some restrictions and changes must occur in order to maintain the qualities we value in common.

In preparation for this management plan, the Partnership gathered input through online and paper surveys, one-on-one digital interviews, and video conferences with focus groups. COVID-19 and social distancing requirements in early 2020 shaped this data collection process. In developing management plan elements, the Management Committee paid particular attention to the following issues, which technical advisors and citizens raised in the process:

- Use balance and interface
- Funding sources and commitments
- Trail types, conditions and classifications and current recreation uses
- Use/r conflicts and opportunities
- Limited uses and events
- Limiting motorized use for management purposes and access for persons with mobility needs
- Special Management areas and interfaces

East Moraine Community Forest  
Spring/Summer 2020 Public Input Survey Report



Photo credit: Ellen Morris Bishop

Conducted by: Wallowa Lake Moraines Partnership  
Prepared by: Wallowa Land Trust





## Land Use

Photo: David Jensen

### SUMMARY OF ZONE DESIGNATIONS & RESOURCE OVERLAYS

The Community Forest is subject to various and sundry land use designations (Appendix D: Land Use Zoning Map). They have been developed by the Wallowa County Planning Department and citizens and adopted by the 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, 2019).

The Community Forest itself is zoned Exclusive Farm Use, Timber/Grazing, and Resort Park with Reasons Exception Area (RP\*). These zones do not overlap. They apply to different areas and are divided along existing tax lot boundaries. However, the entire Community Forest is also subject to the Goal 5 Resource Overlay and applies in addition to underlying land-use zones. The trails (See Appendix T: Existing Roads and Trails Map) along the moraine are considered a pre-existing non-conforming

use. Wallowa County Ordinance Article 11, Non-Conforming Uses, adopted in 1988, establishes the right to continue that use, and codifies the ability to restore, repair, or make repairs necessary to comply with any lawful requirement for continued use.

This section, and references to any regulations called out throughout this management plan, are intended to identify land use designations and regulations which apply to the Community Forest as a reference for land managers and decision-makers. This is not a guide regarding use compatibility or permissibility. Summaries of zone designations and regulations herein are not intended to be exhaustive or 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/>. Consultation with the Wallowa County Planning Department regarding uses, modification to existing uses, and introduction of new uses will help ensure land managers and decision-makers are in compliance.

**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 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 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.”

**RESORT PARK WITH REASONS EXCEPTION AREA (RP\*):**

The purpose of the RP\* zone is “to provide minimum standards for park, camp, retreat and conference grounds, and open space recreation activities in the Unincorporated Resort Community of South Wallowa Lake where visitors from within and outside the County are attracted to the natural and man-made amenities” (Wallowa County, 2019). Regulations affected by this land use designation are contained in Ordinance Article 56: South Wallowa Lake.

**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 and Historical (Appendix E: Goal 5 Resource Overlay Map).

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 (Appendix F: Goal 5 Protection Status Map). 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).

# Uses & Management

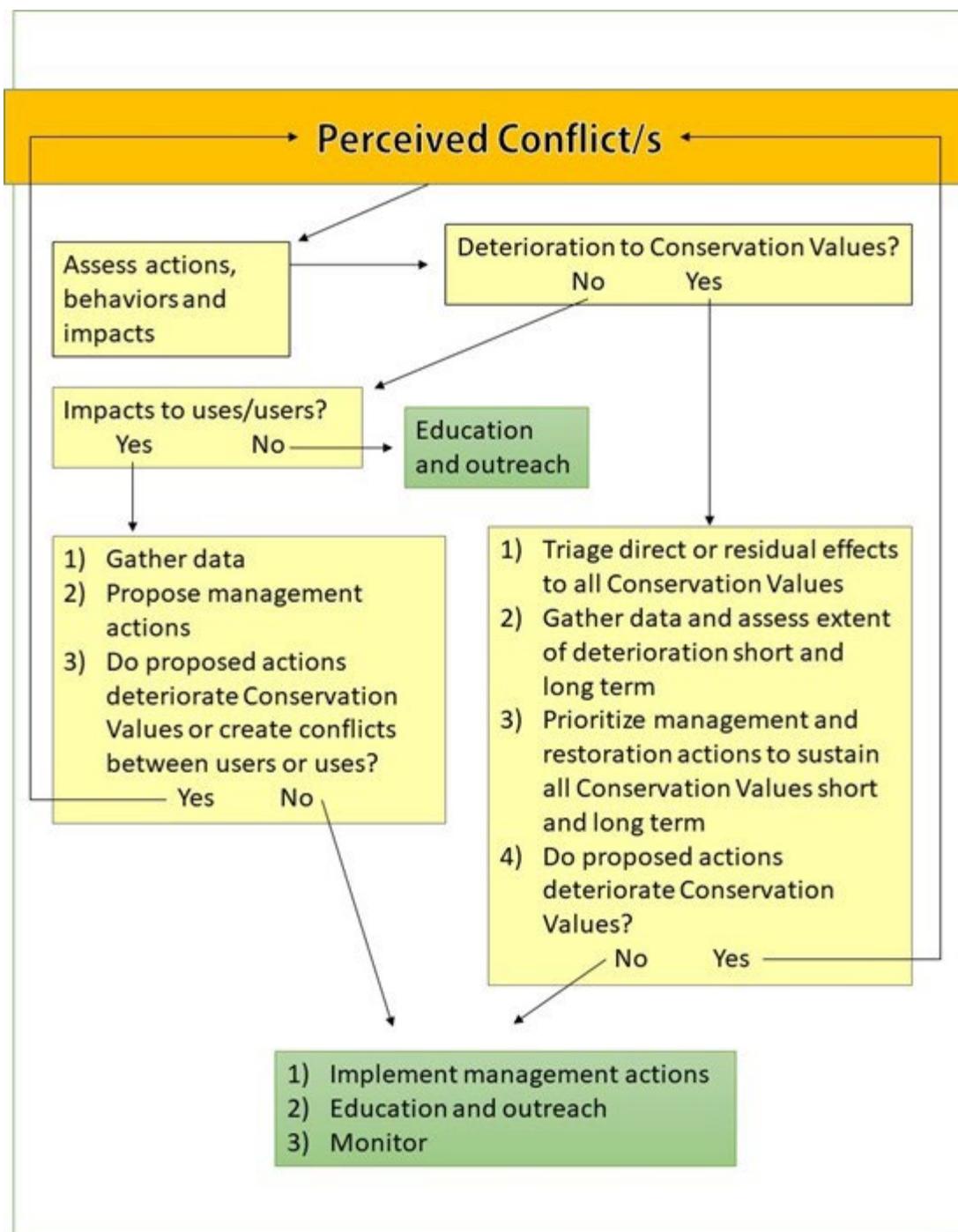
In correlation with the conservation values, resources and their management on the Community Forest are categorized by the uses of **Habitat and Wildlife, Cultural Resources, Forestry, Rangeland, and Recreation** with the intent of acknowledging a continuum on the Community Forest across space and time. The Management Committee is also designed with the same intention, evidenced by the members and entities who compose it.

Conflicts will arise and consequences will vary in severity and in terms of how use and people impact one another and how use impacts the conservation values.

Conflicts which the Wallowa County Board of Commissioners and Management Committee determine not to impact the conservation values will be addressed by gathering and assessing data, educating users and potentially taking management action if necessary. Conflicts that degrade or threaten the conservation values are of the utmost importance. They will require prioritization, data gathering, mitigation and potential restoration. They will also require prioritizing stewardship of individual conservation values to ensure all are preserved short and long term. The following diagram shows how decision makers will assess conflicts which threaten balance of the conservation values and address them first to ensure the conservation values are preserved:



*Photo: Carl Lincoln*



In collectively authoring this management plan, the Management Committee recognized the importance of prioritizing a management strategy that sustains the healthy, natural setting that provides reliable returns to support property management and the local economy, as well as recreational opportunities long-term. The following sections, designed by the Management Committee and with public input, strive to preserve the conservation values, to honor commitments made to public and private funders who supported the purchase of the Community Forest and to balance multiple uses mutually and collectively and for public benefit. Decisions and actions based on the following sections are intended to consider effects on all uses and to preserve and achieve the most desirable outcomes for each.



# Public Input & Community Outreach

Photo: Tia Hatton

## GOALS

- Sustain and build on the foundation of goodwill generated through the community effort to acquire the Community Forest.
- Utilize education, communication and community outreach to set expectations, build consensus and facilitate dialogue with the community around the alignment of the multiple use management plan and Conservation Values.
- Develop a nuanced approach to management which considers public input and the larger context, perceptions and misperceptions of multiple use.

## STATUS

Through the process of gathering public input, including interviewing focus groups and administering a public survey, the Wallowa Lake Moraines Partnership ascertained that the community considers the acquisition of the Community Forest a great achievement, but individuals vary widely in their understanding of the uses which will occur, how they will occur, and how or if they can be balanced.

The American West has an evolving and complex history of land use. Communities are working to learn about Indigenous history and find ways to acknowledge the impacts of dispossession and indoctrination while moving forward collaboratively.

Rural areas in particular are becoming more populated and sought after as tourist and retirement destinations. The recent COVID-19 pandemic and changing climate have highlighted both the safety and resource abundance of rural places as well as the ability for the American workforce to work remotely. Conversely, these changes have also highlighted concerns like water quality, invasive species, and wildfires. Many rural economies have lost their connection to place, shifting to service and amenity sectors. These changes have affected property ownership and increased development pressure. Wallowa County is no exception.

Public input gathered about the Community Forest reflects a complex mix of gratitude, cautious optimism and skepticism for the future. Most appreciate the development protection offered by this acquisition. Some question multiple uses on an iconic and central landscape.

These questions are opportunities; with the acquisition of the Community Forest as a literal foundation of common ground, the Partnership needs to proactively educate, build consensus and foster dialog around multiple uses. The goal for all of this work should be to sustain and expand community buy-in and reduce or even eliminate user conflicts proactively.

## CURRENT INFRASTRUCTURE

Understanding and awareness of the Community Forest’s multiple use management was established through various means. A public survey included a description of the conservation values that underlie the Partnership’s vision and long-term management for the Community Forest. Communication materials and grant applications developed during the campaign to purchase the Community Forest also relied upon the conservation values and goals of the Partnership as a base to promote the project and raise funds.

The Commissioners engage with the community through its bi-monthly meetings to discuss, present and vote on Wallowa County business, including issues related to the Community Forest. The Commissioners also have the authority to call meetings outside of this schedule to discuss timely topics. These meetings have been opportunities for the Partnership to present updates on aspects of the acquisition of the Community Forest. These meetings and their agendas are open to members of the public. Meetings, agendas, plans and policies are regularly updated on Wallowa County’s website.

Wallowa County is also home to many entities, groups and organizations that work collaboratively and whose missions include educational programming and community outreach. Understanding that culture, the Partnership hosted outdoor education programs at the Community Forest with permission from previous land managers. In October 2020, Wallowa Resources hosted an outing under new Wallowa County ownership to discuss forest management planning with the public. Programs like this have also focused on topics like stewardship, recreation, natural resources and rural economics. Indigenous guides have led outings at the Community Forest to teach about the longstanding relationships between people and the land as well as topics of history, culture and stewardship. These outings provide a forum for participants with varying levels of familiarity to engage professionals and each other. They also provide an opportunity for land managers to show land use and management strategies on the landscape and how these strategies are informed, change and adapted over time.

Committees, organizations and groups throughout Wallowa County have also worked together to develop messaging, distribute promotional materials and develop programs to talk about regional and local topics of history, culture and land use. These opportunities provide visitors and residents alike with information and context about the area and the many ways the landscape and its natural resources have shaped a way of life for people here for thousands of years. Like outings, these events and forums provide the opportunity for participants and professionals to engage one another on these topics.



Photo: Eric Greenwell

## MANAGEMENT ACTIONS

A nuanced approach to public input and community engagement, as opposed to a prescriptive one, is essential. The executive summary of the public survey report notes, “An old axiom holds true: change is hard, and as the new owners and managers of [the Community Forest], Wallowa County and its partners are now managers of that change.” (Wallowa Lake Moraines Partnership, 2020) Every management action is an opportunity for community outreach to inform users about management goals and values and the role each action has in advancing these goals.

Preservation and enhancement of the conservation values and the Partnership’s goals take precedence. They were the foundation of the messaging that garnered significant community support and the financial inducements leading to the successful acquisition. Myriad proactive and thoughtful management actions can be taken to engage the community, start conversations, and build consensus around the conservation values and the multiple uses required to preserve them.

Land managers and decision makers will ensure that the public has a reasonable chance to comment and ask questions when this management plan is revised. Additionally, a webpage will be developed for the Community Forest where the management plan will be posted and accessible. A print copy will also be on file in the Wallowa County Courthouse and any member of the public may request a print copy in a reasonable amount of time at the requester’s expense, reasonably determined by Wallowa County. When the Management Committee meets annually, a Commissioners’ meeting will be scheduled and promoted for members of the public to ask questions and engage land managers and decision makers as part of development of annual work plans.

As resources allow and when opportunities present themselves, land managers will also leverage partnerships and partners will support land managers to distribute messaging and host forums and outings on the property to discuss land use and management planning. For example, partners may facilitate and promote forestry tours with land managers, foresters and members of the public to discuss forest management, forest health, restoration, fire resilience and other complex topics related to forestry. Infrastructure updates may also present opportunities to engage the public. Land managers may facilitate onsite workshops about rangeland management, range health, rotational grazing and other relevant topics when installing internal fences or water sources for livestock.

Topics and uses will require varying degrees of familiarity and discretion. For example, the public may be

interested in learning about First Foods from Indigenous guides, but revealing locations or details about cultural resources can impact those resources, which may be better served by not revealing their appearance or location. Land managers and partners will consult and collaborate with appropriate professionals and knowledge bearers when considering public outreach programming.



Photo: Tia Hatton

Expectations can also be set through signage and communication collateral on or about the property. As land managers evaluate and design these materials, such as web content or kiosks at entrances, messages will notify visitors of the multiple uses occurring on the Community Forest and that they should anticipate encounters associated with those uses. Signs will also provide context about the purchase of the property and the reasons the community came together to support its acquisition. It is critical that we remember the success of the acquisition and the significant outpouring of support to carry out the goals of the Partnership. This success is the foundation for the work to preserve the Community Forest's conservation values.



Photo: Tia Hatton

## MONITORING

The following quantitative and qualitative data will inform management as well as gauge the effectiveness of community engagement:

- Number of attendees at public meetings about the Community Forest and its management, including annual work plan meetings and Commissioners meetings;
- Attendance at educational outings;
- Attendance at forums related to multiple use and management decisions on the Community Forest;
- Web analytics, including how many times websites and web pages are accessed or email and social media posts are viewed, shared, garner impressions and/or evoke engagement;
- Summaries of public meetings, including feedback and experiences of participants;
- Records of the types of questions, concerns, or other points of discussion presented by participants in public meetings and attendees of educational outings;
- Summaries of electronic communications submitted to land managers;
- Interviews with land managers and decision makers who interact with users; and,
- Interviews with operators, contractors and outing leaders.

Land managers or their appropriate appointees and partner organizations will collect and store these data. Partners will submit them to the property manager, who will work with the Management Committee to present at annual Management Committee meetings and inform work plan development for the upcoming year. Cumulatively, these data will also inform substantial revisions of this management plan over time.

As resources allow public meetings and more extensive surveys of the public, like the initial public survey administered in spring of 2020, can also provide pertinent data, especially at broader points of review and revision of this management plan.



Photo: Leon Werdinger

# Habitat & Wildlife

## GOALS

- Maintain and enhance the diversity of habitats present on the Community Forest, including cultural plants.
- Support the development and maintenance of plant communities that are resilient and resistant to non-native species establishment.
- Use land management activities, including timber harvesting, grazing, and prescribed fire to demonstrate how they can enhance and diversify habitat.
- Maintain and increase the population of Spalding's catchfly plants.
- Work with land managers to ensure recreation opportunities minimize disturbance to wildlife.

## STATUS

For a comprehensive list of plant and animal species known to exist or are supported by habitat on the Community Forest, see Appendix H: Plant and Animal Species Lists.

The Community Forest hosts a variety of wetland, riparian, prairie, shrubland, and forestland habitats discussed in the baseline document. Historically, wildlife use of the area likely changed with the seasons and included elk, deer, bear, cougar, wolf, coyote, porcupine, several rodents, a few reptiles and amphibians, and numerous birds adapted to the forest and grassland habitats of the Blue

Mountain Eco-region. Forestry and livestock uses within the past 100 years or so have altered the site's natural environment through direct modification, such as timber harvest and impacts of soil compaction and erosion, as well as the removal of native vegetation. Introduction of invasive plant species have also modified habitats.

Today, habitats are in moderately good condition. Based on visual observations, grasslands are generally in fair to good condition with native grass species dominating the vegetative composition in most areas.

However, there are areas where native species have been compromised by invasive species. Formal inventory and monitoring of grasslands on the Community Forest have not been undertaken to provide documentation of stand composition, health or trend. Historical information pertaining to stand structure is also lacking. Currently, livestock graze grassland pastures annually during summer and early fall months. No known fires have occurred on the grassland portion of the moraine in recent decades.

Currently there are a significant number of invasive, nonnative plant species on the Community Forest including cheatgrass (*Bromus tectorum*), ventenata (*Ventenata dubia*), Canada thistle (*Cirsium arvense*), Scotch thistle (*Onopordum acanthium*), houndstongue (*Cynoglossum officinale*), diffuse knapweed (*Centaurea diffusa*), spotted knapweed (*Centaurea stoebe*), sulfur cinquefoil (*Potentilla recta*), meadow hawkweed (*Hieracium caespitosum*), common bugloss (*Anchusa officinalis*) and others. Recent, comprehensive weed data on the Community Forest is lacking. The most recent noxious weed survey (Hamann 2013) mapped weeds of concern across the Community Forest, revealing significant infestations of meadow hawkweed and common bugloss on the forested portion. Wallowa County's Vegetation Department has also begun to inventory noxious weeds (see Appendix I: Noxious Weed Maps) classified as "Target" species in Wallowa County's Integrated Weed Management Plan. These initial inventories indicate the meadow hawkweed infestation has

worsened significantly over time. The 2013 survey and recent inventories did not include invasive annual grasses.

Forest stands and the road system are generally in good condition when it comes to noxious weeds, though meadow hawkweed infestation occurs across much of the forested land. Most stands have good tree spacing and growth, and adequate understory reproduction, though forest inventories conducted over the last year suggest habitat can benefit from forest management which promotes large trees and maintains, where appropriate, snags and large downed wood. Some stands would benefit from pre-commercial and commercial thinning. (See Appendix N: Forest Stand Map). Invasive nonnative plant species such as thistle and knapweed species are in localized areas of past logging disturbance. Domestic species such as orchard grass, Timothy, and white clover have been inter-seeded to provide forage for livestock and wildlife. Trees important to wildlife, such as snags or roost trees, have not been inventoried. Wildfire or under burning has not occurred on the forestlands for several decades.

Perennial water is very limited on the Community Forest. A small wetland exists on the southeast portion and receives relatively heavy livestock use. Stock ponds have been developed and provide good water sources for livestock and wildlife. There is one spring located in the southwest forested portion as well as one developed, covered well with nearby troughs centrally located (See Appendix J: Water Resources Map). Riparian habitat is limited.



Photo: Wallowa Land Trust

Public use has been allowed on much of the Community Forest with the frequency and type of use increasing in recent years. Generally public use of motor vehicles within the Community Forest has not been allowed. Horseback riding, biking, running, hiking, hunting and wildlife viewing are the most common recreation uses and conflicts between user types have not been an issue, nor have interactions between livestock, wildlife and humans. The East Moraine Community Forest is important wintering mule deer habitat. To avoid disturbance to mammal dens, fawning deer, and ground nesting birds during spring and early summer months, dogs should be leashed at all times while visiting the Community Forest.

## RARE PLANTS & ANIMALS WITH CURRENT STATUS

Spalding's catchfly (*Silene spaldingii*) is a state-listed endangered species and a threatened species listed under the federal Endangered Species Act. It is found in various locations on the entire East Moraine, an area identified as a U.S. Fish and Wildlife Service (USFWS) Key Conservation Area for the species. Bio-Resources, Inc. and USFWS documented 650 individual plants during late summer presence-absence surveys on the northern portion of the Community Forest in 2014 and 2017. In 2018, Bio-Resources, Inc.; Robert V. Taylor, Ph.D.; and USFWS established belt transects on the Community Forest and other private lands on the East Moraine to monitor long-term trends.



Photo: Julia Lakes

Other individual catchfly plants have been documented further south along the moraine, but intensive surveys have not been initiated. As the Community Forest is now publicly owned, consultation with the Oregon Department of Agriculture and review by USFWS is required to ensure management practices protect the species. The USFWS and local partners are three years into a 20-year monitoring initiative for Spalding's catchfly for the ESA Recovery Plan. This effort includes Spalding's populations on the East Moraine Community Forest and it will continue to inform management. Threats to pollinators, such as pesticides, on private land around the Community Forest are considered minimal at this time.

Inventory of wildlife species utilizing the East Moraine are nonexistent, with the exception of mule deer (*Odocoileus hemionus*). To date, annual fall and spring surveys of mule deer have been conducted along the west face of the East Moraine since the early 1960's by Oregon Department of Fish and Wildlife. Currently, mule deer numbers are very low throughout their range. However, in past years, more than 300 deer have been recorded wintering on the moraine, indicating that it is high quality habitat. According to Oregon Department of Fish and Wildlife, this high of a concentration of mule deer in one place is not seen anywhere else in Wallowa County. Through Goal 5 and 8 planning processes the Oregon Department of Fish and Wildlife has designated the west face of the East Moraine sensitive big game winter range. Winter range is important to maintain for mule deer populations as it supports their numbers at a time when species are most vulnerable. Habitat on the west face of the moraine is considered in good condition for wintering mule deer (Appendix K: Mule Deer Winter Range Map).

Photo: Vic Coggins

# MANAGEMENT ACTIONS

The wide variety of wildlife that use the Community Forest suggests two guiding principles to direct management and enhancement of wildlife habitat. First, maintain and improve the diversity of, and edges between, differing habitat types and second, management will require more detailed information, including more recent comprehensive invasive species inventories and a more detailed survey to delineate habitat types. Given the absence of detailed information, this section contains suggestions on management approaches by habitat type. Strategies include addressing wide-spread invasive species and other uses to increase habitat diversity.

## **PRESCRIBED FIRE**

Prescribed fire is one of the oldest land management tools in the Wallowa Valley, used first by Nez Perce people to manage vegetation. Today, residential development and density, drought as a result of changing climate, air quality and other challenges make prescribed fire a challenging and expensive tool to implement. When controlled, however, it can be effective because much of the Community Forest and its habitat, including its majority grasslands and forestlands, evolved with fire. On the forestlands, and as conditions and resources permit, low intensity controlled burns on small acreages and patchwork or mosaic patterns could be used on 10-15 year intervals to improve forage quality and quantity of herbaceous and deciduous species. On grasslands and shrublands the use of small, low-intensity fires in a patchwork pattern could be used with a 5-10 year return interval to improve the condition of vegetation. Prescribed fire should be used in small, irregular-shaped areas to maximize the edge between treatments and should be used cautiously and at appropriate times to minimize adverse effects to wildlife, air quality and adjacent lands.

## **FORESTLANDS**

Wildlife species vary in their preferred and/or required forest habitats. Some prefer open stands while others need dense stands. Some require large living trees, others standing snags, and yet others large woody debris. To this end, the goal of management should be to use logging at

different intensities in some areas and no logging in others at intervals to provide economic return while producing a diversity of tree sizes, ages and densities across the landscape. Like fire, logging should be used in small, irregular shaped areas to maximize overall diversity and the edges between treatments.

Improving wildlife habitat in forestlands can be achieved through continued active management with proper silviculture practices like restoring and retaining the natural range of variation in stand structure, species composition and forest distribution for this site – including edges between different stands. Management should include creating a mosaic of different ages, densities and understory types. New road construction should be minimized and motor vehicle use of roads in forested areas should be for administrative and permitted uses only. Reseeding of old road grades, no longer necessary for use, would also improve habitat conditions and forage. Cattle grazing can be used to improve forage palatability for wildlife, help reduce potential spread of wildfires by removing ground level forest fuels and create habitat diversity. A pasture rotation system will need to be designed to manage cattle distribution and allow a rotating rest of individual pastures annually. Grazing that reduces vegetation by over 45 percent should not take place because of the potential damage to pollinators.

## SHRUBLANDS

Shrubby areas can be very productive for wildlife. They provide both food and protection from the weather as well as from predators. Monitoring and caging or otherwise preventing consistent browsing of shrub shoots by wild ungulates and livestock can enhance shrubland habitat. Due to a current lack of data and the potential productivity of shrublands, surveys should prioritize them and include assessments for opportunities where they can be enhanced.

## WETLANDS

The few springs and ephemeral streams present on the moraine are very important and productive places for wildlife. They should be protected from livestock grazing by fencing and pumps utilized where possible to move water to troughs or other locations.

The wetland area on the southeast side of the Community Forest has considerable habitat potential for a variety of bird species. Consideration should be given for building a wildlife-friendly fence around this particular wetland to prevent livestock grazing. Any enclosure should include water gaps and rock approaches to allow livestock access to water while minimizing erosion, siltation and disturbance, or solar pumps or other infrastructure should be developed to pump water away from the wetland to ensure livestock can access water. Planting of desirable shrub/tree species will improve diversity of the wetland habitat. Aspen in the wetland do not appear to be generating any new growth, which could be due to heavy browsing by wild ungulates. Strategically caging aspen and other favorable species will give riparian species time to establish and improve the diversity of wetland habitat conditions.

All spring improvements should include an assessment of cultural resources prior to implementation.

## GRASSLANDS

As with forestlands, some wildlife species utilize grazed grasslands with short plant structure while others will only use un-grazed areas with tall grasses and large amounts of either standing, dead vegetation or ground litter. Habitat diversity supports forage, nesting, pollinators, grasses, shrubs and forbs. From a habitat perspective, the management goal should be to use livestock grazing at different intensities in some areas and no livestock grazing in others at intervals to provide economic returns and promote diversity in plant structure. As much as possible, grazing should be used like fire in small, irregular shaped areas to maximize the edges between treatments.

Grasslands should be managed to maintain and improve native species distribution and health. Livestock grazing (cattle) can be a useful tool to achieve diversity in stand structure, stand vigor, and improve forage availability for wildlife. Due to the proximity to the Wallowa Mountains and National Wilderness domestic sheep and goats should not be grazed to prevent potential contact with and spread of disease among bighorn sheep. A deferred grazing or pasture rest-rotation system will need to be designed to manage cattle distribution and allow a rotating rest of individual pastures annually. New livestock fences will need to be built and temporary fences used to facilitate pasture rotation and should be built according to wildlife friendly standards (bottom wire 18 inches high, top wire 42 inches high).

## NOXIOUS WEEDS

Treatment of noxious weeds across the Community Forest will require a significant investment in initial years of County ownership. Wallowa County's Integrated Weed Management Plan prioritizes education and prevention as the most cost-effective, long-term measures for early detection and eradication of noxious weeds (Wallowa County 2013). Unfortunately, the Community Forest is already afflicted with landscape-scale infestations which are much costlier to contain and often require biological, chemical and cultural controls.

Land managers will continue to develop a full inventory of noxious weeds while beginning to treat the most significant infestations, hiring contractors as necessary and as resources allow. A complete inventory of noxious weeds, including invasive annual grasses, will identify abundance and distribution.

Initial treatment will prioritize known populations of “Target” listed species in Wallowa County’s Integrated Weed Management Plan. In the forestlands, shrublands and wetlands, infestations including meadow hawkweed, spotted knapweed and common bugloss present the most immediate and significant threats to the conservation values. Wallowa County’s Integrated Weed Management Plan states that these species “require the most aggressive management and the utmost vigilance” and recommends chemical and biological controls and diligent monitoring in order to successfully contain them (Wallowa County 2013). Biological controls use living organisms to affect the biology of the target species (i.e. fungi or bacteria), while cultural controls are aimed at cultivating desirable vegetation to minimize weed invasion (i.e. seeding desirable species). Initial costs will be high, then projected to decrease as initial treatments begin to control populations. Given that infestation control will require significant resources land managers should prepare for several years of consistent treatment and monitoring to be effective. A combination of stewardship funds, grants, and Wallowa County’s vegetation budget and capacity will be used as well as hiring contractors to treat significant infestations.

The grasslands of the Community Forest appear in good condition, composed primarily of intact native bunchgrass. Current threats include Scotch thistle, which arises in heavily used areas such as livestock mineral licks, though grazing leases which include requirements to control weeds have kept Scotch thistle manageable. An additional threat appears to be conversion to invasive annual grasses, however a thorough inventory is necessary to confirm.

In addition to “Target” listed species, various “A” listed and “B” listed species noted in Wallowa County’s Integrated Weed Management Plan, such as Canada thistle and houndstongue, occur on the Community Forest. These are especially common along vectors, such as roads, old staging areas, trails and livestock trails in the forested portion. While these species currently present concerns, they do not threaten the ecological and economic integrity of the Community Forest as significantly as “Target” listed species. Treatment of “A” and “B” listed species should be in coordination with or subordinate to handling the larger infestations of “Target” listed species.

Landowners will begin to assess how education and prevention can help curb infestations like those described above in the future. Educating and empowering users to identify weeds and report them could be critical to future minimizing large-scale infestations, especially along vectors like roads and trails. Land managers should consider signs and other communication, such as posting photos and descriptions of invasive weeds which pose significant threats.

### **NOXIOUS WEEDS – CONFLICTS AND SPECIAL CONSIDERATIONS**

Land managers will consider conflicts depending on the location of noxious weed treatment, type of treatment, and/or time of treatment. If biological or chemical controls are advised, land managers will assess how those controls may conflict with public access on the Community Forest, particularly at peak seasons when public access is likely to increase (late spring, summer, and early fall). The public will be notified when and where controls are being used. Where necessary and as timing of treatment requires, areas of the Community Forest may be closed to the public for safety during treatment. The same considerations should be assessed with impacts of controls on livestock during grazing season and timed accordingly.

Cultural resources also require careful consideration when planning and treating noxious

weeds. While controlling noxious weeds is critical to sustaining the natural setting and native plant populations which contain traditional foods and medicines of the Nez Perce people, controls can also have unintended effects on these plants and plant communities and the people who may consume them. Cultural controls, like seeding desired vegetation to outcompete noxious weeds, may also unintentionally outcompete native communities which include traditional foods and medicines. Ecotypes of native species from Wallowa County or similar areas should be prioritized when considering seeding/planting efforts. That said, on the grasslands in particular, native bunchgrasses can be expensive and difficult to reestablish in the presence of invasive species. The Nez Perce Tribe will be consulted to best assess how to prioritize the treatment of noxious weeds where treatment is critical to sustaining the conservation values but is also likely to degrade native plant communities. For special considerations when treating weeds where listed species are known to occur, see "Spalding's catchfly (*S. spaldingii*)" section below.

### **SPALDING'S CATCHFLY (*S. spaldingii*):**

A variety of potential activities occurring in specific locations on the grassland section of the Community Forest have the potential to impact known populations of *S. spaldingii*, including management of invasive species, herbivory, and vehicle use and recreation. Locations of known populations are documented in the Baseline Documentation Report.

While invasive nonnative plants deteriorate *S. spaldingii* habitat, control activities, such as herbicide applications, may also negatively affect *S. spaldingii* individuals. If controls are needed they should be done with care to minimize effects. Integrated strategies should identify all control methods available, such as prevention, manual control, biological control, and herbicide control. Periodic weed surveys should be conducted to detect new infestations or new invasive nonnative plant species. These surveys can inform restoration to prevent reinvasion where weeds have been

controlled. Monitoring and evaluation should continue to determine if control goals are being met (U.S. Fish & Wildlife Service 2007). Before spraying at *S. spaldingii* sites, all individuals should be located and flagged, and herbicide applications that affect broadleaf plants should occur when wind speeds are less than 8 kilometers (5 miles) an hour to minimize herbicide drift. Managers should use manual control techniques only when within 1 meter (3 feet) of individual *S. spaldingii* plants. Manual control of vegetation along recreational paths (e.g. trail maintenance) should only occur after managers have reviewed known locations of *S. spaldingii* plants. Individuals conducting maintenance operations should be trained in *S. spaldingii* identification. Mechanical removal equipment (e.g. string trimmers) should be operated no closer than 10 meters (33 feet) from known individuals. Invasive nonnative plant control, when possible, should occur when *S. spaldingii* is dormant (September - May), to minimize effects to the plant. When possible, applicators should use herbicides that break down in the environment quickly. Persistent chemicals should not be used within 15 meters (50 feet) of existing *S. spaldingii* plants. Chemicals that do not affect members of the Caryophyllaceae family should be identified and utilized whenever possible. Management should aim to eliminate the use of insecticides and pesticides, which threaten pollinators.

Historically, fire likely reduced thatch-like layers of dead grass leaves and stems. Prescribed burning may be a limited option for removal of thatch and nonnative rhizomatous grasses, especially Kentucky bluegrass (*Poa pratensis*), which show potential to choke out native bunchgrass species. If *S. spaldingii* plants are located in the area, management activities should be adjusted accordingly either by not burning in the area or enacting a monitoring program to gauge the plant's response. Responsible grazing regimes can also be encouraged to minimize impacts to *S. spaldingii* while benefiting the plant by maintaining range conditions without a thick layer of accumulated litter.

*S. spaldingii* has adapted to some herbivory over the course of its evolutionary history, while other herbivory is new or may have increased as a result of human activity. More research is needed to determine at what levels of herbivory and livestock and wildlife trampling *S. spaldingii* plants can persist, and at what levels its habitat remains intact. Responsible parties should evaluate cumulative effects of grazing in areas where both native and domestic ungulates graze. Until more data is collected, the following management actions are designed to balance herbivory while sustaining or increasing known *S. spaldingii* populations:

Prior to placing livestock in any pasture, a range-readiness evaluation should be conducted considering soil moisture and grass leaf heights. Soils should be firm enough to resist excessive shear and compaction. Active herding of cattle should not occur when soils are saturated. New growth on perennial bunch grasses such as Idaho fescue (*Festuca idahoensis*) and Bluebunch wheatgrass (*Pseudoroegneria spicata*) should be at least 6 inches. These evaluations are especially critical within *S. spaldingii* populations in early spring (April and May) when seedling germination occurs and during plant emergence and growth (May and June). Within known *S. spaldingii* populations and within high probability habitat, grazing should be minimized in mid-July through mid-October. Grazing should be avoided one out of three years in these areas with a maximum of 30 percent use of forage. Temporary fences and rotational grazing systems should also be used.

Off-road vehicle use should be effectively controlled in all areas containing *S. spaldingii* habitat and any recreation activities should be controlled to avoid trampling or depredation of plants. Signs encouraging users and operators to stay on roads

and trails should be posted. Winter recreation activities, such as snowshoeing or cross-country skiing, pose less threat to *S. spaldingii* in months when the species is dormant.

### **HUMAN-WILDLIFE-LIVESTOCK INTERACTIONS**

While the chance to observe wildlife is why many people will choose to visit the Community Forest, the interaction between people and wildlife can be detrimental to either the people (e.g. deer defending a fawn) or wildlife (e.g. disturbance causing bird nest abandonment or displacement from prime deer winter areas). It is important to focus human recreation on some areas of the moraine and minimize recreation on others, particularly during key nesting and wintering times. This can be done by encouraging people to use designated trails and routes and by closing select areas or trails during certain critical seasons. Dogs should be leashed at all times and not allowed to run after or chase wildlife or livestock. Public use of the Community Forest will need to be monitored to determine if public use restrictions are necessary to prevent conflicts between people, wildlife and livestock.

Informational kiosks should be posted and updated at entry points to remind the public of potential conflict with wildlife during certain times of the year. These signs should include the regulations prohibiting motor vehicle use and campfires. The west face of the moraine is important habitat for wintering mule deer from November through April. While it is unclear whether current public use has negatively impacted wintering deer, managers may need to limit public use of this portion of the moraine during winter months if problems arise in the future. Spring and early summer months are critical for nesting birds and public use may need to be limited to certain areas or trails during this time.



Photo: Leon Werdinger

## MONITORING

- Noxious Weeds: Treatment will rely on consistent monitoring efforts in initial years of treating infestations to contain populations, assess efficacy and adjust treatment. Areas must be monitored before and after annual treatments.
- Inventory: To date, with the exception of mule deer (*Odocoileus hemionus*), no wildlife surveys have been conducted on the site to determine species composition and use. There have been studies in nearby areas (e.g. annual bird counts, bat counts, ungulate surveys) that could be useful. Opportunities to participate in future studies that could include this site should be explored to further understanding of wildlife populations.
- Inventory of wildlife species, abundance and distribution can be achieved through contract work with qualified biologists, and/or volunteer efforts such as breeding bird surveys, Christmas bird counts and small mammal surveys. Opportunities may also exist to partner with natural resource agency personnel and educational institutions interested in specific species inventories such as bat monitoring, eagle roost sites, etc. Partners should work to take advantage of these opportunities, where feasible and affordable, and establish these efforts on the Community Forest.
- Wintering mule deer numbers and trend data will continue to be inventoried annually by the Oregon Department of Fish and Wildlife.
- In coordination with rangeland, habitat and wildlife, cultural resource and public recreation monitoring, visits to the Community Forest will be conducted annually in the spring to monitor condition, range readiness and balance between uses.
- Conduct Community Forest-wide habitat survey monitoring and assessment at least once every five years.
- In coordination with U.S. Fish and Wildlife Service and Willowa Land Trust, continue collecting trend monitoring data to assess health and vitality of Spalding's catchfly populations on the Community Forest.



*Example of volunteers constructing enclosures to enhance riparian and shrubland vegetation.*

*Photo: David Jensen*

# Cultural Resources

Photo:  
Eric Greenwell

## GOALS

- Hunting/Gathering: Maintenance of landscape and resources to promote the natural setting integral to maintaining gathering practices.
- Sacred Sites: Maintenance of landscape to promote natural setting integral to maintaining sacred sites.
- Traditional Cultural Properties: Ensure natural/cultural setting is maintained and enhanced, to preserve and protect specific “historic properties,” which are eligible for inclusion on the National Register of Historic Places.
- Archaeological Sites: Ensure that the National Historic Preservation Act and its provisions are addressed in any undertakings and consider any potential effects on historic properties.
- Inadvertent Discoveries: Ensure that proper coordination with the cultural programs of the Nez Perce Tribe and Confederated Tribes of the Umatilla Indian Reservation, in the event that ancestral human remains are encountered.

## STATUS

Nez Perce people (Nimi'ipuu) have always interacted with the land and resources and managed Wallowa Valley's aboriginal landscape throughout history into the present. The term Cultural Resources not only refers to individual physical and biological resources that are gathered, hunted and fished, it also refers to the health of the natural setting on which those resources depend for survival and the relationships between those resources and Nez Perce people. These relationships have sustained the resources, the natural setting and the people in equal measure since time immemorial. These relationships have also sustained the people's culture and lifeways, including language and naming, beliefs, stories and living traditions central to Nez Perce identity.



Rights reserved by the Nez Perce Tribe in the Treaty of 1855 (Article 3) with the United States were a conscious and concerted effort by the Tribe to maintain their relationship with the landscape to sustain both the resources and the people biologically and culturally. The Wallowa Lake basin, including the Community Forest, was originally included within the boundaries of the Nez Perce reservation of the 1855 Treaty. While a subsequent and controversial treaty ceded the Wallowa Valley in 1863, the Nez Perce Tribe today continues to advocate for their rights to gather, hunt and fish in ceded and usual and accustomed lands.

Cultural Resources also refers to physical places and locales, sacred sites or archaeological sites. Sacred sites are representations upon the landscape that have been identified by ancestral and current knowledge bearers within the traditional community. These sites are vital to promoting the community and individual well-being of aboriginal people. Specific sites and associated view sheds/soundscapes are required to facilitate interaction between Indigenous people and land/sites. Archaeological sites are where physical objects, such as artifacts and remains, are found intentionally or inadvertently. These sites may be documented by cultural resources surveys or other means.

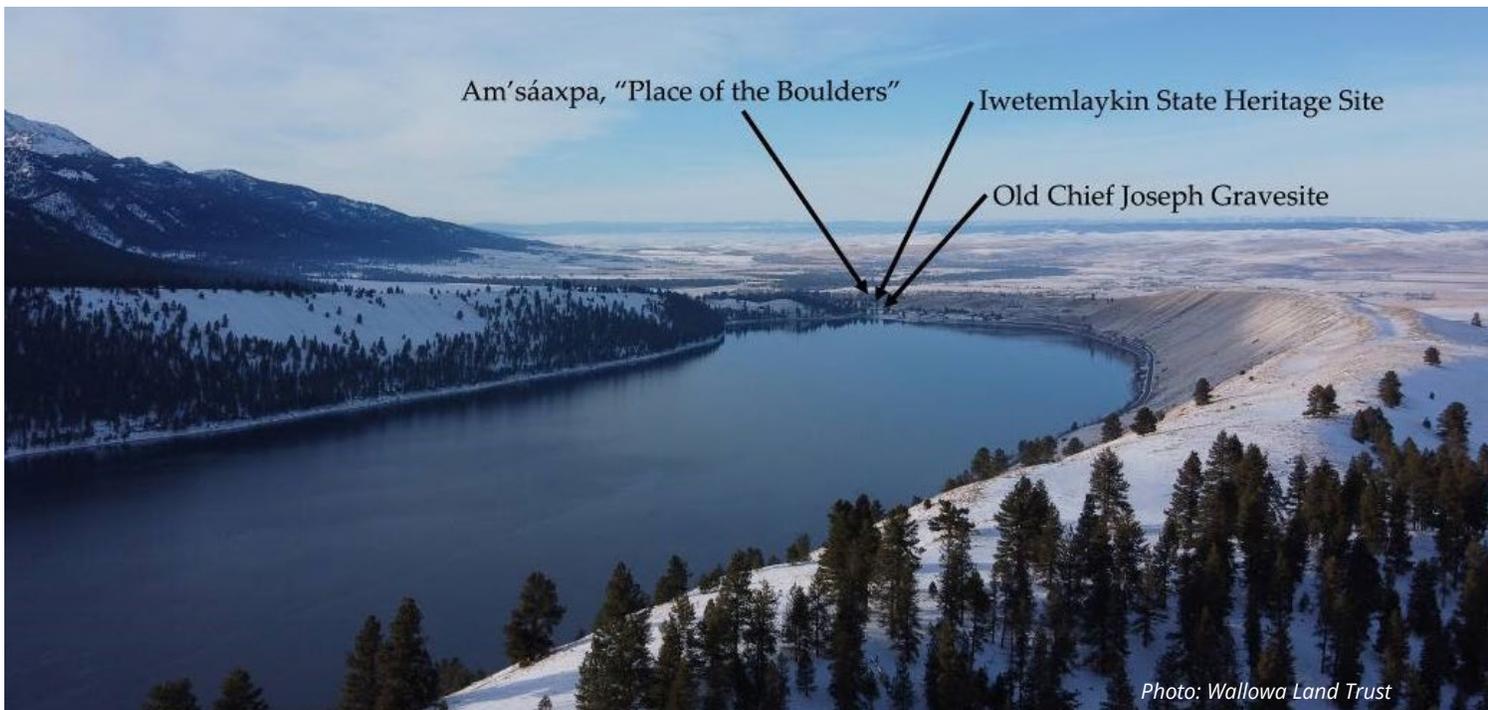


Photo: Wallowa Land Trust

Development throughout the Wallowa Lake basin and subsequent surface disturbance has resulted in inadvertent discoveries and documentation of archaeological sites and artifacts. The probability that sites and/or artifacts are located throughout the basin is likely, where seasonal rounds were practiced across a larger region. Foods were cultivated and harvested, camps were established, and traditional knowledge was shared and handed down from generation to generation. Many of those sites, which are sources of traditional knowledge and identity today, are part of the natural setting.

Collectively, the above are Cultural Resources - relationships between resources, land and people which continue to sustain each other and the sites and artifacts that memorialize those relationships and lifeways.

Like the Community Forest, Iwetemlaykin State Heritage Site, Am'sáaxpa and Chief Joseph Cemetery, located at the north end of Wallowa Lake, are managed for their conservation and cultural values. Cultural Resources are living elements of the culture and identity of Nez Perce people on the land.

# CURRENT INFRASTRUCTURE

Phase I Cultural Resource Inventory for the Wallowa County East Moraine Community Forest Survey Project



Nez Perce Tribe Cultural Resources Program did a cultural resources survey of a social trail on the East Moraine for Wallowa Land Trust in 2016. The subsequent report from that survey, the “Phase I Cultural Resource Inventory for the Wallowa Lake East Moraine Trails Project,” is on file with Wallowa Land Trust and the Nez Perce Tribe. A narrow portion of the social trail surveyed bisects the Community Forest, formerly owned by the Ronald C. Yanke Family Trust. The survey was limited in size (approximately 15 acres

of the Community Forest) and scope, including limited subsurface testing (Chadez, 2017). Within those 15 acres the Cultural Resources Program found no significant archaeological resources. Assessment of native plants and traditional foods were not included in the scope of the survey or the survey report.

In 2020, the Nez Perce Tribe’s Cultural Resources Program conducted another cultural resources survey specifically in preparation for this management plan. Financial resources limited the ability to survey the entire Community Forest. The Cultural Resources Program focused the 2020 survey on areas where disturbance and use are likely to occur including legal access points, existing roads and trails and areas where infrastructure is proposed to be installed, such as cross fencing to establish pastures for livestock rotation. The 2020 survey included a total area of 318 acres within the approximately 1,820-acre Community Forest. The subsequent survey report, “Phase I Cultural Resource Inventory for the Wallowa County East Moraine Community Forest,” is also on file with Wallowa Land Trust, Wallowa County and the Nez Perce Tribe.

The 2020 survey report describes four archaeological sites and two isolates (single historic era artifacts heavily rusted and damaged and lacking depositional context) located on the Community Forest (Chadez and Wallen, 2020). These sites will not be disclosed in this management plan. Of the sites and isolates found, three sites and two isolates were not recommended for registration on the National Register of Historic Places. One site is eligible for listing on the National Register and further surveying of that site is necessary to determine its origin and contents. The report ultimately determined there will be no effect on historic properties in the area surveyed as long as land managers maintain a 30-meter protective buffer around the site eligible to be registered. The 2020 report concludes that a majority of the Community Forest remains unsurveyed and notes, “There remains the potential for undiscovered archaeological resources, so care should be taken during project implementation.” (Chadez and Wallen, 2020)

Initial site visits and ocular surveys by the Nez Perce Tribe Cultural Resources Program staff and Cultural Resources director confirmed traditional foods and medicines grow on the Community Forest. The property also provides habitat, including the lakeshore, for traditional fish and game. The scope of the 2020 survey report did not include an assessment of known concentrations of these resources on the Community Forest.

## MANAGEMENT ACTIONS

In the Community Forest, Cultural Resources can be sustained through management practices and planning which protect specific sites as well as balance use with the health of native ecosystems to preserve the natural setting. Threats to Cultural Resources include a lack of understanding and/or misunderstanding of Cultural Resources; management practices and/or use conflicts which result in detriments to known sites and the overall health of native plant and animal communities; and threats which degrade and/or change the native composition, sights and soundscapes of the natural setting.

Initial management will prioritize working with the Nez Perce Tribe Cultural Resources Program to establish a 30-meter protective buffer around, and further surveys of, the known archaeological site which qualifies for the National Register of Historic Places on the Community Forest. With any archaeological site, known or found, managers will work with the Nez Perce Cultural Resources Program and adhere to regulations and/or regulatory bodies, including but not limited to the National Historic Preservation Act, Oregon State Historic Preservation Offices and the Confederated Tribes of the Umatilla Indian Reservation to ensure historic preservation concerns are addressed. The goal is to seek alternatives when effects are identified and try to avoid or minimize any adverse effects to sites and historic properties. The Nez Perce Tribe Cultural Resources Program will be consulted on any signage that might be considered to protect sites but also risk revealing locations.

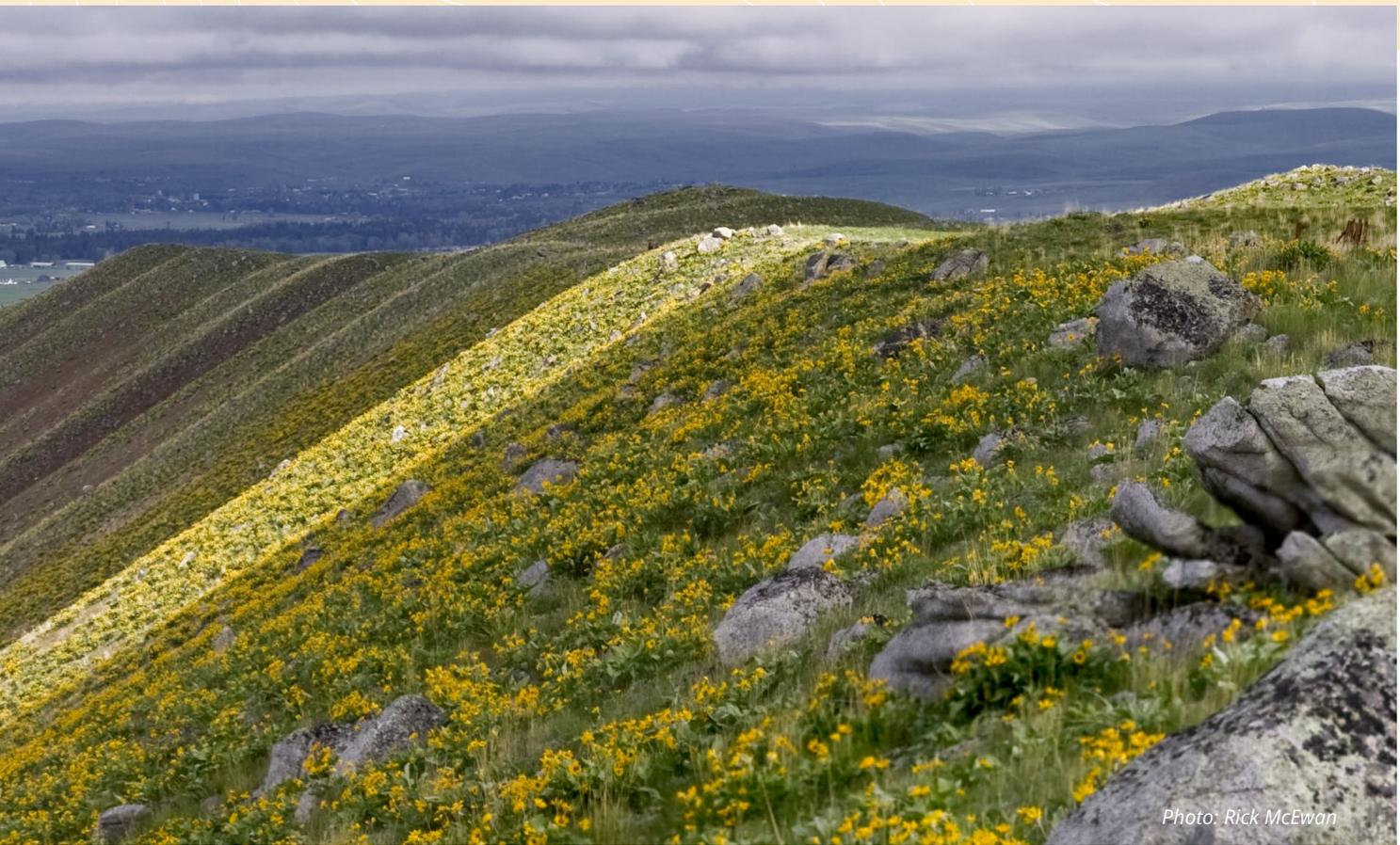
**Inadvertent Discoveries Policy:** While many areas on the Community Forest were surveyed in either 2016 or 2020, approximately 80 percent of the Community Forest has not. There is a likelihood that additional sites may be discovered inadvertently. In the event ancestral human remains or archaeological sites are encountered or perceived to have been encountered on the

Community Forest, land managers should ensure that they are left in-situ within the perceived site and protected. The discoverer should follow Appendix L: Inadvertent Discoveries Policy to ensure the proper handling of artifacts or reburial of human remains and Appendix M: Treatment of Native American Human Remains Discovered Inadvertently or Through Criminal Investigations on Private and Public, State-Owned Lands in Oregon.

Land managers and the Management Committee will consult the 2016 and 2020 survey reports for areas that have and have not been surveyed when planning future management actions or developments on the Community Forest. If management actions or developments are proposed in areas that have not been surveyed, especially actions which will disturb the surface, land managers will consult Nez Perce Tribe's Cultural Resources Program to minimize risk of disturbing unknown sites. Consultation may include localized surveys.

Land managers and the Management Committee will also continue to partner with Nez Perce people and knowledge bearers to understand how to balance uses on the Community Forest to ensure the natural and cultural settings of the land and sacred sites are preserved.

Prescribed fire is one tool the Nez Perce used to manage vegetation in forest understories as well as regenerate grasslands to improve vegetation and forage conditions for wild game and domestic livestock. As suggested in the habitat and wildlife management section above, managing logging and grazing uses at different intensities in some areas and resting others at intervals can provide economic returns while producing a diversity of size, ages and densities across the landscape. Where prescribed fire cannot be used, thinning and other forestry activities can also help promote wildfire resilience and diversity in tree sizes, ages

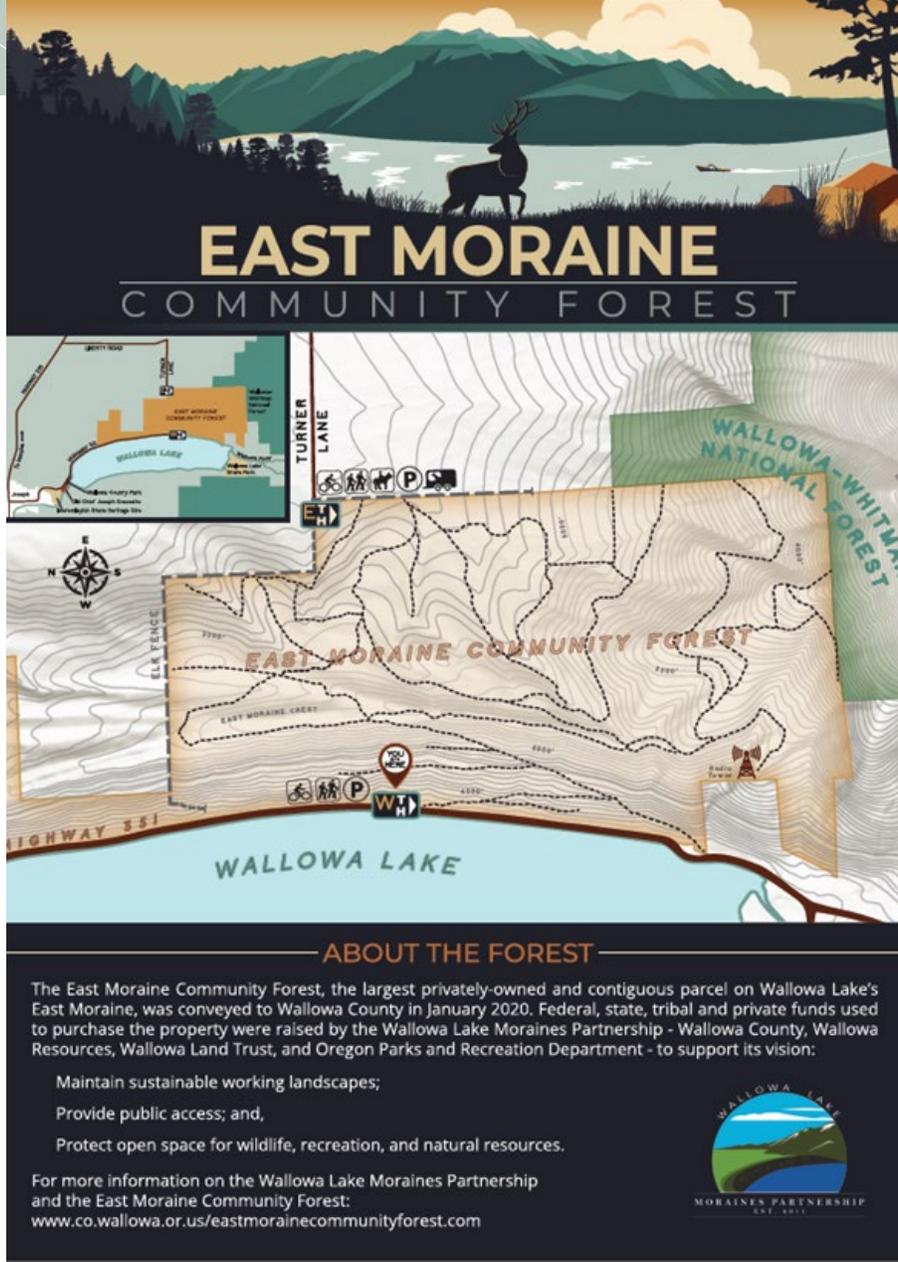


and densities. This diversity can be beneficial to native plant and animal communities, though care will be taken to ensure that disturbance from these uses don't introduce or exacerbate noxious weeds or otherwise alter vegetation to the detriment of existing native plant communities. The Nez Perce Tribe's representative on the Management Committee will ensure that appropriate notification is given to the relevant tribal departments.

The Management Committee will also work to explore opportunities to reestablish activities that are traditionally central to the health of native plant and animal communities and Nez Perce people. Gathering of culturally significant plants is not only an act of procuring important resources needed to promote aboriginal activities (root feast, traditional funerals, etc.), but also a recognition that aboriginal gathering practices have long been a part of the ecology of native plant communities. Gathering is a reciprocal act of stewardship, during which parts of plants are harvested while others are reseeded or returned, promoting growth. Gathering culturally significant plants also perpetuates

stories, language, lessons and overall identity of Indigenous people associated with those plants. Land managers will work with the Nez Perce Tribe to provide opportunities to inventory vegetation through surveys or other means and explore opportunities to reinstate traditional practices on the land.

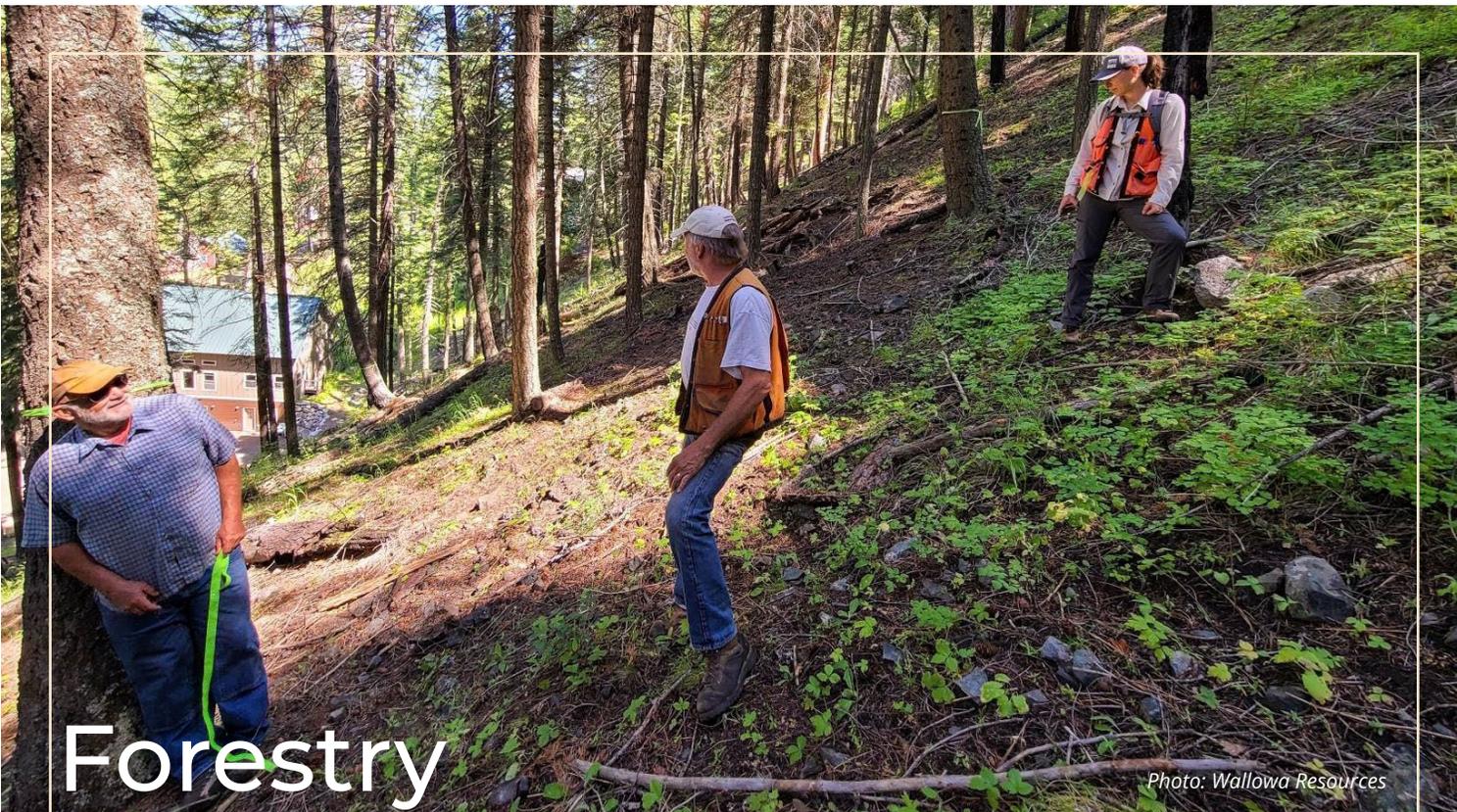
Management should also strive to educate users about cultural resources. Interpretive signs and educational materials are opportunities to welcome and educate the public about the Community Forest and its uses, the Indigenous landscape and cultural resources. Signs can also be used to encourage access and pathways that do not disturb cultural or archaeological sites while protecting and maintaining the confidentiality of those sites. When designing educational, interpretive and directional signs land managers will work with the Nez Perce Tribe and knowledge bearers to ensure signage accurately represents culture, protects sensitive sites and resources and does not disclose information Nez Perce people do not wish disclosed.



## MONITORING

Monitoring of cultural sites and other cultural resources will be led by tribal cultural resources personnel. The following monitoring activities are general and are subject to change as more information is gathered about cultural resources on the Community Forest.

- Annual visit to the Community Forest to assess condition of sacred sites and assess condition and management actions for cultural resources, such as culturally significant plants, with other uses.
- Conduct annual and confidential visits to any known or discovered archaeological sites to ensure documentation and preservation.
- When activities are proposed which will disturb the surface, monitor before and afterward to determine presence/absence of cultural resources.
- Monitor Inadvertent Discovery sites as they may arise.
- In coordination with habitat monitoring, conduct a property-wide assessment of cultural resources to document condition every five years.



# Forestry

Photo: Wallowa Resources

## GOALS

- Maintain forest health and productivity over the long term.
  - » Manage forest structure, species distribution and age classes appropriately to maintain ecosystem integrity by providing the entire sere (pre-forest, young, mature, old) which in turn maintains wildlife habitat and under-story forage.
  - » Maintain soil health and water quality, as well as native plant diversity, and prevent the spread of noxious weeds.
  - » Restore natural patterns of fire frequency and severity to the landscape where possible – being cognizant of the need to reduce wildfire risk transference to adjacent properties and smoke impacts on health and visibility.
  - » Apply best available science relevant to goals and guidelines above.
- Manage to obtain periodic revenue from timber production using silvicultural prescriptions tiered to forest health and other management goals above.
- Maintain recreational opportunities and provide opportunities to increase awareness among users about fire management, forest restoration and stewardship.
- Maintain roads necessary for future management activities.
- Strive to be recognized as exemplary managers under the Oregon Forest Practices Act and demonstrate best practices in Northeast Oregon forest stewardship.

## STATUS

Previous owners, the Ronald C. Yanke Family Trust, acquired the property from Ron and Linda Yanke in 1994. Ron and Linda Yanke acquired the property from RY Timber, Inc., a company they owned, in 1992. RY Timber, Inc. originally acquired the property in 1990 from the KBL Company. Prior to RY Timber ownership, there was a timber purchase agreement between RY Timber, Inc. and the KBL Company. Bruce Dunn, an RY Timber forester, managed the property for the Ronald C. Yanke Family Trust after the purchase. Harvest and grazing has occurred on the property for more than 60 years. Most of the 1,229 forested acres of



Photo: Wallowa Resources

the Community Forest have been harvested over the last several decades by RY Timber Inc. Roughly 67 percent of the property is forested and the remainder is grassland. Recent timber and grazing management strategies were documented in a plan authored primarily by Mr. Dunn, the East Moraine Forest Management Plan, last updated in 2015. It is on file with Wallowa County, Wallowa Resources and Wallowa Land Trust.

In 2020 professional forester Larry Nall collected data sufficient to draft an assessment and an initial forest management plan. His assessment classifies the Community Forest into stands (See Appendix N: Forest Stand Map) and points to the need for continued management. Individual stands are relatively homogeneous areas of similar forest conditions. Stand boundaries are often related to soils boundaries and to species mix of trees. The forest stands are outlined in red and numbered on the Forest Type Map. The existing road system is mapped in a yellow hashed line. The plan provides the following information for each stand:

- The acreage of that type;
- An estimate of volumes in million board feet, trees per acre, and average diameter;
- A description of insects or disease present above endemic levels;
- A potential time frame for harvest; and,
- A short summary statement of management priority.

Fifteen stand types have been delineated with nineteen forested stands. Each forest stand type has at least a 20 percent cover of trees. Remaining lands not classified as forested include dry grasslands to the north, and lush grasslands, some with a tree cover <20 percent in the middle portion. Douglas fir (*Pseudotsuga menziesii*) is the primary species, with ponderosa pine (*Pinus ponderosa*) a close second. Western larch (*Larix occidentalis*) and grand fir (*Abies grandis*) are minor components, while lodgepole pine (*Pinus contorta*) is limited to the southern, higher elevation portion of the Community Forest. Engelmann spruce (*Picea engelmannii*) and subalpine fir (*Abies lasiocarpa*) are incidental species and are not common. Slopes range from gentle to 65 percent. The Community Forest is bounded by the Wallowa-Whitman National Forest and private homes to the south, ranch/farm land, both dry and irrigated, to the east and north, and a heavily-traveled paved highway to the head of Wallowa Lake on the west side. During a boundary survey of the

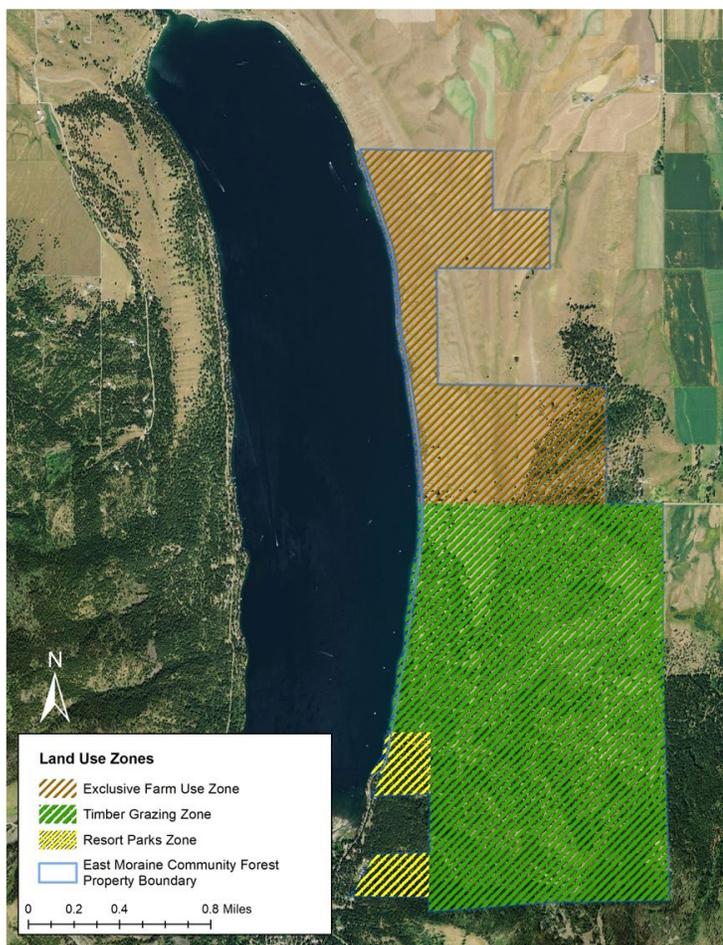
of the Community Forest in 2019 Baggett, Griffith & Blackman Surveyors reported the higher-elevation, southern boundary with the Wallowa-Whitman National Forest was blazed and markings were identifiable. The surveyor also blazed the western boundary of the Oregon Parks and Recreation Department parcel in 2020 where the Community Forest borders a number of residential lots. (This parcel has since been conveyed into County ownership and is a part of the Community Forest.) Other boundaries are also distinct.

Foresters from the Nez Perce Tribe Department of Natural Resources have agreed to complete a forest inventory and create a summary of current forest conditions, as well as establish a permanent plot system to track changes over time. This work is anticipated over the spring and summer of 2022 and will generate additional information on

stand conditions, including large trees, snags and downed wood, that will contribute to the first set of revisions to the management plan, and provide additional guidance for annual operating plans.

While a majority of the forestlands on the Community Forest are zoned Timber/Grazing, southwest portions of the Community Forest are zoned Resort Park with Reasons Exception Area (RP\*) (see Appendix D: Land Use Zoning Map). This zoning designation is critical to note here as it will restrict how Stand 1 can be managed. Any forestry management in Stand 1 will have to meet specific criteria, noted in Article 56: South Wallowa Lake; SECTION 56.030, DESIGN STANDARDS; 09. in the Ordinance Articles of Wallowa County's Comprehensive Land Use Plan:

09. VEGETATION: Commercial forest practices are not allowed. Only the trees and shrubbery within the immediate area of the building site and driveway may be removed to enable permitted development. Pruning, thinning, and removal of dead, dying, or hazardous trees shall be permitted. Pruning or removal of trees pursuant to a harvest/forest management plan for forest fuel reduction or forest health may be approved by the review authority. A map of the property identifying trees to be removed shall be submitted to the Planning Department for approval prior to removal. The Director may require an on-site inspection in which case trees identified for removal shall be clearly marked. Trees removed with Planning Department approval, if found to be merchantable, may be sold by the owner.



## CURRENT INFRASTRUCTURE

There are two points where vehicles can access the Community Forest located on the west boundary of the Community Forest along Highway 351/Wallowa Lake Highway (colloquially known as “the green gate”) and the east boundary of the Community Forest at the west end of Turner Lane. Predictably, “the green gate” along the highway is more visible and sees more visitors to the Community Forest. This gate was recently replaced and the entry improved. Conversations with Oregon Department of Transportation have verified that the approach to “the green gate” is permitted for industrial timber use, which is also sufficient for recreational use. The gate on Turner Lane is in fair condition and includes gates for vehicles and pedestrians, however it sits at the end of a county road with limited room to park or turn around. Adjacent landowners have expressed concern that more frequent use could significantly damage Turner Lane. In response to these concerns, improvements are being made to the Turner Lane entrance, which includes parking and accommodations for stock.

Internally, a network of roads and culverts provide access to stands throughout the Community Forest (See Appendix J: Water Resources Map). There is an approximately 75' x 75' gravel pit located on the

Community Forest where rock was locally mined in order to maintain roads. Roads are in various states and conditions. While some have not been used in many years and may only be passable by managers on ATV, horse or side-by-side, others are lightly maintained and managed for a variety of reasons. For example, roads from “the green gate” and the Turner Lane gate to the crest of the East Moraine are often used by equestrians, hikers and bikers as well as operators who have leased the Community Forest to graze cattle. A local telecommunications company who leases ground to operate a radio tower on the southern portion of the Community Forest also uses specific roads to maintain the tower. A comprehensive inventory of the roads, an assessment of their condition, as well as of culverts where runoff and intermittent streams risk erosion, will provide a better understanding of which roads are necessary for management and which require maintenance. Some sections are naturally growing over and may be left in this condition. These data are also important to planning alternate routes for recreationists when portions of the Community Forest are likely to be closed or use is limited in order to conduct forestry or other management activities safely.

### *Examples of various access roads/access road conditions*



*Photo: Kathleen Ackley*



*Photo: Eric Greenwell*

# MANAGEMENT ACTIONS

The objective of forestry management is to identify current conditions of the various stands and propose management recommendations for each one. An important part of owning forested property is to manage and maintain not only the resources but also the infrastructure.

Improving and maintaining forest health is important for all of the resource uses planned for the Community Forest. This plan identifies stands of trees and their approximate location, species mix, general stocking level, volumes in thousands of board feet (MBF), insect and disease presence and overall tree health. Some stands should be treated in the near term. Others should be reassessed in the near future with an eye to further stand condition development, as well as market conditions. Most of the stands should be left to grow for the next ten years or more. The forest management goals above inform the assessment of stand conditions, and the recommendations for each stand. For specific management recommendations for each stand, see Appendix O: Stand Management Plan.

Two stands, totaling 145 acres, are the highest priority for management. A restoration harvest is recommended for Stand 1 – and may generate net-income back to the Community Forest. This operation would take place on steep ground with limited access from existing roads – further analysis and planning is required to confirm feasibility and viability, and to ensure compliance with Wallowa County’s Comprehensive Land Use Plan. Pre-commercial thinning is recommended for Stand 2 – particularly if cost-share funding is available. Stand 1 is zoned R-2 and requires consultation and/or review with the Wallowa County Planning Department in order to begin treatment. Pre-commercial thinning is recommended for Stand 2 – an application for cost-share funding from Oregon Department of Forestry was submitted to support this work.



This Forest Management section of the larger management plan and the Stand Management Plan are intended to be used as a guide for the Commissioners and Management Committee in reaching the desired level of forest management intensity and tree stocking on the Community Forest to meet overall objectives. This section describes various forest conditions and offers general recommendations. Specific actions on the ground will need to be planned with more detailed information collected in advance of the action and detailed in an annual operating plan. The forest is dynamic and conditions can change rapidly due to wind, fire, drought, and other actions. The management plan should be reviewed and/or updated every 5± years as forest conditions can change rapidly with changes in weather patterns, insect or disease conditions. When a more intensive forest inventory is completed, the plan should be updated with that information.

Continued partnership with the Nez Perce Tribe's Forest and Fire Management and Cultural Resources programs for forest inventory and surveys will aid, overall, in how management will balance restoring and sustaining forest health, preserve heritage elements of the natural setting, protect habitat and cultural resources and provide economic returns.

The 2022 Oregon Legislative Session is considering revisions to the Forest Practices Act under the Private Forest Accord. Most of these proposed changes affect Western Oregon, but include changes to Eastern Oregon riparian buffers. This management plan will comply with these changes if they become law. More generally, forest management will coordinate with habitat and wildlife and rangeland plans to support the restoration, improvement and long-term conservation of wetland and riparian features on the East Moraine Community Forest.

The forest management goals above recognize the importance of large old trees, snags and other wildlife trees on the landscape. Snags and downed wood have not yet been inventoried. When a more intensive forest inventory is undertaken, snags and downed wood should also be inventoried at that time and management recommendations of individual stands can be updated. Once an inventory is complete, tools like the United States Forest Service's Decayed Wood (DecAID) Advisor can aid land managers in assessing quantities of dead wood recommended left for habitat.

Managers will also note that the Occupational Safety and Health Standards (OSHA) for logging operations has specific guidance for snags and danger trees. OSHA defines a snag as any standing dead tree or portion thereof. A "danger tree" is defined as a standing tree that presents a hazard to employees due to conditions such as, but not limited to, deterioration or physical damage to the root system, trunk, stem or limbs, and the direction and lean of the tree (U.S. Department of Labor, 2014). The general guidance is to remove these hazards. Leaving snags or danger trees in place has risks to people working or recreating on the Community Forest. Careful consideration is needed in deciding to leave any potential hazards standing, including their proximity to designated trails systems and/or ongoing work, and appropriate marking and posting of the hazard.



Photo: Leon Werdinger



*Photo: Wallowa Resources*

## MONITORING

- Monitoring plots: Within the first five years of ownership, land managers supported by members of the Management Committee, should establish permanent monitoring plots indicative of forest types. Plots will provide long-term data and inferences regarding site quality, stand origin, age class, species composition and efficacy of management actions to achieve goals.
  - » As resources and partnerships allow, define and implement drone monitoring protocols.
- At least once every ten years, revisit and collect comprehensive data from permanent monitoring plots, including measurements, photo documentation, etc.
  - » Use data collected to prepare and inform substantial revisions to this management plan.
- In coordination with rangeland, habitat and wildlife, cultural resource and public recreation, visit the property annually in the spring to monitor forest conditions and balance between uses.
- Additional annual site-visit monitoring includes:
  - » Inspecting access points and roads for necessary maintenance, damages and obstructions which need to be removed to ensure accessibility for multiple uses.
  - » Assessing blowdown and infestations which need to be salvaged.



Photo: Brady Holden

# Rangeland

## GOALS

- Maintain a diversity of grassland structural conditions through space and time.
- Manage range ecosystems to ensure basic needs of forage and soil resources are met.
  - » Forage will be managed for both wildlife and domestic livestock under guidelines that will assure continued maintenance or improvement of range resources.
- Maintain or enhance the riparian conditions on the Community Forest and establish a riparian monitoring plan based on the site, concerns and goals.
  - » Maintain or enhance watershed conditions as identified in the Wallowa County Natural Resource Management Plan.
- Maintain livestock grazing as an integral part of sustainable and economical livestock operations, which maintain and/or enable natural recovery processes. Strive for longevity and to maintain or enhance conditions.

## STATUS

The Community Forest was most likely grazed prior to acquisition by the previous landowner, RY Timber Company, in 1990. While the RY Timber Company and the Ronald C. Yanke Family Trust primarily managed the property for timber they also continued grazing practices by leasing the property for cattle production. The Yanke Family Trust's management plan drafted in 2015 provides a window into the goals and aims of previous rangeland management, where the stocking rate fluctuated between 100 and 125 cow-calf pairs on the portion of the property south of the elk fence and 50 cow-calf pairs north of the elk fence. Cattle

were used to manage grasses and forbs to heights of 4 – 6 inches. As current land managers strive to achieve the rangeland goals listed above and balance rangeland uses with Habitat and Wildlife, Cultural Resources, Forestry, and Recreation uses, a combination of historical information and introduction of new rangeland practices will be required.

Range on the Community Forest includes uncultivated grasslands, shrub lands, and forested lands with an herbaceous and/or shrubby understory. It includes lands with native vegetation

cover and lands naturally or artificially revegetated with native or adapted, introduced forage-plant species. The grassland portion of the Community Forest contains remnants of bunchgrass prairie with introduced and invasive species throughout. This area is likely where the highest production of forage occurs. The forested areas have also been seeded with introduced species like Timothy (*Phleum pratense*) and orchard grass (*Dactylis glomerata*) that supplement the forage in those areas. Much of the grasslands and forested areas provide functional and productive forage.

Perennial water is very limited on the Community Forest. A freshwater emergent wetland exists along the east boundary, at the west fork of Prairie Creek, which is a non-fish-bearing stream. Riparian vegetation stabilizes the banks and provides shade for the streams. The riparian area adjacent to the spring is composed of

moist, fertile sediments that support a variety of plants, including willows (*salix*), poplars or black cottonwoods (*Populus/populus trichocarpa*), and others. This area contains aquatic and terrestrial ecosystems which mutually influence each other and occur as transitions between aquatic and upland habitat. The riparian area performs many functions for livestock and wildlife including providing a reliable water source, supplying forage and maintaining habitat essential to survival and productivity of riparian and aquatic species apart from fish.

From a financial perspective, in order to balance other uses and achieve goals, rangeland plant composition and rangeland infrastructure both require investment. There are noxious weed concerns, fences in need of construction or repair, and other infrastructure necessary to maintain and/or improve forage production, livestock production, and habitat quality.

## CURRENT INFRASTRUCTURE

**For locations of features and infrastructure discussed in this section, see the Appendix P: Current Rangeland Infrastructure Map.**

**WEEDS:** Along with threats to habitat quality, noxious weeds on the Community Forest will also reduce the quality and productivity of forage. For more information on the current status of noxious weeds, see the Habitat and Wildlife section above. Traditionally, lessees are assigned the task of treating weeds associated with grazing uses (i.e. weeds growing in areas where the ground is disturbed due to frequent cattle use). However, the County Weed Manager will have primary responsibility for addressing significant weed infestations such as meadow hawkweed and common bugloss discussed in the Habitat and Wildlife section. Lessees will assist in these efforts.

**FENCES:** Fences along most of the Community Forest boundaries are functioning and fencing along the southwest boundary has been replaced in recent years. The slopes of Mt. Howard, on the southern border of the Community Forest, are composed of steep, wooded and uneven terrain—a natural boundary for livestock.

In terms of repairs, an elk fence that runs north-south and east-west from its corner at the Turner Lane gate on the east side of the Community Forest is an older fence of galvanized wire and treated wood posts. It was erected through coordination between landowners in the vicinity and Oregon Department of Fish and Wildlife to keep elk to the south and out of cultivated farmland. In partnership with adjacent landowners and relevant agencies, this fence should be surveyed for potential repairs. An additional quarter-mile of fence to the northeast is also in need of repairs.

The Community Forest is currently configured into two distinct pastures: one to the north of the elk fence and one to the south. This configuration is a result of both topography and adjacent property boundaries, which present access challenges, and a lack of interior fences. The southern pasture contained a cross fence at one time, which ran north-south parallel to the crest of the East Moraine. Without adequate cross fences and distinct pastures, the Community Forest lacks infrastructure for moving cattle to separate pastures or preventing cattle from returning to the same places routinely to graze.

**STOCKING RATE:** Access to the north pasture is challenging due to risks of erosion on steep and eroding slopes on the west side of the pasture, while private property with no access surrounds it to the south, east and north. Landowners adjacent to the north pasture have been the lessees. The south pasture has legal access to the east and west via the Turner Lane gate and “the green gate.” A visual inspection of the range from the 2019 grazing season revealed that current stocking rates taxed the forage and rangeland health and that, without fences, cattle remained in specific areas. A committee of grazers and rangeland managers recommend that the number across the southern pasture be reduced to 80 cow-calf pairs in 2022 for the months of August and September based on these observations.

**WATER AND WATER IMPROVEMENTS:** Several intermittent streams flow across the Community Forest and supply water to a network of small ponds and troughs. However, a majority of these are fed by snowmelt and runoff from higher elevations and often dry up by the late season. They do not provide reliable sources of stock water throughout the entire duration of the grazing season (June through October).

There are few annual sources of stock water. The west fork of Prairie Creek flows year-round and is located along the east boundary of the Community Forest. Currently, no fences or infrastructure are erected around the wetland and it receives relatively heavy stock use. A spring, located, on the southwest side of the Community Forest, is another perennial source. It is not developed for stock water and is difficult for livestock to access. There is a water right associated with this spring. Finally, there is a well located in a draw between the crest of the East Moraine and the next lateral moraine to the east, just south of the elk fence and the former Chief Joseph Rodeo Grounds. According to the District 7 water master landowners do not need a water right to draw water from a well for livestock. The viability of the well as a reliable water source throughout the grazing season is untested.

*Examples of current infrastructure: Covered well (left) and elk fence (right)*



*Photo: Eric Greenwell*



*Photo: Eric Greenwell*

## MANAGEMENT ACTIONS

As rangeland aims to achieve goals, actions in this section are designed to ensure the current condition of the range is enhanced while also introducing new infrastructure necessary to balance Rangeland uses with Habitat and Wildlife, Cultural Resources, Forestry and Recreation uses on the Community Forest. Due to considerable costs associated with the introduction of new infrastructure, such as fences and water improvements, as well as costs associated with balancing uses, such as the potential installation of specialized gates for varying modes of recreation, management planning should prioritize those costs which mutually benefit rangeland and other uses, until such time as new infrastructure can support the following objectives.

*Goal 1: In coordination with other uses, land managers should strive to maintain the diversity of rangeland structural conditions through space and time.*

**SPECIES COMPOSITION, FORAGE PRODUCTION AND SPECIES DIVERSITY:** The most immediate challenges include invasive noxious weeds and invasive annual grasses. As noted in the Habitat and Wildlife section, older weed inventories provide evidence that the Community Forest will likely need to be treated for a variety of invasive species (see Appendix I: Noxious Weed Maps), however the most benefit for rangeland conditions will be gained from gathering current information regarding frequency and location of invasive annual grasses. Short-term management actions include:

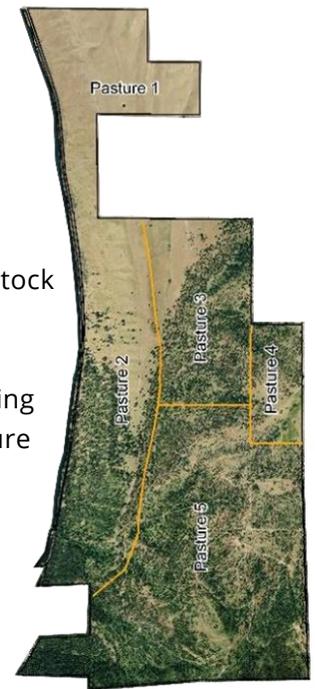
- Continue requiring lessees to undertake localized treatments of noxious weeds. Where needed, educate operators regarding culturally significant plants and Spalding's catchfly locations and implement non-herbicide treatments in those areas.

In the long-term, land managers should strive to maintain species composition, forage production and species diversity through the following management actions:

- In coordination with habitat and wildlife and cultural resources, enhance native vegetation where appropriate. Where aggressive annual grasses threaten diversity and productivity of range, habitat and cultural resources, land managers should find appropriate vegetation to combat invasion, with a preference for ecotypes of native species from Wallowa County or similar areas.
- After fire or other disturbances, facilitate the recovery of vegetation as much as possible. Seed ecotypes of native species from Wallowa County or similar areas when natural recovery is not expected or as needed for soil protection. Where cost, establishment and germination rates of native seed prevent the mitigation of erosion and/or cannot outcompete invasive annual grasses and noxious weeds, adaptable species should be used.

**GRAZING REGIMES:** The rangeland on the Community Forest has evolved over time with wildfire, the cultivation of culturally significant plants, and domestic and wildlife grazing, and the vegetation responds to these interactions. Introducing innovative grazing practices in coordination with new management tools, like prescribed fire and plant gathering, can mirror the suite of these historic interactions across the landscape. The result can help maintain natural diversity in range structure and vigor, improve nesting habitat and forage availability for wildlife and provide returns to the local economy through sustained food production.

**ROTATION SYSTEM:** A committee of grazers and rangeland managers assessed the viability of systems on the Community Forest and introduced a rest-rotation grazing system which depends on managing the Community Forest in five pastures. While the southern portion of the Community Forest is divided into four pastures under this system, the northern portion is still managed separately due to topography and access limitations. Other limitations include considerable infrastructure costs associated with a five-pasture configuration. The cost for permanent internal fences alone was estimated at \$75,000 and does not include costs already associated with repairing boundary fences. Water improvements are also required to ensure livestock have access to water in any given pasture year-round. Any trails that would bisect fences will need to be inventoried to ensure recreationists can pass without the potential of letting livestock out of designated pastures. The configuration, including proposed and existing infrastructure, is mapped in Appendix Q: Proposed 5-Pasture Configuration Map.



Currently, the cost of internal fences poses one of the most significant barriers to initiating this five-pasture system. The committee of grazers and rangeland managers recommend installing at least one permanent cross-fence, which bisects the Community Forest north-south along the east side of the crest of the East Moraine. For the time being, the other fences associated with dividing pastures 3, 4 and 5 can be composed of 1.25 to 1.5 miles of temporary low-voltage electric fence installed before grazing seasons commence. The benefits of temporary fences include cost, mobility to adjust pastures as the Management Committee and operators gather data, and they are relatively easy to traverse by people engaging in recreation until such time as spring-loaded gates, cattle guards or similar infrastructure can be installed. When temporary fences are used, signs posted at trails should warn the public of minor shock associated with electrically charged lines.

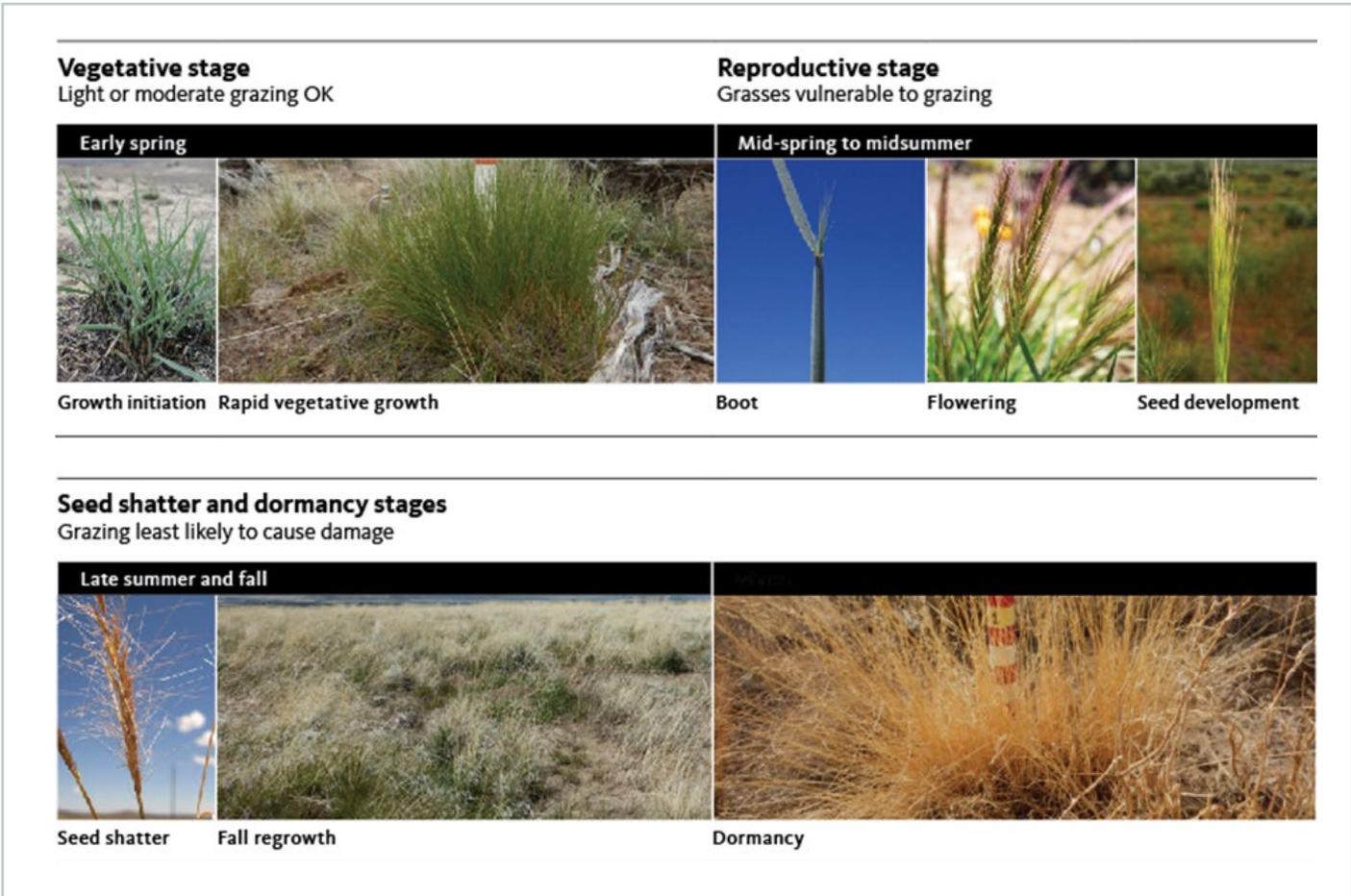
The second barrier to a five-pasture system is ensuring that all pastures include reliable access to water. The only two reliable water sources are located in pastures 2 and 4, while stock ponds and/or troughs in Pastures 1, 3 and 5 dry up seasonally. The well in Pasture 3 is a potential year-round source, though its viability has not been tested. Water developments will incur significant costs, including solar pumps or electric pumps, spring development, piping or tubing, and other infrastructure. Gravity-fed systems should be utilized wherever possible.

Management actions necessary to work toward the proposed five-pasture rotation system include:

- Assess viability of water sources and develop an approach to provide reliable sources in each pasture.
- Work with adjacent landowners and partners to assess and repair any boundary fences, including the elk fence and fences along in the northeast corner of the Community Forest.
- Install permanent cross-fence just east of the East Moraine crest.
- Assess the viability of using temporary fences to separate pastures 3, 4 and 5.
- Where surface disturbance is anticipated for developments, work with cultural resource professionals to ensure cultural resources are surveyed and preserved per the Cultural Resources section above.
- Manage wildfire and prescribed fire with consideration of the needs and effects of domestic livestock grazing to achieve rangeland goals.

*Goal 2: To manage range ecosystems to ensure basic needs of the forage and soil resources are met.*

**GRAZING SEASON DURATION:** Based on the Community Forest’s dominant aspect, steep slopes and soil types, risks of erosion at certain times of year are significant. Grazing season should begin no sooner than June 10 – 15, unless phenological cues such as rapid growth rate, boot and flowering development (see graphic below) indicate that vegetation is established and sooner dates can be considered. Allowing vegetation to establish in the spring while also giving soils time to dry and harden will avoid higher risks of erosion and surface disturbance. Additionally, plants which are passing the rapid vegetation phase toward the boot stage will regenerate much more quickly after they are grazed (Oregon State University 2019). Likewise, grazing after October 30 should not be practiced to avoid risks of erosion and soil displacement when grasses begin to go dormant and soils dampen. This sets the grazing season on the Community Forest to approximately 4 – 4.5 months.



**UTILIZATION:** The utilization rate is defined as the amount of forage set aside for use by domestic livestock for consumption, defecation, urination and trampling. 50 percent utilization is a standard rate based upon the philosophy of “take-half, leave-half,” where 50 percent is consumed or otherwise utilized while 50 percent is left on the range to regenerate and maintain or enhance rangeland productivity over time. The following table shows utilization rates for the Community Forest. When unsatisfactory conditions occur, an analysis of whether livestock are contributing significantly to the issues should also occur.

Range Resource Management Level	Forest		Grassland		Shrubs	
	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition
Livestock managed to optimize forage production and utilization. Cost-effectiveness culture practices improving forage supply, forage use and livestock distribution may be combined with fencing and water development to implement complex grazing systems.	45	0-40	50	0-40	50	0-35
Range Condition	Grasses & Grass-like Species		Sedge & Rush Sinks		Mixed Species	
Satisfactory-Proper Functioning Conditions or functioning at risk	4 inches		3 inches		2 inches	
Unsatisfactory-nonfunctioning	6 inches		4 inches		4 inches	

\* Differences of 10-15 percent between satisfactory and unsatisfactory conditions should be interpreted for utilization by wildlife and species utilizing range other than domestic livestock.

**STOCKING RATE:** In pastures south of the elk fence, Natural Resources Conservation Service (NRCS) Web Soil Survey tools indicate, on a year of average precipitation and under the approximation that cattle are accessing and utilizing 85 percent of the total area, the four pastures can support up to 94 cow-calf pairs over four months (or 375 animal units annually). These calculations also consider an average increase in forage production of 900 lbs./acre in the woodland areas, which deviates from NRCS tools based on the understanding that these areas were supplemented with orchard grass, timothy and other species at some point in the past, increasing forage productivity. Range tools also estimate, when precipitation and conditions for forage production are ideal, the four pastures south of the elk fence can support 133 cow-calf pairs for a four-month grazing season, while they can only support 58 cow-calf pairs when conditions are unfavorable for vegetative productivity, such as drought. The condition that cattle can access and graze 85 percent of the Community Forest is a visual assessment based on topography, and land managers should work to identify more accurately how much of the Community Forest is accessible and provides forage to livestock. Conversely, past operators and land managers accessed historical data to make decisions to maximize both livestock production and vegetative productivity and have used past stocking rates, NRCS tools and visual assessments of range to set the current stocking rate at 100 cow-calf pairs in the southern portion. The stocking rates are broken out across the four pastures based on a four-month grazing season in the following table. These numbers are not intended to be prescriptive, however to act as guides that can be adjusted for rotations (i.e. a given pasture may sustain more cow-calf pairs for a shorter duration).

Pasture	Acres	Percentage of Area	AUMs Favorable Year	AUMs Normal Year*	AUMs Unfavorable Year
Pasture 2	427	27.39%	36	26	16
Pasture 3	275	17.64%	23	17	10
Pasture 4	93	5.97%	8	6	3
Pasture 5	764	49.01%	65	46	29
<b>Totals</b>	<b>1559</b>		<b>133</b>	<b>94</b>	<b>58</b>

\*Using past stocking records, visual assessments and NRCS range tools, land managers should assess placement of 6 additional cow-calf pairs across pastures.

In the pasture north of the elk fence (Pasture 1), NRCS range tools indicate, on a year of average precipitation and under the approximation that cattle are accessing and utilizing 70 percent of the total area, the pasture can support up to 23-24 cow-calf pairs over a four-month grazing season (or 93 animal units annually). Range tools also estimate when precipitation and conditions for forage production are ideal. The pasture north of the elk fence can support 29 cow-calf pairs for a four-month grazing season, while they can only support 18 cow-calf pairs when conditions are unfavorable for vegetative productivity. The condition that cattle are currently accessing and grazing 70 percent of the Community Forest is a visual assessment based on topography and current infrastructure. The 2021 operator grazed 60 cow-calf pairs over two months, while the recommendation based on range tools during a year of normal conditions is 46-48 cow-calf pairs (23-24/month for 2 months). Land managers should assess future stocking rates and how much of the pasture is accessed to ensure optimal balance between long-term range productivity and livestock production.

For a more detailed calculation of forage production and stocking rate calculations based on soil type, using NRCS tools, see Appendix R: Grazing Calculation as well as Appendix S: Farmland Soils Classification Map.

Management actions associated with managing range ecosystems to ensure the basic needs of the forage and soil resources are met are:

- Implement utilization guidelines for 4-4.5 month grazing season. Based on plant phenology, climate and plant responses to grazing, there are three basic periods to manage: fall/winter, early spring, and late spring.
- During monitoring, assess northern and southern pastures to ensure access to total grazing and utilization area is accurate.
- Where practical, assess infrastructure needs for water developments and fence placement.
- Authorize annual grazing permits based on monitoring of satisfactory conditions in which domestic livestock grazing is as follows:
  - » Range forage condition, as it applies to grazing capacity, is at least fair or in an upward trend based on utilization guidelines
  - » Soil stability is at least fair or in an upward trend.
- On lands grazed but not maintaining or moving toward a satisfactory condition, management should be changed to allow for improvement of conditions to allow for an upward trend if monitoring shows livestock contributes to the condition.
- Include wildlife and recreation stock forage along with permitted rangeland use when setting range management objectives.

*Goal 3: Maintain or enhance the riparian conditions on the Community Forest and establish a riparian monitoring plan based on the site, concerns and goals.*

It is to the long-term benefit of Wallowa County to maintain healthy wetland and riparian vegetation located in Pasture 4. Root systems of shrubs and forbs in meadow areas and trees in other areas are a protection against bank erosion during high water. The season, timing, frequency, duration and intensity of grazing use around wetlands should be based on the physical and biological characteristics of the site, which should offer adequate cover (live plants, plant litter, and residue), vigorous plants, and proper root growth to promote infiltration, conserve soil moisture and maintain soil stability. Also: a healthy stream has little bank exposed. Even during high water, the effect of riparian vegetation is to protect streambanks from erosion by floods and ice and to slow floodwaters and allow fine sediments to settle out, building soil fertility and thickness. The fine soils of floodplains also store water. Riparian areas used for livestock grazing need special care to remain healthy and productive. Healthy riparian areas include a variety of types and ages of plants, including trees, shrubs, grasses, and groundcovers.

Benefits of riparian vegetation on the Community Forest include trees, shrubs, grasses, sedges and overhanging banks maintaining cool temperatures in streams; forage provided for both livestock and wildlife; plant roots stabilizing stream banks and controlling erosion and sedimentation; sediment and nutrients filtered out of runoff; moderated stream volumes, including reduced peak flows during flooding periods and stored water released into streams during low flows; leaves, twigs and insects contributed to streams, thereby providing basic food and nutrients that support aquatic and riparian wildlife; and large trees that fall into streams creating pools, riffles, backwater, small dams, and off-channel habitat and protection from predators.

Currently, the wetland on the Community Forest is in fair condition. The following management actions are intended as a menu of options for maintaining and/or enhancing the wetland and riparian area over time. Where resources limit options, land managers should assess and prioritize those actions designed to maintain or enhance rangeland and habitat uses simultaneously, as wetlands are vital to both.

**MAINTAINING OR ENHANCING RIPARIAN CONDITIONS:**

- Establish baseline conditions and trends by monitoring, using one or several types of monitoring (i.e. Properly Functioning Condition, Multi-Indicator Monitoring).
- Plant hardwoods in areas that lack vegetation for the site's potential.
- Reduce competition from conifers when encroachment is occurring.
- Eradicate/control noxious weeds using appropriate methods.

**INCREASE STREAMBANK STABILITY, WATER QUALITY, DISSIPATE ENERGY DURING HIGH FLOWS AND APPROPRIATELY FILTER SEDIMENT/NUTRIENTS FROM RUNOFF:**

- Plant cut-banks with willows or other appropriate species and cage if needed.
- If necessary, fence and gate riparian area to control access and encourage utilization of alternative water sources\*.
- Seed with appropriate grass species (preferably ecotypes of native species from Wallowa County or similar areas).
- Develop management strategy for continued upward vegetation trend and address areas of chronic concern.
- Address tree density to balance flow, access to water, and bank stability.

\*Domestic livestock require reliable access to water sources throughout the grazing season. Fencing and gating the riparian area will require development of alternative water sources (see below). In the event managers decide to erect fences and gates, resources should be assessed for also developing alternate viable water sources. Additionally, any fences installed should meet wildlife friendly standards (bottom wire 18 inches high, top wire 42 inches high) to allow wildlife access to the stream.

**UTILIZE GRAZING STRATEGY TO ENHANCE RANGE AND RIPARIAN CONDITIONS, INCLUDING SEDIMENT ENTRY AND DEPOSITION IN CHANNEL BOTTOM:**

- Develop alternative water sources and stations such as stock ponds, troughs, springs, hardened water gaps, etc. where it is necessary to improve livestock distribution or part of a management strategy to improve adjacent resource conditions.
- If necessary, develop infrastructure for moving water to alternate sources, such as gravity pipes, electric pumps and solar pumps.
- Locate any new livestock handling and/or management facilities outside of Riparian Areas.
- Utilize adaptive grazing management, adjusting year to year depending on climatic and vegetation conditions.
- Cut livestock trails through trees to help with livestock distribution, utilizing old roads or trails where available and practical.
- Improve water storage in soils through riparian improvements listed above.
- Monitor channel shape to manage for appropriate shape that is efficient for sediment processing.
- Utilize long term effectiveness monitoring for instream sediment measurements.
- Utilize low-stress livestock handling.
- Graze riparian pastures consistent with other objectives.

**UTILIZATION:** Similar to range utilizations, land managers should strive to meet the following utilization guidelines in riparian areas and pastures. When unsatisfactory conditions occur, an analysis of whether livestock are contributing significantly to the issues should also occur.

Range Resource Management Level	Grass and grass-like Species		Shrubs	
	Satisfactory Condition	Unsatisfactory Condition	Satisfactory Condition	Unsatisfactory Condition
Livestock managed to optimize forage production and utilization. Cost-effectiveness culture practices improving forage supply, forage use and livestock distribution may be combined with fencing and water development to implement complex grazing systems.	45	0-35	50	0-35
Riparian Condition	Grasses & Grass-like Species	Sedge & Rush Sinks	Mixed Species	
Satisfactory-Proper Functioning Conditions or functioning at risk	4 inches	3 inches	2 inches	
Unsatisfactory-nonfunctioning	6 inches	4 inches	4 inches	

*Goal 4: Maintain livestock grazing as an integral part of sustainable and economical livestock operations, which do not impede but enable natural recovery processes. Strive for longevity and to maintain or enhance conditions.*

Management strategies and actions discussed above are intended to maintain livestock production as an integral and sustainable use across the Community Forest, and to sustain the culture of providing economic returns to the local economy through rangeland and livestock production. As monitoring provides more data and insight and management strategies adapt over time, land managers should strive to ensure the Community Forest provides economic opportunities to livestock producers. Land managers should also strive to identify opportunities where management actions can mutually benefit Rangeland, Habitat and Wildlife, Cultural Resources, Forestry, and Recreation Uses. Where listed species are known to occur, land managers will review the Habitat and Wildlife section above, tailor management strategies and educate operators to balance rangeland activities with preservation and enhancement of listed species populations.

Management actions include:

- Maintain grazing opportunities and allotments that support commercial ranching.
- Use livestock grazing as a tool to aid in natural recovery processes.
- Maintain grazing opportunities as an integral part of a sustainable and economically viable operation while allowing natural watershed processes.
- Use adaptive management strategies to improve riparian conditions within pastures.
- Evaluate season, numbers, and rotation for riparian areas. Evaluate early and late season grazing to strive toward healthy riparian conditions.
- Identify opportunities to educate the public and students regarding rangeland techniques, balanced uses, and rural ways of life.
- Identify grazing opportunities and allotments for young producers seeking to enter and succeed in the field of livestock production and rangeland.
- In Pastures 1 and 3, where populations of federal and state-listed Spalding's catchfly are currently known to occur, observe management recommendations in the Habitat and Wildlife section above.
  - » Tailor grazing rotations to control access later in the grazing season (Aug – Oct) to Pastures 1 and 3 during flowering and fruiting stages.
  - » In coordination with Habitat and Wildlife, monitor catchfly population trends and grazing regimes to assess compatibility and mutual benefits of use.
  - » Educate operators and third-parties on limited use of herbicides and/or pesticides in areas where Spalding's catchfly occurs.

## MONITORING

Ongoing monitoring will be an important process to adapting rangeland management strategies, especially due to variables in soil types, weather, diverse geography, and plant communities. With these factors in mind, it is important to note that forage production in all soil types can vary significantly (up to +/- 40%) from year to year. Consistent data collection can reveal trends and help maximize long-term livestock production opportunities, including determinations of optimal stocking rates, when to increase or decrease grazing season durations, when to adjust pasture rotations for optimal forage production and habitat diversity and how other uses changing on the Community Forest can balance with rangeland management.

Monitoring should include establishing a diversity of permanent monitoring plots across the rangeland and maintaining a schedule of short-term monitoring (annual – triggers, endpoints), mid-term monitoring (three to five years), and long-term monitoring (ten+ years).

- Establish permanent monitoring plots.
  - » In the first year of management, OSU Extension will establish a diversity of permanent monitoring plots (i.e. water resource areas, open grassland pasture, open forested pasture, wetlands, varying topography, etc.) to monitor range conditions in a comprehensive manner.
  - » In coordination with forestry monitoring, establish drone monitoring protocols where time and resources allow.
- Short-term monitoring is designed to interpret rangeland use and help adjust management actions. Data sought includes current soil and forage condition, wetland conditions, fences and infrastructure.
  - » Assess phenological cues to determine entry and exit dates.
  - » Measure stubble height and assess triggers before and after grazing season.
  - » Measure incidence use of shrub lands.
  - » Take photos at photo points/permanent monitoring plots.
  - » Assess condition of boundary and pasture fences and any water infrastructure
- Mid-Term Monitoring visits are designed for longer, five-year intervals and a more comprehensive assessment of range conditions. (This could be coordinated with five-year habitat monitoring.)
  - » Multiple Indicator Monitoring for appropriate Indicators
    - ◊ Indicators from the United States Department of Agriculture National Range and Pasture Handbook include: species composition; age classes of key plant species; hedging/growth of key plant species; use of plant growth more than one-year-old; evidence of browse lines; grass, shrub and plant mortality; size of plant growth; use of undesirable and/or invasive species; reproduction of undesired and/or invasive species; and condition of domestic livestock and wildlife.
  - » Take photos at photo points/permanent monitoring plots
- Long-term Monitoring visits are designed for longer, ten-year intervals and a more comprehensive assessment of conditions, trends and efficacy of management actions.
  - » Multiple Indicator Monitoring for appropriate Indicators
  - » Take photos at photo points/permanent monitoring plots (before and after grazing monthly to show regrowth if possible)
  - » Water temperature
  - » Wetland condition and channel morphology if necessary
  - » Assessment of long term trends



## GOALS

- Provide non-motorized recreational opportunities without compromising Wallowa County's ability to manage the Community Forest to balance and preserve the conservation values.
- Connect and educate users to the complex and dynamic resources that make up the Community Forest including: natural, cultural, recreational and agricultural resources.
- Design layout and use that will reduce opportunities for conflict and meet public needs for diverse recreation:
  - » Meet ADA requirements where feasible.
  - » Reduce conflict among users.
  - » Reduce conflict with other management objectives.
- Maintain trails and other recreational facilities to mitigate resource degradation:
  - » Monitor and anticipate increased recreation uses and needs.
  - » Use existing roads and trails.
  - » Eliminate unnecessary or user-made trails.
- Encourage all recreation users to embrace a stewardship ethic while using the Community Forest.
- Mitigate risk through a strong public communication plan and maintenance standards.

## STATUS

Under past ownership of the KBL Company, RY Timber Company and Ronald C. Yanke Family Trust, adjacent landowners and residents have enjoyed varying levels of access to the Community Forest. While some users and user groups would approach local property managers and/or landowners to ask permission to access the property, trespassing laws were not often enforced and the public was

generally and informally allowed to access the property for non-motorized recreational use. Past recreation uses include educational outings, hiking, mountain biking, horseback riding, hunting, cross-country skiing, snowshoeing and hosting ceremonies, such as weddings. Motorized public access was limited by landowner permission.

Due to the Community Forest's unparalleled views and proximity to the urban centers of Joseph and the south end of Wallowa Lake, many local residents have established lasting connections with the property as a close and desirable place to spend time outdoors. Additionally, the Community Forest's previous status as private property likely reduced the amount of users one might encounter while recreating. Fences, gates and lack of advertisement likely prevented potential users from accessing the property or knowing the landowners allowed public access. In preparation of the creation of this management plan, users who have recreated on the property often cited in interviews and focus groups that the Community Forest's ease of access combined with its remote, isolated feel make it a sought-after place to recreate.

Over time, however, word of recreational access has spread. Before being acquired by the Partnership and conveyed to Wallowa County, the Community Forest and its existing trails were featured on popular websites, forums and recreation databases, such as [alltrails.com](http://alltrails.com). Local lodging has also featured trails on the East Moraine, including the Community Forest, as local points of interest and things to do for visitors. While the local population is around 7,100, Wallowa County swells in spring, summer and early fall, hosting up to 100 times its population in visitors over the duration of each tourist season. Many visitors come to Wallowa County as a recreation destination.

In addition to a network of trails within the property boundaries, the Community Forest is also part of a larger informal and popular trail system that crosses multiple private properties on the East Moraine (See Appendix T: Existing Roads and Trails Map). The informal "East Moraine Crest Trail" begins at the north end of Wallowa Lake and crosses on and off the Community Forest at multiple points. Additionally, another trail leaves the Community Forest to the south on the west

slope of Mount Howard, and crosses multiple private properties at the south end of Wallowa Lake, where it connects to a service road south of the Wallowa Lake Tramway. Currently, no legal agreements for public access are recorded with private landowners along trail corridors that leave the Community Forest, and some landowners along these corridors have begun to limit or restrict trail access altogether as users and types of use continue to increase, resulting in conflicts. In the East Moraine Community Forest Public Survey Report, some respondents indicated they do not clearly understand where property boundaries are, which properties allow public access and which do not.

The Community Forest currently provides year-round opportunities for non-motorized recreation. Opportunities include hiking, horseback riding, mountain biking, walking, running, cross-country skiing and snowshoeing. The Partnership is committed to continuing to provide non-motorized recreational opportunities that do not interfere with other uses and to limit access by motor vehicles for maintenance, management and limited uses which are specifically defined in this management plan. A draft trail management plan is under development that will ensure trail standards, reduce user conflict, provide for educational opportunities and encourage stewardship of the land.

### ***"East Moraine Crest Trail"***



Photo: Wallowa Land Trust

## CURRENT INFRASTRUCTURE

Current trails used by recreators are comprised of a network of unpaved access roads, pedestrian trails/shared use paths, and livestock trails throughout the Community Forest (see Appendix T: Existing Roads and Trails Map). Historically, this network was primarily used for forestry and rangeland. Over time, it has also provided access to several loops and through-hikes that are appropriate for a variety of users and user groups.

Condition of roads and trails on the property vary from maintained gravel to packed dirt. The grade of gravel depends upon the road. Some roads are well maintained with a bed of  $\frac{3}{4}$  minus gravel, while others have been compacted and eroded to expose large, baseball and softball-sized chunks of shale, which may not prove challenging for forestry equipment, rangeland and maintenance equipment, and mountain



Photo: Courtesy of Cliff Galli

bikes, but could prove challenging for foot and hoof traffic. Culverts have been installed in areas and at various locations where drainage and erosion present issues. Livestock trails and the East Moraine Crest Trail appear well traveled, and trail surveys and interviews with users reveal that mountain bikers, hikers, and equestrians can and do use these trails with relative ease.

Due to the East Moraine's topography and soils, slopes on the Community Forest can vary from slight to severe and soil type and consolidation also vary. Some trails are cut into steep slopes and may present erosion hazards if recreational use continues. Additionally, some trails terminate abruptly at private property boundaries where access was allowed at one time but is no longer, or trespassing was not enforced but is now.

As noted in the Forestry sections, the Community Forest has two main access points. The east entrance on the county road, Turner Lane, has gates for motorized access and non-motorized recreation access which are functional, however there is not enough room for vehicles to enter and park or for livestock trailers to turn around safely without blocking the roadway. Landowners along the county road have also expressed concern about erosion on the roadway if more room is not allotted to users seeking to access the Community Forest. In response, the County is working to create a parking area within the boundary of the Community Forest. The legal access point on the west side, colloquially referred to as "the green gate," was recently improved with the old gate replaced. Additionally, the west entrance abuts Highway 82, which experiences high traffic volumes and congestion in spring, summer, and fall. Although the west entrance is permitted by Oregon Department of Transportation for commercial forestry, which is suitable for recreation as well, maneuvering horse trailers presents safety concerns. Infrastructure at both entrances appear to have been designed and constructed for utility.

ADA access on the Community Forest is limited, especially due to topography which begins to vary immediately as users enter the property. The Partnership is committed, however, to providing equitable access to the Community Forest, and Limited Use Permits (LUPs) can be issued for users who have mobility challenges that prevent them from accessing the property. These permits allow limited access for certain

users to use designated roads with motor vehicles on the property at specific times, to and from specific locations (see the LUP process below).

To improve communication and education, kiosks have been erected at both entrances to welcome users, communicate expectations and rules of use. Information is also provided about the Community Forest and the nature of its acquisition. Trails on the property are not currently marked, but a map is included at both entrances to guide visitors. Some private property boundaries around the Community Forest are posted, but not consistently. No central digital space, such as a website or webpage, exist yet to post general information or information specific to recreational use on the Community Forest.

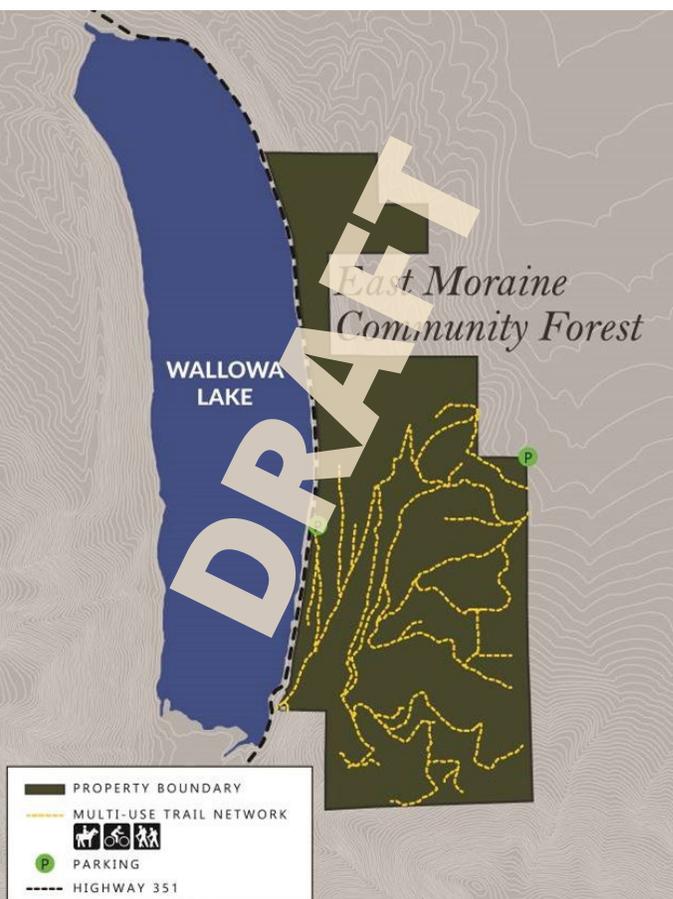
## MANAGEMENT ACTIONS

The transition from private ownership and unrecorded public access to public ownership and recorded public access will require the development of documentation, processes, rules and guidelines, infrastructure and other tools to ensure recreation management goals can be achieved and balanced with other uses.

### DEVELOPMENT OF OUTREACH AND EDUCATIONAL OPPORTUNITIES AND MATERIALS:

- **Community Forest Website or Webpage:** Create County-based Community Forest website or webpage as an extension of the existing Wallowa County website with up-to-date information on access, closures, special events and activities (related to rangeland and forestry uses). This would provide an opportunity to keep the public aware of intermittent, planned and/or ongoing activities. This would also be an excellent resource for maps, property rules, etiquette, Limited Use Permit information, etc.
- **K-12 Education:** There is a high degree of potential to work with school districts within Wallowa County to develop and/or facilitate educational opportunities that meet or exceed curriculum requirements for subjects including; science, natural resources, rural economics, technology, English, art and math. Partnerships in education could be expanded to include state, federal and non-profit groups.

- **Visitor Education:** Work with partners and stakeholders to develop additional educational panels and other materials aimed at increasing public knowledge/understanding of the Community Forest, the history of its acquisition and its resources. These panels may be placed strategically to showcase geological wonders, highlight cultural history and events, increase user stewardship and inform users about ongoing management and the nature of the property as a working landscape. Signage should educate users about private property rights and help users navigate boundaries with neighboring private landowners.



# EAST MORaine

## COMMUNITY FOREST

### HABITAT

The East Community Forest is home to a variety of wildlife and native plants. The land is critical habitat for Rocky Mountain elk and mule deer. Bears, wolves, coyotes, foxes and cougars live on this landscape as well as resident birds like flickers and red-tailed hawks. Spalding's catchfly is a native forb listed as threatened on the Endangered Species List and the east side of the moraine is covered in arrowleaf balsamroot in the spring.

Remnants of bunchgrass remain in some areas while large ponderosa pines dominate the east face and ridgeline. White fir, Douglas fir and western larch are found mostly on the west side and higher elevation sites of the property. These trees provide food and nesting sites for a variety of birds, including migratory species.



**MULE DEER**  
*Odocoileus hemionus*  
Photo by Bob Wilson



**COYOTE**  
*Canis latrans*  
Photo by Bob Wilson



**RED FOX**  
*Vulpes vulpes*  
Photo by Lisa Perleberg



**SWAINSON'S HAWK**  
*Buteo swainsoni*  
Photo by Lisa Perleberg



**NORTHERN FLICKER**  
*Colaptes auratus*  
Photo by Bob Wilson



**ARROWLEAF BALSAMROOT**  
*Balsamorhiza sagittata*  
Photo by Bob Wilson



**SPALDING'S CATCHFLY**  
*Silene spaldingii*  
Photo by Bob Wilson

### HISTORY

Wallowa County is part of the homeland of the Nez Perce, or Nimiipuu people, who consider Wallowa Lake and the moraines as sacred ground. For thousands of years they returned to the lake to fish for sockeye salmon or "blue backs". The Wallowa, Imnaha, Minam and Lostine rivers teemed with coho and chinook salmon as well as steelhead. The Nimiipuu had an established hunting camp near Buckhorn overlook, gathered roots on the Zumwalt Prairie and maintained a village along the Lostine River where settlers met with tribal leaders.



Nez Perce camp on shore above Wallowa Lake. Photo by J.H. Romig early 1900s.

From the crest of the East Moraine one can see Wallowa Lake, Old Chief Joseph's gravesite at the Nez Perce National Historical Park, and Iwetemlaykin State Heritage Site.

The foot of the lake is the start of the Nez Perce National Historic Trail.

Once the site of the first Chief Joseph Days Rodeo and the Joseph Airport, today the



Nez Perce Tribe 2011. Nez Perce Appaloosa Horse Club riders at the head of Wallowa Lake.

East Moraine is managed as a multiple-use landscape, the property supports forestry and livestock grazing while protecting cultural resources and wildlife habitat and providing for quiet recreational use.



**IMPLEMENT RULES FOR RECREATIONAL USE OF COMMUNITY FOREST:** The Management Committee will continue to develop and assess rules which govern recreational use. Rules will be developed based on the goals for which the property was acquired, adaptive management and input from users and user groups. Currently, Wallowa County and the Partnership has agreed to implement the following rules:

- No motorized vehicle access for recreational purposes, including four wheelers, side-by-sides, golf carts, ATVs, dirt bikes, motorcycles, off-road vehicles, snowmobiles, or electric bikes.
- Motorized access is allowed for maintenance, management, or with an LUP (see below and Appendix V: East Moraine Community Forest LUP Information).
- No overnight camping.
- Pets allowed, on leash at all times.
- No smoking and no fires.
- No recreational trapping.
- Non-motorized access for hunting is allowed August through January and during spring bear season. Hunters are responsible for following all local, state and federal hunting regulations. Hunting is limited to the following species:

- |                  |                   |
|------------------|-------------------|
| » Cougar         | » Buck Deer       |
| » Black Bear     | » Antlerless Deer |
| » Antlerless Elk | » Bull Elk        |

**ADDITIONAL FUTURE RULES FOR USE MAY ALSO ADDRESS:**

- |                 |                           |
|-----------------|---------------------------|
| » Social Trails | » Pack it in, pack it out |
| » Woodcutting   | » Private property rights |

**LIMITED USE PERMIT PROCESS:** The purpose of Limited Use Permits (LUP) is to allow for limited motorized access to the Community Forest for uses other than those listed in Section 3.9 of the Conservation Easement, as provided in Section 4.1 of the Conservation Easement. Motorized access shall be limited to traditional vehicles, vans, or buses (subject to 25-person limit specified below). Other motorized access, including but not limited to ATV access, shall not be allowed.

The County will create a permitting system that will be managed by the Property Manager and reviewed annually by the East Moraine Community Forest Management Committee (Appendix W: Oregon Department of Forestry District Proclamation). The criteria for eligibility and the process for applying will be transparent and readily accessible on the County's website and in person at the County Courthouse. The County will maintain a public calendar that indicates when events will be taking place or any other activity that might impact other users. No LUPs will be issued prior to the system being in place.

The Property Manager will review each request to ensure that the activity is acceptable and will not negatively impact the conservation values of the property (as defined in the conservation easement), recognizing that the County has a legal duty to protect the conservation values. When there is uncertainty about the appropriateness of any proposed activity, the County will seek further instruction and advice from the East Moraine Community Forest Management Committee.

Approved LUPs shall be tracked by the County and made available to the East Moraine Community Forest Management Committee each year during the annual review. LUP recipients must have their permit displayed or available on request at all times during the activity itself. The County will ensure that access through a locked gate is tightly controlled and only permitted vehicles may enter.

The County will inspect the property promptly following LUP use and will ultimately be responsible for ensuring that LUPs issued do not pose a fire risk, violate the Conservation Easement, this management plan or otherwise impair the values of the property for which the Wallowa Lake Moraines Partnership acquired the property. Co-holders (Wallowa Land Trust and Oregon Department of Forestry) do not, by reason of the LUP terms, give up any rights to enforce the Conservation Easement or Forest Legacy Program requirements.

The East Moraine Community Forest Management Committee will review the LUP requirements, impact, and process annually to determine what, if any, adjustments should be made.

**IMPLEMENT RULES FOR SCHEDULED CLOSURES, EMERGENCY CLOSURES AND PUBLIC SAFETY:**

Wallowa County may close all or portions of the property for resource protection and public safety. Temporary closures may occur associated with timber harvest or other natural resource management activities, increased fire risk, resource (wildlife, plant, cultural) protection, and spring thaw. Forest management in particular can incur significant costs and present significant safety concerns if activities occur during peak recreational times. Temporary closures in areas where forest management is scheduled to occur are highly recommended to prevent unnecessary costs and risks to public safety.

In the event of scheduled closures, maps and information will be posted at trailheads and along trails in proximity of the activities to inform users the area is closed. In preparation for scheduled closures, property managers will review trail maps and, if possible, attempt to reroute trail users around ongoing activity.



Photo: Julia Lakes



*Photo: Brady Holden*

**DEVELOPMENT OF EAST MORAINE COMMUNITY FOREST TRAILS PLAN:** Currently there are no plans to add or extend existing roads or trails on the Community Forest. If additional trails are proposed the management team will undergo a formal process including but not limited to applying for a conditional use permit from the Wallowa County Planning Commission. A Trails Plan will be developed to adopt trail standards, designate and monitor use and make recommendations for future needs and uses with the overall goal of addressing critical recreation needs and balancing those needs with the overarching goals of the Community Forest consistent with the conservation easement (see Appendix A: Conservation Easement). Through a public process, with input from stakeholders, the Trails Master Plan should review current conditions, identify and prioritize future needs and ensure that recreation does not compromise other uses and Wallowa County's ability to manage the Community Forest as a working landscape.

The final trail plan will be integrated into this management plan, adopted by Wallowa County and created through the following process:

- Identify members of main user groups to form an Advisory or Stakeholder group and create a Vision Statement.
- Management Committee works with Advisory group to develop general Trails Master Plan themes. Two to three stakeholder meetings will be held.
- Management Committee and Advisory group works together to deliver information to and solicit information from the public. Two to three public meetings will be held.
- Integrate the following components into Trail Master Plan:

1. Trailheads – Standard trailheads will include designated use, maps, rules and etiquette, partnership logo, etc. Determine best use for each trailhead. For example: Turner Lane may be more appropriate access for equestrian use. These types of management decisions will help address and reduce user conflict. Restrooms - Determine types of restrooms and locations. Restrooms should be designed to be accessible for all visitors. (CXT or similar: <http://www.cxtinc.com/vault.asp>)
2. Trail signage/mapping - All directional and informational signs will be uniform in type. Temporary signs may be necessary to identify periodic closures, reroutes or events. All signs must be authorized by Wallowa County.
3. Determine and Adopt Trail Standards – Trail Standards examples:
  - a. <https://www.fs.fed.us/managing-land/trails/trail-management-tools/trailplans>
  - b. [https://www.parks.ca.gov/?page\\_id=29674](https://www.parks.ca.gov/?page_id=29674)
4. Trail inventory and density – Currently an inventory of trails, roads and paths exists. A detailed record of all trails should be mapped, including type, length, width and surface materials. This information will help determine future needs and designations. The Management Committee will need to determine both short and long term tolerance for trail density (high, medium and low). This determination will help the EMCF Trail Plan stakeholders and public understand future implications of trail development, if any.
5. Maintenance
  - a. Maintenance of recreational trails
  - b. Prioritization
6. Trail designations
  - a. Some trails may be designed specifically for each zone-type of use, while other trails may be designed more for multiple use and examples may include:
    - i. Zone 1 – Open to all non-motorized users. Primarily managed for bicycles.
    - ii. Zone 2 – Open to all non-motorized users. Highly sensitive wildlife habitat. Primarily managed for equestrian use.
    - iii. Zone 3 – Open to motorized use through Wallowa County Limited Use Permit.
7. Accessibility
  - a. Strive to achieve USDA Forest Service Accessibility Guidelines for Outdoor Recreation Facilities and Trails.
    - i. <https://www.americantrails.org/resources/accessibility-guidebook-for-outdoor-recreation-and-trails>
8. Impacts on cultural, wildlife and livestock resources
  - a. Manage recreational activities and educate users to reduce potential adverse impacts on cultural, wildlife, vegetation and livestock resources.
9. Winter vs. summer recreation
  - a. Trail Etiquette
  - b. Trail User Types
  - c. Future needs
    - i. Expansion of trails on to adjacent, public lands
    - ii. Parking and trailhead expansions



Photo: Tia Hatton

## MONITORING

Like other aspects of recreation management planning, monitoring will have to be developed for recreational use on the Community Forest. Development of the East Moraine Community Forest Trails Plan should also include the development of a monitoring structure which can be implemented to address issues and record trail conditions and use over time. This monitoring structure should include:

- On-going site inspections and observations by County staff, partners, users and volunteers.
- Priority for repairs and maintenance based on public safety and resource protection.
- Responses to and process for resolving conflicts between uses by the public and others.
- Responses to and process for responding to proposals for new or additional uses of the Community Forest.
- Benchmarks to monitor recreational use and impacts to stay within acceptable limits and ensure recreation does not detract from the overall management objectives of the Community Forest.

# References

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- Chadez, Jenifer. *Phase I Cultural Resource Inventory for the Wallowa Lake East Moraine Trails Project*. Lapwai, Idaho. 2017.
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- Oregon State University. "Bunchgrass Phenology: Using Growth Stages of Grasses as Adaptive Grazing Management Tools." Corvallis, Oregon. 2019.
- U.S. Fish and Wildlife Service. *Recovery Plan for Silene spaldingii (Spalding's Catchfly)*. Portland Oregon. 2007.
- United States Department of Labor, Occupations Safety and Health Administration. 1910.266 – *Logging Operations*. Washington, D.C. 2014.
- Wallowa County. *Wallowa County Comprehensive Land Use Plan*. Enterprise, Oregon. 2019.
- Wallowa Lake Moraines Partnership. *East Moraine Community Forest Spring/Summer 2020 Public Input Survey Report*. Enterprise, Oregon. 2020.
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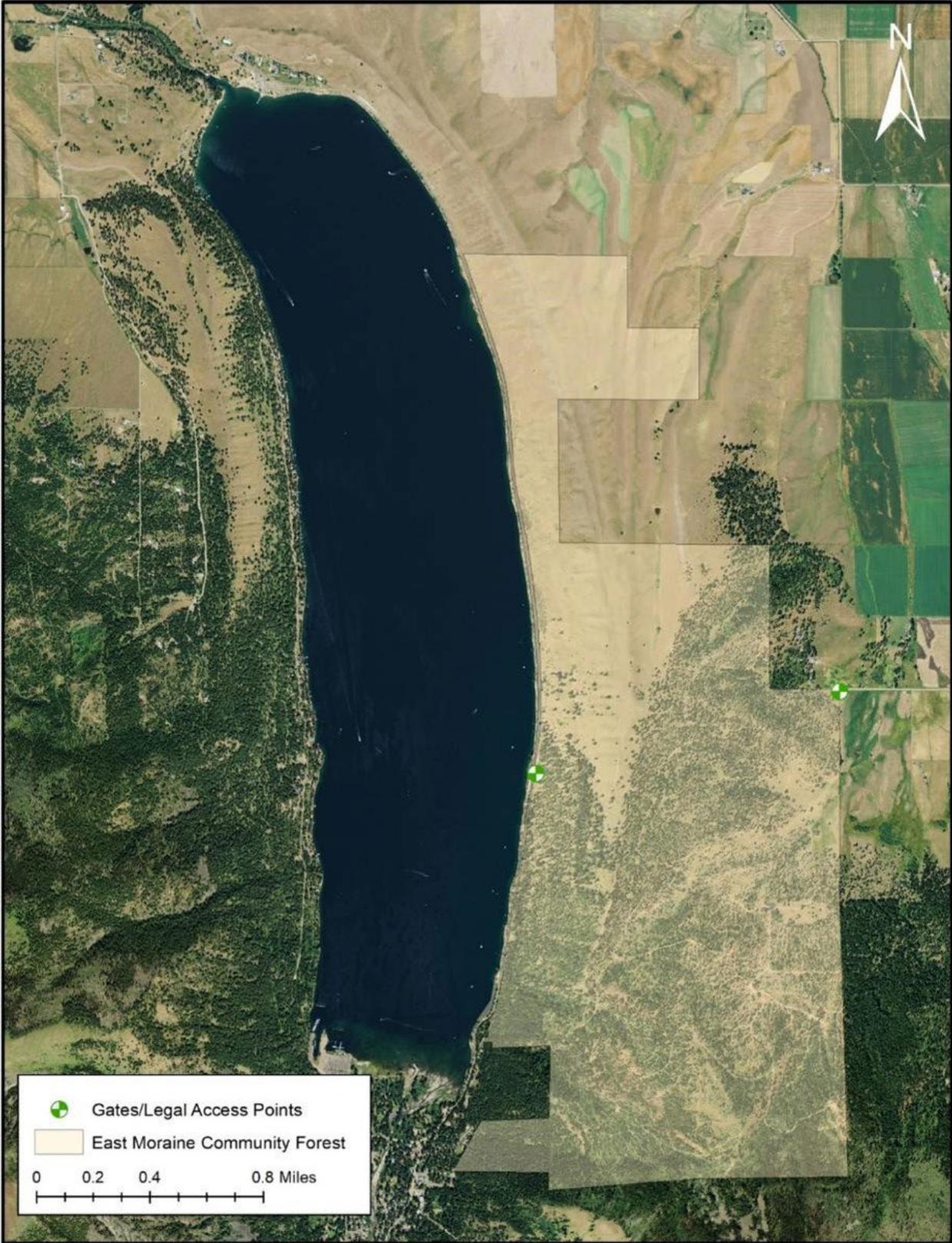
# Appendices

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## APPENDIX A: CONSERVATION EASEMENT

*Will be inserted when it's recorded.*

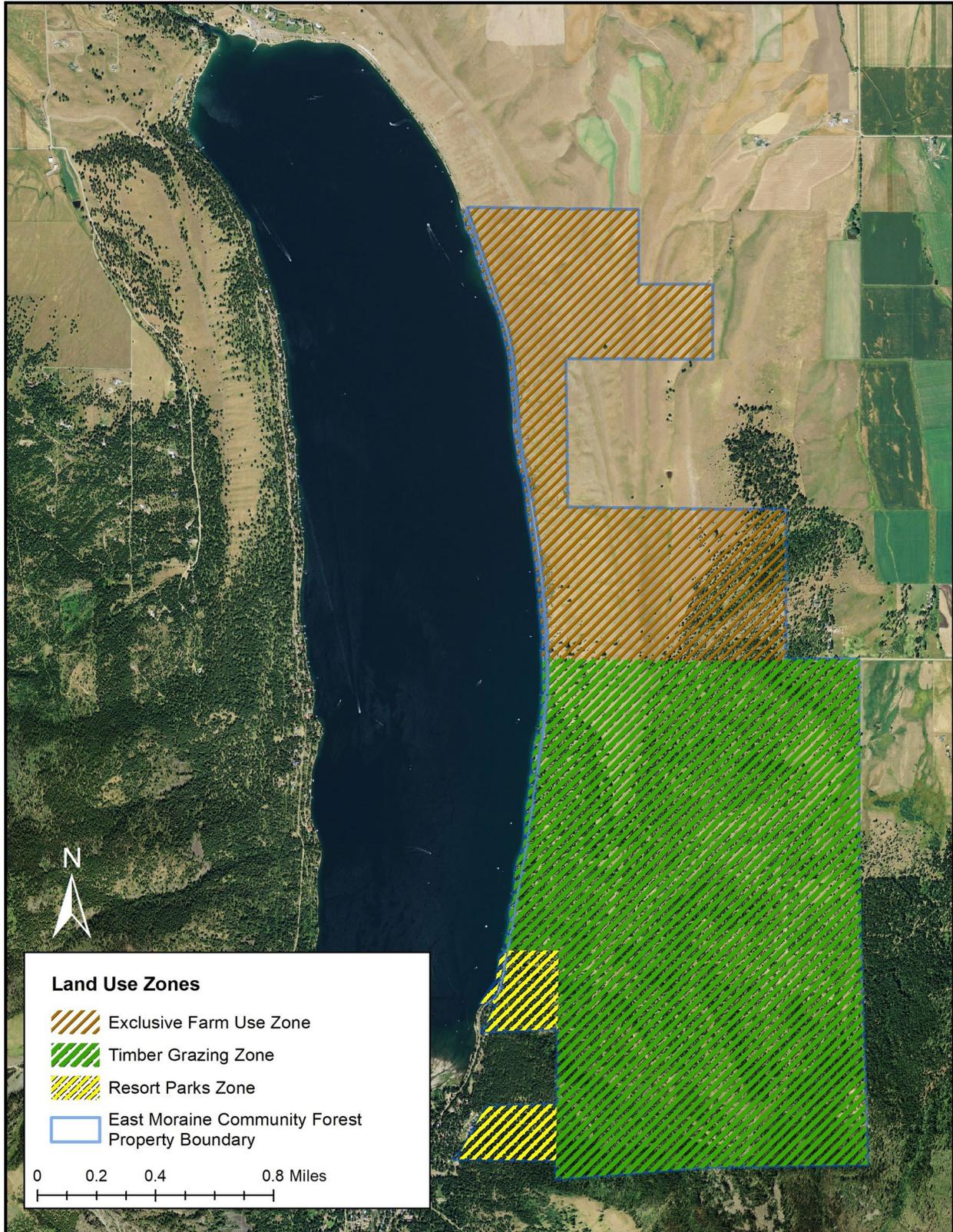
# APPENDIX B: PROPERTY MAP



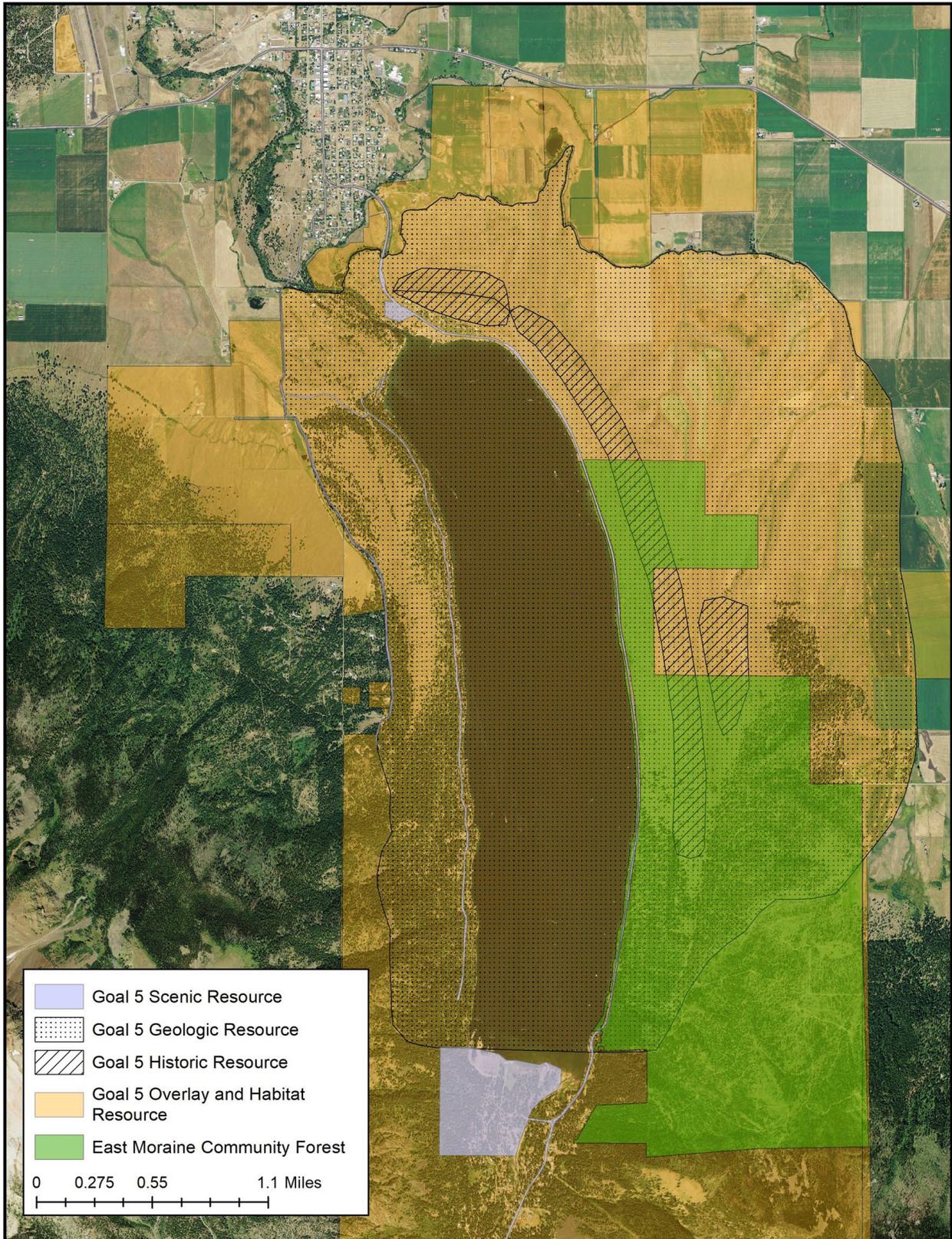
## APPENDIX C: BASELINE DOCUMENTATION REPORT

*In the process of being updated.*

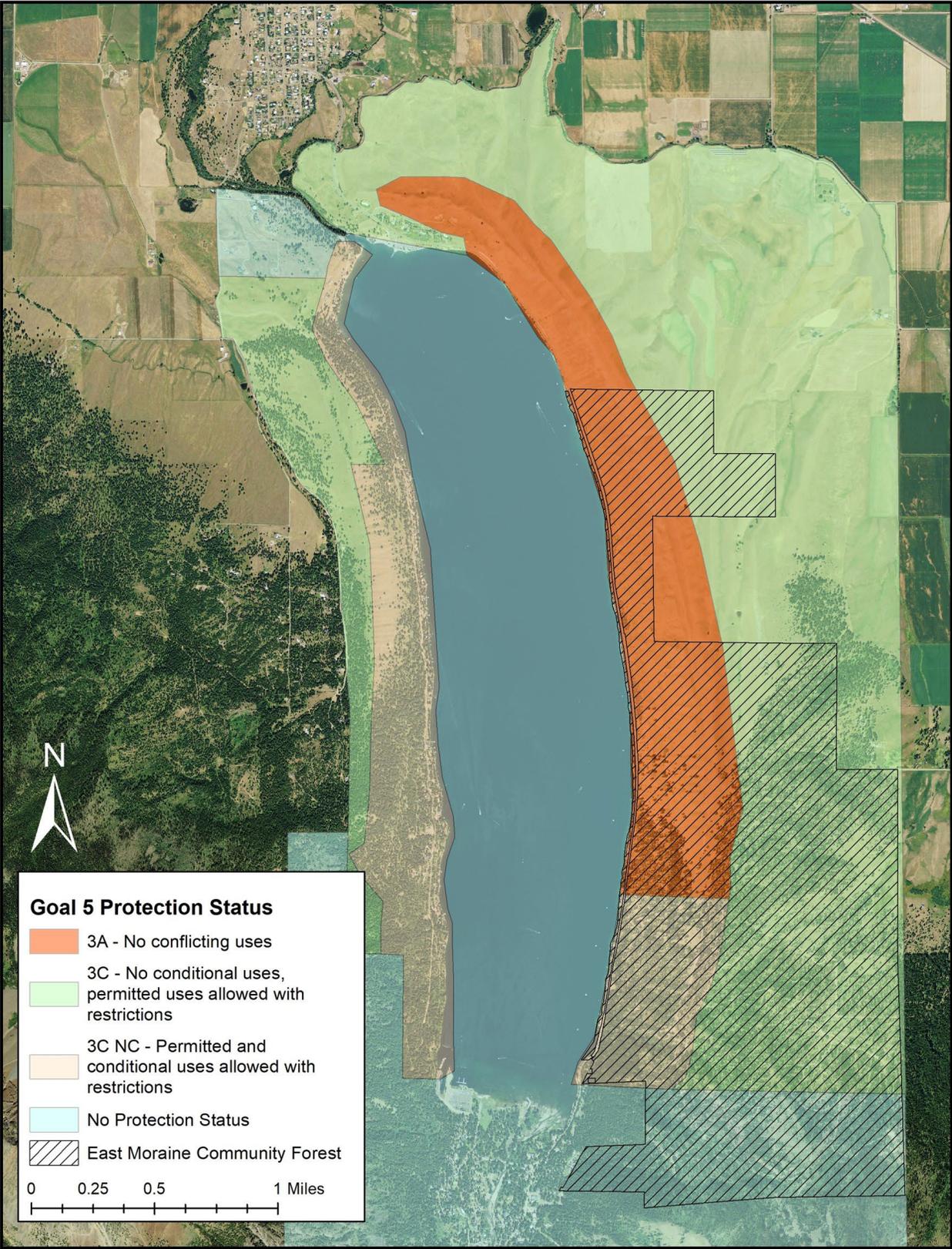
# APPENDIX D: LAND USE ZONING MAP



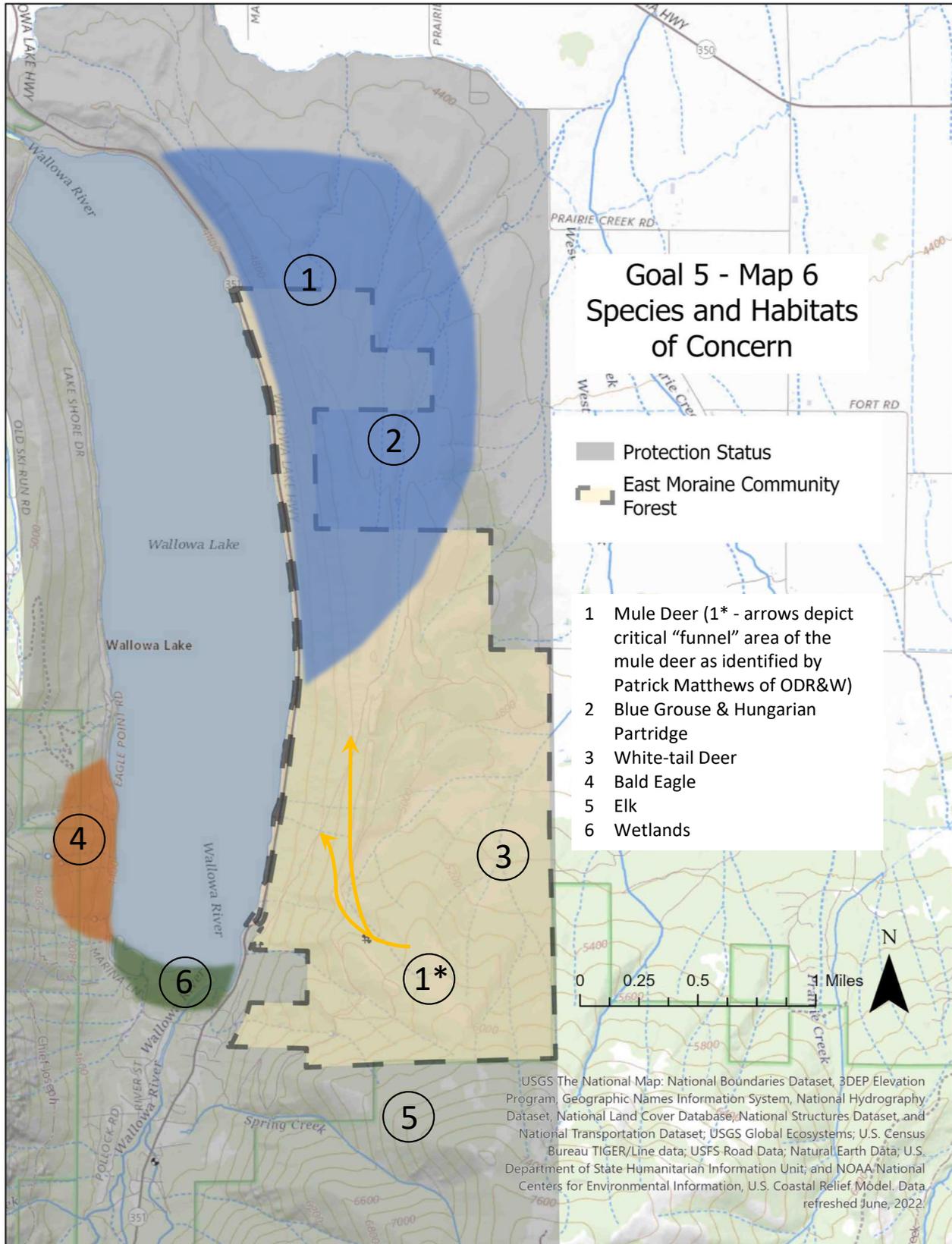
# APPENDIX E: GOAL 5 RESOURCE OVERLAY MAP



# APPENDIX F: GOAL 5 PROTECTION STATUS MAP



# APPENDIX G: GOAL 5 SPECIES & HABITATS OF CONCERN MAP



# APPENDIX H: PLANT AND ANIMAL SPECIES LISTS

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 nuttallii</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>Lasionycter 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>

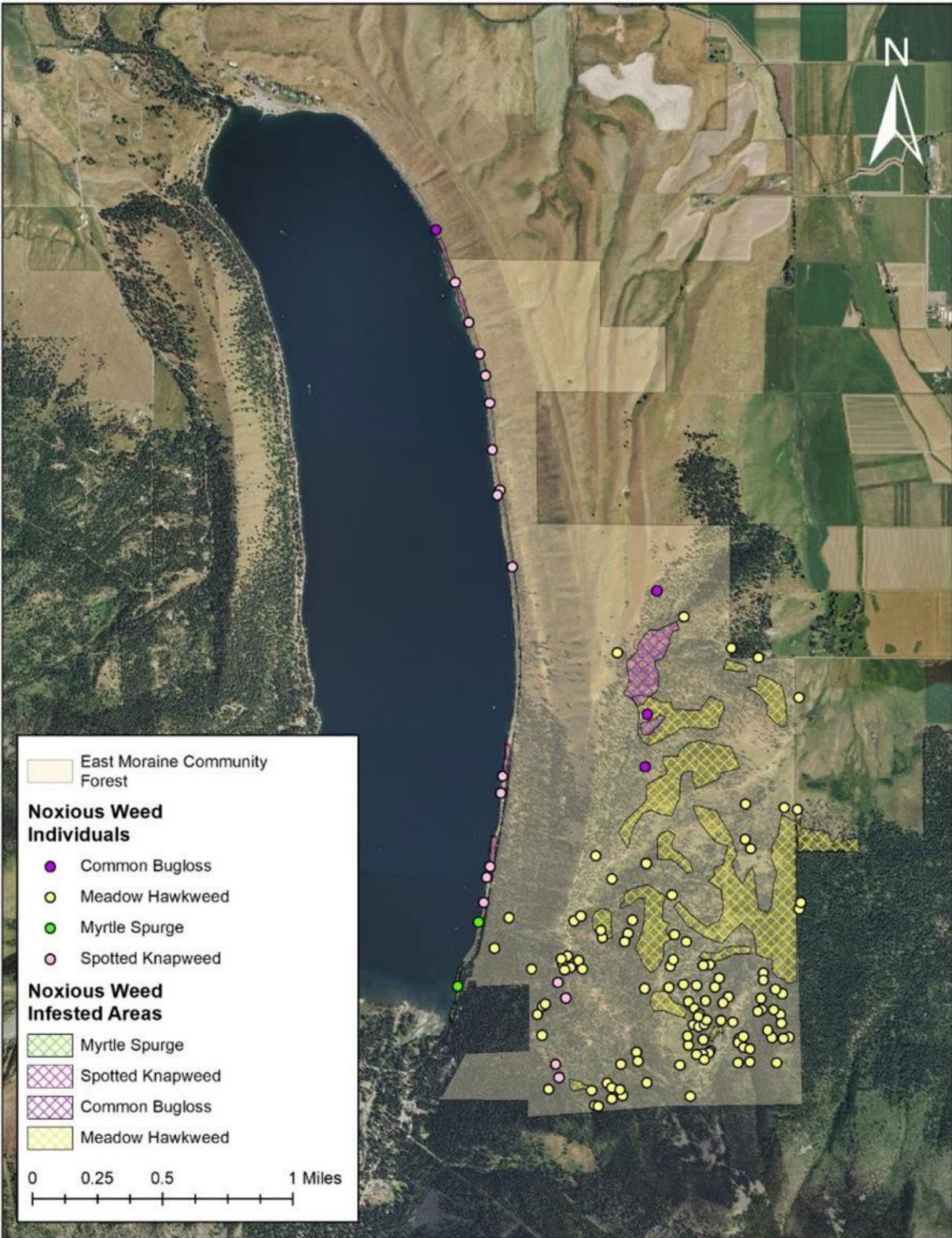
Bewick's wren	<i>Thryomanes bewickii</i>	Hermit thrush	<i>Catharus guttatus</i>	Rufous hummingbird	<i>Selasphorus rufus</i>
Black-backed Woodpecker	<i>Picoides arcticus</i>	Horned lark	<i>Eremophila alpestris</i>	Savannah sparrow	<i>Passerculus sandwichensis</i>
Black-billed magpie	<i>Pica hudsonia</i>	House finch	<i>Haemorrhous 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>Haemorrhous 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>Haemorrhous 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.			

<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 Amica ( <i>Amica cordifolia</i> )
Wormwood ( <i>Artemesia absinthum</i> )	Wild strawberry ( <i>Fragaria virginiana</i> )
Bessya ( <i>Bessya rubra</i> )	Pens temon var. species ( <i>Pens temen</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>Lithospreum ruderales</i> )	Sender pussytoes ( <i>Antennaria racemosa</i> )
Blanketflower ( <i>Gaillardia aristata</i> )	Wallowa paintbrush ( <i>Castilleja chrysantha</i> )
Pens temon var. species ( <i>Pens tamon</i> sp)	Brodiea ( <i>Brodiea douglasii</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> )
Hounds tongue ( <i>Marrubium vulgare</i> )	Hounds tongue ( <i>Marrubium vulgare</i> )
Tumble mustard ( <i>Sisymbrium altissimum</i> )	Bulbous bluegrass ( <i>Poa bulbosa</i> )
Vetenata ( <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> )

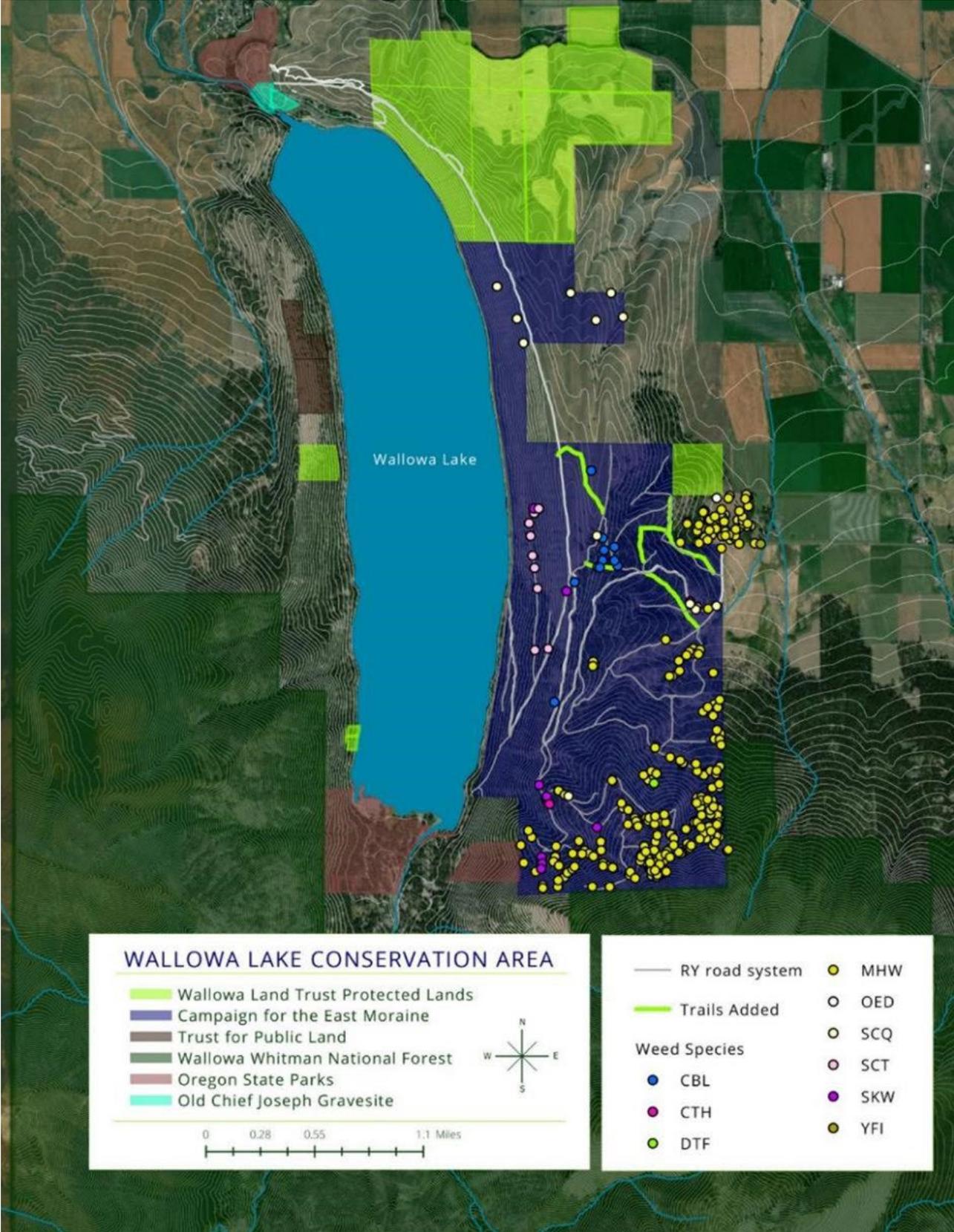
<b>Mixed Conifer Forest Native Species</b>	<b>Wetland Native Species</b>
Douglas fir ( <i>Pseudotsuga Menziesii</i> )	Bluegrass var. species ( <i>Poa</i> sp.)
Grand fir	Sedges var. species ( <i>Carex</i> sp.)
Engleman spruce	Rosy Pussytoes ( <i>Antennaria rosea</i> )
Western larch ( <i>Larix occidentalis</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>Aemone deltoidea</i> )
Kinnickinnick ( <i>Arctostaphylos uza-ursi</i> )	Heartleaf arnica ( <i>Arnica cordifolia</i> )
Pinegrass ( <i>Calamagrostis rubescens</i> )	Prickly currant ( <i>Ribes laeustre</i> )
Elk Sedge ( <i>Carex geberi</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>Avues 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> )
<b>Mixed Conifer Forest NonNative Species</b>	
Dutch clover ( <i>Trifolium repens</i> )	<b>Wetland Native Fungus</b>
Houndstongue ( <i>Marrubium vulgare</i> )	Slippery jack fungus ( <i>Suillus</i> sp.)
Meadow Hawkweed ( <i>Pilosella caespitosa</i> )	Puffball ( <i>Calvatia</i> sp.)
	<b>Wetland Nonnative Species</b>
	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> )
<p>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.</p>	

# APPENDIX I: NOXIOUS WEEDS MAPS

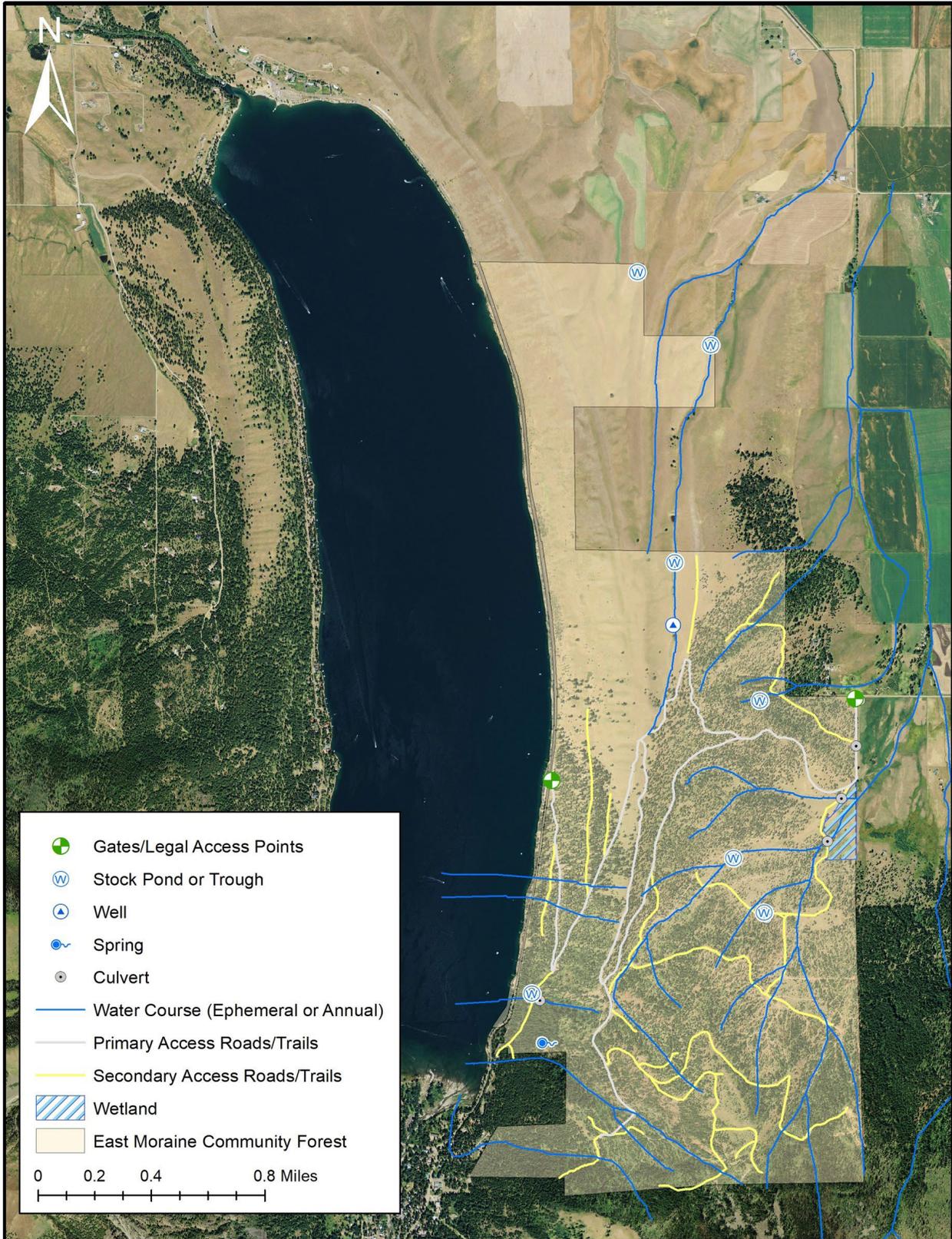
## 2020 T-Listed Weed Inventory



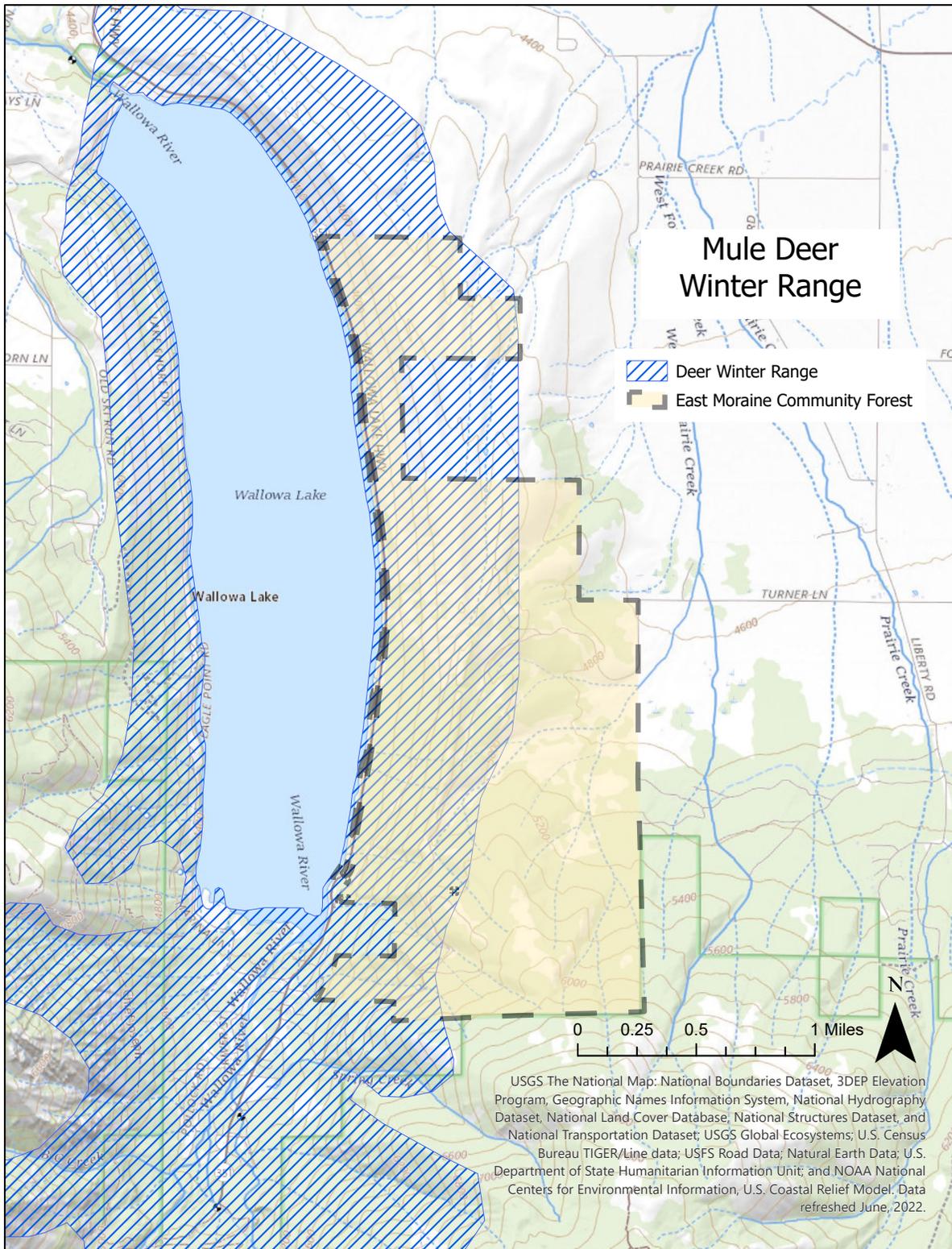
# 2013 Weed Inventory



# APPENDIX J: WATER RESOURCES MAP



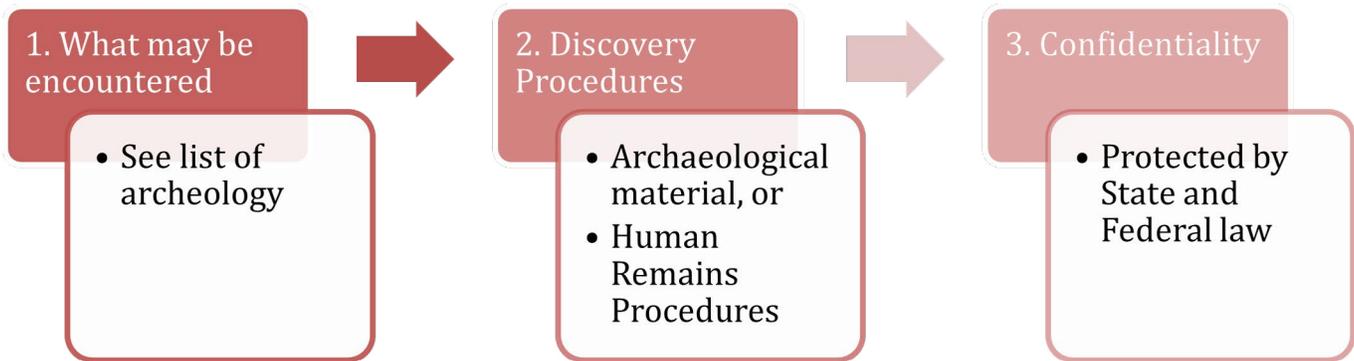
# APPENDIX K: MULE DEER WINTER RANGE MAP



## APPENDIX L: INADVERTENT DISCOVERIES POLICY

The following policy for Inadvertent Discoveries of Human Remains within the external boundaries of the Nez Perce Indian Reservation has been requested by the Nez Perce Tribe Executive Director and the Natural Resources Department Manager. This policy will apply to all discoveries on the Reservation, in compliance with the Native American Graves Protection and Repatriation Act (NAGPRA), Tribal Code, Idaho Statutes, and other applicable laws and regulations. This policy should also guide the treatment of Inadvertent Discoveries by Tribal Employees working outside the reservation boundaries.

It is the policy of the Nez Perce Tribe to protect resources of cultural significance to the Tribe. The Cultural Resource Program is intended to prevent the willful and/or the inadvertent destruction, damage, loss, desecration, theft, and/or illegal sale of cultural resources. Ancestral remains and burial sites are an important physical link to the past in the Nez Perce culture, and the Tribe has an obligation to preserve and protect these remains.



### 1. WHAT MAY BE ENCOUNTERED

Human Remains are defined as any remains or parts thereof, whether or not the remains are found in the cemetery or burial site. Human remains shall also include any remains that have been obtained by any federal, state, or local agency, and any public or private foundation, company, educational institution, museum, or individual. The protection of Human Remains extends to all Burial Goods, including, but not limited to, any jewelry, regalia, tools, sacred objects, clothing, works of art, or anything that is reasonably thought to have been found or obtained at or near a burial site, including the soil surrounding these objects.

Additional objects encountered consist of the physical remains of the activities of people in the past. Archaeological objects can include but are not limited to:

- Stone flakes, arrowheads, stone tools, bone or wooden tools, baskets, beads.
- Historic building materials such as nails, glass, metal such as cans, barrel rings, farm implements, ceramics, bottles, marbles, beads.
- Layers of discolored earth resulting from hearth fire
- Structural remains such as foundations
- Human skeletal remains and/or bone fragments which may be whole or fragmented.

If there is an inadvertent discovery of any human remains or archaeological objects, see procedures below. If in doubt call it in.

## 2. DISCOVERY PROCEDURES

It is the goal of the Nez Perce Tribe to preserve all ancestral remains in situ, undisturbed and avoided whenever possible. If archaeological objects are inadvertently discovered or suspected to have been inadvertently discovered during archaeological, construction, or other ground disturbing activities, the following steps will be taken:

1. Stop all work and activities in the vicinity of the find.
2. Secure and protect area of inadvertent discovery with 30 meter/100-foot buffer and stop all work inside the buffer.
3. If Property Manager is not present, notify Property Manager.
4. Property Manager will contact Nez Perce Tribal Historic Preservation Office (THPO) to assess the find
5. If archaeologist determines the find is an archaeological site or object, Property/Land Manager will work with them to provide information and contact regulatory agencies. If it is determined to not be archaeological, work and activities may continue.

If human remains, burials, funerary, or sacred objects are inadvertently discovered or suspected to have been inadvertently discovered during archaeological, construction, or other ground disturbing activities, the following steps will be taken:

1. Stop all work and activities in the vicinity of the find.
2. Secure and protect area of inadvertent discovery with 30 meter/100-foot buffer and stop all work inside the buffer.
3. Cover remains from view and protect them from damage or exposure, restrict access, and leave in place until directed otherwise. Do not take photographs. Do not speak to the media.
4. If Property Manager is not present, notify Property Manager.
5. Property Manager will notify:
  - » Wallowa County Commissioner Chair
  - » Nez Perce Tribal Police Department (NPTPD)
  - » Tribal Historic Preservation Office (THPO)
6. The NPTPD and appropriate law enforcement agency will examine the remains as soon as possible to determine if the remains are forensic.
7. If the remains are forensic, the discovery will be treated as a crime scene and Oregon State Police, FBI or other appropriate agencies will be contacted
8. If remains are not forensic, the THPO and Cultural Resource Program (CRP) will be contacted to examine the discovery site and the remains to determine the approximate age and ethnicity of the individual(s), if possible, and make recommendations for avoidance or removal and reburial of the remains.
9. If remains cannot be avoided by project proponents, the CRP will be retained to excavate, in consultation with appropriate Tribal or community leaders. The project proponent will be responsible for cost of any consultation, excavation, and/or reburial of ancestral remains by the CRP.
10. Do not resume any work in the buffer until a plan is developed and carried out.

### Contact Information

- Wallowa County Commissioners: 541-426-453 ext. 1131, 1132, or 1133
- Nez Perce Tribal Police Department (NPTPD): 208-843-7141
- Nez Perce Tribal Historic Preservation Office (THPO): 208-621-3850
- Nez Perce Tribe Cultural Resources Program (CRP) Director, Nakia Williamson: 208-790-7349

### **3. CONFIDENTIALITY**

Land managers should make their best efforts, in accordance with federal and state law, to ensure that its personnel and contractors keep the discovery confidential. The media, or any third-party member or members of the public are not to be contacted or have information regarding the discovery. Any public or media inquiry is to be reported to Wallowa County Board of Commissioners and Nez Perce Tribe Cultural Resources Department. Prior to any release, the responsible agencies and tribes shall concur on the amount of information, if any, released to the public.

# APPENDIX M: TREATMENT OF NATIVE AMERICAN HUMAN REMAINS DISCOVERED INADVERTENTLY OR THROUGH CRIMINAL INVESTIGATIONS ON PRIVATE AND PUBLIC, STATE-OWNED LANDS IN OREGON

## Treatment of Native American Human Remains Discovered Inadvertently or Through Criminal Investigations on Private and Public, State-Owned Lands in Oregon

Native American burial sites are not simply artifacts of the tribe's cultural past, but are considered sacred and represent a continuing connection with their ancestors. Native American ancestral remains, funerary objects, sacred objects and objects of cultural patrimony associated with Oregon Tribes are protected under state law, including criminal penalties (ORS 97.740-.994 and 358.905-.961). The laws recognize and codify the Tribes' rights in the decision-making process regarding ancestral remains and associated objects. Therefore both the discovered ancestral remains and their associated objects should be treated in a sensitive and respectful manner by all parties involved.

### Identification of Human Remains

- Oregon laws (ORS 146.090 & .095) outline the types of deaths that require investigation and the accompanying responsibilities for that investigation. The law enforcement official, district medical examiner, and the district attorney for the county where the death occurs are responsible for deaths requiring investigation. Deaths that require investigation include those *occurring under suspicious or unknown circumstances*.
- If human remains that are inadvertently discovered or discovered through criminal investigations **are not clearly modern**, then there is high probability that the remains are Native American and therefore ORS 97.745(4) applies, which requires immediate notification with State Police, State Historic Preservation Office, Commission on Indian Services, and all appropriate Native American Tribes. To determine who the "appropriate Native American Tribe" is, the responsible parties should contact the Legislative Commission on Indian Services (LCIS). To determine whether the human remains are Native American, the responsible parties should contact the appropriate Native American Tribes at the initial discovery. It should be noted that there may be more than one appropriate Native American Tribe to be contacted.
- If the human remains are possibly Native American then the area should be secured from further disturbance. The human remains and associated objects **should not be disturbed, manipulated, or transported from the original location until a plan is developed in consultation with the above named parties**. These actions will help ensure compliance with Oregon state law that prohibits any person willfully removing human remains and/or objects of cultural significance from its original location (ORS 97.745).
- All parties involved and the appropriate Native American Tribes shall implement a culturally sensitive plan for reburial.

### Notification

- State law [ORS 97.745 (4)] requires that any discovered human remains suspected to be Native American shall be reported to -
  1. State Police
    - Sgt. Chris Allori, Office (503) 731-4717, Cell (503) 708-6461, Dispatch (503) 731-3030

2. State Historic Preservation Office (SHPO)
  - Primary contact = Dennis Griffin, State Archaeologist, office phone (503) 986-0674, cell phone (503) 881-5038
3. Legislative Commission on Indian Services (LCIS)
  - Contact = Karen Quigley, Director, office phone (503) 986-1067. Karen will provide the list of appropriate Native American Tribes
4. All appropriate Native American Tribes provided by LCIS
  - Burns Paiute Tribe - Diane Teeman, Cultural Resources Program (541) 573-8089
  - Confederated Tribes of Coos, Lower Umpqua and Siuslaw - Stacy Scott, M.A., Cultural Resources Protection Specialist (541) 888-7513, Cell (541) 297-5543
  - Confederated Tribes of Grand Ronde - David Harrelson, Cultural Protection Coordinator (503) 879-1630
  - Confederated Tribes of Siletz - Robert Kentta, Cultural Resources Director (541) 444-8244
  - Confederated Tribes of the Umatilla Indian Reservation - Teara Farrow Ferman, Cultural Resources Program Manager (541) 276-3447; secondary contact Catherine Dickson (541) 966-2338 or (541) 429-7231
  - Confederated Tribes of Warm Springs – Holly Shea, Tribal Archaeologist (541) 553-3555
  - Coquille Indian Tribe – Bridgett Wheeler, Director, Education, Culture & Library Services (541) 756-0904
  - Cow Creek Band of Umpqua Indians - Jessie Plueard, Cultural Programs Manager (541) 677-5575 ext. 5577
  - Klamath Tribes - Perry Chocktoot, Culture & Heritage Director (541) 783-2219

# APPENDIX N: FOREST STAND MAP



# APPENDIX O: STAND MANAGEMENT PLAN

## 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, 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 percent, soils are rocky. Elevation ranges from 4,470' to 6,000'. Part of this stand is the parcel that Oregon Parks and Recreation Department 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.

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

## Stand 2

This 20-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 trees per acre 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 percent. The stand is in the grand fir/pinegrass plant association. Elevation ranges from 5,670' to 6,100'.

**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 trees per acre, 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 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 trees per acre over 7" diameter breast height (DBH), and 925 trees per acre 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 thousand board feet (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 4,800'. 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" DB is 86 square feet 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 trees per acre, at 2" average DBH. Elevation averages 4,800', 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 trees per acre, with an average diameter of 10.8", and a basal area of 39 square feet per 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 trees per acre, of which 25 trees per acre are DF 6" DBH crop trees. Looked at a little differently then, 85 trees per are over 6" DBH crop trees, with an average BA of 44 square feet per 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 5,500'.

**Recommendation:** This stand has undergone stocking control and should be left to grow for 20 years.

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

### Stand 6

This eight-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 trees per acre". Trees likely to thrive to merchantability in the understory number 150 trees per 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", 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 merchantable 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 cost share of simultaneous pre-commercial thinning.**

### 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 in 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 percent. The stand is in the Douglas fir/Rocky Mountain maple-ninebark plant association and has a heavy component of tall shrubs. Elevation ranges from 4,470' to 5,200'. 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 square feet per acre, with 64 trees per acre. Average diameter is 14". The 0-7" DBH understory averages 240 trees per acre, of which 120 will probably thrive to merchantability, with an average DB 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 4,850'.

**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 square feet.

**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 square feet 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 percent, 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 1,000 trees per acre, 10 square feet of basal area, of which 25 trees per acre would likely make it to maturity, the remainder being suppressed. The stand is in the grand fir/twinflower plant association. Elevation ranges from 5,300' to 5,850'.

**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 MBF, 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 trees per acre, with an impressive 250 trees per acre likely to reach merchantable size. Total basal area per acre is 120 square feet, 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 5,750' to 6,400'.

**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 percent.

**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 cut over harvest more than 30 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 trees per acre, with an average basal area of 76 square feet. Average DBH 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 trees per acre with a crop tree stocking of 100 trees per acre, primarily in clumps of pre-commercial size. Considering the 15 square feet in the pre-commercial size, total stocking is 91 square feet per acre. The stand age of commercial-sized trees averages 55 years of age. Slopes range from gentle to 60 percent. The stand is in the grand fir/twinflower plant association. Elevation ranges from 5,200' to 6,050'.

**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 two million board feet 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 percent lodgepole pine and 20 percent Douglas-fir/western larch. Trees over 7" DBH average 103 per acre, with an average BA of 50 square feet. Volume is 1.8 MBF/acre. Average DBH 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 trees per acre, all excess. Dead grand fir (*Scolytus* mortality) average 28 trees per acre. The stand is in the Grand fir/Rocky Mountain maple-ninebark plant association. Elevation is 4,940' to 5,200'.

**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. Basal area is 48 square feet per acre with 73 trees per acre >7". There is an average of 312 trees <7" per acre with only 71 trees per acre rated as likely to survive to merchantability, mostly Douglas fir 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 4,970' to 6,020'. Slopes average around 40 percent. 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 five 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 14

Two stands, 344 and 7 acres, totaling 351 acres, consist of ponderosa pine and Douglas fir, 96 square feet per acre, with 26 trees per acre 17" or over. Ponderosa pine comprises 67 percent of the basal area and Douglas fir – 33 percent. 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 trees per acre. 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 4,580' to 5,460'. 1-7" stocking is light, with a total of 188 trees per acre, averaging 3", averaging 9 square feet of basal area per acre. Of this stocking, acceptable crop tree stocking is 62 trees per acre 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.**

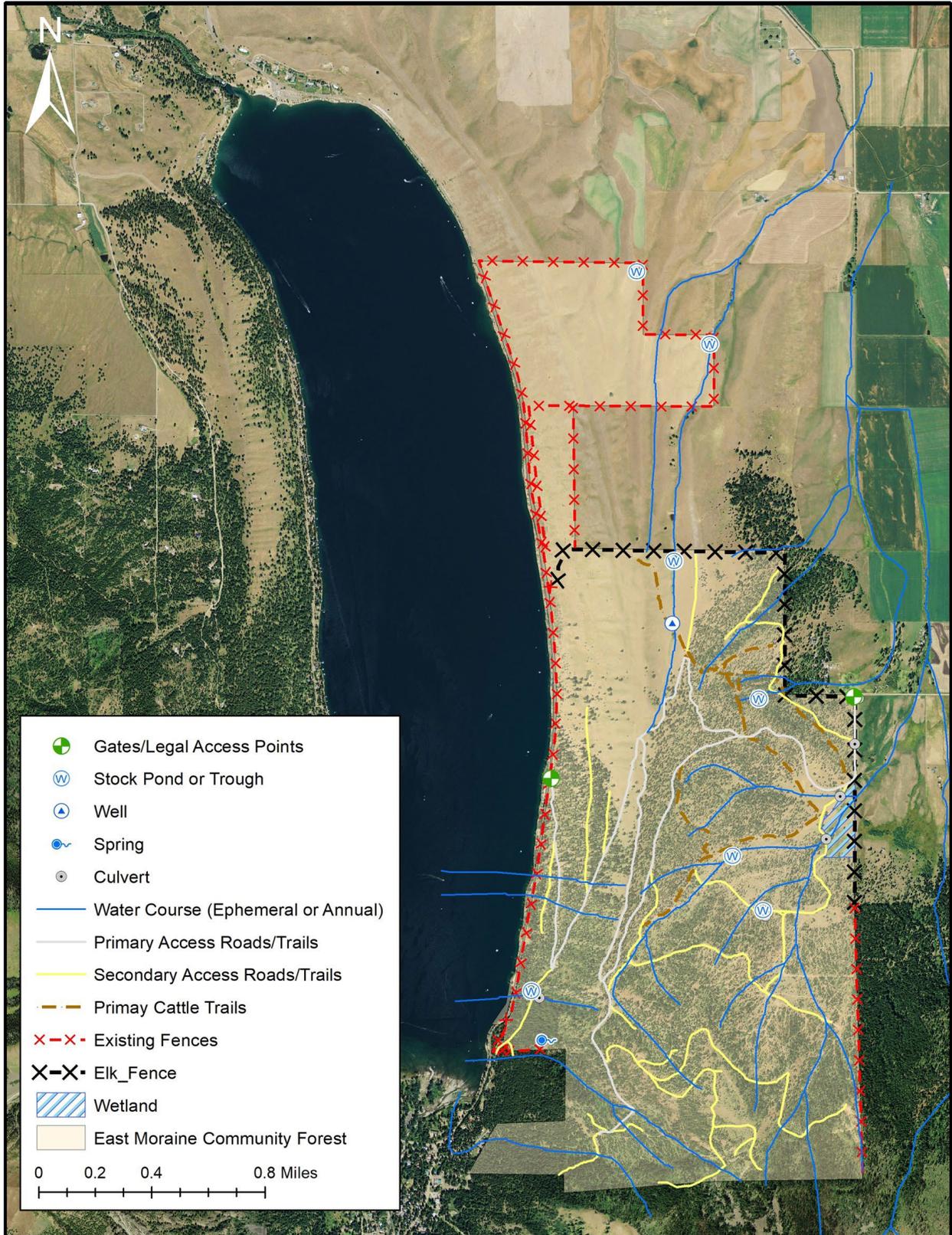
### Stand 15

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 percent. The stand is in the grand fir/Rocky Mountain maple/ninebark plant association. Elevation is 6,100' at its midpoint.

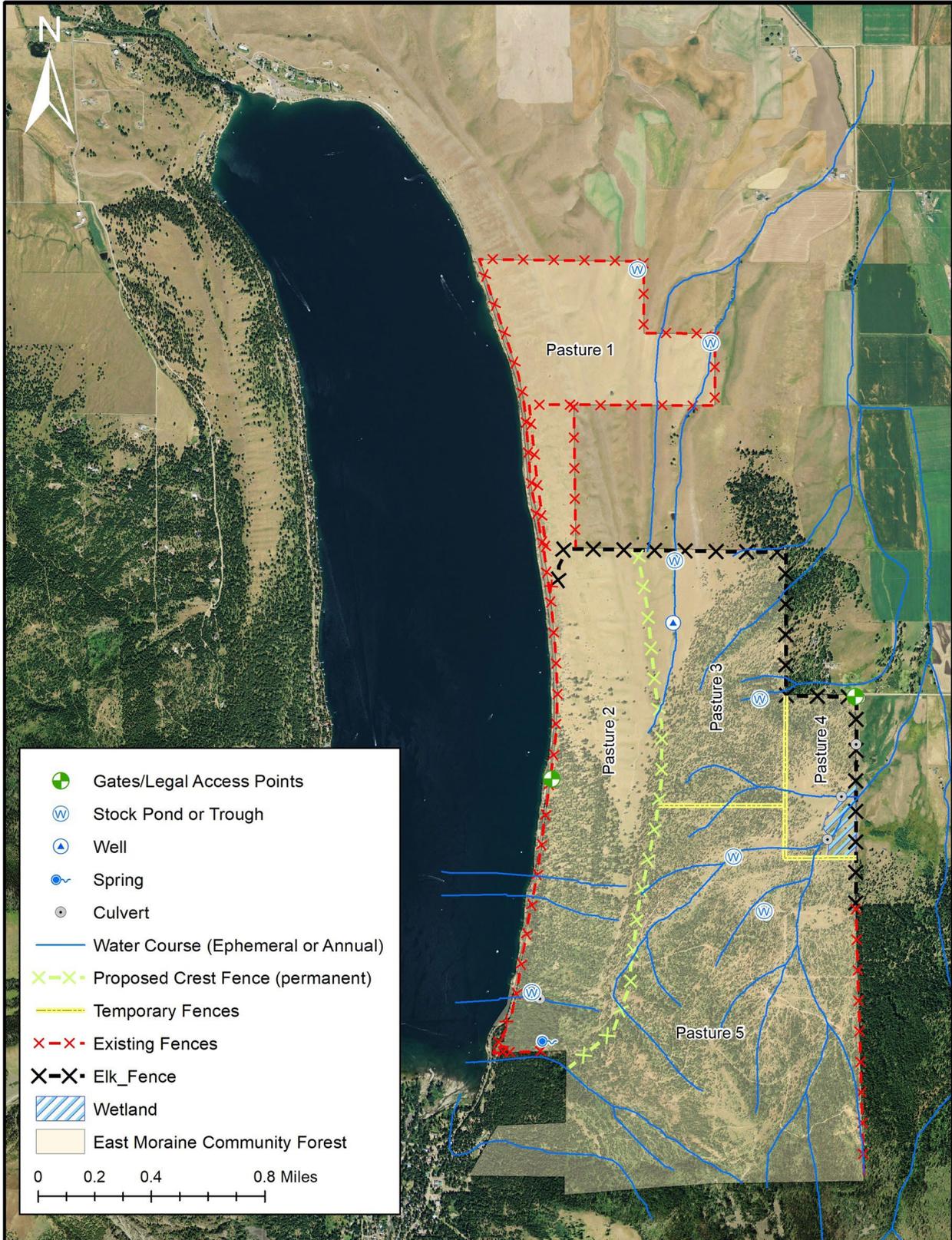
**Recommendation:** These stands are early seral, which is an under-represented structural stage on the forest. No management activity recommended.

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

# APPENDIX P: CURRENT RANGELAND INFRASTRUCTURE MAP



# APPENDIX Q: PROPOSED 5-PASTURE CONFIGURATION MAP



# APPENDIX R: GRAZING CALCULATION

East Moraine Community Forest - South Unit (Pastures 2-5) Stocking Rate Calculations

Soil unit symbol	Soil Classification	Rating - pounds per acre per favorable year	Rating - pounds per acre per normal year	Rating - pounds per acre per unfavorable year	Acres	Percent of AOI	Favorable Year lbs Total	Normal Year lbs Total	Unfavorable Year lbs Total
1	Akerite silt loam, 2 to 8 percent slopes	1300	900	500	46.3	3.00%	60190	41670	23150
74	Ferguson very fine sandy loam, 2 to 15 percent slopes	1300	900	500	109.8	7.00%	142740	98820	54900
110	Harl-Anatone-Rock outcrop complex, 60 to 90 percent north slopes	1300	900	500	27.1	1.70%	35230	24390	13550
140	Hurwal silt loam, moist, 15 to 30 percent north slopes	2500	2000	1500	3.6	0.20%	9000	7200	5400
157	Klicker-Anatone complex, 2 to 15 percent slopes	1300	900	500	1	0.10%	1300	900	500
158	Klicker-Anatone complex, 15 to 30 percent south slopes	1300	900	500	29.4	1.90%	38220	26460	14700
159	Klicker-Anatone complex, 30 to 60 percent south slopes	1300	900	500	106.6	6.80%	138580	95940	53300
187	Limberjim silt loam, 2 to 15 percent slopes	1300	900	500	14.1	0.90%	18330	12690	7050
189	Limberjim-Syrupcreek complex, 15 to 30 percent north slopes	1300	900	500	63	4.00%	81900	56700	31500
190	Limberjim-Syrupcreek complex, 30 to 60 percent north slopes	1300	900	500	126.5	8.10%	164450	113850	63250
205	Minam loam, 2 to 8 percent slopes	1300	900	500	20.6	1.30%	26780	18540	10300
206	Minam loam, 8 to 15 percent slopes	1300	900	500	0.7	0.00%	910	630	350
216	Mountemily-Troutmeadows complex, 30 to 60 percent north slopes	1300	900	500	195.9	12.50%	254670	176310	97950
254	Rondowa silt loam, 2 to 8 percent slopes	2300	1800	1400	66.5	4.30%	152950	119700	93100
255	Rondowa silt loam, 8 to 15 percent slopes	2300	1800	1400	4.8	0.30%	11040	8640	6720

257	Rondowa stony loam, 15 to 30 percent north slopes	3000	2500	2000	0.7	0.00%			
							2100	1750	1400
258	Rondowa stony loam, 30 to 60 percent north slopes	3000	2500	2000	36.6	2.30%			
							109800	91500	73200
260	Rondowa stony loam, 30 to 60 percent south slopes	1800	1400	1000	141.9	9.10%			
							255420	198660	141900
261	Rondowa bouldery loam, 2 to 15 percent slopes	1300	900	500	0.1	0.00%			
							130	90	50
263	Rondowa bouldery loam, 30 to 60 percent north slopes	1300	900	500	210	13.40%			
							273000	189000	105000
265	Rondowa bouldery loam, 30 to 60 percent south slopes	1300	900	500	80.6	5.20%			
							104780	72540	40300
305	Syrupcreek-Anatone complex, 0 to 15 percent slopes	1300	900	500	9.3	0.60%			
							12090	8370	4650
312	Tamarackcanyon -Lowerbluff complex, 2 to 15 percent slopes	1300	900	500	109.2	7.00%			
							141960	98280	54600
313	Tamarackcanyon -Olot-Harlow complex, 15 to 30 percent south slopes	1500	1000	700	39.3	2.50%			
							58950	39300	27510
314	Tamarackcanyon -Olot-Harlow complex, 30 to 60 percent south slopes	1500	1000	700	17.3	1.10%			
							25950	17300	12110
329	Tolo-Getaway complex, 15 to 30 percent north slopes	1300	900	500	71	4.50%			
							92300	63900	35500
330	Tolo-Getaway complex, 30 to 60 percent north slopes	1300	200	500	27.7	1.80%			
							36010	5540	13850
<b>Totals</b>					<b>1,559.20</b>	<b>99.80%</b>	<b>2248780</b>	<b>1588670</b>	<b>985790</b>
Average pounds per acre of forage growth							<b>1442.3</b>	<b>1018.9</b>	<b>632.2</b>
Animal units (900 lbs/day per cow-calf pair) per acre at 25% harvest efficiency/50% utilization (0.25)							<b>0.40</b>	<b>0.28</b>	<b>0.18</b>
Total animal units available							<b>625</b>	<b>441</b>	<b>274</b>
Estimating 85% currently accessed to the total area (0.85)							<b>531</b>	<b>375</b>	<b>233</b>
Based on a 4 month grazing season (June 10-15 through October 10-15)							<b>133</b>	<b>94</b>	<b>58</b>

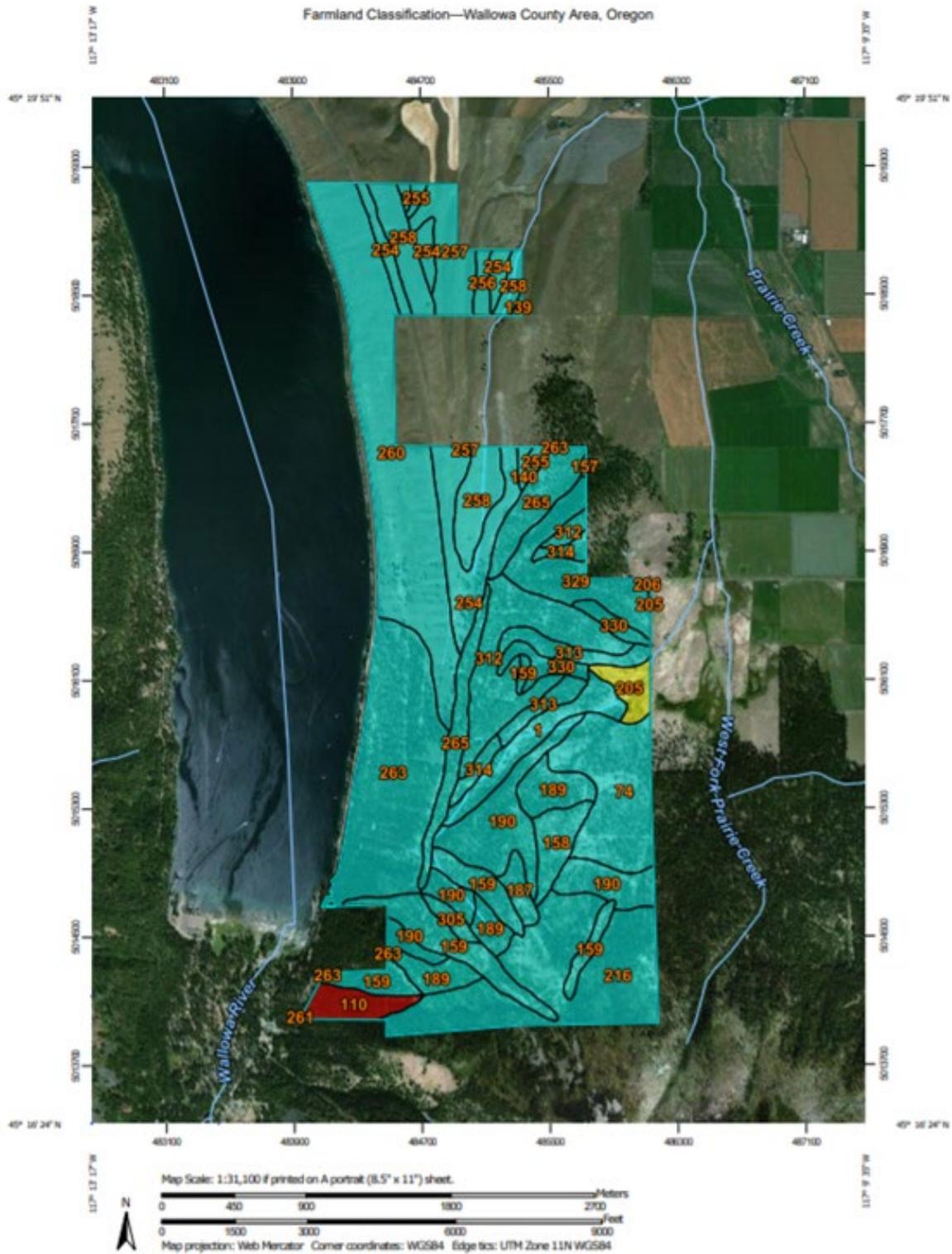
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**East Moraine Community Forest - North Unit (Pasture 1) Stocking Rate Calculations**

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Map unit symbol	Map unit name	Rating (pounds per acre per favorable year)	Rating (pounds per acre per average year)	Rating (pounds per acre per unfavorable year)	Acres in AOI	Percent of AOI	Favorable Year Pounds Total	Normal Year Pounds Total	Unfavorable Year Pounds Total
139	Hurwal silt loam, moist, 8 to 15 percent slopes	2300	1800	1400	1.4	0.50%	3220	2520	1960
254	Rondowa silt loam, 2 to 8 percent slopes	2300	1800	1400	33.3	12.80%	76590	59940	46620
255	Rondowa silt loam, 8 to 15 percent slopes	2300	1800	1400	3.7	1.40%	8510	6660	5180
256	Rondowa stony loam, 2 to 15 percent slopes	2300	1800	1400	9.3	3.60%	21390	16740	13020
257	Rondowa stony loam, 15 to 30 percent north slopes	3000	2500	2000	48.6	18.80%	145800	121500	97200
258	Rondowa stony loam, 30 to 60 percent north slopes	3000	2500	2000	43.6	16.80%	130800	109000	87200
260	Rondowa stony loam, 30 to 60 percent south slopes	1800	1400	1000	117.4	45.20%	211320	164360	117400
<b>Totals</b>					<b>257.4</b>	<b>99.20%</b>	<b>597630</b>	<b>480720</b>	<b>368580</b>
Average pounds per acre of forage growing							<b>2321.8</b>	<b>1867.6</b>	<b>1431.9</b>
Animal units (900 lbs/day per cow-calf pair) per acre at 25% harvest efficiency/50% utilization (0.25)							<b>0.64</b>	<b>0.52</b>	<b>0.40</b>
Total animal units available							<b>166</b>	<b>134</b>	<b>102</b>
Estimating 70% currently accessed of the total area (0.7)							<b>116</b>	<b>93</b>	<b>72</b>
Based on a 4 month grazing season (June 10-15 through October 10-15)							<b>29</b>	<b>23</b>	<b>18</b>

# APPENDIX S: FARMLAND SOILS CLASSIFICATION MAP



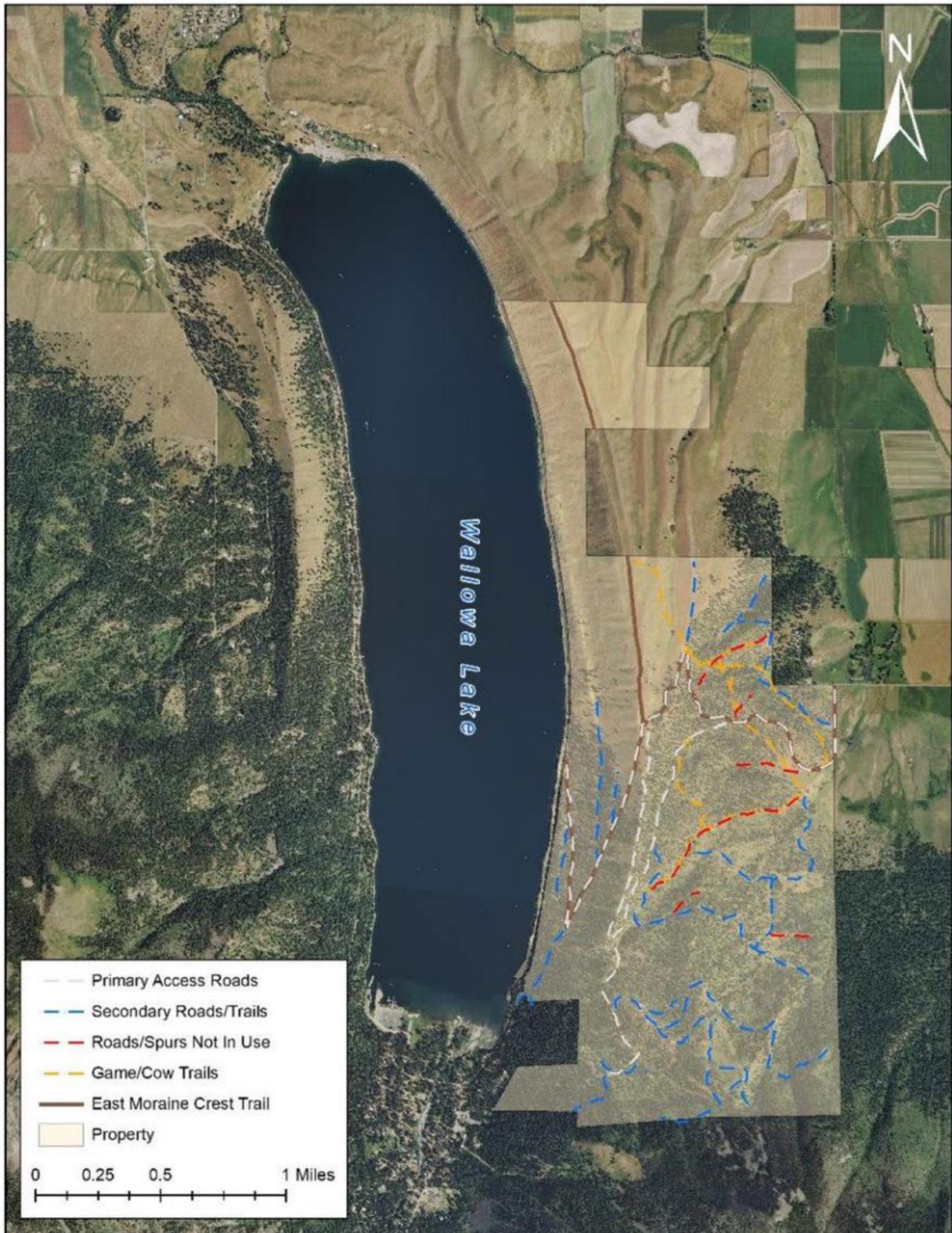
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
1	Akerite silt loam, 2 to 8 percent slopes	Farmland of statewide importance	46.3	2.6%
74	Ferguson very fine sandy loam, 2 to 15 percent slopes	Farmland of statewide importance	109.8	6.1%
110	Harl-Anatone-Rock outcrop complex, 60 to 90 percent 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%

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%
<b>Totals for Area of Interest</b>			<b>1,799.9</b>	<b>100.0%</b>

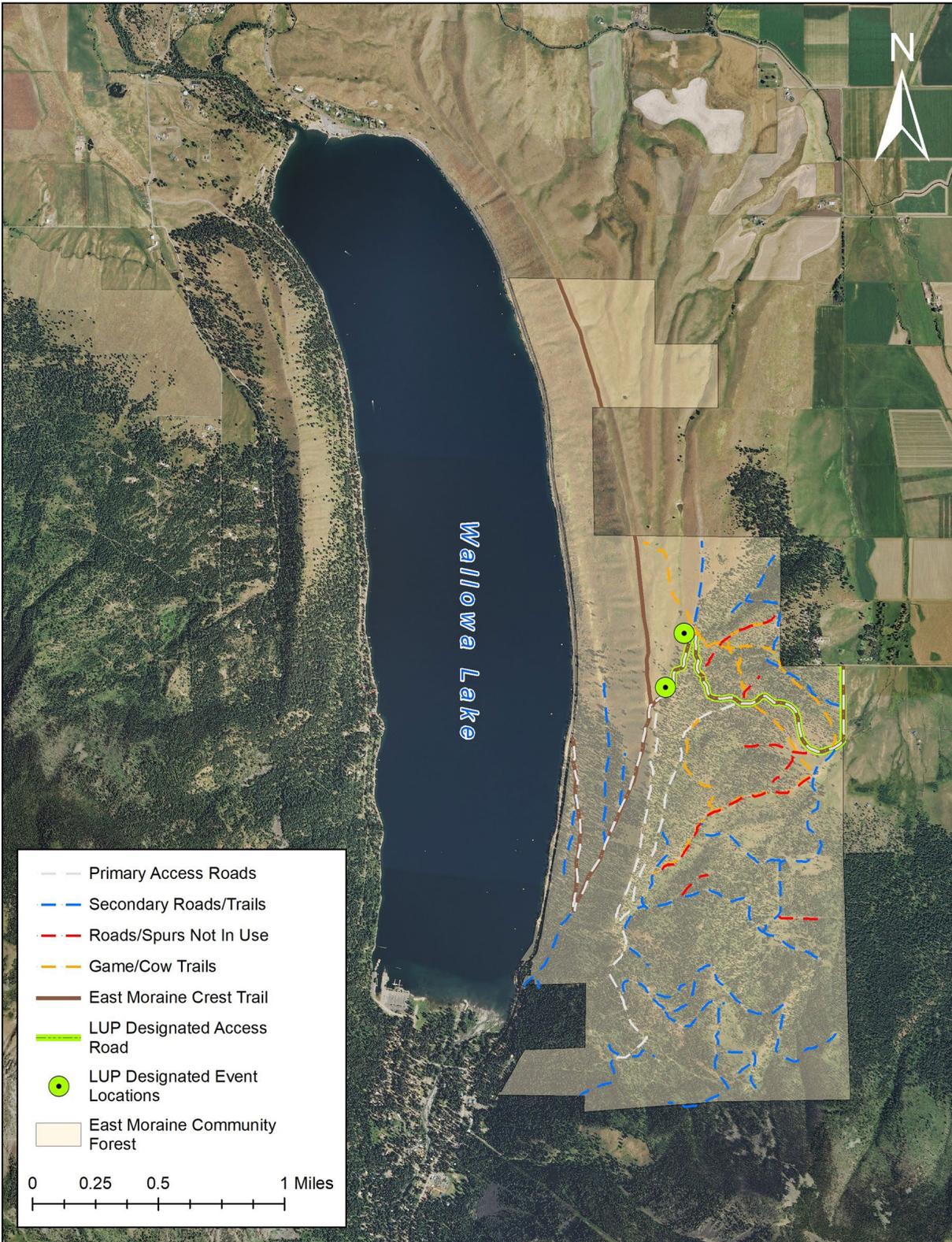
## Description

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 T: EXISTING ROADS AND TRAILS MAP



# APPENDIX U: LUP DESIGNATIONS MAP



# APPENDIX V: EAST MORAINÉ COMMUNITY FOREST LUP INFORMATION

East Moraine Community Forest Limited Use Permit Information and Rules Pursuant to Management Plan for Wallowa Lake East Moraine Community Forest

The purpose of Limited Use Permits (LUP) is to allow for limited motorized access to the Community Forest for uses other than those listed in Section 3.9 of the Conservation Easement, as provided in Section 4.1 of the Conservation Easement. Motorized access shall be limited to traditional vehicles, vans, or buses (subject to 25-person limit specified below). Other motorized access, including but not limited to ATV access, shall not be allowed.

A LUP may be issued, consistent with Section 4.1 of the Conservation Easement, for the following categories of use:

- For people with a disability or limited mobility to use a motorized vehicle to equitably access the property. LUPs for access for people with a disability or people with limited mobility shall be offered on a limited-basis not to exceed two days per month. No more than (1) LUP will be allowed on any given day June 15 through September 15.
- For organized school groups to transport students onto the property for the purposes of an educational outing. LUPs for access for school groups shall be offered on a limited-basis not to exceed two days per month. No more than (1) LUP will be allowed on any given day June 15 through September 15.

For non-commercial cultural or social events with up to 25 people in attendance for activities in specified locations shown on Appendix V (map). Permits will be limited to 6 per year not to exceed one (1) permit per week, June 15 through September 15, unless otherwise agreed to in writing by the co-holders of the Conservation Easement.

For all such use, in all categories, only on-road driving and parking shall be permitted (consistent with Appendix V: LUP Designations Map in the EMCF Management Plan).

The following will be prohibited for all permit types:

- Alcohol and other drugs
- Fires of any size
- Smoking
- Amplified sound systems
- Overnight use, such as camping
- Structures other than temporary, stand-alone structures erected and deconstructed during visit. No stakes or devices can be used that damage resources.

At a minimum, the LUP will collect the following information from applicants:

1. Name and contact information of party requesting the permit.
2. Number of people in the group (up to 25).
3. Date and time of the event.
4. Detailed description of the activity to take place and reason a vehicle is necessary if requested.
5. Location of where the activity will take place (one location per LUP for cultural /social events).

1. Make, model and license plate of the vehicle they intend to take on the property (standard LUP allows access of 1 vehicle).
2. Subject of study, if an educational outing.
3. Signed commitment from user that no alcohol or other drugs will be used, and commitment to other terms of use including only on-road driving and parking and adherence to Oregon Department of Forestry's District Proclamation.

Motorized access to the property shall be limited to the east side entrance, off Turner Lane, and entry will be supervised by the Property Manager. Only one vehicle will be allowed per LUP and will only be allowed (1) trip up and (1) trip down the moraine. Vehicles must remain on existing rock roads and park in designated areas only (Appendix U). Speed shall not exceed 5 MPH. No off-road parking is allowed due to soil compaction, fire risk, and species damage concerns.

There will be no more than six LUPs issued per year for cultural and social use events as specified above. LUPs for access for people with a disability or limited mobility shall be offered on a limited basis not to exceed two days per month.

The number of LUPs issued to school groups shall not be limited by number but shall be considered on a case-by-case basis. Regardless, no permits will be issued if they are deemed by the Property Manager to be detrimental to the Conservation Values of the property or otherwise materially interfere with other approved uses (such as grazing, forestry activities, cultural resources, recreational access, or habitat protection).

# APPENDIX W: OREGON DEPARTMENT OF FORESTRY DISTRICT PROCLAMATION



## FIRE RESTRICTION INFORMATION FOR OREGON DEPARTMENT OF FORESTRY

PROTECTED LANDS IN NORTHEAST OREGON, 2022 FOR CURRENT RESTRICTION  
INFORMATION CALL 541-975-3027 OR VISIT [BMIDC.ORG/RESTRICTIONS](http://BMIDC.ORG/RESTRICTIONS)  
OR QR Code



### Low Fire Danger (Out of Fire Season)

#### PROHIBITED:

- Use of sky lanterns throughout the year in Oregon.

### Moderate Fire Danger

### IN EFFECT

#### PROHIBITED:

- Permit Required for all open debris burning and use of burn barrels.
  - Contact your local ODF office as listed below to inquire about a permit.
- Campfires for recreational and/or cooking purposes are allowed.
  - Possession of the following firefighting equipment is required; shovel or other firefighting tool, minimum of 1-gallon of water, or 2 ½ pound or larger fire extinguisher and a fire watch at least one hour after extinguishing.
- Use of exploding targets.
- Use of tracer ammunition or any bullet with a pyrotechnic charge in its base.
- Use of sky lanterns throughout the year in Oregon

### High Fire Danger

#### PROHIBITED:

- All open debris burning and the use of burn barrels.
- Open fires, including campfires, charcoal fires, cooking fires, and warming fires, except at designated locations.
  - Portable cooking stoves using liquefied or bottled fuels are allowed.
  - Propane fire pits are allowed if they are self-contained and 3 feet away from any flammable fuels with a maximum flame height of 2 feet.
- Non-industrial Chainsaw use is prohibited Noon-8PM.
  - Non-industrial chainsaw use is allowed at all other hours if the following firefighting equipment is present with each operating saw: one shovel or other firefighting tool, and one 8 ounce or larger fire extinguisher or 1-gallon of water. In addition, a fire watch is required at least one hour following the end of chainsaw use.
  - Electric Chainsaws are allowed all day.
- Use of fireworks.
- Use of exploding targets.
- Use of tracer ammunition or any bullet with a pyrotechnic charge in its base.
- Any electric fence controller in use shall be: 1) Listed by a nationally recognized testing laboratory or be certified by the Department of Consumer and Business Services; and 2) Operated in compliance with manufacturer's instructions.
- Smoking while traveling, except in vehicles on improved roads, in boats on the water, or at a cleared area free of flammable vegetation.
- Possession of the following firefighting equipment is required for any vehicle/UTV/ATV traveling on unimproved roadways, where flammable vegetation exists on roadway; shovel or other firefighting tool, minimum of 1-gallon of water, or 2 ½ pound or larger fire extinguisher.
- Mowing of dried and cured grass with power driven equipment is prohibited Noon-8PM, except for the commercial culture and harvest of agricultural crops.
  - Electric string trimmers are allowed all day.
- Cutting, grinding, and welding of metal is prohibited Noon-8PM. Cutting, grinding, and welding of metal is permitted at all other hours, if conducted in a 10-foot area cleared of flammable vegetation, shovel or other firefighting tool, minimum of 1-gallon of water, or 2 ½ pound or larger fire extinguisher.
- Use of sky lanterns throughout the year in Oregon.

## Extreme Fire Danger

### PROHIBITED

- All open debris burning including the use of burn barrels.
- Open fires, including campfires, charcoal fires, cooking fires, and warming fires.
  - Portable cooking stoves using liquefied or bottled fuels are allowed.
  - Propane fire pits are allowed if they are self-contained and 3 feet away from any flammable fuels with a maximum flame height of 2 feet.
- Use of fireworks.
- Use of exploding targets.
- Use of tracer ammunition or any bullet with a pyrotechnic charge in its base.
- Non-industrial chainsaw use.
- Cutting, grinding, and welding of metal.
- Mowing of dried and cured grass with power driven equipment, except for the commercial culture and harvest of agricultural crops.
  - Electric tools: chainsaws and string trimmers are allowed all day.
- Smoking while traveling, except in vehicles on improved roads, in boats on the water, or at a cleared area free of flammable vegetation.
- Any electric fence controller in use shall be: 1) Listed by a nationally recognized testing laboratory or be certified by the Department of Consumer and Business Services; and 2) Operated in compliance with manufacturer's instructions.
- Possession of the following firefighting equipment is required for any vehicle/UTV/ATV traveling on unimproved roadways where flammable vegetation exists on the roadway; shovel or other firefighting tool, minimum of 1-gallon of water, or 2 ½ pound or larger fire extinguisher.
- Use of sky lanterns throughout the year in Oregon.

\*The above public use restrictions are in accordance with ORS 477.535

**\*If you would like further information, please call your local office.**

**Baker City: 541-523-5831**

**La Grande: 541-963-3168**

**Pendleton: 541-276-3491**

**Wallowa: 541-886-2881**