

Land Management Plan Luckiamute Meadows

Tract ID: WILF-WL-13



Prepared for Bonneville Power
Administration and Oregon Department
of Fish and Wildlife by Greenbelt Land
Trust

Final Draft 7.29.2022

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PREFACE

Land Management Plan Template For Newly Acquired, Working Lands Conservation Easement Properties, Where BPA Holds Third Party Rights of Enforcement

In this management plan, the Grantor (landowner) and the Grantee (Greenbelt Land Trust) of the Conservation Easement (together referred to as “Grantor/Grantee”) shall describe the uses and activities on the property that the Grantee expects to undertake or allow to be undertaken on the property, including any restoration, enhancement, stewardship, and working lands activities or uses.

The Grantor/Grantee shall include in this management plan and/or any associated management plan (i.e. grazing plan, forest management plan, etc) any limitations or prescriptions for these uses and activities necessary to ensure the purpose of the Conservation Easement. This management plan shall be developed in consultation with BPA, ODFW, and relevant interested local, state, tribal, and federal resource agencies, and the sponsor shall provide an opportunity for public input on this management plan.

BPA shall review this management plan and any proposed amendments for conformance with any associated MOA and the Conservation Easement. BPA must provide its written confirmation of the management plan or any amendments of it prior to its implementation. The sponsor shall make the final acknowledged Management Plan, and any approved amendments, available to the public.

As land management practices and the land itself changes over time, the LMP will need to be updated.

A. PROPERTY DETAILS (QUESTIONS 1-11)

1. Please provide the following information for the property and LMP:

- Project site or management area name: Luckiamute Meadows (WILWF-WL-13)
- Situs address: No situs address, but accessed from: 38970 Kings Valley Hwy., Monmouth, OR 97361
- Location (See Attachment A: Maps – Location)
 - Latitude: 44°41'52.807"N
 - Longitude: -123°26'9.012"W
 - Datum: North American Datum 1983
- County: Benton
- Acres: 73.6 acres
- Tax lot(s): Almost the entirety (73.6 acres) of Tax Lot #106160001001 (See Attachment A: Maps – Conservation Easement and Parcel.¹)
- Acquisition date: The Conservation Easement (CE) was acquired on April 9, 2014 and recorded by Benton County on April 11, 2014
- Plan date: 2022-2032
- Plan duration: 10 years (to be evaluated after 5 years)
- Property owner and Role: Kings Valley Community Trust (Grantor)

The Grantor is responsible for protecting and maintaining baseline habitat conditions and conservation values, including such items as maintenance of roads, trails, fences and weed control as described in the Baseline Inventory Documentation and the Management Plan (Section 17.a) of the CE). The Grantor also reserved the ability to prevent trespass and control access to the Property (CE Section 5).

- Project sponsor and Role: Greenbelt Land Trust (Grantee)

The Grantee is responsible to preserve and protect the conservation values of the Property, including making decisions regarding management of habitat and agriculture, the pursuit of funding for restoration, and the execution of contracts and agreements for funding and cost share programs related to protecting and restoring the conservation values of the Property (CE Section 6.a)). The Grantee also has the right to enter into leases/contracts on the property for specific restoration or agricultural activities as described in the Management Plan (CE Section 6.d), and has exclusive use and benefit of the Water Rights appurtenant to the Property (CE Section 6.e)). In addition, the Grantee is primarily responsible for monitoring and enforcing the terms of CE (CE Section 12.a)).

¹ Note that at the time of CE acquisition, the CE area spanned parts of two tax lots. Since that time, the landowner reconfigured the lots with Benton County, resulting in the current tax lot configuration.

- Property manager (if different from Grantor/Grantee): N/A
- Preparer’s name and affiliation
Carolyn Menke, Claire Fox, Matt Blakeley-Smith
Greenbelt Land Trust (“Greenbelt”)
- Contact information for key on-the-ground staff (e.g., property manager; list all that apply).
Stewardship Director: Matt Blakeley-Smith (matt@greenbeltlandtrust.org)
Stewardship Manager: Carolyn Menke (carolyn@greenbeltlandtrust.org)
Stewardship Coordinator: Jeff Baker (jeff@greenbeltlandtrust.org)
Greenbelt Land Trust
101 SW Western Blvd., Ste. 111
Corvallis, OR 97333
541-752-9609
- Map that specifically details the location of the property, including roadways and other relevant landmarks as appropriate. Label all tax lots or parcels considered in this management plan.

See Attachment A: Maps –Location, and Conservation Easement and Parcel

2. Briefly summarize the purpose of this property/acquisition and provide the Conservation Values as stated in the Conservation Easement.

See Attachment B: Conservation Easement.

From the Easement:

The purpose of the CE is to protect and conserve, and as appropriate, to allow for the restoration or enhancement of the conservation values of the Property. As such, the Purpose of this Conservation Easement includes the prevention of any use of the Property that will materially harm or materially interfere with any of the Conservation Values of the Property. The Grantor intends that this Conservation Easement will confine the use of the Property to activities that comply with the Conservation Easement, including the Management Plan. Grantee shall have the right, but not the obligation, to enforce any and all terms of this Conservation Easement. Any use of or activities on the Property by the Grantor shall be consistent with the Purpose of this Conservation Easement. In the event that there is a conflict between the Grantor’s uses or activities and the Purpose of Conservation Easement, the Purpose of the Conservation Easement shall be construed broadly and shall prevail over any conflicting uses or activities of the Grantor.

The Conservation Values of the Property meet the broad definition of open space values provided by ORS 308A.300. The Property, in its present state, comprises approximately 73.6 acres and includes important species, habitat, and other ecosystem attributes. The Conservation Values of the Property that currently exist specifically include those listed below,

recognizing that such Conservation Values may periodically fluctuate or trend toward long-term change, due to natural events such as wildfire, floods, interdecadal climate events, and long-term climate change, as well as human-initiated enhancement or restoration actions. Thus, Grantor and Grantee shall maintain, preserve and protect the following Conservation Values that now exist on the Property:

Conservation Values include:

- a) *Habitats and Associated Species. The Property contains the confluence of the Luckiamute River and Maxfield Creek, a priority area in Kings Valley for the protection and enhancement of riparian and floodplain habitats and to improve water quality and habitat for steelhead trout (*Oncorhynchus mykiss*) and cut-throat trout. The Property has important conservation value for the creek and river systems, riparian and oak forest, grassland² and wetland habitats and associated species. Existing riparian and oak forests are comprised of native species including but not limited to Oregon white oak (*Quercus garryana*), black cottonwood (*Populus trichocarpa*), Oregon ash (*Fraxinus latifolia*), Pacific ninebark (*Physocarpus capitatus*), and red osier dogwood (*Cornus sericea*). The grassland and wetland areas support numerous species including Roosevelt elk and various waterfowl, shorebirds, and neo-tropical migrants such as western bluebird, acorn woodpecker, yellow-breasted chat, chipping sparrow, slender-billed nuthatch and Oregon vesper sparrow. The creek and river systems protect critical life history functions for listed or species of conservation concern, that may include Chinook salmon (*Oncorhynchus tshawytscha*), cutthroat trout (*Oncorhynchus clarki*), steelhead trout (*Oncorhynchus mykiss*), Oregon chub (*Oregonichthys crameri*), Pacific lamprey (*Lampetra tridentata*), northwestern pond turtle (*Emys marmorata marmorata*), and red-legged frog (*Rana aurora*).*

The Grantee will use their best efforts to enhance or restore the Property's habitats for native species if found necessary through the management plan development process. The habitats and species associated with the natural environment of the Property will be conserved and sustained as provided herein. Any restoration activities planned for the Property and described in the Management Plan, will increase the quality and quantity of habitats for native fish and wildlife and the public value of the ecosystem services that the Conservation Values provide to humans.

- b) *Scenic Resource. The Property's Conservation Values also include its scenic resource of riparian, oak, grassland, wetland and creek/river system habitats that are seen by visitors to the Property.*
- c) *Other Ecosystem Attributes and Services. Ecosystem attributes and services, present as of the Effective Date of this Conservation Easement, include but are not limited to the*

² Please note that while the CE discusses grassland, the Baseline Inventory Documentation describes the same segment of the Property as pasture, which is the terminology used in this LMP. See Attachment C: Baseline Inventory Documentation.

fish and wildlife habitats described above, biodiversity, clean air and water, storage of flood water, maintenance of soil productivity, and carbon sequestration.

- d) *Contribution to landscape-scale conservation. The Property is located within a priority conservation area for riparian and aquatic habitats identified in the Oregon Conservation Strategy, adopted by the Oregon Department of Fish and Wildlife in 2006. One of the goals of the Oregon Conservation Strategy is to protect and restore native Willamette River tributary habitats and the species that rely on them. In addition, the Property is contiguous with an existing conservation easement, also held by the Grantee, creating a conservation zone of nearly 225 acres adjacent to the Luckiamute River that includes the confluences of both Price and Maxfield Creeks with the Luckiamute River.*

3. Is this a new LMP or an update? If this is an update to an existing plan (e.g., to address changes in habitat, adding additional property, or including more or different activities), please provide the original plan duration.

This is the first LMP approved by BPA for the Property.

Preceding this LMP, the original Grantor (Hall family) referred to a guiding management document produced by Steve Smith (Private contractor, former ODFW and USFWS Biologist, retired) in July 2015. This document, included in Attachment D: Habitat Assessment and Recommendations, offered prioritized management actions over this Property as well as neighboring land under the same ownership. This document has been used as an advisory document and is not intended to parallel this LMP.

4. Does this property provide connectivity to other conservation properties, or is it uniquely related to other habitat/species in the vicinity? If your site located in a Conservation Opportunity Area (COA), list here.

The Property contributes to a landscape-level conservation along the Luckiamute River. The adjoining property to the south (owned by the same Grantor) is under a CE held by Greenbelt Land Trust (Greenbelt). Adjacent to that property is Rainshine Farm, a property also under a CE held by Greenbelt. Together, these three CEs create a contiguous conservation area of 225 acres adjacent to the Luckiamute River that includes the confluences of both Price and Maxfield Creeks with the Luckiamute River. This area includes approximately 5 km of streamside habitat for protection and enhancement. See Attachment A: Maps – Luckiamute Conservation Easements. Also in the Kings Valley area are two Benton County Natural Areas and Parks properties, Fort Hoskins and Bezell Memorial Forest.

The Property is located in Conservation Opportunity Area 075: Luckiamute River and Tributaries.

5. Describe adjacent property land uses relevant to property management.

All parcels adjacent to the Property, with the exception the northeast corner (approximately 100 feet of shared border), are zoned for Exclusive Farm Use by Benton County. The 1-acre parcel to the northeast is zoned Rural Commercial, with a small store and a small, paved parking lot; this area does not provide habitat and could potentially be a source of noise or light disruption. The Property is directly adjacent to two other Greenbelt Land Trust conservation properties to the south (see map “Luckiamute Conservation Easements”). These lands are also conserved and managed (riparian forest buffer restoration, water quality protection, invasive species control) to benefit similar conservation values, and collectively provide over 225 acres of conserved land in the area. Also to the southeast is Kings Valley Charter School (KVCS), which is small both in extent and student number (300 students). The lands to the west (across the Luckiamute River) are managed for industrial timber, subject to Oregon Department of Forestry practices to protect clean water. The Property may provide a haven for wildlife as the timber harvest rotations occur. To the east, land is currently in Christmas tree farms, which provides temporary habitat for wildlife; similar to the case with the adjacent forestry use to the west, the Property may serve as a haven for wildlife once trees are harvested. The parcel to the north is 9.6 acres, bounded to the north by the Luckiamute River; that parcel has farm buildings and some open fallow ground that likely harbors some of the same non-native plants that are found on the Property.

6. What is the current land use? Is there a history of land use on the Property covered by this LMP that may be relevant to future land management activities?

At the time of CE acquisition (2014) and at the time of management plan development (2022), the Property is used primarily for habitat conservation, education, and passive recreation. A retrospective view of the history of land management on the Property is described below.

Prior to Hall family Acquisition

Prior to EuroAmerican settlement, the area was used by Kalapuya peoples as a trade route. It is likely that this valley was also used by the Kalapuya for food production, collection of plant materials, fishing and hunting of game. In 1847, the King family arrived in their wagon train and settled in the Valley to live and farm on the Donation Land Claim. The Kings Valley school was opened in 1848. The historic farmhouse adjacent to the CE was built in 1898 for Nahum King’s daughter. Kings Valley then was known as a fertile agricultural area with a gristmill stationed in the Luckiamute River. The river was also used to transport logs downstream. Loggers used the practice of amassing logs behind dams and then exploding dynamite to flush all the logs downstream at once. This practice took a toll on the river, by straightening out its many meanders and incising its banks. This impact on the Luckiamute River and its tributaries makes stream restoration today even more significant. During the 1970s-1990s the Property was used primarily for hay production and livestock grazing, including use by sheep and cattle in the pasture areas. At that time, the pastures extended more closely to Maxfield Creek, with a narrower riparian buffer than at the time of CE acquisition.

Hall Family Acquisition to CE Acquisition

In 1999, when the Hall family first acquired the Property, it was primarily used for grazing and had little-to-no riparian buffer along the creeks that flowed into the historic Luckiamute River. The landowner has worked to restore the ecological integrity of the Property and create a habitat for local wildlife.

From the time of the Hall family's property acquisition to the CE acquisition in 2014, the Property underwent a substantial habitat restoration, including the following:

- In 2001-2002, the Hall family planted oak seedlings in the oak woodland restoration area at approximately 250 trees per acre.
- In 2001 three seasonal wetlands/ponds were constructed with Oregon Department of Fish and Wildlife (ODFW) to promote wetland habitat. In partnership with the Luckiamute Watershed Council (LWC), the Hall family conducted in-stream restoration projects in Maxfield Creek to restore a meander in the creek and improve fish habitat; in Maxfield Creek, 80 Douglas-fir logs were placed in logjams to improve channel complexity, recruit gravel, and develop side channels.
- Beginning in 2001, through the Conservation Reserve Enhancement Program (CREP; see question #12 for more information), the Hall family improved riparian buffers and wildlife habitat enhancement across 27.3 acres on the Property. The Hall family has also personally planted approximately 25,000 trees and native forbs on the Property and implemented regular invasive species removal.
- In 2003 (and ongoing, see question #8), the southern pasture was disced, fertilized, and planted in pasture grasses and native grasses. This project was led by ODFW with the goal of improving grazing habitat for the winter Roosevelt elk (*Cervus canadensis roosevelti*) herd. The Hall family continues to manage approximately 20 acres of pasture on the Property for forage, particularly in winter. The Hall family has maintained access points to improve elk movement and worked with ODFW to implement a forage improvement program. The pastures include tall fescue and orchard grass, and the Grantor uses haying as a management tool to minimize thatch accumulation, and control the encroachment of trees, shrubs, and non-native species into the pasture.
- Between 2006-2008, Greenbelt and the USFWS Partners Program planted native wildflowers in the understory of the oak woodland restoration area.
- 2012 – 2014 (and ongoing through 2017) Riparian planting project along the Luckiamute River. Beginning in 2012, LWC began planting native riparian species along the Luckiamute River and the neighboring Price Creek (Zone E). Following plant establishment, the LWC treated invasive weeds, especially knotweed. Between 2012 and 2017 the weed control treatments occurred on an annual basis in August/September. This project uses SIP funding. The LWC plans to continue doing weed control along the Luckiamute every 3-4 years, depending on the funding available.

The CE also allows for non-commercial recreational uses, such as hiking, wildlife viewing, and outdoor education. The primary recreation users of this Property are from KVCS, a historic

school serving grades K-12, located immediately adjacent to the Property. The CE Section 9 specifically permits the Grantor to grant access to the school for activities such as restoration, monitoring, education, recreation, or other activities that do not materially harm the conservation values. The Grantors have granted this access to the school. Thus, teachers, students, and families can regularly be found on the Property walking on the trails, engaged in a science lesson, or participating in a native species planting. The trail system, which existed prior to the easement, is maintained as a mowed grass pathway.

This Property's agricultural, logging, and community history informs many management actions today. The Grantor's vision for the Property is: "to protect and preserve the natural and environmental features of the Property, support wildlife, provide educational opportunities, encourage recreation and aesthetic characteristics."

7. Describe existing infrastructure and how it may affect management at this site.

Fences, trails, bridges, the animal shed and water infrastructure are shown in Attachment A: Maps – Improvements.

- **Fencing**: At the time of CE acquisition and currently, the northern, southern (except adjacent to the school fields) and eastern boundaries of the Property are fenced. Additional wire fences throughout the Property enclose pastures and some of the planting areas. All of this fence high tensile smooth wire electric fence, except for short stretches (totaling < 100 feet) of woven wire fencing bordering the southeast corner of the central CE exclusion area (the exclusion area includes the residence, barn, outbuildings and garden). The electric fence is in fair condition, with some repair needed for full electric functionality, but that is not required for management in the absence of grazing and is consistent with baseline condition. Gates are left open for wildlife passage.
- **Wells and Irrigation**:
 - There are two wells located on the Property which serve as a domestic water source for the residence located on adjacent Exclusion 1. Records of well identification 38007 and 59762 are on file with Oregon Water Resources. The owner of the adjacent residence holds well and waterline easements allowing continued residential use. Access to water rights, points of diversion, and use of access for electricity are as described in the Conservation Easement.
 - An electrical pump situated on the west side of Maxfield Creek within sight of the rail car bridge (see Waterway Crossings) moves water to several portable stock tanks throughout the Property, to planting areas, and to a garden in Exclusion 1 (see Attachment K- Photopoints).
 - Permanent subsurface irrigation infrastructure as described by the Hall family is shown on Attachment M- Improvements. In addition, temporary surface hoses and plastic pipes divert water from Maxfield creek to planting areas.
 - Irrigation equipment on the Property includes pipes and headers.

- Bridges: A railcar bridge installed as part of a CREP project (see #12 for more information) is located on the west side of the Property, crossing Maxfield Creek. The bridge is in fair condition and measures 89 feet long by 10 feet wide. A small wooden bridge approximately 10 feet long by 3 feet wide crosses an unnamed seasonal tributary to Maxfield Creek on the southwest corner of the Property.
- Trails and Utility Road: A trail system of both grassed pathways and native dirt pathways is documented in the Baseline Inventory Documentation. The grassed pathways are about 6-feet wide. The native dirt paths are found primarily in the forested sections of the Property and are closer to 4-feet wide. A utility road of approximately 445 feet long exists at the lower southeast corner of the Property, connecting it with the grounds of the adjacent school.
- Animal Shed: A dilapidated open sided shed of approximately 50 feet by 30 feet is present, not in use, and overgrown by blackberry.
- Electric- Electrical lines connect to the residence's irrigation pump and wells and are located as shown in Attachment A: Maps - Improvements. Electrical lines benefit the residence, not the Property.

The CE requires the Grantor be responsible for protecting and maintaining baseline habitat conditions and Conservation Values, which includes maintenance of roads, trails, fences and weed control as described in the Baseline Inventory Documentation and the Management Plan. The Grantor is also responsible for routine maintenance of any easement used to access the Property (CE Section II, 17. a).

The CE identifies that the Grantee (Greenbelt) shall be responsible for maintenance of the Grantor's or Grantee's irrigation equipment used by the Grantee for agricultural activities or restoration (CE Section II, 17. B).

8. Describe interim management activities between the time of acquisition and the present.

Between the time of CE acquisition and management plan development the following management activities have occurred (see below). Where activities are ongoing, they are noted, and included in the Goals and Objectives of question #23. A further description of historical activities on the Property is included in question #6. Management zones referenced below are included in Attachment A: Maps – Management Zones.

- 2014- Present (Ongoing – see Goal 1) - The Grantor maintains the grass pathways within the Property with regular mowing, 3-4 times a year, and trims encroaching brush by hand as needed.

- 2014- Present (Ongoing – see Goal 2) - With the verbal approval of Greenbelt, the Grantor maintains the water rights through use of water to irrigate riparian plantings or fill one of the wildlife ponds as needed to extend flooding in spring.
- 2014- present (Ongoing – see Goal 6) – Pasture Management: The Grantor manages the ~ 20 acres of pasture using haying as a management tool to maintain forage habitat for elk during the winter months, while also reducing fire hazard in the summer. This ongoing activity is described in #12.
- 2014-present (Ongoing – see Goal 7) - Invasive Species Control: The Grantor engages in regular invasive species monitoring and control throughout the Property. In addition, LWC implements invasive species control along the Luckiamute for priority species, e.g., Japanese knotweed.
- 2015 –Riparian Forest Management: The Grantor reduced sapling (young tree) density in two small areas of dense Willamette Valley ponderosa pine to reduce crowding and promote individual tree survival and growth (in Zone D in the NW corner of the Property and near Kings Valley Hwy).
- 2018 –Ongoing through 2023 – see Goal 3 – Riparian Forest Restoration: Within the riparian of Maxfield Creek (Zone E) the LWC planted vine maple, Western red cedar, thimbleberry, Oregon ash, and red elderberry, with target density of 2500 plants per acre. Site prep began in 2018, followed by the first planting in 2019. In 2020 and 2021, the LWC interplanted. The LWC has funding until 2023 to do ring-sprays and spot-spraying of priority weeds 2-3 times a year.

9. List all current and prior Land Use Agreements. Include copies of the agreements.

None.

10. Are there any access issues affecting management of the Property?

No. There is no evidence of trespassing on the Property. The CE (Section 5(f)) allows the Grantor, their invitees or guests to undertake non-commercial recreational uses such as camping, wildlife viewing, hiking, outdoor education, non-motorized cycling, and photography without further permission from Greenbelt, provided that no such use shall be allowed to impair the conservation values.

11. Are there water rights included in the Conservation Easement? If there are water rights, list them, include the water right certificates, and answer the following questions:

There are two water rights associated with Maxfield Creek benefiting the Property:

- Certificate of Water Right 76493, priority date February 26, 1936, allows for irrigating 21.0 acres, of which 17.0 acres are located within the Conservation Easement boundary. The CE conveyed exclusive use of 81% of this right (at a maximum flow rate of 0.212 cubic feet per second (cfs) per acre over 17 acres).

- Certificate of Water Right 76494, priority date October 26, 1937, allows for irrigating of 43.0 acres of which 36.1 acres are located within the Conservation Easement boundary. The CE conveyed 84% of this right (at a maximum flow rate of 0.451 cfs per acre over 36.1 acres).

Per the CE, Section II.6(e), Greenbelt has exclusive use and benefit of the water rights appurtenant to the Property as shown in Attachment A: Maps – Water rights. Greenbelt shall have exclusive use of 81% (at a maximum flow rate of 0.212 cfs per acre over 17 acres) of water available under Water Certificate No. 76493 and 84% (at a maximum flow rate of 0.451 cfs per acre over 36.1 acres) of water available under Water Certificate No. 76494.

Also associated with the Property are two State of Oregon Permits to Construct a Reservoir and Store the Public Waters (#R-13371 and #R-13372), which were used for the wildlife ponds constructed in 2001. Per the CE, Greenbelt also has exclusive control of waters associated with the wildlife ponds, which will be managed as described in this LMP.

- **How have the water rights been used in the last five years?**

The water rights have been used in the riparian areas to irrigate new plantings during dry summer months. The water rights have also been used during dry years to add water to the constructed seasonal wetlands/ponds, in order to support amphibians and buoy other wildlife that use the ponds.

- **Have you complied with all usage requirements? If not-explain**

The annual amount of water used is enough to legally maintain the water rights.

- **Describe how you plan to use the water rights**

Greenbelt plans to continue the same use of water rights as allowed in the CE (Section 6(e)) to support the conservation values of the Property, summarized below and explained in goal 2, and including:

1. Irrigation associated with agricultural activities
2. Irrigation for restoration activities or protection of the Conservation Values
3. Instream flow
4. Wildlife ponds

- **Do you anticipate any changes to your water rights?**

In the future, if irrigation is no longer needed for the above indicated uses, or at a point when due the impacts of climate change on the Luckiamute River or Maxfield Creek it is determined by Greenbelt or technical advisors that instream use is of a greater value for conservation, Greenbelt will implement an In-stream Transfer of all or part of the water rights. Greenbelt will evaluate the need for and best use of water rights on an approximately 3-year interval.

The process for transfer to instream use is briefly described here. The State of Oregon works on a voluntary basis with water right users, landowners, flow restoration organizations, watershed

councils, soil and water conservation districts, irrigation districts, and other organizations to restore streamflows for fish and wildlife, recreation, and pollution abatement. To implement a transfer, Greenbelt would submit an application to the Water Resources Department describing: the current water right; the proposed changes; evidence of water use; land ownership or consent by the landowner; and compliance with any local land use plans.

B. CURRENT ECOLOGICAL SETTING (QUESTIONS 12-21)

12. List habitat and cover types, including special status habitats, and describe habitat conditions. Please use definitions found in Oregon Conservation Strategy (2016). Please include a map.

The four primary habitat types that have been identified on the Property are described below (see Attachment A: Maps - Current Conditions); a hedgerow shown on the map for completeness is not included due to its small size of less than 1 acre. Not all of the habitat types on the Property fit neatly into the strategy habitats identified in the Oregon Conservation Strategy (OCS). Pasture habitat occupies 20 acres, and while it is managed for wildlife, with few native species present, it does not meet the classification of an OCS strategy habitat. Table 1 includes the acreage of each habitat at CE acquisition (and current condition) and at desired future condition. There is no proposal to change any habitat type—current and desired acres are the same. Unless stated otherwise, the habitat types are in similar condition at the time of LMP development and acquisition.

Table 1. Acreage of habitat types based on OCS designation. Current and future acreages are provided. All acreages are rounded to the nearest acre. The minor difference between total acres calculated via GIS and on the ground survey relates to desktop mapping accuracy and is not of concern.

Baseline/Current OCS Habitat Type/Management Type	Desired Future OCS Habitat Type/Management Type	Current Acres	Desired Acres
Flowing Water & Riparian Habitats	Flowing Water & Riparian Habitats	39	39
Wetlands (constructed)	Wetlands (constructed)	10	10
Oak Woodland	Oak Woodland	4	4
Pasture (non OCS)	Pasture	20	20
	Total	73	73

Flowing Water and Riparian Habitats (39 acres)

Approximately 39 acres of the Property are associated with Flowing Water and Riparian Habitats. The Luckiamute River forms the western boundary to the Property for about 0.45

miles, and the Property is also bisected by Maxfield Creek, which is an important tributary of the Luckiamute River.

In 2001, prior to CE acquisition, the Hall family enrolled approximately 27 acres of the Property in the Conservation Reserve Enhancement Program (CREP), a voluntary program for agricultural landowners. The first term was 2001-2015, and it was renewed in 2015 through 2030. The CREP program allows landowners to receive incentive payments from the federal Farm Service Agency (FSA) for establishing long-term, riparian buffers on eligible land, with the goal to restore, maintain, and enhance streamside areas along agricultural lands to benefit fish, wildlife, and water quality. Generally, landowners enrolled in CREP receive payments to implement conservation measures such as planting trees and shrubs, installing fencing, or installing livestock watering facilities. The CREP enrolled area on the Property covers a ~160-foot wide riparian buffer zone on either side of Maxfield Creek and some adjacent upland areas. In 2002 and 2003, over 12,000 native trees and shrubs were planted in the CREP area (Table 2; see Attachment A: Maps – Conservation Reserve Enhancement Program Area). Electric fences meeting the CREP requirements were also installed.

An authorization process with BPA and Greenbelt was not completed when the CREP was renewed in 2015. In 2022, when ownership was transferred from the Hall family to Kings Valley Community Trust (KVCT), Greenbelt reviewed options to address CREP with KVCT and BPA, and determined it was most appropriate for KVCT to assume the CREP contract, with annual reporting to Greenbelt of CREP payments and property expenses, to be included in the annual property report to BPA. The CREP contract and nature of required reporting to Greenbelt will be included in a lease agreement between Greenbelt and the Grantor, further discussed in Question #28 and included in Attachment E: Draft Agricultural and CREP Lease.

Table 2. CREP plantings in 2002 and 2003 on the Luckiamute Meadows property.

CREP 2001-0005	Planted 2002	Planted 2003	Total
Willows	340	0	340
Hardwoods	5299	1860	7159
Softwoods	434	250	684
Shrubs	1724	110	1834
Subtotals	7797	2220	10017
CREP 2001-0010			
Willows	135	65	200
Hardwoods/Bushes	1696	274	1970
Softwoods	90	160	250
Subtotals	1921	499	2420
TOTALS	9718	2719	12437

The condition of Maxfield Creek in general is fair for water temperature. The Maxfield Creek-Luckiamute River watershed has been included in the 303(d), list since 2010 due to seven day

average daily maximum (7DADM) water temperatures exceeding Oregon DEQ criteria. Addressing this item, in addition to shrub/tree plantings for expansion/enhancement of the Maxfield Creek riparian corridor, LWC completed instream work. In 2004 and 2008, a restoration project led by the LWC installed logs within Maxfield Creek on the Property in order to bring a meander back to the creek. Since then, the logs have accumulated gravel and some of the banks have naturally eroded, creating more of a meander and creating a number of pools. The result is slower velocity of water, cooler water, and more hospitable habitat for native fish, including cutthroat trout, Oregon chub, and lamprey.

The riparian area surrounding Maxfield Creek and adjacent to the Luckiamute River supports an extensive ash and cottonwood forest. The Property contains several legacy oaks, conifers, and cottonwoods, including many trees over 24 inches diameter breast height (dbh). A riparian shrubland habitat flanks the riparian forest, including willows, thimbleberry, snowberry, and red elderberry, creating a transitional buffer between the riparian forest and adjacent habitats. The native trees and shrubs that were planted in the CREP areas and other riparian restoration areas, including valley ponderosa pine, ash and cottonwood, are still young and will eventually fill out this buffer. There is an active beaver (*Castor canadensis*) colony in this area. Invasive species such as Himalayan blackberry (*Rubus armeniacus*), meadow knapweed (*Centaurea pratensis*), hawthorn (*Crataegus monogyna*), feral cherry (*Prunus* sp.) and Japanese knotweed (*Fallopia japonica*) are found in the riparian area but are contained at manageable levels through ongoing management.

Additionally, within this riparian forest there is a constructed seasonal riparian wetland/pond (constructed at the same time as the other two in the wetland habitat, see below for more information). The wetland/pond is roughly 0.9 acres in size and creates habitat suitable for red-legged frogs and other amphibians. This pond does not hold water continuously but fills and slowly drains with rain events during the rainy season, roughly late November through April or May. Non-native pennyroyal (*Mentha pulegium*) is present in the constructed wetland. As the riparian forest continues to develop it will provide excellent habitat for migratory songbirds.

Wetlands (10 acres)

Wetlands on the Property have not been determined or delineated on the ground and do not appear in the National Wetlands Inventory (NWI), administered by the USFWS (<http://www.fws.gov/wetlands>). However, wetland obligate species are associated with the two constructed seasonal wetlands/ponds on roughly 10 acres in the northeastern corner of the Property. These seasonal wetlands/ponds were established in 2001, as a project led by ODFW and supported by USFWS. The western wetland/pond is roughly 1.2 acres in extent, while the eastern wetland/pond is larger at 2.4 acres. Filling from groundwater or local overland flow/runoff, the wetlands/ponds generally contain water from late November through April or into early May. They provide wildlife habitat and support numerous amphibians, waterfowl, shorebirds, and neo-tropical migratory birds. The Grantor uses water from the water right, via the existing water piping system, to add water to the eastern wetland/pond in the spring to extend the flooding when necessary to allow tree frog tadpoles to mature and leave the pond.

Non-native pennyroyal is the dominant species throughout the constructed seasonal wetlands. Additional species include spikerush (*Eleocharis* sp.), tufted hairgrass (*Deschampsia cespitosa*), willow (*Salix* sp.), and the occasional young Oregon ash. Surrounding the wetlands is an upland area dominated by tall fescue (*Festuca arundinacea*); while the plant diversity is low, the heavy cover of pasture grasses has kept invasive species to a minimum in this adjacent habitat.

Oak Woodland (4 acres)

The oak woodland is a habitat restoration area of about 4 acres. Historically, this acreage was a remnant upland prairie with several large oaks on the fringe and had benefitted from planting of native plant species. In 2001, prior to CE acquisition, the Hall family converted this upland area into an oak woodland by planting oak seedlings and a diverse mix of native forbs in the understory. At the time of the CE acquisition, the oaks were 13 years old and at the stocking rate of about 200 trees per acre. This area has occasional blackberry and knapweed plants, which are treated on an annual basis by spot spray crews.

Pasture (20 acres)

The 20 acres of pasture, composed of two distinct areas on the Property, are currently managed for wildlife forage value. These pastures are dominated by non-native tall fescue with some common herbaceous weeds mixed throughout and minimal native plant diversity present. The pastures are separated from Maxfield Creek and the Luckiamute River by the riparian habitats (including the CREP enrolled area) that are generally of 50 meters or more in width.

The Grantor manages the pasture habitat by haying. Haying benefits the habitat similarly to mowing, through reducing encroachment by woody species and maintaining open habitat. Like grazing, haying has the added benefit of removing grass residue, which prevents thatch accumulation, and increases the ground available for forage growth. Current activities associated with maintaining the pasture include:

- Monitoring and treating any weed species of concern in the pasture via spot spray in March/April and again in August/September;
- Consulting with an agronomist periodically in the early spring to determine fertilizer mix and application amount;
- Fertilizing the pastures in April with a well-blended fertilizer to provide high-quality forage. Current farmer applies 100-250 pounds (lbs) of fertilizer per acre, which is generally under the recommended amount, but depends on pasture and soil quality in a given year; and
- Haying the pastures occurs in late spring or early summer, depending on the nature of the growing season weather and rain. It is not possible to avoid the ground nesting bird season and still produce hay of a reasonable quality, therefore delaying haying to avoid the nesting season will not be required.

The riparian forest buffer of approximately 50 meters in width, flat slopes, and well drained soils make any fertilizer runoff issues into the Luckiamute River or Maxfield Creek unlikely. In addition to elk, the pasture provides excellent foraging habitat for ground-feeding birds and deer. The adjacent oak and ash trees on the pasture perimeter offer good cavity-nesting opportunities for birds that feed in the open pasture, for example, there may be western bluebirds and swallows.

Invasive species such as Canada thistle (*Cirsium vulgare*) and meadow knapweed are present as dispersed individuals throughout pastures, but overall, invasive species are minimized through regular spot spraying, in addition to regular mowing and haying.

13. List special status, focal fish and wildlife, and/or Oregon Conservation Strategy species. Provide a brief description of their occurrence on the Property and their relevance to Conservation Values. If the list is different from the application, baseline or the last LMP, please explain why.

The species listed in Table 3 have been confirmed within the habitats on the Property, thus contributing to the Conservation Values in the CE. The CE listed several additional species as present, and the baseline included all potential strategy species in the habitats present on the Property, however survey data for all species were and still are not available. The list in Table 3 has been updated from the CE to reflect what is known to occur on the Property, based on information from on-the-ground biological surveys have occurred and confirmed presence or absence of the species or their habitat. Narrative describing the status of species identified in the CE's conservation values that are not listed in Table 2 is included below.

For example:

- Acorn woodpecker (*Melanerpes formicivorus*) was listed as a species present in the CE but has not been detected on site. The species prefers oak woodlands with high canopies and relatively open understories (Oregon Conservation Strategy; ODFW 2016). While oak trees have been planted and oak woodland is a desired future condition, suitable habitat for acorn woodpecker is not currently present. As the habitat matures, the species may occupy the site in the future.
- Chinook salmon (*Oncorhynchus tshawytscha*) are listed in the CE as potentially present, however no known surveys have documented the species on site, nor is it identified as habitat in the Web Map of ODFW Oregon Fish Habitat Distribution (https://nrimp.dfw.state.or.us/FHD_FPB_Viewer/index.html).
- Northern red legged frog (*Rana aurora*) is listed as potentially present in the CE, but no surveys have confirmed this species on site.
- Oregon vesper sparrow was listed as a species present in the CE. However, this species is not known to occur on the Property, which lacks 20 acre or larger blocks of open short statured grass dominated habitat (must be in this condition in the month of May). Vesper sparrows have high site fidelity, meaning that they return at high rates to nest in the same areas each year. There is only one known single male (potentially pair) of

vesper sparrows in the area, located about a mile away, making the likelihood of an accidental visit to the Property and establishment of a new population low.

- Steelhead trout (*Oncorhynchus mykiss*) are discussed as a focus for the site in the CE, and federally designated Critical Habitat (USFWS) is delineated on the Property within Maxfield Creek and the Luckiamute River (<https://ecos.fws.gov/>). However, no known surveys have documented the species on site, nor is it identified as habitat in the Web Map of ODFW Oregon Fish Habitat Distribution (https://nrimp.dfw.state.or.us/FHD_FPB_Viewer/index.html).
- Western bluebird (*Sialia mexicana*), an OCS species, was not listed in the CE, was listed as potentially present in the baseline, and has not been confirmed on the site via survey. However, given habitat conditions on the site, this species is likely present, and will be assessed in future avian surveys of the Property.
- Yellow breasted chat (*Icteria virens auricollis*) was identified as a species present in the CE but is not known to occur on the site. This species uses dense brushy thickets especially near streams (ODFW 2016). As riparian plantings grow and expand the riparian buffer, the species may occupy the site in the future.

Table 3. Special status, focal fish and wildlife, and/or Oregon Conservation Strategy species associated with the Property.

Target Species	Species Scientific Name	Occurrence	Documentation of Known Occurrence	Species Status ²
American bald eagle	<i>Haliaeetus leucocephalus</i>	Present	Landowner obs.	
Chipping sparrow	<i>Spizella passerina</i>	Present	Landowner obs.	OCS
Coastal cutthroat trout	<i>Oncorhynchus clarki clarki</i>	Present	ODFW Survey, B. Bangs ¹ .	OCS
Oregon chub	<i>Oregonichthys crameri</i>	Present	ODFW Survey, B. Bangs ¹ .	OCS
Pileated woodpecker	<i>Selasphorus rufus</i>	Present	Landowner obs.	OCS
Purple finch	<i>Haemorhous purpureus</i>	Present	Landowner obs.	FWS BCC
Roosevelt elk	<i>Cervus canadensis roosevelti</i>	Present	Landowner obs.	
Rufous hummingbird	<i>Selasphorus rufus</i>	Present	Landowner obs.	FWS BCC
Pacific lamprey	<i>Lampetra tridentata</i>	Present	ODFW Survey, B. Bangs ¹ .	OCS
Western gray squirrel	<i>Sciurus griseus</i>	Present	Landowner obs.	OCS
Northwestern pond turtle	<i>Emys marmorata marmorata</i>	Present	Landowner obs.	OCS
(Slender-billed) White-breasted nuthatch	<i>Sitta carolinensis aculeata</i>	Present	Landowner obs.	OCS

¹Personal communication from ODFW staff, no documentation available to cite.

²FWS BCC = USFWS Bird of Conservation Concern; OCS = Oregon Conservation Strategy Species

14. What are the most significant invasive species issues on the Property? Please describe the extent of their occurrence and include a map of their distributions.

Invasive species present on the Property have similar distribution and abundance to their baseline level at CE acquisition, reflecting years of management that have provided containment and control. The highest priority invasive species for continued control on the Property are reed canarygrass (*Phalaris arundinacea*), meadow knapweed, Himalayan blackberry, and Canada thistle. Management of teasel (*Dipsacus fullonum*) and pennyroyal would be optimal but is a lower priority. Reed canarygrass is present at the junction of Maxfield Creek and the Luckiamute River. Himalayan blackberry is present along the banks of the Luckiamute River. Meadow knapweed is present in several upland areas, along with teasel and thistle. A large quantity of pennyroyal grows in and around the constructed wetlands. Japanese knotweed is a known threat on the Luckiamute River, and LWC is actively implementing work in the watershed to control this species. Japanese knotweed was not identified on the Property at the time of site visits. See Attachment A: Maps – Invasive species, for a representation of invasive species locations.

15. Are there known Endangered Species Act -listed or candidate species on the Conservation Easement area? If so, please describe the extent of their occurrence and include a map of their distributions.

None known on terrestrial portion of the Property. Habitat for listed fish species is present.

USFWS designated Critical Habitat has been delineated on the Luckiamute River and Maxfield Creek (including the reaches associated with the Property) for the following species in 2006:

- *Oncorhynchus mykiss* –Steelhead (Upper Willamette River DPS)

16. Are there hydrologic considerations relevant to property management or desired future conditions?

The Property is named after its location along the Luckiamute River, which forms the western boundary to the Property for about 0.45 miles. The Property is also bisected by Maxfield Creek, an important tributary of the Luckiamute River. Because of these hydrologic features, much of the Property is within the floodplain. FEMA data show that roughly 60% of the Property is within the 100-year flood zone.

The Property's floodplain location results in increased risk of invasive species like reed canarygrass or Japanese knotweed populating the Property. The desired future conditions and ongoing management must continue to address priority invasive species spread through such as Japanese knotweed, where EDRR is likely to succeed.

The hydrographical footprint of these waterways are bound to change over the course of time, due to flood events, erosion, etc. As described in question #6 of the LMP, the Luckiamute River and its tributaries were used to transport logs in the past century. These past logging practices incised and straightened these waterways. See question #6 for a description of instream restoration and monitoring work that has occurred.

There are three shallow, seasonal constructed wetlands filled by an unnamed tributary to the Luckiamute River (see question #12 for a description of their condition). Encroachment by woody shrubs and trees, like Oregon ash, can be a threat to the stability of these vernal ponds and their plant communities. Competition for light, water and nutrients are detrimental to the smaller and generally shade-intolerant native plants. On-going management tasks for these include control of invasive species and may include reducing encroachment of woody species.

17. Please include a soils map for the property. Identify how soil types will inform property management or desired future conditions.

Soils on the Property are silty clay loams (McBee, Abiqua, McAlpin, and Conser), or gravelly loam (Briedwell), and are displayed in Attachment A: Maps – Soils. Soil characteristics are included in Table 4. Nearly all the soils are partially hydric in nature, except for quite small segments (less than 2 acres) of non-hydric soils in the southeast corner, and approximately two acres of all hydric soils, also in the southeast portion of the Property.

The majority of the Property is on Class 1 or Class 2 capability soils, indicating few limits for cultivation, and high potential for productivity, which supports restoration actions (Elk forage production, oak and riparian habitat establishment). The Abiqua soils are capability class 1, and primarily contained within the pasture areas. This soil is deep and well drained, which maximizes the potential for forage production and reduces runoff potential. Much of the Oak Woodland (restoration) area is also on the Abiqua soils, again indicating potential for productive woodland development.

Table 4. Soils classification for the Luckiamute Meadows property.

Soil Classification	Capability class	Hydric Classification	Acres	% of Property
Conser silty clay loam, 0-3% slopes	3	All hydric	1.9	3%
Briedwell gravelly loam, 0- 7% slopes	3	Not hydric	0.1	< 1%
Briedwell gravelly loam, 7- 20% slopes	4	Not hydric	1.5	2%
Abiqua silty clay loam, 0-3% slopes	1	Partially hydric	12.1	16%
Abiqua silty clay loam, rarely flooded, 0-3% slopes	2	Partially hydric	10.5	14%
McAlpin silty clay loam, 0-3 %slopes	2	Partially hydric	34.5	47%
McAlpin silty clay loam, rarely flooded, 0-3% slopes	2	Partially hydric	10.1	14%
McBee silty clay loam, 0 to 3% slopes	2	Partially hydric	0.0	< 1%
Water		Unknown	2.7	4%
Total			73.4	100%

18. Are there historical and cultural resources and traditional use resources relevant to property management?

No.

19. Is there public access to the Conservation Easement area? Provide a description of access and activities and its relevancy to the property management. How will you monitor access and identify and mitigate potential impacts to Conservation Values should they arise?

General Access

There is no open public access to the CE area, nor is it identified by signage. The Property perimeter is fenced in many, but not all areas.

The Grantor has the reserved right to prevent trespass and control access to the Property (CE Section 5). The Grantor “may allow access to the Property for restoration, monitoring, education, recreation, or other activities that do not materially harm the Conservation Values, and specifically may allow access by Kings Valley Charter School (KVCS; or any name successor to the school located adjacent to the Property) for such activities” (CE Section 9). The Grantor has provided permission to KVCS to utilize the trails for a once per year middle school cross country invite meet typically held in September or October. All parking and staging areas are located on school grounds, but students on the KVCS team and visiting teams run the trails on the Property as part of the meet. Approximately 150 students participate and stay on the mowed trails and dirt paths, avoiding any impacts to the Conservation Values. The course is temporarily marked with pin flags and flagging ribbon; markers are removed following the meet.

Several individuals and groups, such as the KVCS, Audubon Society, and specific Oregon State University students, have been granted access to the Property for education and non-motorized, non-commercial recreation. Access is restricted for safety reasons during Property management or restoration actions.

The Grantor controls the access/use of the Property such that activities would not materially harm or materially interfere with any of the Conservation Values. The Grantor also monitors access/use and any effects. If there are any access activities that materially harm the Conservation Values of the Property, then the Grantor and Greenbelt have the ability to restrict access at any time and would evaluate the need or approach to mitigate those impacts (e.g., by replanting) with the responsible party. The Grantor would monitor the efficacy of the mitigation to ensure consistency with the conservation easement. If at any time a proposed use may result in a potential conflict with the Conservation Easement, then that proposed use will be addressed in a Land Use Agreement with BPA.

Greenbelt conducts annual monitoring visits to the Property. In years when the trails are used for the cross country meet, Greenbelt will implement a monitoring visit after the event. Greenbelt follows Land Trust Alliance protocol standards to document the visit and any observed violations to the easement or unauthorized uses. The Grantor has not observed any trespass or unauthorized activity on the Property.

Tribal Access

Greenbelt is committed to increasing indigenous access to land. The indigenous peoples of the Willamette Valley were forcibly removed from their homelands, and modern-day land ownership, even with conservation lands, represents a separation between native communities and their traditional lands. The organization and structure of this tribal access to Greenbelt lands is still in development and is based on deepening trusting relationships and partnerships and developing a shared vision with tribes. Greenbelt is in the process of developing these ideas with its colleagues at the Confederated Tribes of Grand Ronde, the Confederated Tribes of Siletz Indians, and the Confederated Tribes of Warm Springs.

Traditional ecological knowledge and cultural land uses provide historical and cultural insights that can be woven into restoration and stewardship for these lands. Tribal access and uses on the Property may include (but are not limited to) inviting tribes to use the Property to harvest first foods, medicines, and fibers, for educational opportunities with elders and youth, for convening together, for outdoor recreation, and for spiritual/cultural connection. These uses would be identified in advance, occur upon request by tribal members, and be coordinated by Greenbelt in concert with the Grantor, in line with the general access provisions described above.

20. Is there fire history or planned burns relevant to property management or desired future conditions?

Prairies and oak woodlands are fundamentally fire dependent systems and their distribution, structure, and composition in the pre-settlement Willamette Valley was substantially determined by frequent fires. Absence of regular fires in these systems can result in encroachment of woody vegetation and thatch build-up. Fire has not been used as a management tool on the Property since prior to 1999, and a concern with the use of fire is the proximity of to the KVCS, because prescribed burning usually taking place during the school year. No planned burn are contemplated in this management plan.

21. Are there threats to any of the Conservation Values or other attributes of the Conservation Easement (e.g., boundary issues)? If so, what are the plans to abate those threats?

Invasive Species

The most substantive threat to Conservation Values on the Property is the spread of invasive species, as described in the response to question #14. The invasive species present on the Property are similar to those which occurred at the time of acquisition (the baseline condition).

Eradication of the species is not realistic or required to protect the Conservation Values, however the terms of the CE specify that the “Grantor shall be responsible for protecting and maintaining baseline habitat conditions and Conservation Values, including such items as maintenance of roads, trails, fences and weed control as described in the Baseline Inventory Documentation and the Management Plan” (Section 17.a) of the CE). Plans to abate the invasive species threat are to manage the invasive species to not exceed the baseline levels, through monitoring and invasive species control. This monitoring may be achieved through the Grantor walking the property at least twice per year to monitor for new invasive species throughout the Property, and conduct spot spraying or mechanical control. To support this capacity, Greenbelt holds a donor-restricted fund (donated from the Hall family) from which annual earnings can be used to support spot spraying. This fund is to support the Property as well at the Hall property to the south (Luckiamute Riparian-Hall). Currently this fund yields an average about \$2,500, which covers the cost of approximately 8 hours of work by a 6-person field crew for activities such as herbicide spot spray of invasive species.

Potential future restoration projects may include commitments to specific invasive species control actions, some of which may improve (reduce) levels of invasive species from the baseline. For example, the LWC currently implements regular monitoring and spot-spraying along the Luckiamute River and Maxfield Creek as part of their OWEB-funded grant project; funding goes through 2023 to do ring-sprays and spot-spraying of priority weeds 2-3x a year. It is uncertain what funding will be available in the future to do continued weed treatment of the LWC project restoration area.

Similarly, the CREP enrollment (see question # 12 for more detail) has an independent commitment to invasive species control for the enrolled acres. In that case, the Grantor will monitor the riparian areas enrolled in their CREP agreement and conduct spot spraying in those areas.

Improper Management of Livestock

Improper management of livestock is a threat to the conservation values of the Property. Improperly managed livestock can damage soils, cause erosion, pollute water, produce undesirable changes in habitat, damage scenic resources, and impact native species.

No grazing is contemplated within the term of this Plan. If and when it does, a grazing plan would be developed in consultation with NRCS, and the grazing plan would be approved by BPA/ODFW via Land Use Authorization (LUA). Any potential for overgrazing would be abated through development of the grazing plan.

Recreational Use

Recreational use of the Property also poses risks to its conservation values. Visitors can impact wildlife species and spread invasive plants. This threat will be abated through generally limiting most visitor use to trails and regular mowing of trails, in addition to ongoing herbicide spot spray of invasives across the Property. There is no uncontrolled public access allowed on the property.

C. GOALS, OBJECTIVES AND ACTIONS (QUESTIONS 22-29)

22. Describe the present and desired future condition and/or abundance for each habitat type and/or target species (e.g., now a degraded farm field, later will be a high value oak savanna).

The present (baseline) condition and abundance of habitat types at Luckiamute Meadows is described in the response to question #12. No change of habitat types or acreage is proposed as a desired future condition. A description of the desired future condition for each habitat category (and infrastructure, invasive species, and partnerships/outreach/education) is included in the sections below, reflecting the intentions expressed in the grant application, baseline documentation report, and Conservation Easement documents. In general, due to the quality of the property condition at the time of acquisition, and the terms of the CE, the desired future condition is to preserve and maintain the baseline condition of the CE area. Desired future conditions are mapped in Attachment A: Maps – Desired Future Conditions.

Infrastructure

The current condition of infrastructure (fences, trails, roads, bridges and water infrastructure) on the Property is described in the responses to question #7 (infrastructure) and question #10 (access) and is mapped in Attachment A: Maps - Improvements. The current condition now is the same as the condition at the time of CE acquisition.

The desired future condition is to maintain the current condition of infrastructure, as required by the CE. Any replacement of boundary fencing must be with wildlife friendly fence.

Flowing Water and Riparian Habitats (39 acres)

The riparian area is currently in good condition with an extensive cottonwood, maple, alder and ash forest that includes several large legacy oaks and conifers. A riparian shrubland habitat with many native species present flanks the riparian forest, creating a transitional buffer between the riparian forest and the pasture and oak woodlands, and including species such as willow, red osier dogwood and pacific ninebark.

The desired future condition is to maintain the current condition of the habitat by controlling invasive species. The native trees and shrubs that were planted in the CREP areas and other riparian restoration areas are still young, and the desired future condition is to let them eventually fill out this buffer. Where restoration funding and partnerships allow, the desired future condition is to continue to expand and fill in the buffer further.

Wetlands (10 acres)

The wetlands contain two constructed seasonal wetlands/ponds that attract amphibians and migratory birds (one additional constructed seasonal wetland/pond is located in the riparian

forest). The habitat has low native plant diversity and a high percentage of non-native species cover but serves wildlife by providing a water source and the appropriate physical structure.

The desired future condition is to maintain the current condition of the habitat.

Oak Woodland (4 acres)

The current condition of the oak woodland is a habitat restoration area of about 4 acres. As of 2021, the oaks are about 20 years old and at the stocking rate of about 200 trees per acre.

The desired future condition is a naturally maturing oak woodland, with tree spacing and density that supports tree canopy development, and an understory with few invasive species. Tree thinning may be conducted by the Grantor to meet those goals.

Pasture (20 acres)

Currently, the pastures are in an open structure with tall fescue and orchard grass as primary forage species for elk and other wildlife, with bentgrass and annual exotic grasses as common species. There are minimal woody invasive species present, as the area is maintained by annual hay cutting.

The desired future condition is to maintain the current condition as an open grass dominated habitat that is a nutritious forage resource for elk, with minimized wildfire hazard, by continuing to manage the pasture to control shrub encroachment and reduce plant litter/thatch accumulation.

Invasive Species

Currently, invasive species such as reed canarygrass, meadow knapweed, Himalayan blackberry, teasel, and thistle are present, but at low and manageable levels (see Attachment A: Maps – Invasive Species).

The desired future condition is to maintain the current (baseline) levels of invasive species.

Outreach, Recreation and Education

Currently (and at the time of CE acquisition), the Grantors allow access by KVCS for education and recreation, which benefits students and staff on an annual basis. The Grantors also welcome visits by local students and naturalists, and regional groups such as Audubon.

The desired future condition, if funding and partnerships can be secured, is that in addition to the KVCS use, the Property includes an interpretive trail, and has annual events open to the community.

23. Describe the overarching goals, objectives (using SMART criteria; Specific, Measurable, Achievable, Relevant, Time-specific), and the actions you plan to take to achieve your goals and objectives. Provide an expected timeframe or schedule in which these actions will be implemented. Include stewardship and restoration activities and timelines for each planned

activity. Indicate with an * if stewardship funds will be used to execute the activity.

The goals for managing the Property are organized by subject area headings in the sections below. Desired future conditions are included with each subject area in question #22, and reflect the intentions expressed in the grant application, baseline, and Conservation Easement documents.

Implementation of the objectives and actions described below are the responsibility of and will be implemented by the Grantor, except where otherwise indicated.

*Please note there is no BPA funding for restoration or enhancement activities on this Property.

Infrastructure

Goal 1: Maintain the Property's infrastructure and accessibility.

Objective 1.1 - On an ongoing basis, maintain the baseline condition and extent of fences on the Property.

Strategy: Use regular monitoring to identify repair needs.

Action 1.1.1: Evaluate all fence lines and gates at least once every 5 years if there is no grazing, and once a year if there is grazing.

Action 1.1.2: Repair fence lines and gates as needed, using similar smooth wire fencing.

Objective 1.2 – On an ongoing basis, maintain the baseline condition and extent of the trails system and utility road on the Property.

Strategy: Use mechanical methods to control vegetation and keep trails and the utility road accessible.

Action 1.2.1: Pass riding mower or mowing implement along pathways and trails at least twice a year.

Action 1.2.2: Use hand tools to remove branches encroaching on pathways and the utility road as needed.

Action 1.2.3: Mow the sides of the utility road to control encroaching vegetation at least once per year.

Goal 2: Maintain water rights for use to support habitats on the Property.

Objective 2.1 – Maintain the water rights through use on an annual basis.

Strategy: Use water rights to irrigate young plantings in the riparian area and add water to the wildlife ponds in the wetland area.

Action 2.1.1: Use water right on an annual basis to support riparian plantings and to fill wetlands as needed³.

Strategy: When water rights are no longer needed (and not used for 4 years in a row), Greenbelt will consider converting to in-stream flow for conservation, to benefit the aquatic conservation values of the site.

Action 2.1.2: Document water right usage annually.

Action 2.1.3: Every 3 years, Greenbelt will evaluate need and potential to convert to in-stream flow and prevent loss of right.

Flowing Water and Riparian Habitats (39 acres)

Goal 3: Maintain and enhance the structure and condition of riparian habitats on the Property.

Objective 3.1 - By 2031, increase the tree and shrub density in the riparian buffer along Maxfield Creek beyond baseline levels.

Strategy: Coordinate with partners such as the LWC to secure funding and resources to add new plantings in the riparian area.

Action 3.1.1: Identify funding and partnerships for maintenance and enhancement work.

Action 3.1.2: Identify gaps in the riparian buffer.

Action 3.1.3: Consult with LWC to coordinate new plantings or recommendations for this habitat zone.

Action 3.1.4: Use crews or volunteers to plant native shrubs and trees by hand in the Maxfield Creek riparian.

Objective 3.2 – On an ongoing basis, maintain growth and diversity of riparian plantings.

Strategy: Coordinate with partners such as the LWC to secure funding and resources to maintain plantings in the riparian area.

³ In drought years, water availability for irrigation may be limited, and this is outside the control of the landowner or Greenbelt.

Action 3.2.1: Implement maintenance to support planted trees/shrubs, such as ring sprays during the first 3 years after planting.

Action 3.2.2: Irrigate riparian area using water right during the summer as needed, targeting young and/or vulnerable plantings (see Goal 2).

Action 3.2.3: On 10-year intervals, with aerial imagery, evaluate where overstocking may limit tree or shrub growth or diversity, and thin to reduce competition.

Wetlands (10 acres)

Goal 4: Manage constructed seasonal wetlands/ponds to provide wildlife habitat.

Objective 4.1 - On an annual basis, evaluate the duration of flooding in the northern seasonal wetlands/ponds and increase the water level in spring if needed to support amphibians.

Strategy: Continue to use water rights (see Goal 2) to supplement water flow into northern wetlands/ponds, to support wildlife in dry years.

Action 4.1.1: Monitor the wetland/pond water levels in April and generally evaluate amphibian life stage (e.g., have pacific treefrog tadpoles matured).

Action 4.1.2: When water levels decline, if amphibians would benefit from additional flooding, add water to the eastern wetland from the water right, if available, to extend period of flooding into late spring or early summer.

Objective 4.2 - Maintain heterogeneous habitat structure of constructed wetland/pond habitat to maintain average tree and shrub cover of less than 50%.

Strategy: Use mechanical and chemical methods to reduce abundance of trees and shrubs.

Action 4.2.1: Assess shrub/tree cover on 10 yr intervals.

Action 4.2.2: If encroachment exceeds 50%, manually or mechanically remove trees and shrubs, including treating with herbicide to prevent re-sprouting as needed by species.

Action 4.2.3: If appropriate, and not limiting for other management treatments (mowing), leave some cut woody debris from native species on site in and around vernal pools.

Oak Woodland (4 acres)

Goal 5: Support the development of the restored oak woodland habitat.

Objective 5.1 – At intervals of ~15 years, reduce competition between oaks by thinning to maintain spacing of at least 1 meter between tree crowns.

Strategy: Use remote sensing data to track and manage oak density over time.

Action 5.1.1: At a minimum of 15-year intervals, use aerial imagery or similar remote sensing data to evaluate tree spacing within oak restoration area.

Action 5.1.2: When average tree crowns become closer than one meter, implement selective thinning to reduce stocking density within the oak woodland.

Objective 5.2 - Reduce competition for oak trees by mowing the understory on 5-year intervals.

Strategy: Use mechanical methods to lower height of understory structure, reducing competition for resources.

Action 5.2.1: Evaluate accessibility of oak woodland for equipment at current tree configuration.

Action 5.2.2: Mow the areas between oaks in late summer or early fall, in areas accessible by equipment.

Pasture (20 acres)

Goal 6: Maintain the quality of forage in the pasture habitat to support wildlife, including elk populations.

Objective 6.1 - On an annual basis, maintain open and grass dominated pasture structure with less than 20% cover of plant litter (thatch) and less than 15% shrub cover⁴.

⁴ When this activity is to be completed via a haying contractor, Greenbelt will complete lease with Grantor for activity, then Grantor will work with haying contractor.

Strategy 1: Use fertilizing and haying as a method to maintain open structured grass pasture to provide elk habitat.

Action 6.1.1: Apply minimum agronomist-recommended fertilizer rate in April (annual) to promote perennial grass growth.

Action 6.1.2: Inspect the field in early May for forage conditions and presence of noxious weeds (annual).

Action 6.1.3: Treat weeds with manual/mechanical or herbicide control methods prior to haying to prevent spreading weeds (annual).

Action 6.1.4: Mow and remove cut material as hay in June-July (annual).

Strategy 2 (alternative)⁵: Use grazing as a method to maintain an open structured grass-dominated plant community and reduce weed encroachment.

Action 6.1.5: If the Grantor wishes to change pasture management to grazing, the Grantee will submit a grazing plan to BPA/ODFW within 4 months of when grazing would be proposed to begin. Grazing plan must be accepted by BPA/ODFW via a LUA before grazing occurs.

Invasive Species

Goal 7: Limit the occurrence and spread of target invasive species throughout the Property.

Objective 7.1 - On an ongoing basis, manage invasive species populations on the Property to remain at or below baseline levels.

Strategy 1: Use Property walks to identify invasive species and problem areas.

Action 7.1.1: At least twice a year, do a Property walk to identify invasive species presence and problems areas.

Action 7.1.2: Note invasive species presence and location.

Strategy 2: Chemically or mechanically remove invasive species.

Action 7.1.3: Spray, mow, or hand-pull invasive species regularly in the oak woodland. Target knapweed, hawthorn, Himalayan blackberry, teasel, and thistle.

⁵ Currently, there are no plans to graze the Property, but this potential future alternative is included for completeness.

Action 7.1.4: Spray, mow, or hand-pull invasive species in the riparian area. Target Japanese knotweed, Himalayan blackberry, English hawthorn, feral cherry, and reed canary grass.

Action 7.1.5: Spray, mow, or hand-pull invasive species in the wetland.

Action 7.1.6: Spray, mow, or hand-pull invasive species in the pasture. Target teasel, knapweed, and thistle.

Strategy 3: Collaborate with local organizations on funding opportunities for invasive species control. LWC has current funding to do additional spot-spraying in the Riparian area until 2023.

Action 7.1.7: Collaborate with local organizations for events such as ‘Pull together’ weed pulls.

Action 7.1.8: In 2023, coordinate with LWC to see if there are future grants available which could include the Property.

Outreach, Recreation and Education

Goal 8: Engage stakeholders and the public in educational or recreational activities on the Property.

Objective 8.1 - By 2031, increase the educational resources for visitors to the Property.

Strategy: Seek funding and partnerships to add interpretive signs on an existing trail to provide educational information regarding the ecology and natural history of the property.

Action 8.1.1: Identify theme/content (plants, trees, wildlife, birds, etc.) for signage.

Action 8.1.2: Seek funding for interpretive signage.

Action 8.1.3: Select trail/locations for adding interpretive signs.

Action 8.1.4: Design signs and have them produced (not to exceed 15 square foot limitation in CE).

Action 8.1.5: Install signs adjacent to existing trails.

Objective 8.2 - Provide at least one annual opportunity for the public to access the Property.

Strategy 1: Advertise and provide educational and engagement opportunities on the Property.

Action 8.2.1: On annual basis, offer at least one guided tour, volunteer or other public event on the Property.

Strategy 2: Continue to engage with Kings Valley Charter School to provide outdoor education and recreation opportunities for students and families.

Action 8.2.2: On annual basis, allow at least one school-based event or activity on the Property.

24. Briefly provide details regarding past and planned future restoration funding efforts (i.e., to whom, for what, when, success rate, etc.)? To whom do you plan to apply in the future (e.g., OWEB, PCSRF)? If this is a management plan update, provide funding information (as described above) for the duration of the last plan to present.

Please refer to question #6 and #8 for details about past restoration activities and partnerships on the Property. Most of these activities were funded by way of collaborations in which partners have approached the Grantor to jointly seek funding for restoration projects.

- Hall Family Stewardship Fund: The Hall family donated a base fund (from which a portion of the ROI is available to support the Property) and continues to provide donations to support the stewardship of the Property.
- BPA: GLT was awarded \$36,000 in Stewardship Funding. The express purpose of this funding was for protection, monitoring, and enforcement of the CE. This funding was not intended for operations, maintenance, or restoration.
- Farm Services Agency: Currently the Property is in the second term of funding from the CREP (running through 2030), although there is no additional work planned for the CREP areas. The Hall family noted that “USDA and NRCS were so happy with the results that they made no new recommendations, and said it was time to let nature do its work.”
- OWEB: The Property is also currently benefitting from LWC’s Maxfield Creek Project, which was funded by OWEB. Most of the restoration work for this project is completed. The Watershed Council is still conducting follow-up spot spraying, post planting, as part of this OWEB grant, and this is expected to extend into the future.
- ODFW/OCRF: The Grantor or Grantee, or a collaborator may apply for Oregon Conservation & Recreation Fund (OCRF) grants in the future, for support of the public outreach and restoration actions included in this LMP.

Where funding and partnerships arise, GLT and Grantor will collaborate to further enhance the Property and will submit a LUA to BPA/ODFW for activities not included in this management plan.

25. Are parts or all of the property historically, currently, or planned to be enrolled in other conservation programs (e.g., CRP, WHIP, USFWS Partners)?

CREP enrollment of the property is discussed in Question #12.

26. Describe what will be monitored (including frequency and duration) to determine progress toward desired future conditions. Include a brief description of monitoring protocols and how monitoring data will be assessed and summarized.

Monitoring

Greenbelt and the Grantor will use a monitoring system to efficiently and effectively evaluate conditions on the Property. See Table 5 for Goal/Objective evaluation techniques, metrics, and timelines.

This system includes three monitoring approaches, which are summarized below. Greenbelt staff will select the most appropriate approach:

- Documentation/Records Management: This is used to track items such as water right use or number of outreach events held.
- Aerial or Drone Imagery Analysis: This is used to track the status of conditions that are visible in aerial imagery. This could include establishment of infrastructure, measures of tree frequency/canopy change in response to management treatments, and invasive species monitoring for selected widespread species.
- On-the-ground Assessment: This is a succinct assessment of a single variable or set of variables within a habitat unit or area of interest. This is used to assess indicators of infrastructure status, habitat quality (e.g., species diversity, native species cover, thatch cover), evaluate structural composition (e.g., presence of snags or woody elements, assess vegetation canopy layers), identify invasive species presence and abundance, or seeding/planting establishment success. For example:
 - Vegetation Monitoring: Ocular percent cover estimates of plant species or functional groups (Native/Exotic: Forbs, Grasses, Shrubs, plus thatch, bare ground); counts of native species diversity. Can include estimates of vegetation layer heights in multi-layered canopy.
 - Invasive Species Monitoring: Walk through assessment of habitat unit(s), noting species presence and abundance, with mapping as appropriate.

The data from the monitoring approaches are then analyzed and summarized for the purposes of adaptive management.

Water Temperature Monitoring

LWC began monitoring temperatures in Maxfield Creek on the Property in 2017, selecting this stretch for temperature monitoring because 1) it represents the end of the creek right before the confluence with the Luckiamute River, and because 2) there is gravel accumulating behind the in-stream logs which changes the flow. This project is funded by OWEB. The LWC installed two temperature sensors in the Maxfield Creek reach within the Protected Property. Ongoing

data collection demonstrates the water from the upper portions of Maxfield is cold and providing important rearing habitat to native fish. Usually the temperature rises as you go downstream, but in the Hall stretch, the temperature surprisingly stays steady or cools. The LWC hopes to collect at least 5 years of temperature data, depending on monitoring funding available.

Compliance Monitoring

In addition, Greenbelt conducts compliance monitoring of the CE as part of our property monitoring program. Annual monitoring inspections document human caused alterations to the Property, natural alterations, description of current land use activities, impacts caused by neighboring properties, presence of boundary markers, and violations of the conservation easement. Summaries of monitoring are included in annual reports to BPA.

27. List your partners or potential partners for management activities.

Luckiamute Watershed Council:

Primarily funded by OWEB, LWC has implemented a series of projects on the Property, including orchestrating the logjams in Maxfield Creek, enhancing the riparian habitats, and monitoring water temperature. This collaboration occurred prior to the CE, and is expected to be ongoing at some level.

Farm Services Agency & Benton SWCD

The property has been in the CREP program since 2001, with technical assistance and support provided by the Benton Soil and Water Conservation District. This is expected to continue through at least 2030.

Oregon Department of Fish and Wildlife

ODFW led the project to construct 3 seasonal ponds on the Property and has also supported pasture improvement (before CE). Greenbelt and the Grantor hope to collaborate with ODFW for additional fish and wildlife surveys in the future.

US Fish and Wildlife Service

USFWS through the Partners Program has helped provide native plant materials for the site, including for enhancing the oak woodland understory (before CE). If the opportunity arose, Greenbelt and the Grantor would collaborate with this program in the future

Oregon State University

Over the years, various student groups, classes, and researchers have visited the Property for learning purposes. Greenbelt and the Grantor would like to collaborate further for opportunities such as the Bioblitz or other applicable projects at OSU that may emerge in the future.

Kings Valley Charter School

The Halls have given permission to the staff, students, and families of the neighboring Kings

Valley Charter School to access the Property for education and passive recreation. (2001-present).

Volunteer Groups

Various community and volunteer groups visit the Property for education, recreation, and restoration projects. Groups include schools, the Girl Scouts, and Odd Fellows. Greenbelt and the Grantor would like to engage with the Audubon Society or other groups to assist in surveys for birds, fish or wildlife.

28. Do you have, or do you plan to have, income generating activities occurring on the property? Provide details. If you have, or plan to have, a lessee or other income generating activities occurring on the property (e.g., grazing and agriculture leases, timber harvest, grazing etc.) please describe how the funds will be used. Will administering these activities be a cost to the project? Will there be proceeds?

As described in Section 7.b) of the CE, any commercial or industrial activity is prohibited except agricultural activities allowed by this LMP, such as agricultural activities used as a management tool for maintenance, restoration or enhancement of habitat. Pursuant to the terms of the CE, Greenbelt was granted rights on the Property, including the right to enter into leases with a tenant, which may include the Grantor, on the Property to perform specific restoration or agriculture activities. Such a lease would limit the use of the premises for agricultural or restoration purposes only in accordance with the CE over the property and the Management Plan and allow the tenant to subcontract services to manage habitat within the Pasture units of the Property. Any income generated by such a lease shall be deposited into a stewardship account held by Greenbelt as the Grantee.

The lease of the pasture for haying to maintain forage quality in the pasture generates a small amount of income if hay revenue exceeds fertilizer costs. These funds are used for stewardship of the Property. In the event grazing is used to manage the pasture units in the future, income from a lease would be deposited into an account held by the Grantor, and reported, and long with the use of the funds, to the Grantee.

Additionally, the current CREP contract, through 2030, provides annual rental payments to the Grantor. These funds are held in the Grantor's account for use to manage the Property, with annual reporting of income and expense to the Grantee, for inclusion in annual reports from the Grantee to BPA.

A draft lease for agricultural activities and the CREP contract is included in Attachment E: Draft Agricultural and CREP Lease.

29. Are you taking a different restoration and/or management approach than what was outlined in the pre-acquisition discussions (i.e., application or intake call) about the property?

No. The proposed management is consistent with what was described in the WWMP

application. The application describes the current condition of the Property and the importance of having it be permanently protected and contributing to a larger conservation network in Kings Valley. The application highlights the confluence of Maxfield Creek and the Luckiamute River and the importance of these riparian and wetland areas for wildlife.

Table 5. Monitoring system for Luckiamute Meadows Property.

Desired Future Conditions, Goals and Objectives	Metric/Data Summary	Monitoring Technique	Approximate Evaluation Timeline	
<i>Infrastructure: Maintain the current condition of infrastructure on the Property.</i>				
Goal 1: Maintain the Property’s infrastructure and accessibility.				
	Objective 1.1 - On an ongoing basis, maintain condition of fence lines, as measured by consistent length of fencing in baseline condition.	Length of fence	Evaluate fences and gates annually	Annually
	Objective 1.2 – On an ongoing basis, maintain functional access within the Property as measured by consistent length of accessible trails.	Length of accessible trail	Walk trails for accessibility	Annually
Goal 2: Maintain water rights for use to support habitats on the Property.				
	Objective 2.1 – Maintain the water rights through use on an annual basis.	Records of water use	Annual documentation of water use	Annually
<i>Flowing Water and Riparian Habitats (39 acres): Maintain current condition of habitat, and where partnership and funding allow, add riparian plantings to fill out full riparian buffer.</i>				
Goal 3: Maintain and enhance the structure and condition of riparian habitats on the Property.				
	Objective 3.1 - By 2031, increase the tree and shrub density in the riparian buffer along Maxfield Creek beyond baseline levels.	Tree density	Aerial imagery and photo comparison	10 yr intervals
<i>Wetlands (10 acres): Maintain the current condition of the habitat and manage shrub encroachment periodically if needed.</i>				
Goal 4: Manage constructed seasonal wetlands/ponds to provide wildlife habitat.				
	Objective 4.1 - On an annual basis, evaluate the duration of flooding in the northern seasonal wetlands/ponds and increase the water level in spring if needed to support amphibians.	Date water addition starts, approximate date flooding ends.	Monitor pond levels	Annual
	Objective 4.2 - Maintain heterogeneous habitat structure of constructed wetland habitat to maintain average tree and shrub cover of less than 50%.	Tree/shrub cover	Aerial or drone imagery	5 years

Desired Future Conditions, Goals and Objectives	Metric/Data Summary	Monitoring Technique	Approximate Evaluation Timeline	
<i>Oak Woodland (4 acres): A maturing oak woodland, with tree spacing and density that supports tree canopy development.</i>				
Goal 5: Support the development of the restored oak woodland habitat.				
	Objective 5.1 – At intervals of ~15 years, reduce competition between oaks by thinning to maintain spacing of at least 1 meter between tree crowns.	Tree spacing/density	Aerial or drone imagery	15 years
	Objective 5.2 - Reduce competition for oak trees by mowing the understory on 5-year intervals.	Management records	Data management	5 years
<i>Pasture (20 acres): Maintain the current condition as a nutritious forage resource for elk and other wildlife, through continuing management practices currently in place.</i>				
Goal 6: Maintain the quality of forage in the pasture habitat to support wildlife, including elk populations.				
	Objective 6.1 - On an annual basis, maintain open and grass dominated pasture structure with less than 20% cover of plant litter (thatch) and less than 15% shrub cover.	Shrub cover	Aerial or drone imagery: On the Ground: Vegetation assessment for thatch	3-5 years
<i>Invasive Species: Maintain the current (baseline) levels of invasive species.</i>				
Goal 7: Limit the occurrence and spread of target invasive species throughout the Property.				
	Objective 7.1 - On an ongoing basis, manage invasive species populations on the Property to remain at or below baseline levels.	Invasive species abundance	Imagery or On the Ground: Invasive species	Twice per year
<i>Outreach, Recreation and Education: In addition to the KVCS use, the Property includes an interpretive trail, and has annual events open to the community.</i>				
Goal 8: Engage stakeholders and the public in educational or recreational activities on the Property.				

Desired Future Conditions, Goals and Objectives		Metric/Data Summary	Monitoring Technique	Approximate Evaluation Timeline
	Objective 8.1 - By 2031, increase the educational resources for visitors to the Property.	# Signs established	Confirmation of installation	Upon completion, by 2031
	Objective 8.2 - Provide at least one annual opportunity for the public to access the Property.	# Events held	Document events	Annual

D. EASEMENT RESTRICTIONS AND PROHIBITIONS (ITEMS 30-32)

30. Using the table structure below, edit and address each prohibited use identified in our specific conservation easement and explain if there are any desired exceptions to the prohibitions. Exceptions will be permitted only if the purpose of such activity is to enhance or maintain Conservation Values and appropriate prescriptions to offset any undesired conditions are included.

Summary of Easement Prohibitions	Will actions be in compliance for duration of Management Plan? If No, please explain and also include the mitigating activities.
<p><u>Division</u>. Any division, partition or subdivision of the Property is prohibited. However, Grantor is permitted to partition or adjust lot lines of the parcel of land that contains the Property subject to the Conservation Easement, if allowed under applicable State and County laws so long as boundaries of the Property described for this Conservation Easement are not affected. This applies to the 4 acre portion of the parcel that is excluded from the Conservation Easement.</p>	<p>No actions proposed.</p>
<p><u>Commercial Activities</u>. Any commercial or industrial activity is prohibited except agricultural activities allowed by the Management Plan, such as agricultural activities used as a management tool for maintenance, restoration or enhancement of habitat. Any Grantee income generated by agricultural activities shall be deposited into a stewardship account held by Grantee.</p>	<p>In compliance. Agricultural lease permitted for haying to maintain habitat (see Goal 6 and question #28). Income generated through lease goes back into stewardship. If grazing begins instead of haying, a new lease and LUA would be initiated.</p>
<p><u>Construction</u>. Any construction, improvement or other human-made modification including buildings, structures, fences, roads and parking lots is prohibited.</p>	<p>No actions proposed.</p>
<p><u>Vegetation</u>. Any cutting or removal of trees or vegetation is prohibited, except for as allowed in Section 5(b) (Firewood), or for the purposes of noxious weed control, removal of danger trees or</p>	<p>In compliance. May remove ash and willow seedlings</p>

obstructions to permitted roads, or removal of vegetation associated with uses allowed herein.	encroaching in the wetland (see Goal 4). Tribal access for harvesting culturally significant plant materials, which may include native plant species, will be allowed per this LMP
<u>Land Surface Alteration.</u> Any mining, quarry, gravel extraction, grading, excavation, or alteration of the land surface is prohibited.	No actions proposed.
<u>Dumping.</u> Dumping, collecting, recycling, accumulating, or storing of trash, refuse, waste, sewage, bio-solids, or other debris is prohibited.	No actions proposed.
<u>Water Courses/Wetlands.</u> Draining, dredging, channeling, filling, leveling, pumping, diking, impounding or any other alteration of any watercourses, ponds, seeps, bogs, springs, wetlands, or any seasonally wet area is prohibited, as is altering or tampering with existing water control structures or devices.	In compliance. Addition of water to seasonal wetlands to extend benefit to wildlife identified in LMP Goal 4.
<u>Vehicle Use.</u> Except as allowed in Grantors Reserved Right section, the use of motorized vehicles is prohibited, except as necessary to carry out activities approved by the Grantee, or for those activities approved in the Management Plan.	In compliance.
<u>Bicycles.</u> Any operation of bicycles is prohibited except when used on roads or trails described in the Baseline Inventory Documentation or in the Management Plan.	No actions proposed.
<u>Hazardous Substances.</u> Any release of Hazardous Substances on or about the Property is prohibited, except the use of Hazardous Substances consistent with permitted agricultural activities, if any, or any act or omission, causing, contributing to, or exacerbating of any release of a Hazardous Substance.	No actions proposed.
<u>Signs.</u> All billboards, advertisements and signs are prohibited, except signs that display the name and address of the Property, the owner's name, the area protected by the Conservation Easement, prohibitions of any unauthorized entry or use, restoration activities implemented, public access rules, and educational content consistent with protection of the Conservation Values. The permitted signs may not exceed 15 square feet in size.	In compliance. Actions proposed for education and outreach in Goal 8.
<u>Domestic, Exotic or Farm Animals.</u> Except for domestic animals allowed on trails, and farm and working animals used for	None proposed at this time but grazing contemplated in Goal

<p>agricultural activities conducted in accordance with the Management Plan, all domestic, exotic, and farm animals of any kind are prohibited, unless expressly permitted in the Management Plan or separately in writing by Grantee if Grantee determines that allowing the animals is consistent with restoration and protection of the Conservation Values.</p>	<p>6. If a grazing lease is proposed, BPA and ODFW would review and issue a LUA.</p>
<p><u>Cultural Resources.</u> Any excavation, injury, destruction, removal, or alteration of any cultural resources on or about the Property is prohibited, except for activity authorized by a permit issued under ORS 390.235 and undertaken in compliance with all state and federal laws related to archeological objects and sites and cultural resources as defined in ORS 358.905 and OAR 736-018-0020.</p>	<p>No actions proposed.</p>
<p><u>Applicable Law.</u> Any activity not in compliance with any federal, state, and local law, regulation, or requirement applicable to the Property is prohibited.</p>	<p>No actions proposed.</p>
<p><u>Grant of Rights.</u> The granting of any Property interest or rights in the Property, including easements, permits, licenses, and leases, without the prior written consent of the Grantee and BPA, is prohibited.</p>	<p>Grantee retains the right in the CE to implement leases which maintain the habitats and conservation values of the property, e.g., the agricultural and CREP lease for haying to maintain habitat (see Goal 6, question #28, and Attachment E). The agricultural and CREP lease will be for a 12 month period.</p>
<p><u>Utilities.</u> Except as may be acquired by BPA, the installation or relocation of new public or private utilities, including electric, telephone, or other communications services is prohibited. Existing utilities on, over, or under the Property may be maintained, repaired, removed or replaced at their current location as that location is documented in the Baseline Documentation Report and Acceptable Encumbrances.</p>	<p>No actions proposed.</p>
<p><u>Hunting.</u> No recreational or commercial hunting is allowed.</p>	<p>No actions proposed.</p>

31. Are there any environmental regulations influencing your actions (e.g., Endangered Species Act, National Historic Preservation Act, Clean Water Act, etc.)?

No.

32. If agriculture/livestock grazing/forestry were permitted as a temporary stabilization or restoration measure, describe the phase-out plan. Provide details, including timing and a map. Please append a grazing/timber management plan and describe how this activity will enhance the Conservation Values of the property.

Agricultural uses are permitted by the CE as a method to maintain the baseline condition of the Conservation Values of the Property. This is applicable to the pasture habitat units (see Current or Desired Future Condition Maps - Attachment A: Maps) and consistent with historical and baseline agricultural land uses on the Property. Agricultural uses in the pasture units also have the safety benefit of reducing fire hazard in the summer and fall.

Haying

As described in question #8 and Goal 6, the Grantor currently fertilizes and hays the pastures. No phase out is required or proposed. This will be accomplished per the lease included in Attachment E.

33. Please describe any actions you have taken or foresee needing to take to protect Conservation Easement area from harm (e.g., trespass, illegal camping, etc.)?

Greenbelt conducts annual monitoring visits for this Conservation Easement Property. Greenbelt follows Land Trust Alliance protocol standards to document the visit and any observed violations to the easement or unauthorized uses.

At the time of LMP development the recent landowner (Hall family) lives in the residence adjacent to the Property. They have not observed any trespass or unauthorized activity on the Property to date.

34. Please summarize opportunities for and outcomes of stakeholder and public input to LMP development.

Greenbelt engaged with the following entities during LMP development:

- Hall Family: Greenbelt engaged with the Hall family, the original Grantor of the CE, to build the history of management at the property, compile the list of past and current partnerships and collaborations, and better understand plans and intentions for the future.
- Luckiamute Watershed Council: Greenbelt engaged with LWC to understand the status of past and future projects on the Property, and gain perspective on context of projects and data for the Luckiamute River and Maxfield Creek.

- Benton SWCD: The SWCD has been involved in the restoration trajectory of the Property since the acquisition and has had input into restoration and management of the site and continue to provide technical assistance to the Grantor.
- ODFW: Greenbelt engaged with ODFW to understand existing fish data for the site, including the recommended use of the online ODFW Oregon Fish Habitat Distribution and Barriers web application:
https://nrimp.dfw.state.or.us/FHD_FPB_Viewer/index.html.

ATTACHMENT A: MAPS

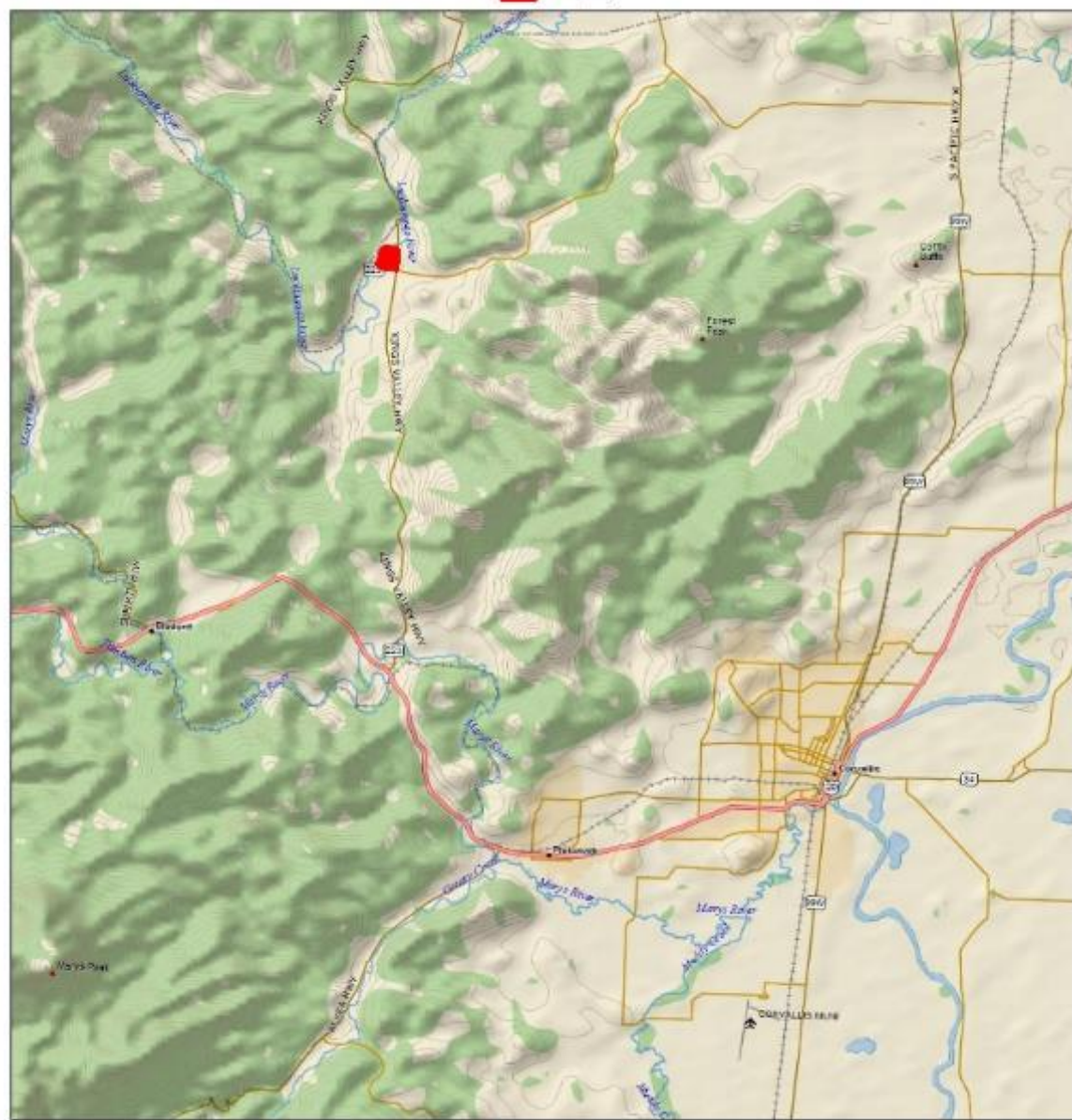
- Location
- Conservation Easement and Parcel
- Luckiamute Conservation Easements (Conservation Context)
- Improvements
- Management Zones
- Water Rights Place of Use
- Current Conditions
- Conservation Reserve Enhancement Program
- Invasive Species
- Soils
- Desired Future Conditions

Luckiamute Meadows

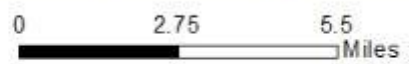
Location



 Property



8/6/2021



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Luckiamute Meadows

Conservation Easement and Parcel Map



The Luckiamute Meadows Conservation Easement (CE) is located in Kings Valley, Benton Co. The Property was protected on Apr 9, 2014, with funding from BPA (WILWF-WL-13). The CE covers 73.6 acres of Tax Lot #108160001001. The CE is bordered to the west by the Luckiamute River, and bordered in part to the east by Kings Valley Blvd.



7/23/2021

0 0.05 0.1 Miles

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Luckiamute Conservation Easements

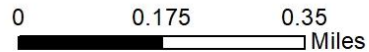
Luckiamute Meadows and Luckiamute Riparian



Greenbelt Land Trust holds two Conservation Easements, Luckiamute Meadows and Luckiamute Riparian, along the Luckiamute River in Kings Valley. Luckiamute Riparian was protected in 2006 through funding from OWEB. It is split between two ownerships: the southern parcel is owned by the Silvermail family, and the northern parcel owned by Kings Valley Community Trust. Luckiamute Meadows was protected Apr 9, 2014 through funding from BPA (WILWF-WL-13). Luckiamute Meadows is owned by the Kings Valley Community Trust.



7/29/2022

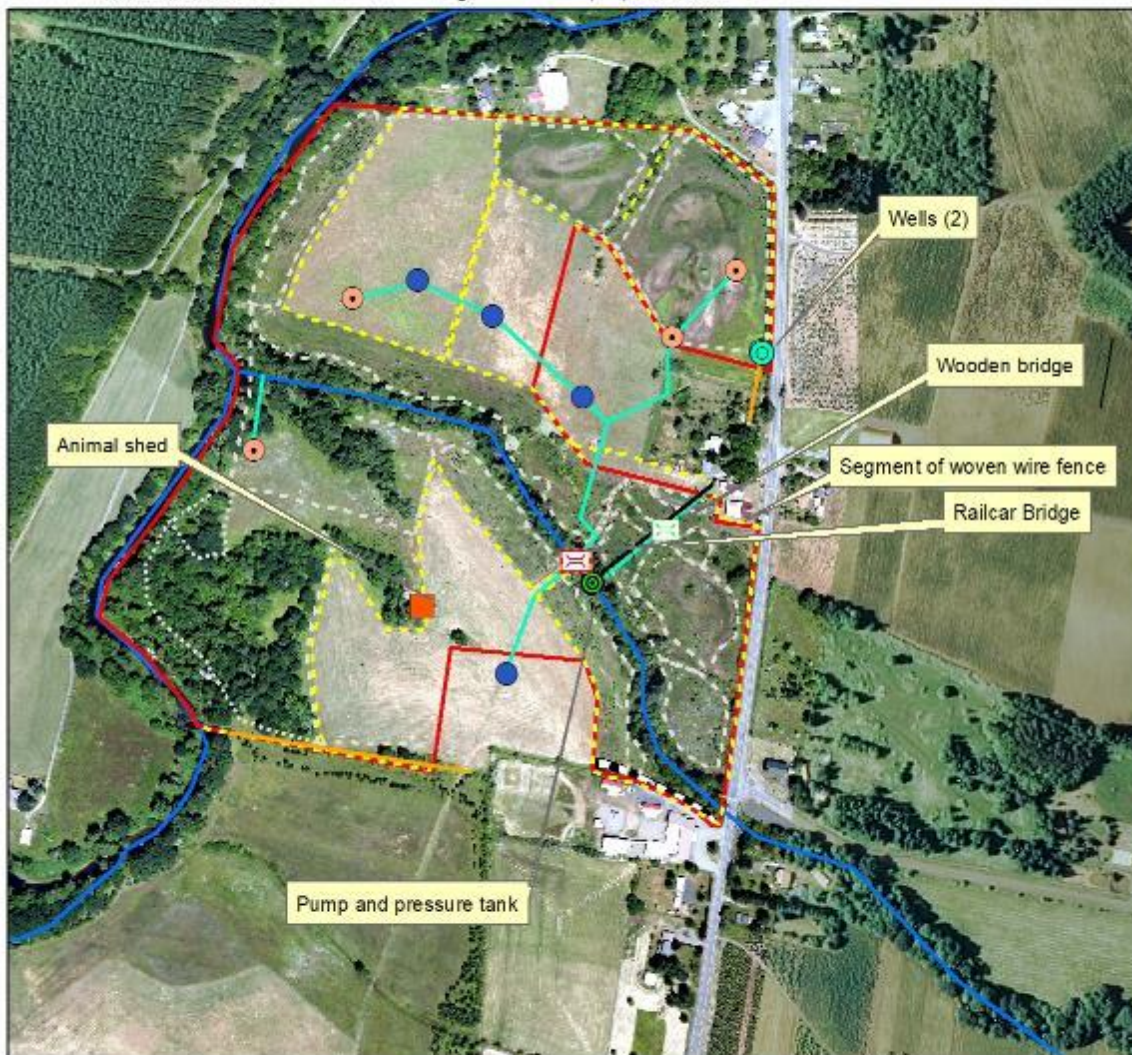


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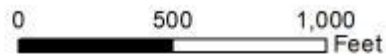
Luckiamute Meadows Improvements



- | | | | |
|------------------------|-----------------------------|--------------------|----------|
| Transportation | Irrigation hose/pipe outlet | Rivers and streams | Property |
| Gravel | Stock tank | Electric | |
| Mowed | Fences | Aerial | |
| Native surface or dirt | Water--underground | Subsurface | |



5/24/2022

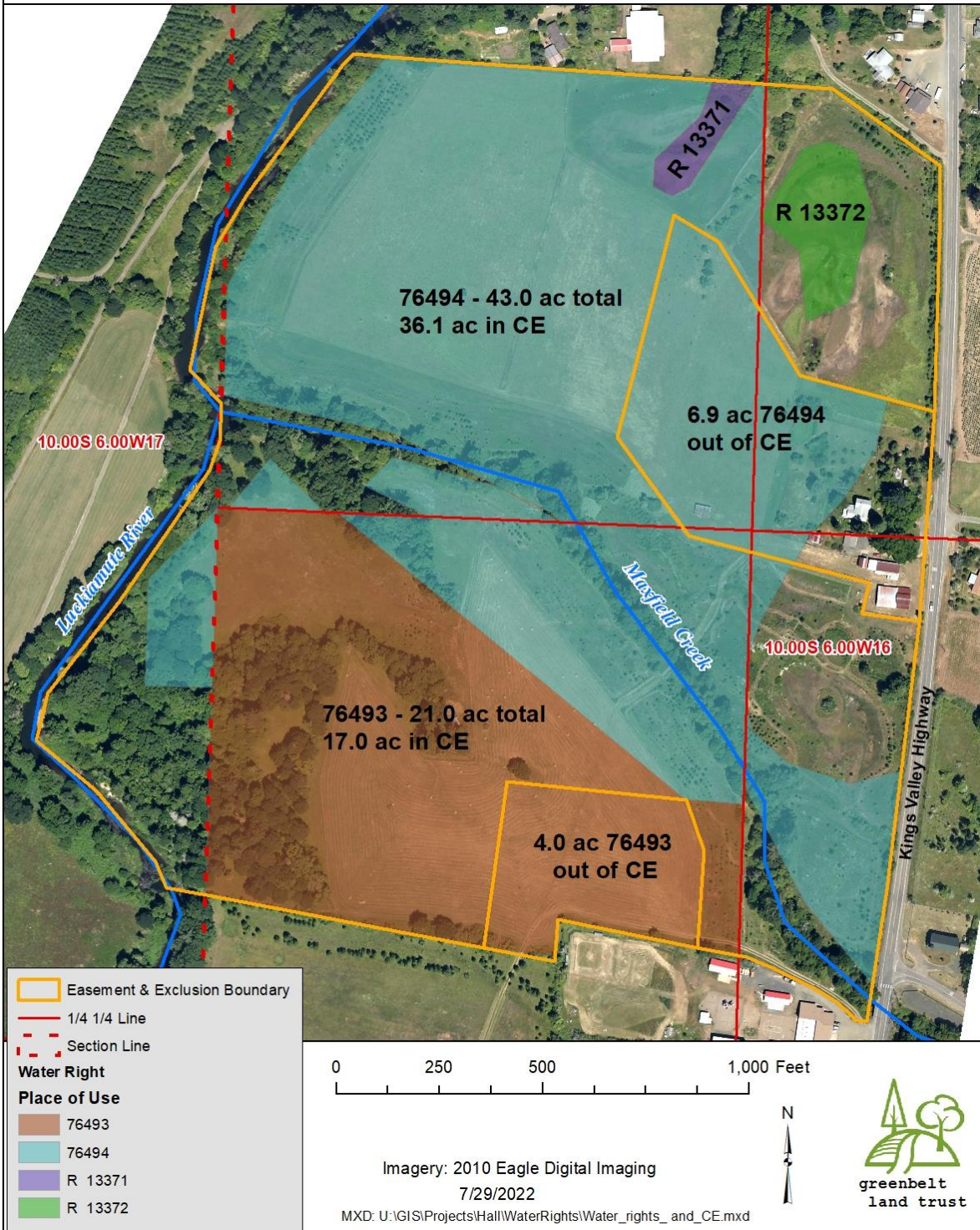


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Luckiamute Meadows Management Zones



Luckiamute Meadows Water Rights Place of Use



Luckiamute Meadows

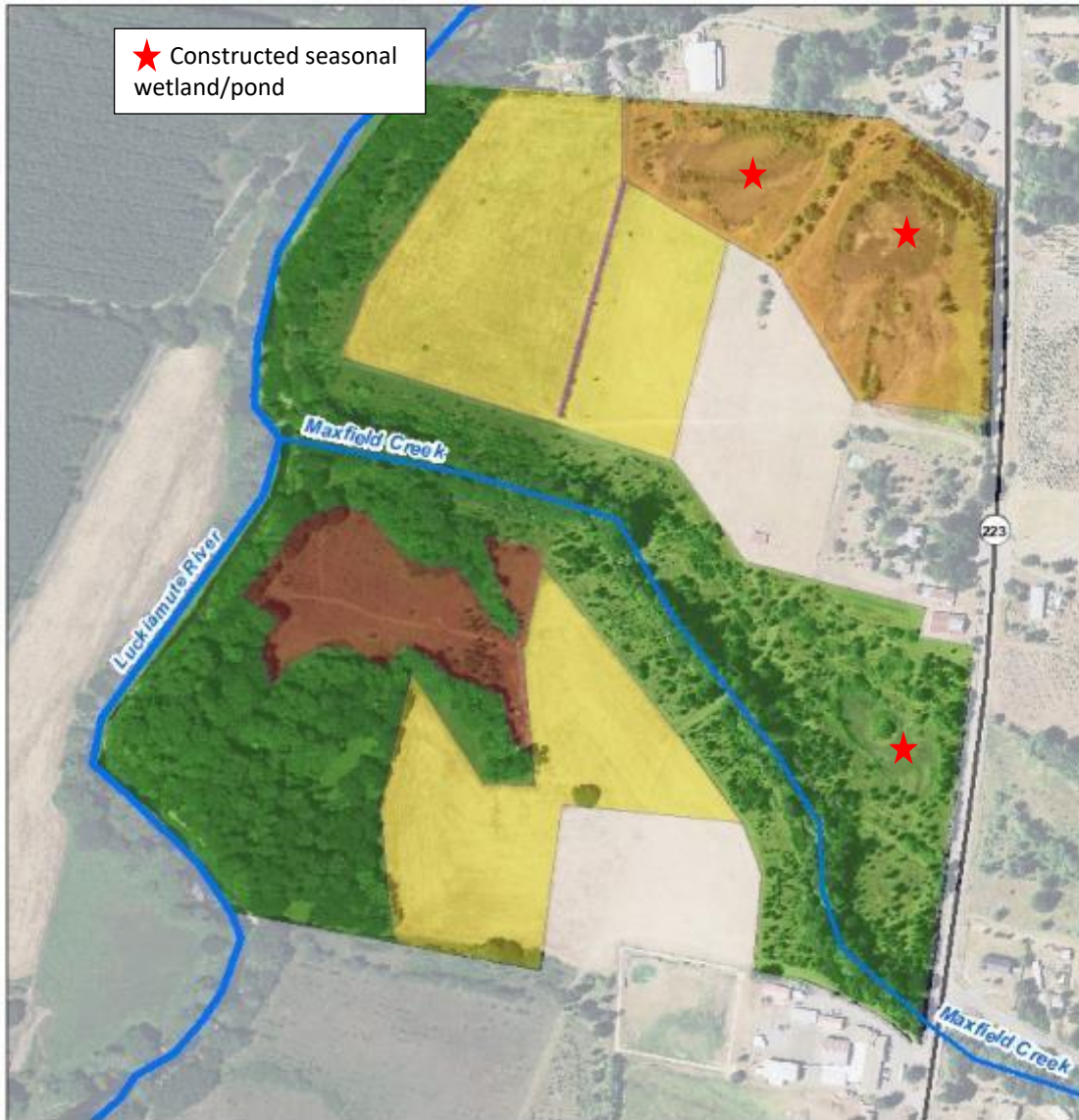
Current Conditions - OCS Strategy Habitats



Habitats + Acres

- | | |
|--|--|
|  Pasture (20 ac) |  Oak Woodlands (4 ac) |
|  Flowing Water + Riparian (39 ac) |  Hedgerow (<1 ac) |
| |  Wetlands (10 ac) |

★ Constructed seasonal wetland/pond



8/6/2021 0 0.05 0.1 Miles

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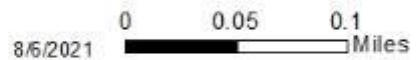
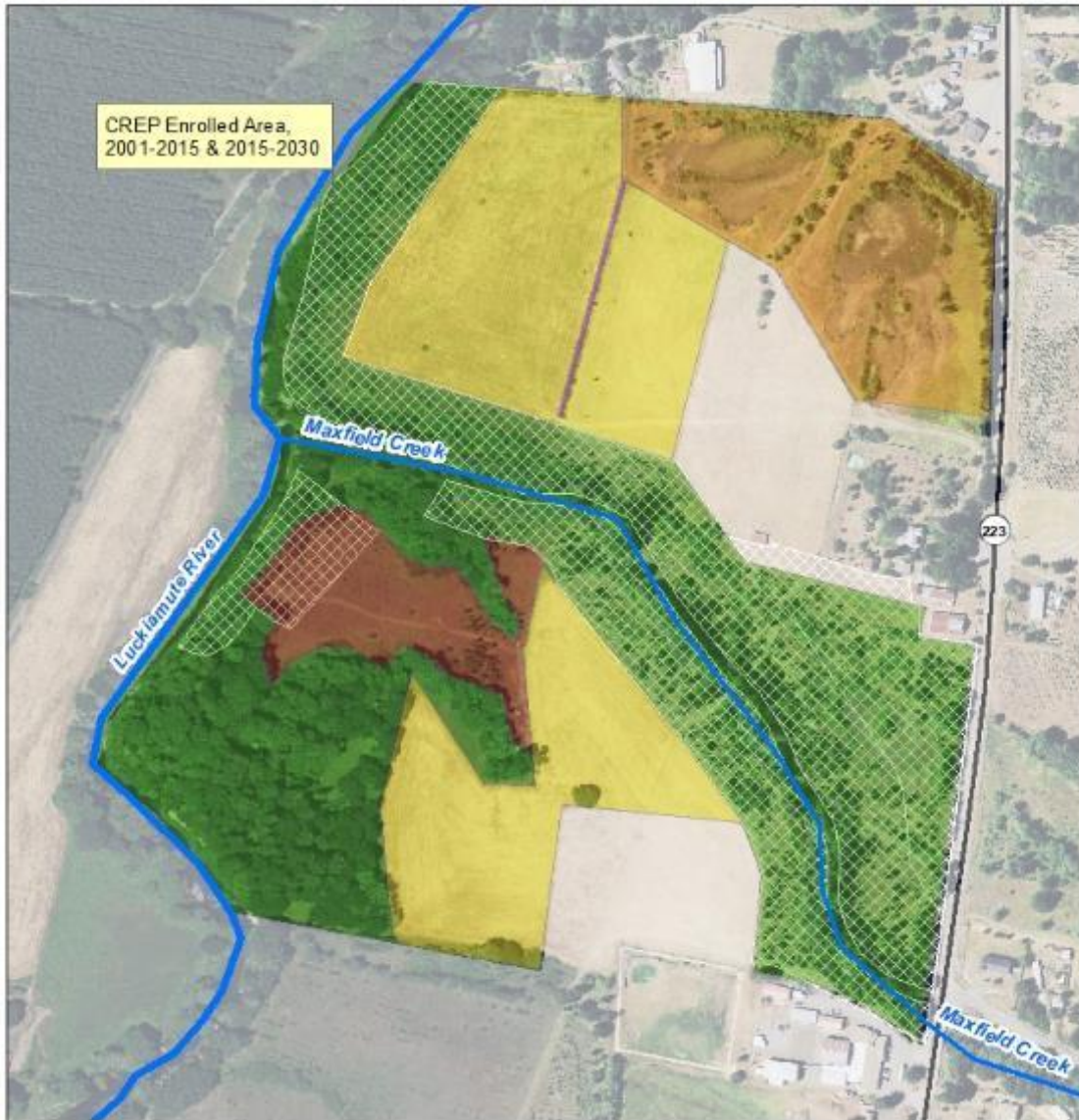
Luckiamute Meadows

Conservation Reserve Enhancement Program



Habitats + Acres

 Pasture (20 ac)	 Oak Woodlands (4 ac)
 Flowing Water + Riparian (39 ac)	 Hedgerow (<1 ac)
	 Wetlands (10 ac)



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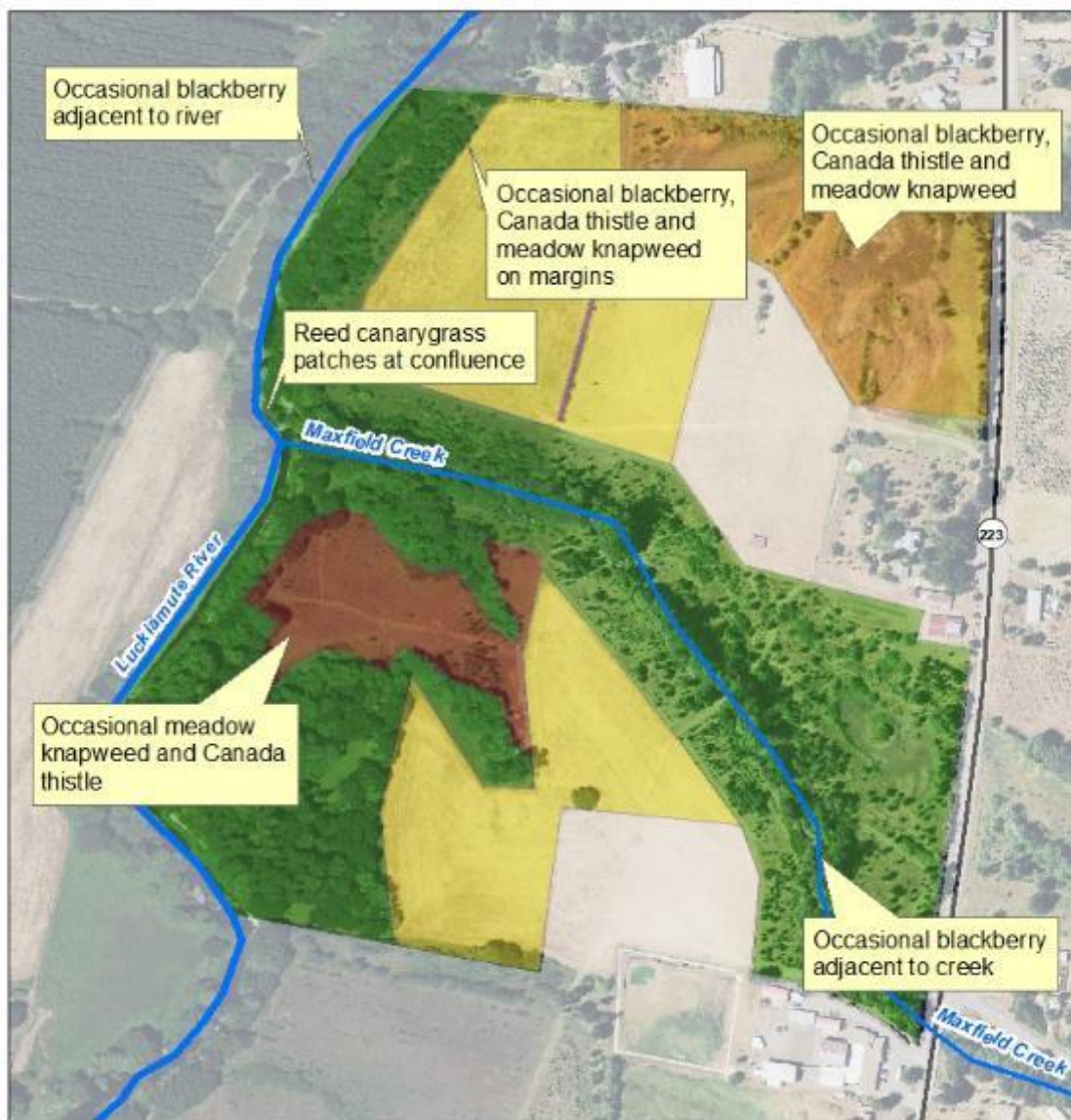
Luckiamute Meadows

Invasive Species

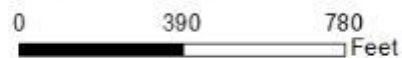


Habitats + Acres

 Pasture (20 ac)	 Oak Woodlands (4 ac)
 Flowing Water + Riparian (39 ac)	 Hedgerow (<1 ac)
	 Wetlands (10 ac)



8/6/2021














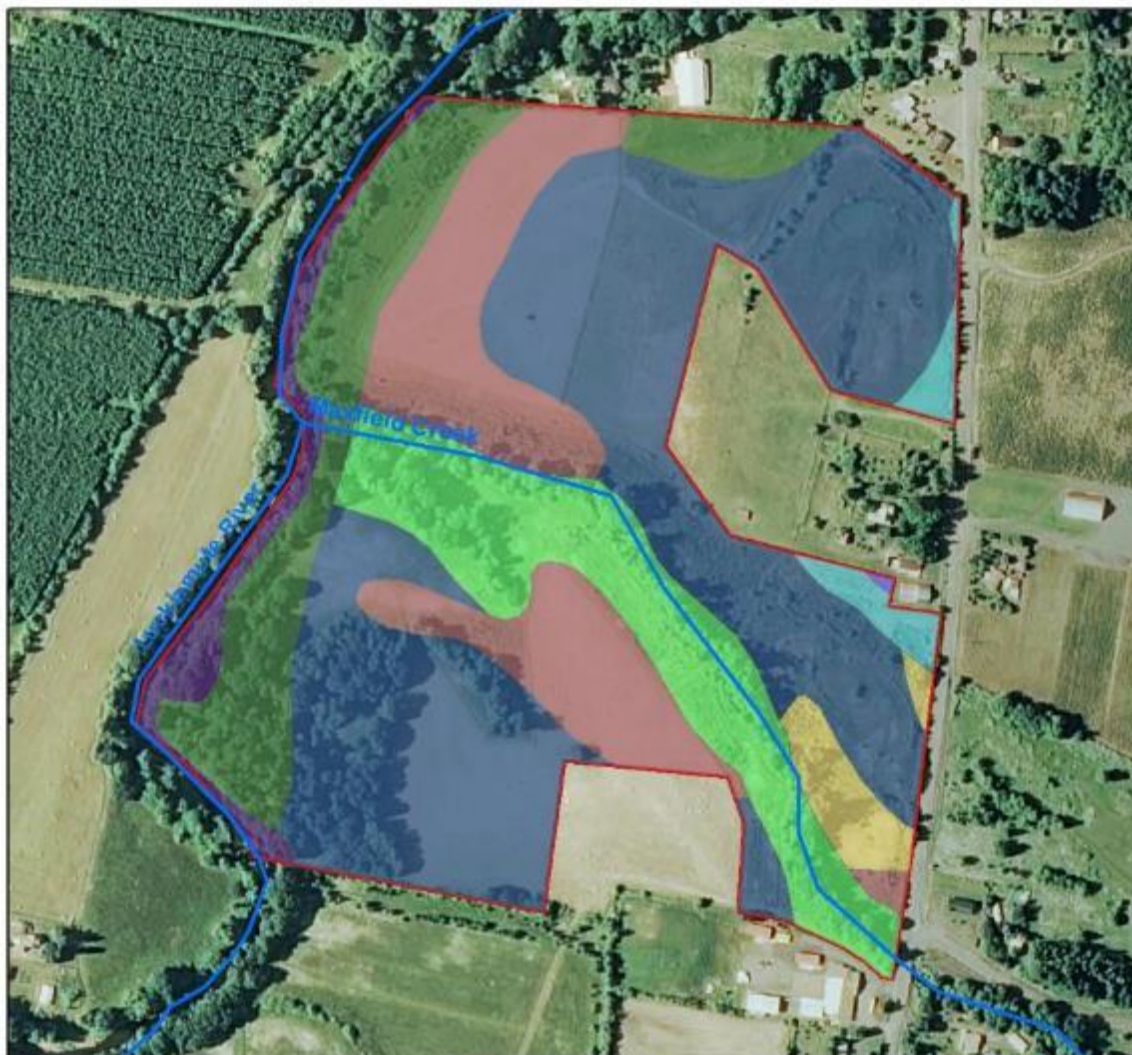
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Luckiamute Meadows

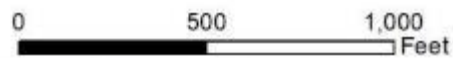
Soils



- | | | |
|---|--|--|
|  Abiqua silty clay loam, 0 to 3 percent slopes |  Conser silty clay loam, 0 to 3 percent slopes |  Water |
|  Abiqua silty clay loam, rarely flooded, 0 to 3 percent slopes |  McAlpin silty clay loam, 0 to 3 percent slopes |  Rivers and streams |
|  Briedwell gravelly loam, 0 to 7 percent slopes |  McAlpin silty clay loam, rarely flooded, 0 to 3 percent slopes |  Property |
|  Briedwell gravelly loam, 7 to 20 percent slopes |  McBee silty clay loam, 0 to 3 percent slopes | |



12/16/2021



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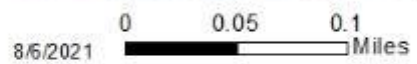
Luckiamute Meadows

Desired Future Conditions - OCS Strategy Habitats



Habitats + Acres

- | | |
|--|---|
|  Pasture (20 ac) |  Oak Woodlands (4 ac) |
|  Flowing Water + Riparian (39 ac) |  Hedgerow (<1 ac) |
| |  Wetlands (10 ac) |



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ATTACHMENT B: CONSERVATION EASEMENT

ATTACHMENT C: BASELINE INVENTORY DOCUMENTATION

ATTACHMENT D: HABITAT ASSESSMENT AND RECOMMENDATIONS (2015)

ATTACHMENT E: DRAFT AGRICULTURAL AND CREP LEASE