

SITE STEWARDSHIP PLAN

Penstemon Prairie



August 2016



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Penstemon Prairie Natural Area

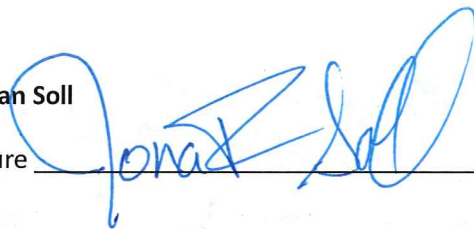
Approvals for Site Stewardship Plan

Date first routed: April 2014

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Jonathan Soll

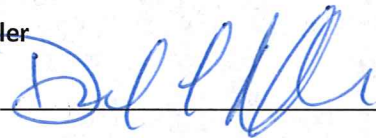
Signature



Date

Dan Moeller

Signature

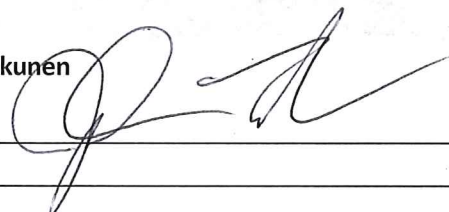


Date

12/10/15

Justin Takkunen

Signature



Date

8/15/15

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PENSTEMON PRAIRIE PROPERTY INFORMATION

LOCATION

Address: 5420 SW Fern Hill Rd., Forest Grove, OR 97116

County: Washington

Number of acres: 254.83

Metro file no.: S 09.02

Table 1: Metro natural area bond purchased land for Penstemon Prairie

PROPERTY NAME	FILE NO.	BOND YEAR	DATE ACQUIRED	MANAGEMENT	ACRES*
Lovejoy Center	09.019	1995	04/16/1999	Metro	147
Lovejoy Center	09.022	1995	03/24/2000	Metro	198

*The southern portions, on the south side of Fern Hill Road, of the two Lovejoy Center properties are actually included in the Fern Hill Forest site and its overall acreage, not Penstemon Prairie.

DIRECTIONS TO SITE

From Wankers Corner Field Station (2661 SW Borland Road, Tualatin, OR 97062):

- Take I-205 S to I-5 N
- Take exit 292A and merge onto OR-217 N
- Take exit 4 and turn left onto OR-2010/Scholls Ferry Rd
- Turn right onto SW Tile Flat Rd
- Turn left onto OR-10 W
- Turn right onto SW Rood Bridge Rd
- Turn left onto SW Burkhalter Rd
- Continue straight onto SW Simpson Rd
- Turn right onto SW Johnson School Rd
- Turn left onto SW Tongue Ln
- Turn right onto SW Golf Course Rd
- Turn left onto SW Blooming Fern Hill Rd
- Turn left onto SW Fern Hill Rd

See Map 1 for details.

SECTION 1: INTRODUCTION

1.1 CONTEXT

Penstemon Prairie is located in Washington County, south of Forest Grove and north of Gaston. It is bordered to the north and west by the Tualatin River, to the south by Southwest Fern Hill Road, and to the east by agricultural land (Map 2). Most of Penstemon Prairie is in the Tualatin River floodplain and it has been actively managed for many years. Metro has disrupted drain tiles, planted riparian and wetland plants, protected rare plants and planted upland and prairie species at higher elevations. Penstemon Prairie's name reflects the discovery of a rare wildflower on the site, Penstemon hesperius, which is known from only two other locations.

1.2 SITE STEWARDSHIP PLAN GOALS AND USES

Site Stewardship Plans (SSPs) and Site Conservation Plans (SCPs) are sister documents. SCPs document conservation targets, desired future conditions, and key threats, providing a long-term vision for the site for internal and external audiences. Though rarely fully updated, SCPs are periodically updated to document strategic implementation and reflect on lessons learned through adaptive management. SCPs provide guidance for short- and long-term stewardship actions and tasks that the Natural Areas Land Management Team will take to reduce threats and increase conservation target health.

SSPs provide a five to ten year outlook for ongoing care of a site, shaping a vision of options and costs to make thoughtful choices within available resources. SSPs are primarily an internal working document and address vegetation management and infrastructure maintenance, such as fences, gates, water control structures. SSPs are updated periodically as key restoration or access and development projects are implemented.

This SSP provides information necessary to:

- Protect natural resources supporting wildlife habitat and water quality.
- Define key actions that help achieve desired future conditions of conservation targets.
- Define key actions required to maintain infrastructure.
- Provide cost estimates for actions.
- Prioritize actions and document implementation.

The major stewardship issues of concern for Penstemon Prairie include:

- Invasive weed control.
- Rare plant conservation and on-site propagation of Nelson's checkermallow (*Sidalcea nelsoniana*) and Penstemon (*Penstemon hesperius*).

SECTION 2: CONSERVATION TARGETS AND DESIRED FUTURE CONDITIONS

2.1 MAJOR HABITAT TYPES

Currently the Penstemon Prairie natural area can be characterized by several natural habitat types, including wet and mesic prairie, emergent wetland, shrub wetland, and riparian forest (Table 2, Map 3). In addition, approximately 36 acres of the site are under agricultural lease. More detailed descriptions are available in the SCP.

Table 2: Major habitat types at Penstemon Prairie

HABITAT TYPE	ACRES
Wet prairie	25
Mesic prairie	78
Emergent wetland	47
Shrub wetland	12
Riparian forest	78
Agriculture	36

2.2 CONSERVATION TARGETS

Conservation targets are composed of a suite of species, communities and ecological systems that represent and encompass the full array of native biodiversity of the site, reflect local and regional conservation goals and are viable or at least feasibly restorable. Using onsite natural habitat types and regional conservation planning efforts as guides, conservation targets were selected that encompass the site's biodiversity values and regional conservation targets. The targets at Penstemon Prairie are:

- Emergent wetland (nested targets of *Penstemon hesperius* and *Sidalcea nelsoniana*)
- Wet/mesic prairie (nested targets of streaked horned lark (*Eremophila alpestris* ssp. *Strigata*) and western meadowlark (*Sturnella neglecta*))
- Riparian forest
- Shrub wetland

Appendix A summarizes the conservation targets, key ecological attributes, threats and strategic short- and long-term stewardship actions that can help address threats to these conservation targets. For more information, see the Site Conservation Plan.

It is important to prioritize restoration and stewardship activities for several reasons. Budgetary or time constraints are likely to limit how much work can be accomplished at a given site. Specific actions may rise to the top due to the scarce or unique nature of a habitat type or because abating a certain threat now will save time and money in the future. The SCP prioritizes conservation targets while Appendix B of this SSP assigns priority rankings to key actions; this does not mean that the other actions are not important, simply that they are not the most important actions within the next 3-5 years.

2.3 SPECIAL OR SENSITIVE HABITAT

The wet and mesic prairies and emergent wetlands at Penstemon Prairie provide habitat for several rare bird and plant species. The streaked horned lark, listed by the United States Fish and Wildlife Service as Threatened, and the western meadowlark, a state sensitive species, have been previously noted at the site on several occasions. Improvements to the prairie structure and plant composition should benefit these species.

Nelson's checkermallow, federally listed as Threatened, and *Penstemon hesperius*, thought to be extinct until 2008 and still extremely rare, have also been discovered as naturally occurring at Penstemon Prairie. In order to protect these endemic species, Metro staff have marked the plants, weeded them by hand, and cut shrubs that would compete with them for resources. Seed from these plants has also been collected, cultivated at the Native Plant Center, and planted back out into wet prairie sections at the site in order to expand their population and distribution.

SECTION 3: STEWARDSHIP ACTIONS

Stewardship actions are broken up into five primary stewardship categories: monitoring, vegetation management, access and infrastructure, water resources, and wildlife habitat as described below. Terramet includes the full list of stewardship categories, actions, and tasks. Appendix B-1 describes strategic stewardship actions for each category needed over the next five to ten years, and Appendix B-2 provides a budget for these actions, as well as additional actions that may be warranted given sufficient time or funds.

3.1 MONITORING

Monitoring at Penstemon Prairie is an integral part of an adaptive management approach to restoration and stewardship. Based on the monitoring plan developed by Metro, a feedback loop is created between monitoring and management decisions. Monitoring will be done to evaluate habitat, population responses to management action, as well as progress toward achieving habitat and population objectives.

Key monitoring actions at Penstemon Prairie may include:

- Regular site walks to identify issues such as hunting, illegal dumping and inappropriate access
- Early detection and rapid response (EDRR) surveys
- Identifying specific weed control needs
- Restoration success, including oak/pine and sensitive species areas
- Access road and gate condition

3.2 VEGETATION MANAGEMENT

Key vegetation management actions for the next five to ten years at Penstemon Prairie relate primarily to:

- Implement collaborative site management with Clean Water Services (CWS) – may include, but not be limited to, weed control and planting.
- Invasive weed control – site wide with extra emphasis on sensitive species areas.
- Rare plant conservation and on-site propagation of Nelson’s checkermallow and *Penstemon hesperius*.

Many of these actions span multiple habitat areas and conservation targets.

Metro has initiated an early detection and rapid response (EDRR) program for certain invasive species. These EDRR species will be controlled by hand pulling or herbicide application as they are detected in the natural area. Other invasive plant species will be controlled as part of restoration projects or ongoing management of habitat areas. See Appendix C for a list of invasive species.

3.3 ACCESS AND INFRASTRUCTURE

Infrastructure generally includes human constructs such as maintenance roads, gates, fences, culverts, and signs. This category of stewardship actions may also include inventory property encroachments or surveying property lines. See Map 4 for spatial information on access and infrastructure at Penstemon Prairie.

Key access and infrastructure actions at Penstemon Prairie are:

- The entry gate, cable fence, and signage at the main entrance will be monitored for issues and repaired as needed.
- There are no fire hydrants near the site; Map 5 (IAP) indicates water sources in case of fire. There is one spigot at the agricultural lease area.

3.4 WATER RESOURCES

Water resources stewardship actions are generally defined as maintenance of infrastructure associated with streams, rivers or wetlands at the site. Examples include maintenance of large wood structures, water control structures or other water resource related actions and tasks.

Key water resources actions at Penstemon Prairie are:

- The water control structure and two culverts on site will be monitored for issues and repaired as needed.

3.5 WILDLIFE HABITAT

Wildlife habitat structures are specific features installed to improve wildlife habitat. Examples include nest boxes, turtle logs or platforms, beaver exclusion fencing and other associated wildlife related actions and tasks.

Key wildlife habitat actions at Penstemon Prairie may include:

- Maintenance of open areas for ground nesting birds, such as the streaked horned lark.

SECTION 4: COORDINATION

This Site Stewardship Plan outlines strategic development and restoration actions to be carried out at Penstemon Prairie site over the next five to ten years. These actions include natural resource, access, and infrastructure improvements. Implementation of these actions will have impacts to future stewardship and management of the site. This section is intended to identify actions that need additional coordination.

Actions that require coordination

- Agricultural lease – periodic access and communication
- Large restoration or development projects require implementation plans and conversations between Science & Stewardship and Land Management teams about long term stewardship costs

Current partners

- Clean Water Services: buffer condition along streams, planning and implementing collaborative restoration plans
- NRCS and Tualatin SWCD: working with our ag lease holders on a conservation plan to identify and assist in implementing practices to conserve soil and water resources on the leased areas at Penstemon Prairie
- USFWS: Safe Harbor Agreement

SECTION 5: VOLUNTEERS AND COMMUNITY ENGAGEMENT

The primary goal of the volunteer program is to provide a variety of high-quality, meaningful volunteer opportunities that add value and capacity to Metro's work. Through these opportunities, community members are able to learn about and enjoy Metro sites, work alongside fellow community members, learn new skills or polish existing ones, and gain the satisfaction of contributing to the long-term health and livability of their communities.

Due to the location and the sensitive nature of some of Penstemon Prairie's habitat areas, community involvement has been minimized; however seed collection and wildlife monitoring are two strategic volunteer opportunities that may be available. Additional volunteer opportunities could be revisited at a later date.

SECTION 6: SITE MANAGEMENT

Metro's management of Penstemon Prairie includes enforcement of the posted rules to provide protection for wildlife, water quality, and to protect the safety and enjoyment of any person visiting these facilities. The following sections describe key elements to management of the site.

6.1 FIRE INCIDENT ACTION PLAN

A fire incident action plan has been developed for this site (Appendix D).

6.2 PUBLIC ACCESS

Current authorized access includes structured seed collecting and bird and amphibian surveys. Unauthorized access is low, but includes some equestrian use near the Tualatin River. The SCP provides more detail on existing access and future access planning.

6.3 SPECIAL USE PERMITS

Special use permits (SUPs) are required for certain regulated and non-traditional uses of Metro's parks and natural areas to ensure public health and safety and to protect natural resources, properties and facilities.¹

Current and historical SUPs for this site can be found on the Penstemon Prairie Docs & Agreements page of Terramet or the M drive (M:\PN\Teams\Visitor Services\SUP). One typical occurrence of

¹ More information regarding policies, guidelines, and applications can be found at www.oregonmetro.gov/specialuse.

an SUP for Penstemon Praire is that Washington County Vector Control applies annually to conduct mosquito surveillance and sampling on site.

6.4 DEED RESTRICTIONS, EASEMENTS AND OTHER SITE AGREEMENTS

The acquisition of a property under the Natural Area Program may sometimes include deed restrictions that place limitations on the use of the land. Deed restrictions can include restrictions on tree cutting, establish landscaping requirements, or establish road maintenance fees. Acquisitions may also include easements that entitle the holder to certain uses or rights on the property. Easements can include utility easements, easements of access and conservation easements. Metro may enter into other voluntary agreements including intergovernmental agreements (IGAs) with other agencies and management agreements with non-governmental organizations.

Existing deed restrictions, easements and other site agreements include:

Lovejoy Center (09.019 & 09.022)

- 2012 grant of rights for Clean Water Services to conduct ecological enhancement and stewardship activities; effective through January 2032.
- 1981 perpetual electric powerline easement to PGE for a 16' strip of land.
- 1975 Bureau of Reclamation contract and grant of easement for a 30' by 30' area along the north boundary of Fernhill Road for maintenance of water pipelines.
- 1951 easement to PGE on the south side of Springhill Road for transmission line support.
- 1947 mineral rights reservation and easement to Union Central Life Insurance Company.
- 1941 easement from Union Central Life Insurance Company to Schoolcraft and the right to the transmission line with the right of egress/ingress across the adjacent property for the purposes of erection, construction, maintenance and operation of electrical and telephone lines and all they entail.
- 1925 right of way granted to the Pacific Telephone and Telegraph Co. with the right to erect and maintain poles with necessary wires and fixtures and to trim vegetation in those areas.
- 1912 easement in deed from Fidelity Trust Co. to Coop Trust Co., excepting and reserving to vendors, heirs and assigns, owners of all and any part of the adjacent land on the easterly side of the premises: a perpetual right of way at all times and for all purposes with or for vehicles and animals from and to the public highway on the westerly side of the premises.
- Rights of the public, government bodies and public utilities in and to that portion of the property lying within Fern Hill Road.
- Rights of fishing, navigation, commerce, flood control, propagations of anadromous fish, recreation and other rights of the public, Indian tribes of government bodies in and to the waters of the Tualatin River.
- Right, title and interest of the State of Oregon to the portion of the property lying below the low water line of the Tualatin River as of 1859.

For more detailed information on any of the above agreements, please refer to the Terramet acquisition pages or the legal acquisition hard copy files for the properties that make up this site (Lovejoy Center – 09.019 & 09.022).

6.5 RESIDENTIAL OR AGRICULTURAL LEASE AGREEMENTS

Some Metro Natural Areas include a residence or multiple residences on the site. If and when it is decided to rent out a residence, a rental agreement is developed by Metro. This agreement describes the lease terms, any rental restrictions, and acceptable uses of the lease area. In some cases the lease area is delineated on the ground by installation of markers such as carsonite posts, t-posts, or fencing. Some standard lease terms include a month to month term, pet restrictions, no hunting, and no commercial activities.

Metro may enter into agricultural lease agreements when the acquisition comes with an existing agricultural lease, farming fulfills management goals, or the preservation of available agricultural land and historic farming practices is desired. The agricultural lease delineates the boundaries of the farmed area and can include specific requirements including crop planted, herbicides used, and equipment used.

Existing lease agreements (Map 6) include:

Residential

- None.

Agricultural

- Agricultural lease of 45 acres to Hally and Mary Haworth (contract #921659) effective 10/1/1999 and renewing automatically in perpetuity unless notice is given by September 1st. A portion of this lease is subleased to Manuel Sosa.

For more detailed information on the above lease, please refer to the Agreements section of the Terramet site page for Penstemon Prairie or the Leases tab of the Terramet Administration Agreements page.

MAPS

Map 1 – Vicinity

Map 2 – Site

Map 3 – Current Cover

Map 4 – Infrastructure

Map 5 – IAP

Map 6 – Agricultural Lease

APPENDICES

Appendix A – Summary of Conservation Target KEA, Threats, Goals

Appendix B – Stewardship Actions

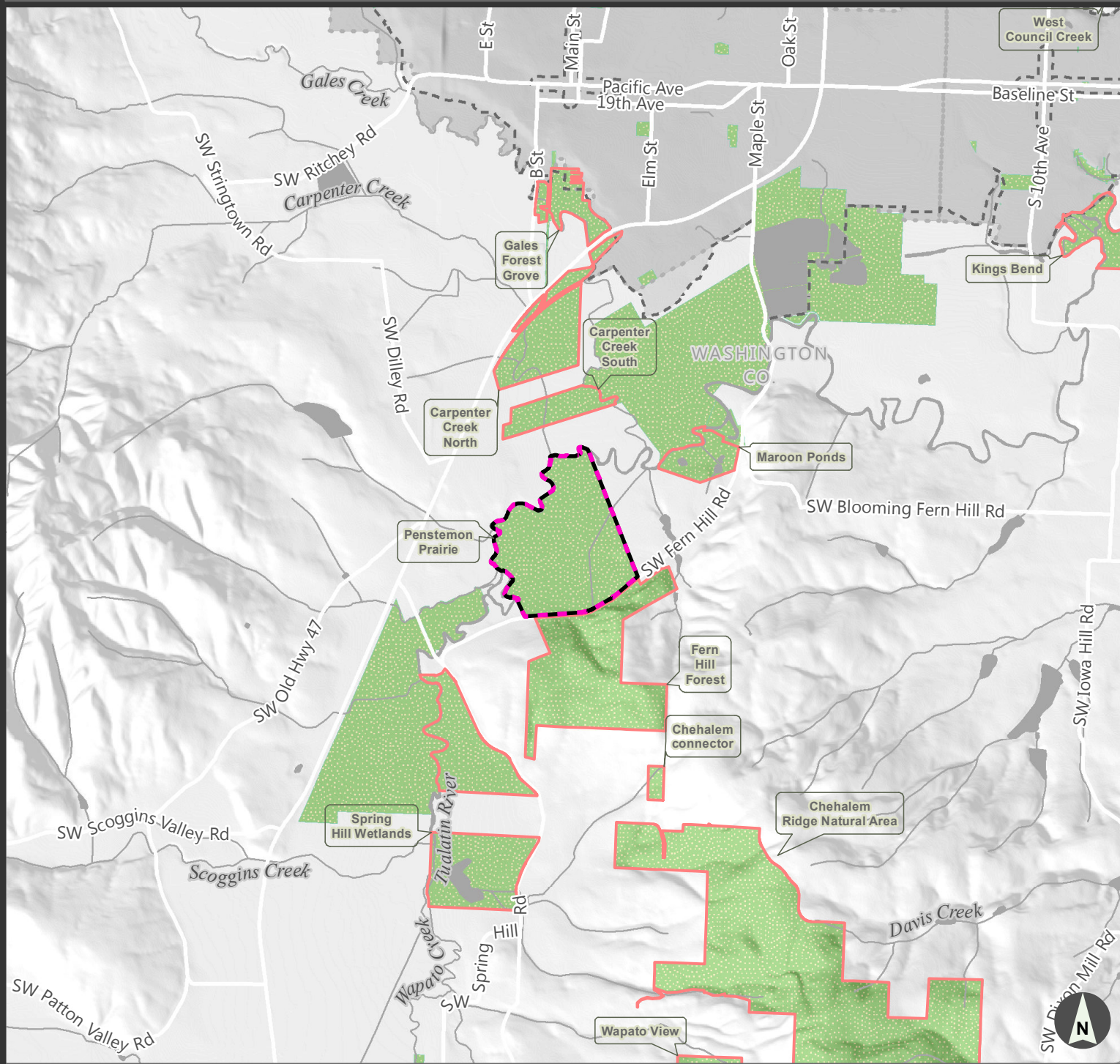
B-1 Summary of Stewardship Actions




B-2 Budget for Stewardship Actions

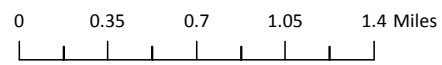
Appendix C – Invasive species

Appendix D – Incident Action Plan

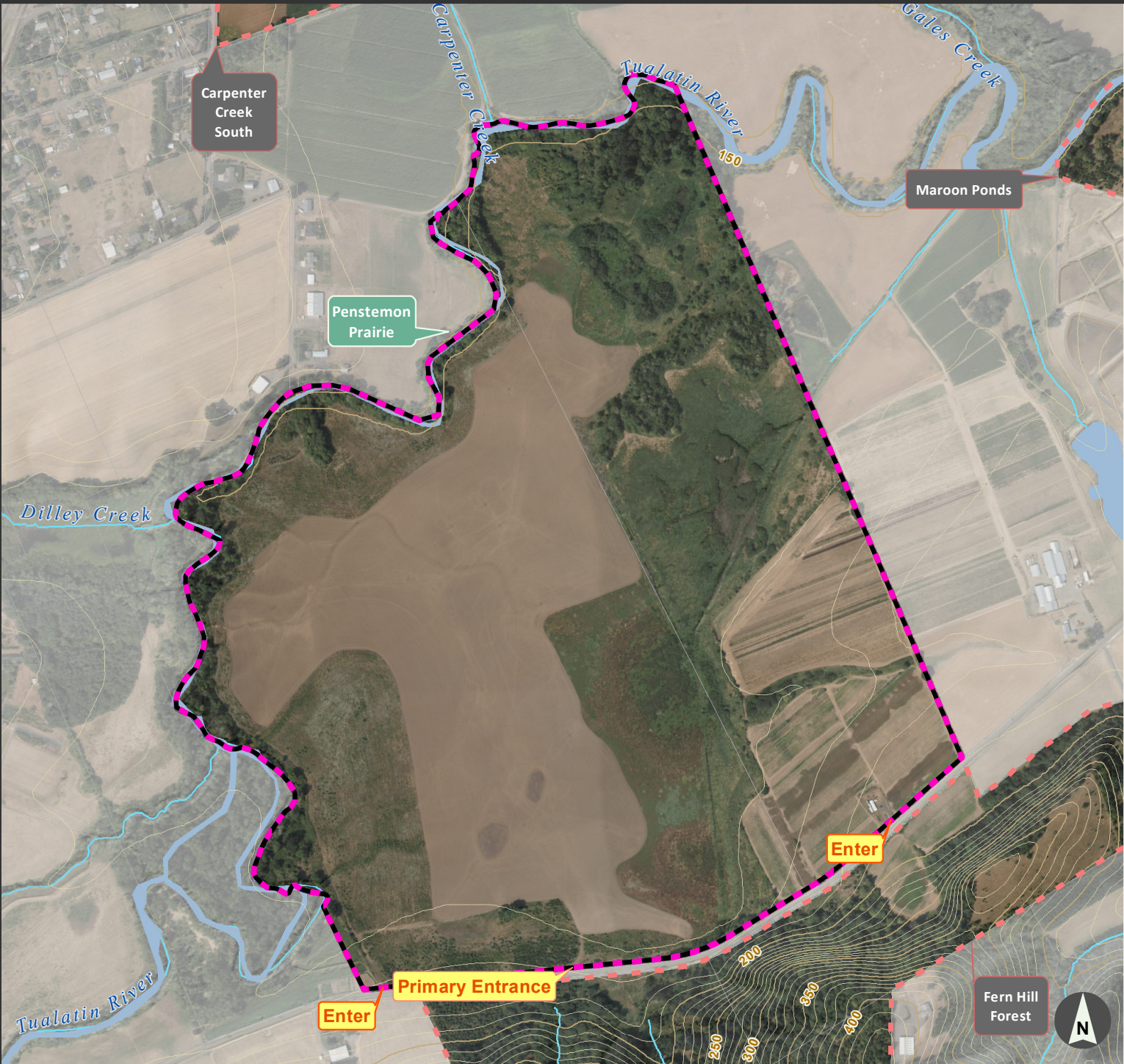
Vicinity map



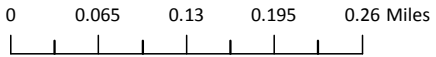
-  **Featured site**
-  **Other Metro sites**
-  **Parks and/or Natural Areas**



Site map



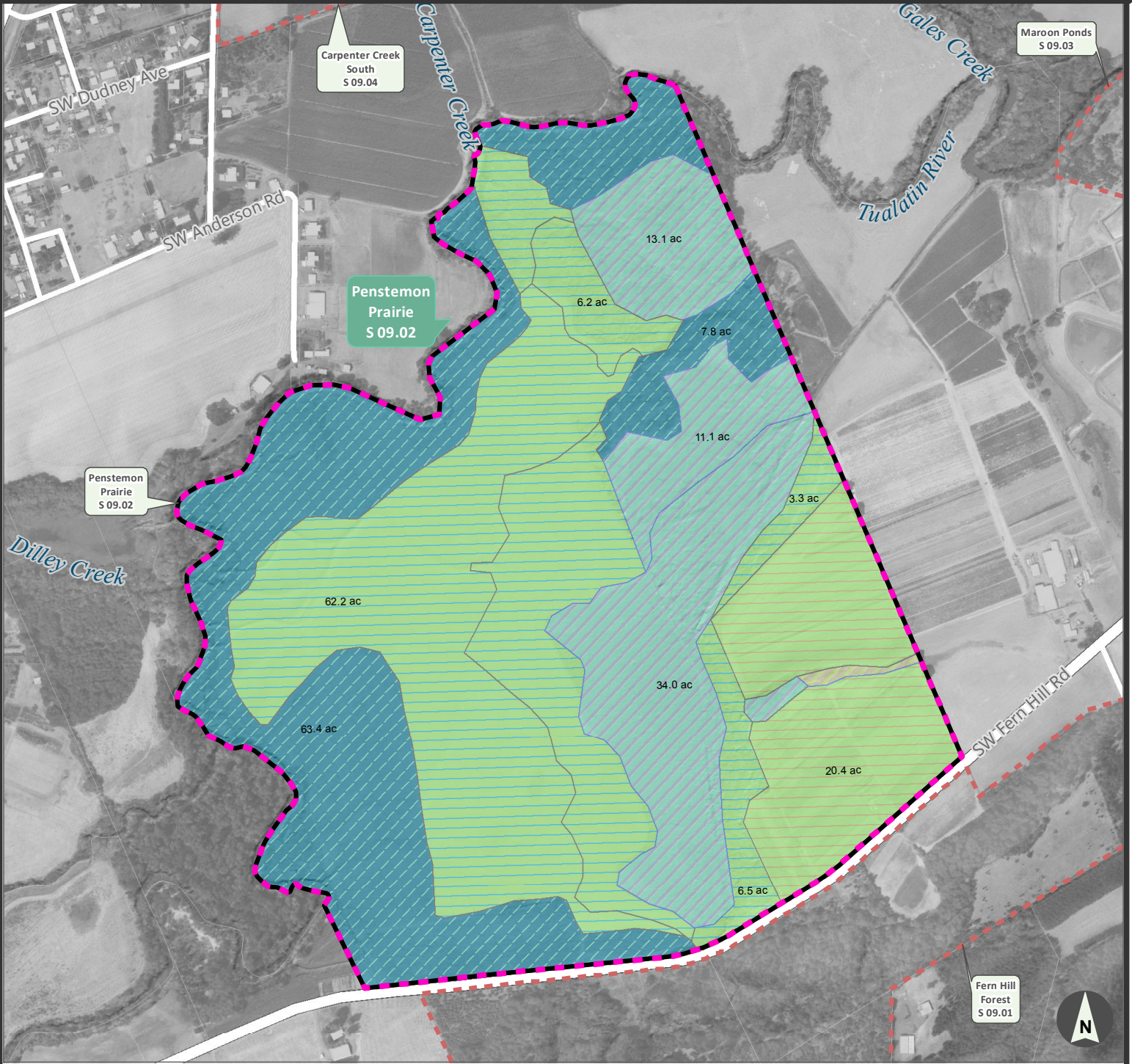
- Featured site
- other Metro managed site
- 10 ft contour
- 50 ft contour



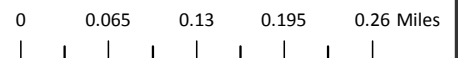
Penstemon Prairie



Current cover map



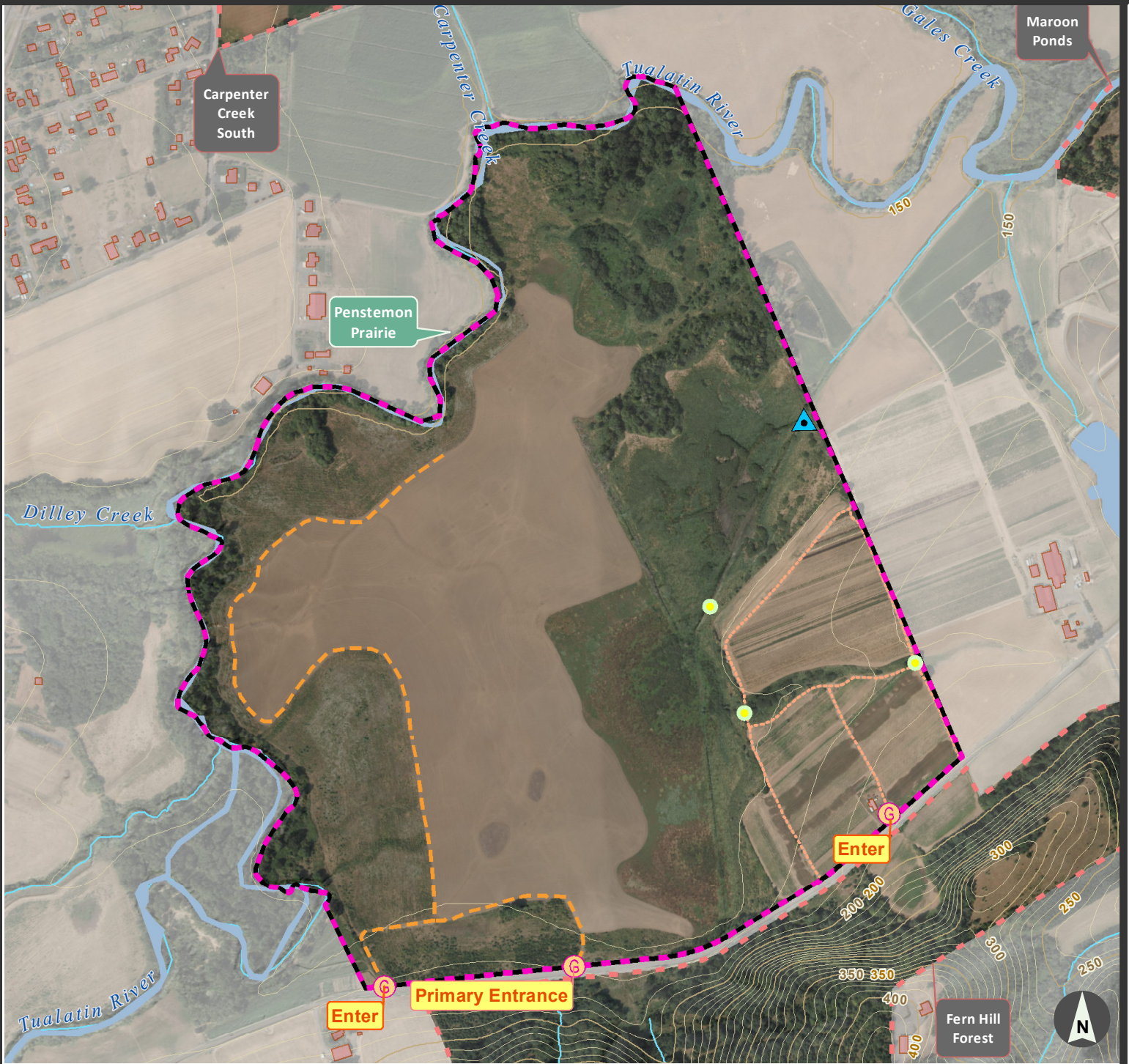
- Penstemon Prairie site
- Other Metro managed site (4)
- Prairie - (dry)
- Prairie - (wet)
- Riparian forest
- Wetland - emergent
- Wetland - shrub



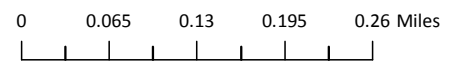
Penstemon Prairie



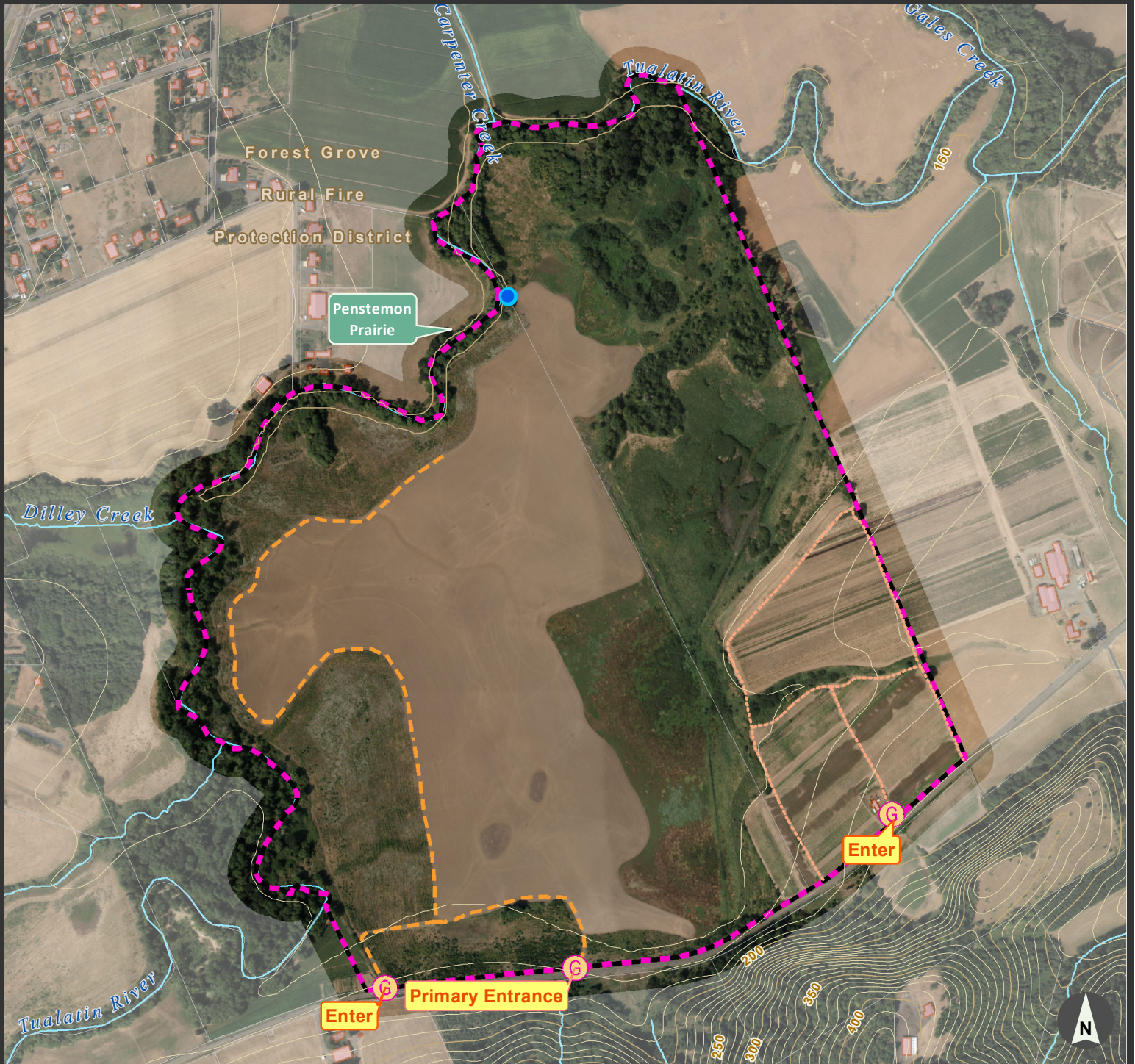
Site infrastructure map



- Featured site
- other Metro site Labels
- Road network on site
- other (unmaintained or historic)
- 4x4 / Dry Season
- G gate (3)
- culvert (3)
- ▲ water control structure (1)
- structures (RLIS)



Penstemon Prairie



Featured site

Roads

other (unmaintained or historic)

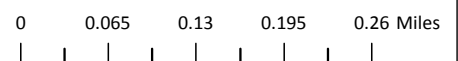
4x4 / Dry Season

Gates

potential water source

Structures

Fire districts

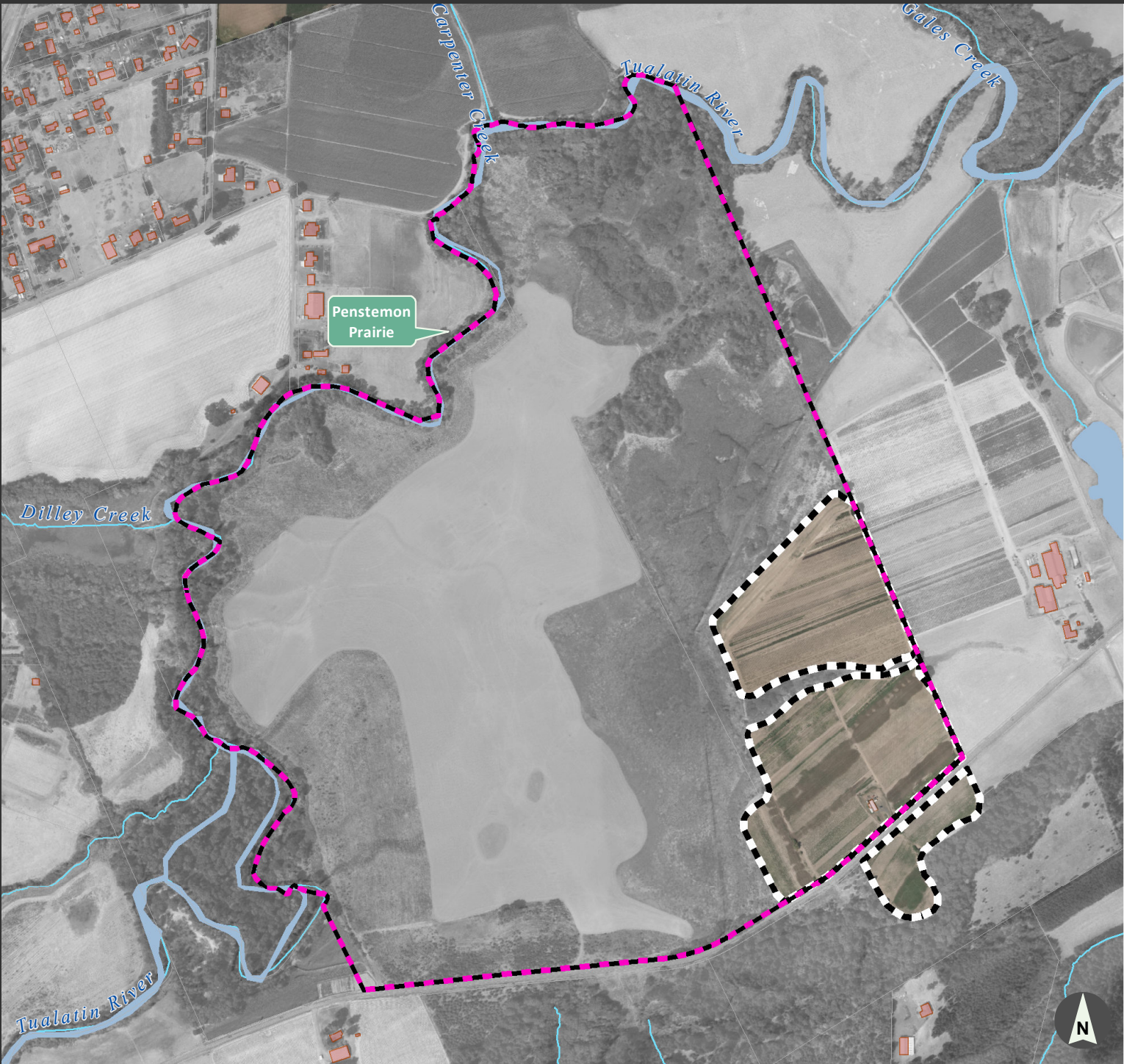


primary entrance for Penstemon Prairie: 5420 SW Fern Hill Rd, Forest Grove, OR 97116

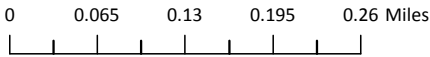
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Agricultural lease map



- Featured site
- Agricultural Lease
- structures (RLIS buildings)



Penstemon Prairie

APPENDIX A

PENSTEMON PRAIRIE

Conservation Target Summary Table for Penstemon Prairie - summary of conservation target key ecological attributes (KEAs), significant threats, and long term goals and strategic restoration actions. The priority assignment refers to the habitat(s) in most immediate need of attention.

CONSERVATION TARGET	KEY ECOLOGICAL ATTRIBUTES (KEAs)	SIGNIFICANT THREATS	KEAs OUTSIDE NORMAL RANGE	LONG TERM GOALS	STRATEGIC RESTORATION AND STEWARDSHIP ACTIONS	PRIORITY
Emergent wetland	Native wetland plant cover in emergent area	Invasive plants	<75% native wetland plant cover	Maintained diversity of native plants and reduced cover of exotics with continued dominant cover by native plants.	Ongoing weed control: monitoring followed by active management and control, developing plant lists and procuring materials to plant areas where invasive plant control occurs.	High
	Hydrology	Climate change, water management upstream	Altered hydrology	Hydroperiod of the site is characterized by natural patterns of filling or inundation and drying or drawdown.	Water level management.	Low
Wet/mesic prairie	Grassland bird habitat	Woody plant encroachment	Insufficient number of potential male meadowlark territories (8 ha, or 20 ac)	Mosaic of plant cover including short native grasses and sedges, and wildflowers providing habitat for pollinators, grassland birds and other wildlife.	Ongoing woody plant control: monitoring followed by active management and control, developing plant lists and procuring materials to plant areas where invasive plant control occurs.	Low
	Native grass and forb richness	Invasive plants	Reduced native species richness	Much-reduced cover of exotic plants.	Ongoing weed control.	High
	Native grass and forb abundance	Invasive plants	Low frequency of native herbaceous species in (11 sq ft) quadrats	Much-reduced cover of exotic plants.	Ongoing weed control.	High
	Native grass and forb percent cover	Invasive plants	Low percent cover native forbs & grasses	Much-reduced cover of exotic plants.	Ongoing weed control.	High
Riparian forest	Native tree and shrub richness	Prior land use	>15 native tree and shrub species per acre	Mature mix of native trees and shrubs providing food and shelter for a variety of wildlife.	Planting and maintenance.	Low
	Riparian habitat continuity	Climate change, prior land use	>1 gap in riparian vegetation	Providing shade for temperature management of the river.	Planting and maintenance.	Low
	Standing and downed dead trees	Prior land use	≤11 snags and ≤10% down wood	Recruiting downed wood into the adjacent river.	Planting and maintenance.	Medium
	Floodwater access to floodplain	Prior land use, water management upstream	Loss of floodwater access to floodplain	Floodplain connected to river.	Bank stabilization.	Medium
Shrub wetland	Native shrub richness	Invasive plants	≤5 native shrub species per acre	Well-established thickets of shrubs that provide food and shelter for a robust diversity of wildlife.	Shrub planting and maintenance to control competition from invasive plants.	Medium
	Vegetative structure: shrub layer	Invasive plants	<70% native shrub cover	Invasive plant coverage at a minimum.	Shrub maintenance to control competition from invasive plants.	Medium
	Vegetative structure: tree layer	Climate change, water management upstream	>10% tree cover	Maintain a shrub wetland with few trees.	Selective control of Oregon ash may be necessary if natural recruitment is too high.	Low

APPENDIX B-1

PENSTEMON PRAIRIE SUMMARY OF STEWARDSHIP ACTIONS

Stewardship actions planned for the next five to ten years at Penstemon Prairie.

(Estimated costs and potential additional actions that could take place, depending on time and resources, are in Appendix B-2)

PROJECT TYPE	DESCRIPTION	TIMING/FREQUENCY	COMPLETED BY
MONITORING			
Vegetation Monitoring – Plantings	Monitor prairie and bare root planting areas for mortality and competition from invasive weeds.	2x per year	Metro Scientist/ Technician/CWS
Vegetation Monitoring – Invasive Weeds	Monitor site for EDRR and other high priority invasive weeds.	4x per year	Metro Scientist/ Technician/CWS
Vegetation Monitoring – Rare Plants	Monitor areas with remnant and planted populations of <i>Sidalcea nelsoniana</i> and <i>Penstemon hesperius</i> .	2x per year	Metro Scientist
Other Monitoring – Site Walk	Walk the site to detect boundary encroachments, infrastructure issues, or other issues.	4x per year	Metro Technician
VEGETATION MANAGEMENT			
Planting – Tree and Shrub	Interplant tree and shrub areas as needed where mortality was high.	1x per year	CWS
Planting – Tree and Shrub	Maintain plantings with invasive treatments and release sprays as needed.	2x per year	CWS
Invasive Weed Control	Control high priority invasive weeds such as <i>Lythrum salicaria</i> and <i>Solanum carolinense</i> . Also control lower priority invasive weeds that threaten to invade the prairie.	2x per year	Metro Scientist/ Technician/CWS
Invasive Weed Control	Mow and/or treat the reed canary grass surrounding the remnant populations of <i>Sidalcea nelsoniana</i> and <i>Penstemon hesperius</i> .	2x per year	Metro Technician
ACCESS AND INFRASTRUCTURE			
Gate	Maintain access gates and monitor for illegal dumping.	1x per year	Metro Technician
Culverts	Inspect and clean culverts as needed.	As needed	Metro Technician
WATER RESOURCES			
Water Control Structure	Inspect and maintain the water control structure as needed.	As needed	Metro Technician
WILDLIFE HABITAT			
Terrestrial Wildlife Habitat – General	Remove trees from shrub unit near the prairie.	As needed	CWS

APPENDIX B-2

PENSTEMON PRAIRIE BUDGET TABLE

10-year budget for stewardship actions

UNIT/AREA	MAINTENANCE CATEGORY	PROJECT TYPE	DESCRIPTION OF TASKS	HABITAT TYPE OR CONSERVATION TARGET	FREQUENCY	PRIORITY	COST BY FISCAL YEAR									
							FY16/17	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26
Edge of prairie	Vegetation Management	Invasive Weed Control	Mow buffer along prairie edge	Prairie	Annually	H	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200
Prairie	Vegetation Management	Invasive Weed Control	Spot spray Solanum carolinense	Prairie /Emergent wetland	Annually	H	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200	\$2,200
Prairie/Emergent wetland	Vegetation Management	Invasive Weed Control	Targeted spot treatments of weeds	Prairie /Emergent wetland	Annually	H	\$0	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Emergent wetland	Vegetation Management	Invasive Weed Control	Mow emergent wetland, treat encroaching woody vegetation	Emergent wetland	Bi-annually	H	\$5,000	\$0	\$5,000	\$0	\$5,000	\$0	\$5,000	\$0	\$5,000	\$0
Totals							\$9,400	\$4,400	\$24,400	\$19,400	\$24,400	\$19,400	\$24,400	\$19,400	\$24,400	\$19,400

APPENDIX C

PENSTEMON PRAIRIE INVASIVE SPECIES

The table below summarizes a preliminary list of invasive plants requiring control in all or parts of Penstemon Prairie, including focus areas and timing for control. Invasive species, with the exception of Early Detection Rapid Response (EDRR) species, will be controlled as part of restoration projects or ongoing management of habitat areas. A list of noxious weeds for Oregon, including descriptions and photos, can be found at:

www.oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml.

Working list of priority non-native species for control at Penstemon Prairie (EDRR species are bolded in red)

GENUS	SPECIES	COMMON NAME	FOCUS AREA FOR DETECTION/CONTROL	CONTROL TIMING
<i>Ailanthus</i>	<i>altissima</i>	Tree of heaven	All	Fall
<i>Alopecurus</i>	<i>geniculatus</i>	Meadow foxtail	Prairie	Spring
<i>Arrhenatherum</i>	<i>elatius</i>	Tall oatgrass	Prairie	Spring
<i>Brassica</i>	<i>nigra</i>	Black mustard	Prairie	Spring
<i>Cirsium</i>	<i>arvense</i>	Canada thistle	Prairie	Spring
<i>Cirsium</i>	<i>vulgare</i>	Bull thistle	All	Spring/Fall
<i>Conium</i>	<i>maculatum</i>	Poison hemlock	Prairie	Spring
<i>Convolvulus</i>	<i>arvensis</i>	Field bindweed	Prairie	Spring
<i>Crataegus</i>	<i>spp</i>	Common hawthorn	Prairie	Fall
<i>Cyperus</i>	<i>esulentus</i>	Yellow nutsedge	Prairie	Spring/Summer
<i>Daucus</i>	<i>carota</i>	Wild carrot	Prairie	Spring/Summer
<i>Dipsacus</i>	<i>fullonum</i>	Teasel	All	Spring
<i>Hedera</i>	<i>helix</i>	English ivy	All	Winter
<i>Kickxia</i>	<i>elatine</i>	Fluvel	Prairie	Spring/Summer
<i>Linaria</i>	<i>vulgaris</i>	Butter and eggs	All	Spring
<i>Lolium</i>	<i>multiflorum</i>	Annual Ryegrass	Prairie	Spring
<i>Lythrum</i>	<i>salicaria</i>	Purple loosestrife	Emergent Wetland	Summer
<i>Mentha</i>	<i>pulegium</i>	Pennyroyal	Prairie, Emergent Wetland	Spring/Summer
<i>Phalaris</i>	<i>arundinacea</i>	Reed canarygrass	Emergent Wetland, Prairie	Spring/Summer/Fall
<i>Prunus</i>	<i>avium</i>	Cherry	Riparian Forest	Fall
<i>Raphanus</i>	<i>sativa</i>	Wild radish	Prairie	Spring/Summer
<i>Rosa</i>	<i>multiflora</i>	Rose	Riparian Forest	Fall
<i>Rubus</i>	<i>bifrons</i>	Himalayan blackberry	Riparian Forest	Fall
<i>Rumex</i>	<i>crispus</i>	Curly dock	Prairie	Spring/Summer
<i>Senecio</i>	<i>jacobaea</i>	Tansy ragwort	All	Summer

GENUS	SPECIES	COMMON NAME	FOCUS AREA FOR DETECTION/CONTROL	CONTROL TIMING
<i>Solanum</i>	<i>carolinense</i>	Carolina horsenettle	Prairie, Emergent Wetland	Summer
<i>Solanum</i>	<i>dulcamara</i>	Bittersweet nightshade	All	Spring
<i>Verbascum</i>	<i>blattaria</i>	Moth mullein	Prairie	Spring

Metro | *Incident Action Plan*

APPENDIX D

PENSTEMON PRAIRIE

Address/access points

Address: 5420 SW Fern Hill Rd., Forest Grove, OR 97116

Secondary Address: 5600 SW Fern Hill Rd., Forest Grove, OR 97116

Primary Gate (with road access): Latitude: 45.478375; Longitude: -123.110949

Secondary Access 1 (park and walk access): Latitude: 45.480540; Longitude: -123.104345

Secondary Access 2 (very rough grass road access): Latitude: 45.478094; Longitude: -123.114858

Location

TS3 RW1 S8, Washington County, Gales Creek Target Area

Acreage

254.83

Structures

Water control structure – located along the eastern boundary of the property, but currently not operational.

Although not owned by Metro, there are a few temporary structures (boxcar and tent covers) belonging to and maintained by one of the lessee farmers – located in the agricultural lease area in the southeastern corner of the property.

Water sources and staging areas

Water can be sourced from the Tualatin River on the north end of the property (Latitude: 45.2917; Longitude: 123.6449) and possibly from the on-site farm at 5600 SW Fern Hill Rd., Forest Grove, OR 97116.

Sensitive habitat

Penstemon Prairie has sensitive areas that should not be disturbed due to rare plant populations. The areas are in the center of the prairie and to the east of the main prairie. Use road along the west edge of the field for access – do not drive through the center of the prairie. Please see IAP map (Map 5) for details.

Contact information*

Metro Conservation Program

503-964-2386 (cell)

Justin Takkunen, Natural Areas Land Manager

971-284-3461 (cell)

Mary Meier, Natural Resource Technician

503-348-5424 (cell)

Elaine Stewart, Natural Resource Scientist

971-344-2207 (cell)

Yuxing Zheng, Communications Coordinator

Sheriff/police department

911

Emergency

503-629-0111

Forest Grove Police Department
2102 Pacific Avenue
Forest Grove, OR 97116

Local fire department

503-629-0111

Forest Grove Fire Department
1919 Ash Street
Forest Grove, OR 97116

Tenants

503-985-7316

Hally and Mary Kean Haworth

503-348-4644

Agricultural lease

Mailing Address:

7845 SW Springhill Road, Gaston, OR 97119

No contact information on file

Manuel Sosa
Sub-Agricultural lease

**Please see Terramet for most up to date contact information.*