SITE STEWARDSHIP PLAN

Fern Hill Forest



October 2016



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FERN HILL FOREST PROPERTY INFORMATION

LOCATION

Address: 41505 SW Sandstrom Rd, Gaston, OR 97119

County: Washington

Number of acres: 262

Metro File no.: 09.01

Table 1: Metro natural area bond purchased land for Fern Hill Forest

PROPERTY NAME	FILE NO.	BOND YEAR	DATE ACQUIRED	MANAGEMENT	ACRES
Lynscot	50.006	2006	2/06/2012	Metro	152.49
Sandstrom Trust	48.005	2006	11/15/2012	Metro	40.00
Lovejoy Center*	09.019	1995	4/16/1999	Metro	69.51
	09.022		3/24/2000		

*Only the southern portions, on the south side of Fern Hill Road, of the two Lovejoy Center properties are included in the Fern Hill Forest site. The remainders of these properties are a part of the Penstemon Prairie site.

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 for OR-217 N
- Take exit 10 for OR-210 W/SW 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
- Slight 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
- Turn left onto SW Spring Hill Rd
- Turn left onto SW Sandstrom Rd

See Map 1 for details.

SECTION 1: INTRODUCTION

1.1 CONTEXT

Fern Hill Forest, located three miles south of Forest Grove, Oregon, is a 262-acre natural area in the upper portion of the Tualatin River Watershed in Washington County. The natural area extends from SW Fern Hill Road south to SW Sandstrom Road, lying east of Spring Hill Road and the Tualatin River (Map 2). It includes the peak of Fern Hill, which is one of the points of recognition along the northwestern Chehalem Mountains, and the site is an important connection between the Chehalem Ridge and the Wapato Valley.

Fern Hill Forest is ringed with rural residential, timber and agricultural land uses, with few remaining open spaces to provide a variety of habitat types. Along with a maintained hazelnut orchard occupying the hilltop area, two small intermittent streams originate within the site, providing seasonal habitat for amphibians, mammals and a resource for migrating birds. Conservation of the forested area will prevent erosion and protect water quality. Further, Willamette Valley oak habitat has declined significantly since the beginning of fire suppression and Fern Hill Forest provides opportunities for restoring oak woodland habitat and the variety of species they support.

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 revised to document strategic implementation and reflect on lessons learned through adaptive management. SCPs provide guidance for short- and long-term stewardship actions 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 facilitate thoughtful decisions using available resources. SSPs are primarily an internal working document and address vegetation management, such as invasive species control, and infrastructure maintenance for items such as fences, gates, and 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 at Fern Hill Forest include:

• Invasive species control

- Illegal dumping
- Fire safety
- Overstocking of trees leading to forest decline
- Douglas-fir and big leaf maple encroachment on Oregon white oak
- Hydrologic impacts, agricultural runoff and soil erosion from one of the agricultural lease areas on site (see Section 6.5 for lease details)

SECTION 2: CONSERVATION TARGETS AND DESIRED FUTURE CONDITIONS

2.1 MAJOR HABITAT TYPES

Historically, the area around Fern Hill Forest was mapped primarily as Oak savanna, Douglas fir forest, and Oak-Douglas fir mixed woodland. Due to the coarseness of pre-settlement mapping, riparian areas are not represented in the historic mapping.

Currently, Fern Hill Forest can be characterized by natural habitat types including riparian forest, upland forest, and oak woodland (Table 2; Map 3). In addition, approximately 88 acres of the site are under agricultural lease and are hazelnut trees. More detailed descriptions are available in the SCP.

Table 2: Major habitat types at Fern Hill Forest

Agriculture 88	.40
Riparian forest 8	.50
Upland forest – mixed 110	.00
Upland forest – coniferous 19	.70
Upland forest – deciduous 5	.60
Woodland – oak 10	.60
Woodland – other 19	.20

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 Fern Hill Forest are:

- Riparian forest
- Upland forest
- Oak woodland

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 Fern Hill Forest 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 five to ten years.

2.3 SPECIAL OR SENSITIVE HABITAT

Sensitive areas at Fern Hill Forest include the existing oak habitat along the ridge on the east side of the property and the wetland and riparian areas along the newly constructed channels.

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.

It is important to note that at the time this SSP was written, much of the Fern Hill Forest site was in stabilization with approximately a year or less left in this phase, and therefore, the stewardship actions outlined here are mainly associated with a stabilization budget. For additional information on stabilization at Fern Hill Forest, please refer to the Lynscot and Sandstrom Stabilization Plans found in the Acquisition Documents section of their property pages in Terramet.

3.1 SITE MONITORING

Monitoring at the Fern Hill Forest 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.

For this Stewardship Plan monitoring actions may include:

- Regular site walks to identify issues such as illegal access and inappropriate public use
- Visual estimates of success of planting units and vegetation management actions
- Vegetation monitoring for invasive weeds
- Early detection and rapid response (EDRR) surveys
- General monitoring for infrastructure issues on site

3.2 VEGETATION MANAGEMENT

Key vegetation management actions for the next five to ten years at Fern Hill Forest relate primarily to the following stabilization efforts:

- Invasive weed control
- Interplanting
- Fuel reduction
- Mowing
- Forest thinning

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 Fern Hill Forest.

Key access and infrastructure actions at Fern Hill Forest are:

- Maintaining roads
- Maintaining culverts
- Maintaining well and pump house
- Maintaining fence along Fern Hill Road
- Maintaining pole barn on site (shared use with lessee farmer)
- Managing agriculture lease and rental properties on site

3.4 WATER RESOURCES

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

At Fern Hill Forest, ongoing channel erosion is a concern due to elevated peak flows caused by the extensive drain tile network in the hazelnut orchard and to the steep slopes in the site's two drainages. Additional wood added to the south drainage in 2016 was intended to address incision caused during record rainfall events in 2015. Additional riparian planting in 2017 will help ensure establishment of stable channel conditions. Ongoing monitoring of channel conditions by Science staff will help identify any localized erosion issues and additional maintenance actions may be

necessary until the native riparian vegetation establishes adequate rooting to support the bed and banks.

Key water resources actions at Fern Hill Forest are:

• Maintenance of stream infrastructure through monitoring and implementation of weed management and revegetation efforts

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.

There are no relevant key wildlife habitat actions at Fern Hill Forest.

SECTION 4: COORDINATION

This Site Stewardship Plan outlines strategic development and restoration actions to be carried out at Fern Hill Forest over the next five to ten years. These actions include natural resource, access, and infrastructure improvements that require implementation plans and communications between Land Management and Science staff about long term stewardship costs. 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

• One of the farmers at Fern Hill Forest is currently deciding whether or not to continue with their operations due to stressed hazelnut trees. If the farm lease is terminated by the lessee before the 2023 reassessment date, further stabilization and restoration work may need to be implemented. This would require further planning and coordination among Metro scientists, planners, technicians and management.

Current and potential partners

- Tualatin Soil and Water Conservation District (TSWCD): Metro is currently working with TSWCD to develop a farm conservation plan for the farm area leased to Manuel Sosa. The possible outcome of this process could be improved field irrigation and restoration of the steepest portion of the farm field to Oak woodland.
- Washington County: Washington County plans to replace the culverts under Sandstrom and Spring Hill Roads in June 2017. Metro may contribute financially towards the Sandstrom culvert, as it was not scheduled for replacement in the near term but is undersized for the observed flows in the creek. Replacing this culvert would also tie the channel bed elevation at Fern Hill Forest to the proposed elevation at Spring Hill Natural Area.

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 Fern Hill Forest, 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.

However, after discussion, staff determined that volunteer opportunities for this site are not appropriate due to it being in stabilization. This could be revisited at a later date.

SECTION 6: SITE MANAGEMENT

Metro's management of Fern Hill Forest 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 RESPONSE PLAN

A fire incident action plan has been developed for this site (Appendix D, Map 5).

6.2 PUBLIC ACCESS

Currently there is no use of Fern Hill Forest by the public.

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 in Terramet in the Site Documents section of the Fern Hill Forest Docs & Agreements page or on the M drive (M:\PN\Teams\Visitor Services\SUP). However, as of the date of this document, Fern Hill Forest has no SUPs.

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:

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

Lynscot (50.006)

• 1979 electric powerline easement to PGE for a 16 foot strip of land through the Easterly Southeast portion of the property (Utilities Easement No. 79-049952).

Sandstrom Trust (48.005)

• None.

Lovejoy Center (09.019 & 09.022)

• Only the southern portions of the two Lovejoy Center properties on the south side of Fern Hill Road are included in the Fern Hill Forest site. The remainders of these properties are a part of the Penstemon Prairie site, so please see section 6.4 of that SSP for details on any deed restrictions, easements and other site agreements for these properties.

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 (Lynscot – 50.006, Sandstrom Trust – 48.005, and portions of 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 include:

Residential

• Lynscot residential lease at 41505 SW Sandstrom Rd, Gaston, OR 97119 to Andy & Debbie Heathershaw (contract #931636, Map 6) effective 10/1/2012 and renewing automatically in perpetuity unless notice is given.

Agricultural

- Ten year Lynscot agriculture lease of approximately 100 acres for hazelnut orchard to Firestone Farms (contract #932448, Map 7) effective 1/1/2014. Lessee has the right to terminate the lease early if they decide not to continue with their operations due to stressed hazelnut trees.
- The southern portion of the Lovejoy Center agricultural lease of 45 acres to Hally and Mary Haworth (contract #921659, Map 8) falls on the south side of Fern Hill Road in Fern Hill Forest rather than in Penstemon Prairie where the majority of the lease is located. A portion of this

lease is subleased to Manuel Sosa. The lease was effective as of 10/1/1999 and renews automatically in perpetuity unless notice is given by September 1st.

For more detailed information on any of the above leases, please refer to the Agreements section of the Terramet site page for Fern Hill Forest 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 Residential Lease
- Map 7 Lynscot agricultural Lease
- Map 8 Lovejoy Center 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



Parks and/or Natural Areas



Site Stewardship Plan

Site map







0.21

0.28 Miles

Wilsonville

0.14

0.07

0

Current cover map





Upland forest - coniferous

Upland forest - deciduous

Woodland - other

0 0.07 0.14 0.21 0.28 Miles

Fern <u>Hill Forest</u>

Site Stewardship Plan

Site infrastructure map



Fire Incident Action Plan

primary entrance: 41505 SW Sandstrom Rd., Gaston, OR 97119





Fern Hill Forest

Metro Parks & Nature - map date: 10/13/2016

Residential lease area map 41505 SW Sandstrom Rd. Gaston, OR 97119

Site Stewardship Plan





Site Stewardship Plan

Agricultural lease map

n Metro



Site Stewardship Plan

Agricultural lease map





APPENDIX A

FERN HILL FOREST

Conservation Target Summary Table for Fern Hill Forest - 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	KEY ECOLOGICAL ATTRIBUTES					
TARGET	(KEAs)	SIGNIFICANT THREATS	KEAs OUTSIDE NORMAL RANGE	LONG TERM GOALS	STRATEGIC RESTORATION AND STEWARDSHIP ACTIONS	PRIORITY
Riparian forest – South Drainage	Riparian forest width	Development, land conversion	<15 m (50 ft) each side of stream	The desired riparian width is 50 to 100 feet given the surrounding steep slopes and narrow valley.	Vegetation enhancement and reforestation, maintenance of previous plantings. Riparian revegetation was initiated in 2016 and will continue for several years.	Medium
	Vegetative structure: tree and shrub layer	Invasive species	<10% cover	>50% cover	Planting and maintenance, ongoing weed control. Riparian revegetation was initiated in 2016 and will continue for several years.	High
	Floodwater access to the floodplain	Development, land conversion	Extensively disconnected	Minimally disconnected or better	Daylighting the stream channel, aggrading the channel, and establishing healthy riparian forest to restore floodplain connectivity. Channel work was completed in 2015, but erosion caused by severe rainfall in December 2015 required installation of additional wood in 2016. Channel stability can be expected to increase as willows and other species establish in and adjacent to the channel.	High
Riparian forest – North Drainage	Vegetative structure: shrub layer	Invasive species	Varies throughout this area from 10% to ~50% cover	>50% cover	Planting and maintenance, ongoing weed control. Riparian revegetation was initiated in 2016 and will continue for several years. Plant mortality was high and extensive interplanting will be required in 2017.	Low in upper reach High in lower reach
	Vegetative structure: tree layer	Invasive species	Varies throughout this area from 0% to 50% or more cover. Eastside is sparser.	>40% cover	Planting and maintenance, ongoing weed control. Riparian revegetation was initiated in 2016 and will continue for several years. Plant mortality was high and extensive interplanting will be required in 2017.	Low in upper reach High in lower reach
	Standing and down dead wood	Previous land management, land conversion	<11 snags and 5-10% down wood	Adequate amount and size of snags and down wood (≥12 snags, ≥10% down wood)	Down wood placed along drainage, visual monitoring. Down wood was added in the lower reach in 2015 and is now adequate.	High
	Floodwater access to the floodplain	Development, land conversion	Moderately or minimally disconnected	Minimally disconnected or better	Adding wood to the channel in the upper reach, daylighting the stream in the lower reach, and establishing healthy riparian forest to improve floodplain connectivity. Channel work was completed in 2015, but erosion caused by severe rainfall in December 2015 required modifications in 2016. Channel stability can be expected to increase as willows and other species establish in and adjacent to the channel.	High
Upland forest	Vegetative structure: native tree and shrub layer	Previous land management	50-75% canopy and shrub cover in upland mixed forest <25% shrub cover in Douglas fir grove	≥75% cover, healthy native shrub layer	Planting and maintenance, ongoing weed control. Efforts should focus on filling gaps in areas with low woody plant density.	High
	Mature trees	Previous land management	Mature trees lacking	Adequate number of mature trees (≥3 per acre)	Thinning of Douglas fir stand to promote larger trees, recruitment of native trees, maintain individual and small clumps of Oregon white oak embedded in the mixed Douglas-fir upland forest.	High
	Standing and down dead trees	Previous land management	<5 snags and <5% down wood	Adequate amount and size of snags and down wood (≥12 snags, ≥10% down wood)	Down wood placed and brush piles left in forest to increase habitat complexity and value.	Low
Oak woodland	Vegetation structure	Development, land conversion, invasive species	Woody vegetation is encroaching, native canopy cover is <60% at least half of the target area	Oak-dominated woodland with 30-30% cover with limited encroachment by Douglas firs and other species.	Ongoing weed control, maintenance of oaks from competing vegetation, prepare work plan to convert hazelnut orchard to oak woodland. Revegetation of non-hazelnut areas was initiated in 2016 and will continue for several years.	Low for hazelnut orchard High for rest of habitat area
	Native grass and forb abundance	Previous land management, invasive species	<20% of total herbaceous cover	30-50% of total herbaceous cover	Ongoing weed control, determine feasibility of reestablishing native forbs and grasses. Seeding should be delayed until shrubs are well established and non-native grass cover is in decline.	Low

APPENDIX B-1

FERN HILL FOREST SUMMARY OF STEWARDSHIP ACTIONS

Stewardship actions planned for the next five to ten years at Fern Hill Forest.

(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 for plant mortality in February 2016 planting units	Spring 2017 and 2018	NRT/NRS	
Vegetation monitoring – invasive weeds	Walk site and monitor for priority invasive plants	Twice a year or as needed	NRT/NRS	
Other monitoring – site walk	Monitor for farm encroachments and equestrian trespass	Twice a year or as needed	NRT/NRS	
Other monitoring – site walk	Inspect infrastructure: gates, shop, road, culverts, etc	Once a year	NRT/NRS	
	VEGETATION MANAGEMENT	•	•	
Planting – tree and shrub	Interplant 2016 and 2017 planting units as needed	Winter (January/February)	Contractor	
Planting – tree and shrub	Seedling release (circle/line spray) on 2016 and 2017 plantings	Spring (2017-2020) until plants are free to grow	Contractor	
Invasive weed control Maintenance – treat priority invasive weeds		Every two years or as needed	Contractor	
Fuel reduction/ mowing	Mow in between rows only if site becomes a fire risk	As needed	Contractor	
Forest thinning	Forest thinning Thin Douglas fir to promote larger trees and release Oregon white oak and madrone		Contractor	
	ACCESS AND INFRASTRUCTURE			
Road	Treat road vegetation	Spring and fall as needed	NRT/NRS/Contractor	
Culverts	Inspect/Clean	As needed	NRT/NRS	
Fence Maintain fence off of Fern Hill Road and repair if necessary		As needed	NRT/NRS	
	WATER RESOURCES	1	1	
N/A				
	WILDLIFE HABITAT	I	Ι	
N/A				

APPENDIX B-2

FERN HILL FOREST BUDGET TABLE

10-year budget for stewardship actions

UNIT/AREA	MAINTENANCE CATEGORY	PROJECT TYPE DESCRIPTION OF TAS	DESCRIPTION OF TASKS HABITAT TYPE OR CONSERVATION TARGET FREQUE	HABITAT TYPE OR CONSERVATION TARGET	HABITAT TYPE OR CONSERVATION TARGET	HABITAT TYPE OR CONSERVATION TARGET	FREQUENCY	PRIORITY					COST BY F	SCAL YEAR				
							FY16/17	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26		
2016-2017 planting units	Vegetation Management	Planting - tree and shrub	Interplant and circle sprays	Oak woodland and riparian	Planting - winter 2017 Circle sprays - spring	High	\$7,500	\$3,000	\$3,000	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0		
Site wide (exluding ag lease)	Vegetation Management	Invasive weed control	Maintenance - Spring/Fall weed treatments	Site wide	Every two years or as needed	Med	\$6,000	\$0	\$0	\$6,000	\$0	\$0	\$6,000	\$0	\$0	\$6,000		
Planting units	Vegetation Management	Fuels reduction	Mow in between rows if necessary	Oak woodland and riparian	As needed - late spring/early summer	Med	\$0	\$6,000	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Upland forest	Vegetation Management	Forest thinning	Thin Douglas fir to promote larger trees and release Oregon white oak and madrone	Upland forest/oak woodland	As needed	Med	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000		
Access road	Access and infrastructure	Road	Treat road vegetation as necessary	N/A	As needed - spring/fall	Low	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000		
Totals							\$14,500	\$10,000	\$20,000	\$10,000	\$1,000	\$1,000	\$7,000	\$1,000	\$1,000	\$17,000		

APPENDIX C

FERN HILL FOREST INVASIVE SPECIES

The table below summarizes a preliminary list of invasive plants requiring control in all or parts of Fern Hill Forest, 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.

			FOCUS AREA FOR	
GENUS	SPECIES	COMMON NAME	DETECTION/CONTROL	CONTROL TIMING
Bambuseae	spp	Bamboo	All	Fall
Cirsium	spp	Nonnative thistle	Oak Woodland	Spring/Fall
Conium	maculatum	Poison hemlock	Oak Woodland	Spring
Crataegus	ssp	Nonnative hawthorn	All	Fall
Cytisus	scoparius	Scotch broom	All	Spring/Fall
Dipsacus	fullonum	Teasel	Oak woodland	Spring/Fall
Geranium	lucidum	Shiny leaf geranium	Oak woodland	Spring/Fall
Geranium	robertianum	Herb Robert	Oak Woodland	Spring/Fall
Hedera	helix	English ivy	All	Winter
Hypericum	perforatum	St John's wort	Oak Woodland	Spring
llex	aquifolium	Holly	All	Fall
Phalaris	arundinacea	Reed canarygrass	Riparian	Spring/Fall
Prunus	ssp	Nonnative cherry	All	Fall
Rubus	bifroni	Himalayan blackberry	All	Fall
Senecio	jacobaea	Tansy ragwort	Oak woodland	Spring/Fall
Silybum	marianum	Milk thistle	All	Spring/Fall
Vinca	ssp	Vinca major and minor	All	Winter

Working list of priority non-native species for control at Fern Hill Forest (EDRR species are bolded in red)

Monitor for common EDRR species annually



600 NE Grand Ave. Portland, OR 97232-2736 oregonmetro.gov

Incident Action Plan

APPENDIX D

FERN HILL FOREST

Address/access points

Primary Access (graveled road):

- 42475 SW Sandstrom Rd., Gaston, OR 97119
- Latitude: 45°28'01.29"N; Longitude: 123°06'52.19"W
- Gate Metro A lock with chain; No Knox box or fire district lock

Secondary Access 1 (graveled road):

- 41505 SW Sandstrom Rd., Gaston, OR 97119
- Latitude: 45°28'10.25"N; Longitude: 123°06'15.18"W
- Gate Metro A lock with chain; No Knox box or fire district lock

Secondary Access 2 (dirt road):

- No situs. Access just east of 41505 SW Sandstrom Rd., Gaston, OR 97119
- Latitude: 45°28'10.25"N; Longitude: 123°06'15.64"W
- Gate Metro B lock with chain; No Knox box or fire district lock

Secondary Access 3 (dirt road):

- No situs.
- Latitude: 45°28'46.64"N; Longitude: 123°06'19.98"W
- Gate Metro A lock; No Knox box or fire district lock

Additional Access: (no road):

- No situs.
- Latitude: 45°28'41.81"N; Longitude: 123°06'36.80"W
- No gate; Access point has 4 wire barbed wire fence

Location

Primary access and secondary access #1 & 2:

- T01S-R03W SECT19
- Secondary access #3 and additional access point:
- T01S-R03W SECT18

Acreage

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Structures

Residential rental house – located just inside the southern boundary of the property and east of the Lynscot agricultural lease area at 41505 SW Sandstrom Road.

Residential rental shed structure – located at the northern end of the residential lease area that is just inside the southern boundary of the property and east of the Lynscot agricultural lease area at 41505 SW Sandstrom Road.

Well and pump house – located just west of the middle of the Lynscot agricultural lease area at the end of the dirt/gravel road from Sandstrom Road that serves as the primary entrance.

Shop structure - located along the western boundrary of the property off of the dirt/gravel road in from Sandstrom Road that serves as the primary entrance.

Water sources and staging areas

Well and pump house (See above) Latitude: 45°28'17.92"N; Longitude: 123°06'45.26"W

Contact information*	
Metro Conservation Program	
Justin Takkunen, Natural Areas Land Manager	503-964-2386 (cell)
Ryan Jones, Natural Resource Specialist	503-964-0513 (cell)
Peter Guillozet, Natural Resource Scientist	971-284-5549 (cell)
Yuxing Zheng, Communications Coordinator	971-344-2207 (cell)
Sheriff/police department	
Emergency	911
Forest Grove Police Dept, non-emergency	503-629-0111
Gaston Police Dept, non-emergency	503-985-7521
Local fire department	
Forest Grove Fire & Rescue	503-629-0111
Gaston Rural Fire District Station #11	503-985-7575
Tenants	
Residential Lease	
Andy and Debbie Heathershaw	971-808-6299; 541-536-4409
41505 SW Sandstrom Rd, Gaston, OR 97119	
Agricultural Lease 1	
Firestone Farms	503-864-2672
Mailing Address:	
18400 N. Hwy. 99W, Dayton, OR 97114	

Agricultural Lease 2 Hally and Mary Kean Haworth Mailing Address: 7845 SW Springhill Road, Gaston, OR 97119

503-985-7316; 503-348-4644

Manuel Sosa Sub-Agricultural lease No contact information on file

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