BAKERS FERRY NATURAL AREA

Approvals for Site Stewardship Plan

Date first routed: December 13, 2018

Justin Takkunen

Signature  Date 10/16/19

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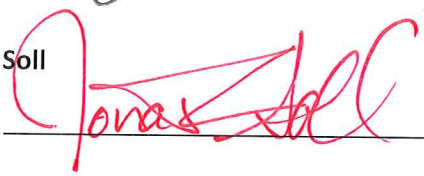
Signature  Date 2/25/2020

Dan Moeller

Signature  Date 2/26/2020

SITE STEWARDSHIP PLAN

Bakers Ferry Natural Area



December 2018

Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

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BAKERS FERRY NATURAL AREA SITE INFORMATION

LOCATION

Address: 19278 S. Bakers Ferry Rd., Oregon City, OR 97045

County: Clackamas

Number of acres: 59.10

Metro file no.: S 18.08

Table 1: Metro natural area bond purchased land for Bakers Ferry Natural Area

PROPERTY NAME	FILE NO.	BOND YEAR	DATE ACQUIRED	MANAGEMENT	ACRES
Oregon	N/A	N/A	N/A	Metro	5.9
Vandeberghe	18.044	2006	6/30/2014	Metro	54.6

DIRECTIONS TO SITE

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

- Head east on SW Borland Rd
- At the traffic circle, take the first exit onto SW Stafford Rd
- Turn left to merge onto I-205 N
- Take exit 10 for State Route 213 S toward Oregon City/Molalla
- Merge onto OR-213 S
- Slight right onto Washington St
- Turn right to stay on Washington St
- At the traffic circle, continue straight onto S Clackamas River Dr
- Continue onto S Springwater Rd
- Turn left onto S Bakers Ferry Rd/Bakers Ferry Eagle Creek Rd

See Map 1 for details.

SECTION 1: INTRODUCTION

1.1 CONTEXT

Bakers Ferry Natural Area, a conservation easement, is located on the Clackamas River, a tributary to the Willamette River, at approximately river mile 10. The Clackamas River supplies drinking water to over 300,000 people and supports significant runs of federal and state listed fish species, including Chinook (*Oncorhynchus tshawytscha*) and Coho salmon (*Oncorhynchus kitsutch*), steelhead trout (*Oncorhynchus mykiss*), cutthroat trout (*Oncorhynchus clarki*), bull trout (*Salvenlinus confluentus*) and Pacific lamprey (*Lampetra tridentate*). Bakers Ferry Natural Area's native habitats include stream channels, floodplains, and riparian and upland forests that support diverse populations of native fish and wildlife.

The Clackamas River Basin has been used by people for thousands of years. The Bakers Ferry Natural Area is reported to be within the traditional territory of the Clackamas, a Chinookan-speaking tribe who lived on the Willamette River near Willamette Falls, along the Clackamas River, and on nearby tributary streams. French and English fur traders began to explore the area in early 1800s bringing diseases which decimated tribes in the Pacific Northwest. Oregon City was founded in 1829 at Willamette Falls to take advantage of the water power to run a lumber mill. Additional use of the area followed, including for transportation, commodity extraction and human settlement. Much of the land surrounding Bakers Ferry Natural Area is currently used for agriculture, nurseries, private forestland, open space, and rural residences. Metro acquired a conservation easement to establish Bakers Ferry Natural Area in 2014 through the 2006 Natural Areas Bond Measure.

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 Bakers Ferry Natural Area include:

- Invasive species management including monitoring and treatments of high priority species.
- Enhancing native vegetation by planting and monitoring and maintaining native plantings.
- Maintaining infrastructure such as culverts, roads, parking areas, signs, gates and fences, etc.
- Monitoring for and mitigating unauthorized/illegal uses of site and restoring site degradation.
- Monitoring agricultural lease area for encroachments and unauthorized uses.

SECTION 2: CONSERVATION TARGETS AND DESIRED FUTURE CONDITIONS

2.1 MAJOR HABITAT TYPES

Historically, Bakers Ferry Natural Area was likely dominated by riparian and wetland forests with patches of upland forest at the higher elevations (Christy et al., 2011). Riparian areas were likely cottonwood gallery forests intermixed with western red cedar (*Thuja plicata*), Oregon ash (*Fraxinus latifolia*), Pacific willow (*Salix lucida ssp. lasiandra*), grand fir (*Abies grandis*), red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) (Intertwine, 2012a). Upland forests were likely comprised of mesic mixed conifer forests including Douglas fir (*Pseudotsuga menziesii*) western hemlock (*Tsuga heterophylla*), grand fir, bigleaf maple, Pacific yew (*Taxus brevifolia*), western dogwood (*Cornus nuttallii*), Oregon white oak (*Quercus garryana*), and red alder (Christy et al., 2011).

Currently the site is characterized by three primary habitat and cover types including agriculture, riparian forest and mixed upland forest (Table 2; Map 3). Additionally, open water and bar formations provide essential habitat for fish and wildlife. More detailed descriptions are available in the SCP.

Table 2: Major habitat types at Bakers Ferry Natural Area

OWNER	HABITAT TYPE	ACRES
Metro	Agriculture	31.9
	Beaches, bars and mudflats	0.6
	Developed – pervious/non ag	1.1
	Open water	2.0
	Riparian forest	7.2
	Upland forest – mixed	9.2
	Upland forest – shrub (stage)	2.6
	Metro Total	**54.6**
OR DSL	Beaches, bars, mudflats	0.7
	Open water	2.7
	Riparian forest	2.5
	OR DSL Total	**5.9**

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 Bakers Ferry Natural Area are:

- Riparian forest and wetland mosaic
- Upland forest
- Native fish

Appendix A summarizes the conservation targets, key ecological attributes, threats and strategic 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 five to ten years.

2.3 SPECIAL OR SENSITIVE HABITAT

Disturbance to the riparian area and riverbed should be minimized. Some rare or special status species that may be found on or approximate to the site may include Pacific lamprey, western brook lamprey (*Lampetra richardsoni)*, Coho salmon, steelhead, Chinook salmon, bull trout, northern red-legged frog (*Rana aurora*), western toad (*Anaxyrus boreas*), western pond turtle (*Actinemys marmorata*) and willow flycatcher (*Empidonax traillii*). Bakers Ferry hosts a Great Blue Heron (*Ardea herodias*) rookery in the southeast portion of the property. Best management practices should be implemented when conducting work during the nesting season. In addition, care should be taken around the northwest corner of the site as a cultural resource and archeological survey documented the presence of a former Native American settlement there and on the adjacent private property.

SECTION 3: STEWARDSHIP ACTIONS

Stewardship actions are broken up into five primary stewardship categories: site 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 should be noted that the Vandeberghe property within Bakers Ferry Natural Area will have a stabilization end date of 6/30/19, however high priority weed treatments will continue to need funding.

3.1 SITE MONITORING

Monitoring at the Bakers Ferry Natural Area 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 Bakers Ferry Natural Area may include:

- Site walks to monitor for priority invasive plants and early detection and rapid response (EDRR) species. Special attention should be focused in riparian areas where new infestations are likely.
- Monitor for plant mortality in planting units using visual estimates for success.
- Monitor for encroachments, illegal uses, fire rings and trash during summer season**,** trail issues, hazard trees, etc.
- Monitor infrastructure for maintenance needs and repairs.
- Monitor agricultural lease area for encroachments and unauthorized uses.

3.2 VEGETATION MANAGEMENT

Key vegetation management actions for the next five to ten years at Bakers Ferry Natural Area relate primarily to:

- Invasive weed control of priority invasive species of concern such as false brome (*Brachypodium sylvaticum*), garlic mustard (*Allaria petiolata*)*,* policeman's helmet (*Impatiens glandulifera*), Bohemian knotweed (*Fallopia x bohemicum*), yellow flag iris (*Iris pseudochorus*) butterfly bush (*Buddleia davidii*), blackberry (*Rubus bifrons*), Scot's broom (*Cytisus scoparius*), spurge laurel (*Daphne laureola*)*,* ivy (*Hedera spp.*), vinca (*Vinca minor*), clematis (*Clematis vitalba*), English holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*) and other common agricultural weeds.
- Interplant riparian and upland areas established in 2016-2018 and plant maintenance to include seedling release/circle sprays.

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 Bakers Ferry Natural Area.

Key access and infrastructure actions at Bakers Ferry Natural Area are:

- Inspect and clean culverts and ditches.
- Maintain road and parking area and re-gravel as needed to maintain integrity of road bed.
- Maintain gates, locks, and signage.

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 Bakers Ferry Natural Area are defined in the Site Conservation Plan and Implementation Plans for Large Restoration Projects in Levy 1.0 & 2.0.

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 Bakers Ferry Natural Area may include:

- Maintaining wildlife habitat in accordance with the Oregon Conservation Strategy's suggested conservation actions for observed strategy species at this site.
- Additional key wildlife habitat actions at Bakers Ferry Natural Area are defined in Site Conservation Plan and Implementation Plans for Large Restoration Projects in Levy 1.0 & 2.0.

SECTION 4: COORDINATION

This Site Stewardship Plan outlines strategic development and restoration actions to be carried out at Bakers Ferry Natural Area 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

- Agricultural lease management on site will require periodic access and communication between the lessee farmers, and also the property management, land management, and science teams.
- Metro is currently managing the island owned by Oregon Parks and Recreation Department through and Intergovernmental Agreement (IGA), which expires on 10/08/2025. The IGA will need to be updated and approved periodically.
- Metro coordinates weed control efforts with the Clackamas River Invasive Species Partnership (CRISP) and will continue to report current treatments that contribute to a watershed wide effort to control invasive species. In addition, Metro will continue to report new EDRR species found on site.
- Inadvertent discovery of cultural or historic resources.

Current and potential partners

- Oregon Parks and Recreation Department: owns Metro-managed island adjacent to the site.
- Clackamas Soil and Water Conservation District: collaborative feedback on vegetation management work such as invasive species and plantings.
- Clackamas River Invasive Species Partnership: collaborative feedback on vegetation management work such as invasive species treatments and newly introduced invasive weeds to the watershed that may affect the site.
- Metro is coordinating in-stream restoration projects with a variety of partners such as Oregon Department of Fish and Wildlife, Portland General Electric, Oregon Watershed Enhancement Board, etc. Details of this coordination is outlined in the Site Conservation Plan.

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 Bakers Ferry Natural Area, 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.

For Bakers Ferry Natural Area, strategic volunteer opportunities may include:

- Annually monitoring amphibian egg masses in the wetland area, which volunteers have been doing on the site since 2015.

SECTION 6: SITE MANAGEMENT

Metro's management of Bakers Ferry Natural Area 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, Map 5).

6.2 PUBLIC ACCESS

Bakers Ferry Natural Area has no identified recreational uses and there is currently no formal master plan for public access or use. However, the river alcove often attracts fishing boats. There is one gated entrance from South Bakers Ferry Road currently used by the leasing farmer, but public access is currently limited due to steep slopes and a lack of on-site parking and trails. Acquisition of the adjacent floodplain parcels would likely be necessary in order to provide safe public access. Although access infrastructure is expected to remain primitive for the ten-year planning horizon, the planned restoration efforts don't preclude future access development.

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 North Logan Natural Area Docs & Agreements page or on the M drive (M:\PN\Teams\Visitor Services\SUP). However, as of the date of this document, Bakers Ferry Natural Area 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:

Oregon Parks and Recreation Department (IGA)

- Agreement for Metro to manage OPRD parcel on the Clackamas River adjacent to Bakers Ferry Natural Area. Initial term 10 years, auto renews for additional five-year terms unless notice is given 90 days prior to expiration. Effective date: 10/09/2015; expiration date: 10/08/2025.

Vandeberghe (File #18.044)

- All of the subject property was granted to Metro as a conservation easement. Recording date: June 30, 2014; recording no. 2014-031399.

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 (Vandeberghe, 18.044).

6.5 AGRICULTURAL LEASE AGREEMENTS

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.

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

Existing lease agreements (Map 6) include:

Agricultural

- Vandeberghe – Agricultural lease (Contract #933676, Map #6) of 23 acres to Abrose Calgano, Jim Calgano and Cal Farms, Inc. effective 04/01/2015 through 12/31/2019; renewing in perpetuity unless notice is given by either party by September 1. Amendment 1, 10/19/17 clarifies procedures and practices relating to the Lease Premises.

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

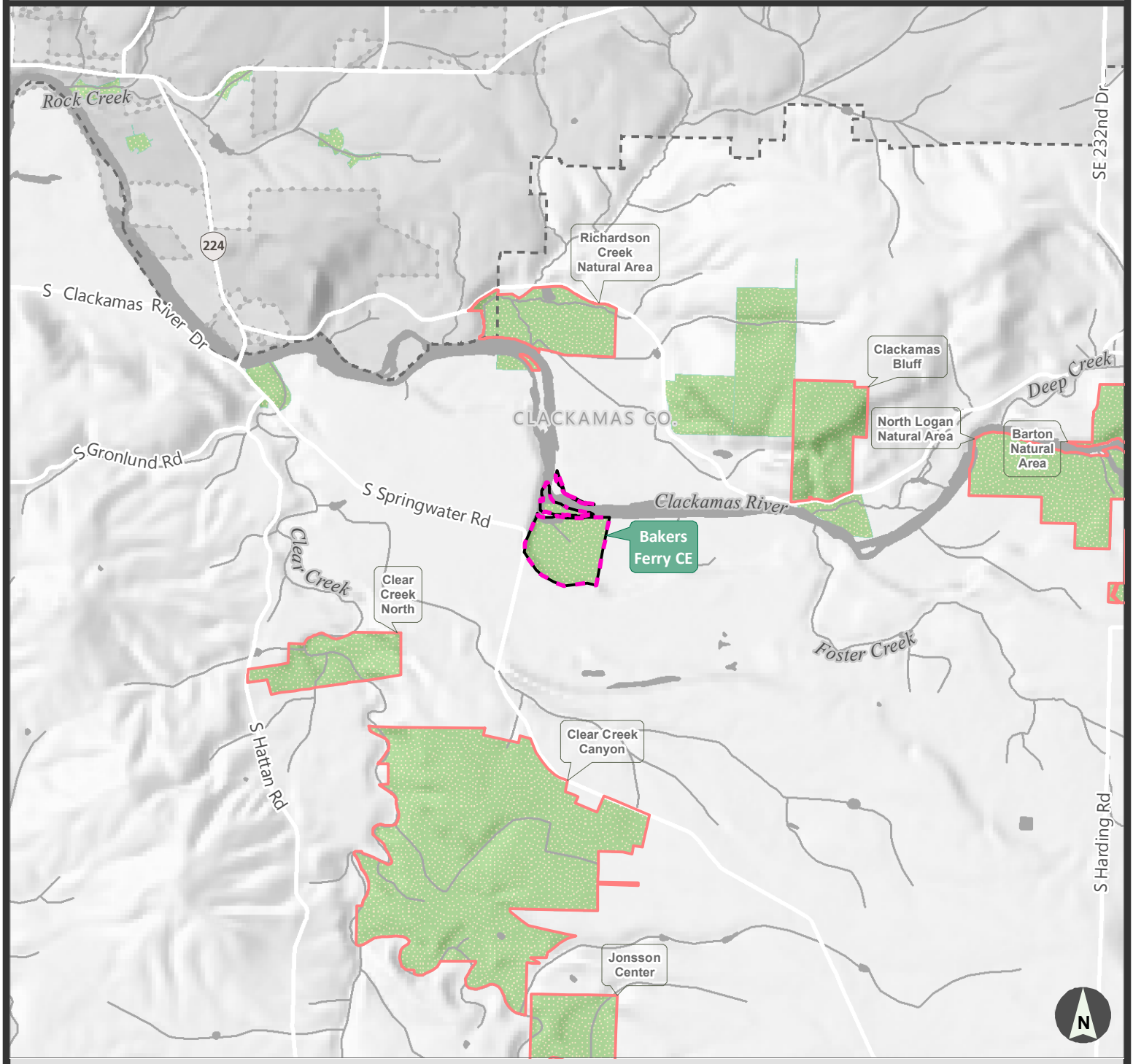
MAPS

APPENDICES

Vicinity map

Site Stewardship Plan

Metro



Bakers Ferry Conservation Easement

Other Metro sites

Parks and/or Natural Areas

0 0.25 0.5 0.75 1 Miles

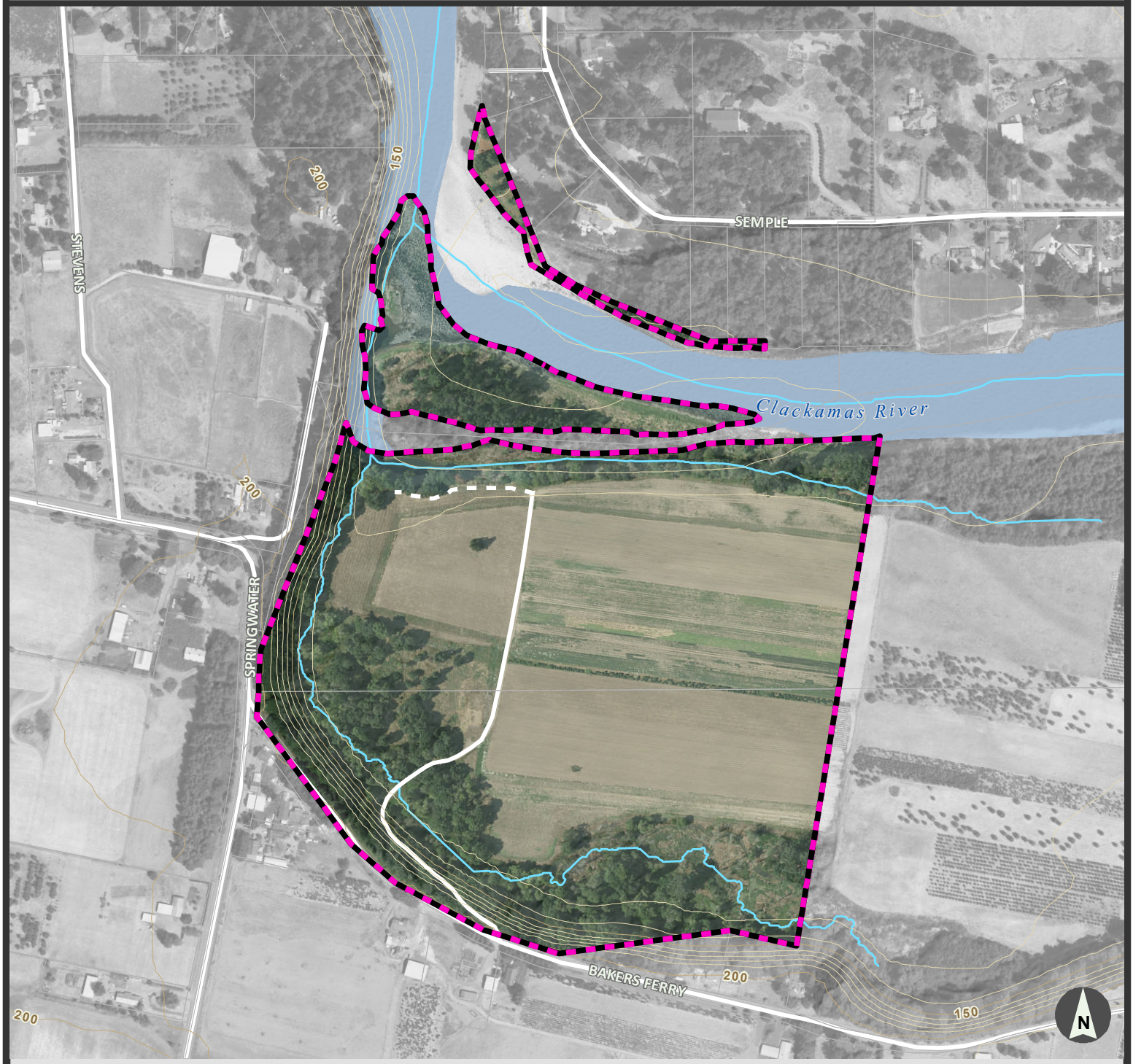
Bakers Ferry CE

Metro Parks & Nature - map date: 8/27/2018

Site map

Site Stewardship Plan

Metro



Bakers Ferry CE

Streams

Taxlot

dirt/gravel

4x4 / Dry Season

0 0.035 0.07 0.105 0.14 Miles

Bakers Ferry CE

Imagery in color is a Metro Site

Metro Parks & Nature - map date: 8/27/2018

Current cover map

Site Stewardship Plan

Metro

Bakers Ferry CE site

Agriculture

Beaches, bars, and mudflats

Developed - (pervious/non ag)

Open water

Riparian forest

Upland forest - mixed

0 0.035 0.07 0.105 0.14 Miles

Featured site

Bakers Ferry CE

Metro Parks & Nature - map date: 8/28/2018

Site Stewardship Plan

Metro

Site infrastructure map

Featured site

Road network on site

dirt/gravel

Culvert

gate

water source

Fence

Signs

P parking

0 0.035 0.07 0.105 0.14 Miles

Bakers Ferry CE

Imagery in color is a Metro Site

Metro Parks & Nature - map date: 8/30/2018

Fire Incident Action Plan

primary entrance: approx 19278 S Bakers Ferry Rd, Oregon City, OR 97045

Site Stewardship Plan

Metro

Featured site

Roads

dirt/gravel

potential water source

G gate

Structures

Fire districts

0 0.035 0.07 0.105 0.14 Miles

Bakers Ferry CE

lat/long for primary entrance: ((45.37972032, -122.46977495))

Metro Parks & Nature - map date: 8/30/2018

Agricultural lease area map

, OR

Site Stewardship Plan

Metro

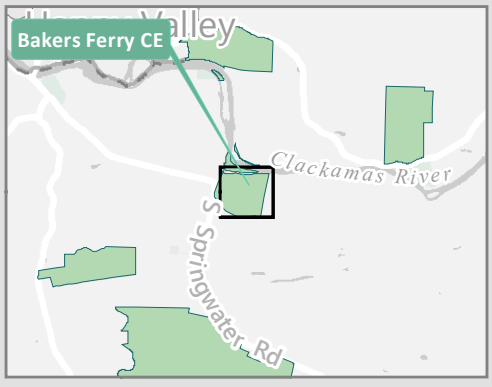
Legend

Lease area

N

1 inch = 229 feet

0 150



Bakers Ferry CE

Imagery in color is a Metro Agricultural lease

Metro Parks & Nature - map date: 8/28/2018

APPENDIX A

BAKERS FERRY NATURAL AREA

Conservation Target Summary Table for Bakers Ferry Natural Area - summary of conservation target key ecological attributes (KEAs), significant threats, 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	STRATEGIC RESTORATION AND STEWARDSHIP ACTIONS & PRIORITY RANK
Riparian forest	• Riparian forest width • Vegetative structure: shrub layer • Mature trees • Floodwater access to the floodplain • Upstream habitat connectivity • Species composition and competition • Habitat area • Floodplain connectivity	• Development, land conversion • Invasive species • Human use, dogs, trails, fishing, etc. • Diking, filling, draining • Previous forest management • Climate change	*Medium to high priority* • Remove invasive plants and replant native trees and shrubs within a 200-foot wide area finding the active stream channel to provide shade, detrital inputs and future large wood recruitment. • Integrated approach of monitoring, cutting, herbicide spraying and controlled burns. • Re-establish native shrubs in channel fringe areas and actively manage vegetation to foster expansion of native shrub cover and suppression of reed canarygrass. • Remove berms that limit floodplain connectivity. • Repair/remove culvert blockage at farm access road crossing. • Re-establish native trees and shrubs on portions of area that is currently farmed.
Upland forest	• Mature trees • Vegetative structure: shrub layer • Standing and downed dead trees • Species composition and competition • Habitat area	• Development, land conversion • Fire suppression • Invasive species • Human use, dogs, trails, fishing, etc. • Previous forest management • Climate change	*Medium priority* • Manage existing Douglas-fir and bigleaf maple to foster re-establishment of late-seral habitat attributes, including canopy gaps, snags and downed wood. • Remove English ivy and holly to reduce competition with native shrub species. • Integrated approach of monitoring, cutting, herbicide spraying and controlled burns. • Re-establish native trees and shrubs on portions of area that is currently farmed.
Native fish	• Complexity of habitat • Key pieces and number of pieces of large wood in wetland areas of the stream and adjacent stream bank • Substrate in wetted areas of stream • Fish passage • Floodwater access to the floodplain • Species composition and competition	• Previous forest management • Development, land conversion • Climate change	*High priority* • Excavate pools adjacent to large wood structures in side channel and the unnamed tributary to provide additional habitat complexity and provide resting and feeding stations for native fish. • Install large wood habitat structures throughout Clackamas River side channel and the unnamed tributary to increase channel complexity and instream cover. • Install floodplain large wood roughness elements to slow overland velocities and create complex flow paths. • Remove or replace undersized conveyance culvert with fish passable structure that allows volitional fish passage and sediment continuity. • Remove existing floodplain berm to increase energy dissipation and flood connectivity. • Integrated approach of monitoring, cutting, herbicide spraying and controlled burns.

APPENDIX B-1

BAKERS FERRY NATURAL AREA SUMMARY OF STEWARDSHIP ACTIONS

Stewardship actions planned for the next five to ten years at Bakers Ferry Natural Area.

(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
SITE MONITORING			
Vegetation monitoring – invasive weeds	Walk site and monitor for priority invasive plants especially in riparian area where new infestations are likely.	Twice per year (at minimum)	Natural Resource Technician/Natural Resource Specialist
Vegetation monitoring – plantings	Monitor for plant mortality in planting units.	Spring 2018 and 2019	Natural Resource Technician/Natural Resource Specialist
Other monitoring – site walk	Monitor for encroachments, illegal uses, fire rings and trash during summer season, trail issues, hazard trees, etc.	Once per week in the summer/once per month during other seasons	Natural Resource Technician/Natural Resource Specialist
Other monitoring – site walk	Inspect infrastructure including gates, fences, barn, road, signage, etc.	Four times per year	Natural Resource Technician/Natural Resource Specialist
Other monitoring – site walk	Monitor agricultural lease area for encroachments and unauthorized uses.	Four times per year	Natural Resource Technician/Natural Resource Specialist
VEGETATION MANAGEMENT			
Invasive weed control	Maintenance – treat priority invasive weeds including high priority weeds such as Scot's broom, false brome, garlic mustard, butterfly bush, Bohemian knotweed, blackberry, spurge laurel, policeman's helmet, ivy, vinca, clematis, English holly and hawthorn and other common agricultural weeds.	Three times per year or as needed	Contractor and oversight by Natural Resource Technician/Natural Resource Specialist
Planting – tree and shrub	Interplant riparian areas established in 2016 -2018.	Winter (January/February)	Contractor and oversight Metro
Planting – tree and shrub	Plant maintenance to include seedling release/circle spray on 2016-2018 plantings.	Spring (2017-2021) until plants are free to grow	Contractor and oversight Metro
ACCESS AND INFRASTRUCTURE			
Fence/gates	Maintain and repair fencing and gates on site.	As needed	Natural Resource Technician/Natural Resource Specialist
Culvert	Inspect and clean culverts and ditches.	Two times per year	Natural Resource Technician/Natural Resource Specialist

PROJECT TYPE	DESCRIPTION	TIMING/FREQUENCY	COMPLETED BY
Roads	Maintain roads and parking area and re-gravel as needed to maintain integrity of road bed.	Once per year or as needed	Natural Resource Technician/Natural Resource Specialist
WATER RESOURCES			
N/A	N/A	N/A	N/A
WILDLIFE HABITAT			
N/A	N/A	N/A	N/A

APPENDIX B-2

BAKERS FERRY NATURAL AREA BUDGET TABLE

10-year budget for stewardship actions

UNIT/AREA	MAINTENANCE CATEGORY	PROJECT TYPE	DESCRIPTION OF TASKS	HABITAT TYPE OR CONSERVATION TARGET	TIMING/ FREQUENCY	PRIORITY	COST BY FISCAL YEAR									
							FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27
Site wide	Vegetation management	Invasive weed control	Maintenance - invasive weed treatments	Site wide	Spring, fall	High	$4,000	$7,000	$7,000	$5,000	$5,000	$3,000	$3,000	$3,000	$1,500	$1,500
OPRD island	Vegetation management	Planting - tree and shrub	Plant maintenance - OPRD island circle sprays, and summer/fall knotweed treatments	Riparian forest	Spring, summer, fall	High	$12,000	$5,000	$5,000	$3,000	$3,000	$1,500	$1,500	$1,500	$500	$500
Site wide	Vegetation management	Planting - tree and shrub	Plant maintenance - circle sprays	Site wide	Spring, summer, fall	High	$12,200	$5,000	$5,000	$5,000	$3,000	$1,500	$1,500	$0	$0	$0
Site wide	Access and infrastructure	Road	Road and staging area improvements	Site wide	Spring, fall	High	$5,000	$2,000	$0	$2,000	$0	$2,000	$0	$2,000	$0	$2,000
Totals							**$33,200**	**$19,000**	**$17,000**	**$15,000**	**$11,000**	**$8,000**	**$6,000**	**$6,500**	**$2,000**	**$4,000**

APPENDIX C

BAKERS FERRY NATURAL AREA INVASIVE SPECIES

The table below summarizes a preliminary list of invasive plants in all or parts of Bakers Ferry Conservation Easement, including focus areas and timing for control if needed. The list is compiled from the data collected during the 2014 weed mapping project, and reviewed and updated by the Natural Areas Land Management team. 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 at Bakers Ferry Natural Area
(EDRR species are bolded in red)

GENUS	SPECIES	COMMON NAME	FOCUS AREA FOR DETECTION/CONTROL	CONTROL TIMING
Allarium	***petiolata***	**Garlic mustard**	**Riparian**	**Spring/fall**
Brachypodium	***sylvaticum***	**False brome**	**Riparian**	**Spring/fall**
Buddleia	***davidii***	**Butterfly bush**	**Riparian**	**Fall**
Calystegia	*sepium*	Hedge bindweed	Site wide	Summer
Cartaegus	*sp.*	Hawthorn	Site wide	Fall
Cirsium	*arvense*	Canada thistle	Site wide	Spring
Cirsium	*vulgare*	Bull thistle	Site wide	Spring
Clematis	*vitalba*	Clematis	Site wide	Fall
Cytisus	*scoparius*	Scots broom	Site wide	Spring
Daucus	*carota*	Queen Anne's lace	Site wide	Spring
Digitalis	*purpurea*	Purple foxglove	Site wide	Spring
Dipsacus	*fullonum*	Teasel	Site wide	Spring
Hedera	*sp.*	Ivy	Site wide	Fall/winter
Ilex	*aquifolium*	English holly	Site wide	Fall/winter
Impatiens	***glandulifera***	**Policeman's helmet**	**Riparian**	**Spring/summer**
Iris	***pseudacorus***	**Yellow-flag iris**	**Riparian**	**Spring/fall**
Lunaria	*annua*	Money plant	Upland	Spring
Melissa	*officinalis*	Common balm	Site wide	Spring
Phalaris	*arundinacea*	Reed canarygrass	Riparian	Spring/fall
Polygonum	*sp.*	Knotweed	Riparian	Summer
Prunus	*avium*	Sweet cherry	Upland	Fall/winter
Rosa	*sp.*	Rose	Upland	Fall
Senecio	***jacobaea***	**Tansy ragwort**	**Upland**	**Spring/fall**
Solanum	*dulcamara*	Bittersweet nightshade	Site wide	Spring
Vinca	*sp.*	Vinca	Upland	Fall/winter

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

Incident Action Plan

APPENDIX D

BAKERS FERRY NATURAL AREA

Address/access points

Address:

- 19278 S. Bakers Ferry Rd , Oregon City, OR 97045

Primary access (gravel road):

- 19278 S. Bakers Ferry Rd, Oregon City, OR 97045 (approximately)
- Latitude: 45.3797203200; Longitude: -122.4697749500
- Gate – combination lock

Location

Primary access #1:

- T2S-R3E SECT 20

Acreage

59.10

Structures

There are no structures on site.

Water sources and staging areas

There are two potential water staging areas on site. The first area for drawing water is at the bottom of the gravel driveway into the site, on the east of the road near the squash culvert (45° 22' 50.86" N 122° 28' 15.79" W). The second area for drawing water is at the north end of the dirt road. A hose lay of approximately 200' may be required to access location for drawing water (45° 23' 00.57"N 122° 28' 12.34" W). See Map 5 for exact locations.

Sensitive habitat

In the southeast portion of the property there is a wetland that hosts a Great Blue Heron rookery. This area should be avoided, if possible. In addition, a cultural resource and archeological survey documented the presence of a former Native American settlement in the northwest corner of the site and on the adjacent property.

Contact information*

Metro Conservation Program

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Chris Hagel, Lead Natural Resource Specialist	971-242-9835 (cell)
Brian Vaughn, Natural Resource Scientist	503-830-8719 (cell)
Yuxing Zheng, Communications Coordinator	971-344-2207 (cell)

Sheriff/police department

Emergency	911
Police Dept., non-emergency	503-655-8211

Local fire department

Clackamas Fire District #1: Station 12	503-742-2600

Tenants

Agricultural Lease

Cal Farms, Inc. 503-631-3810
PO Box 796
Oregon City, OR 97045

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