ad3 11/24/14

Approvals for SSP

Site: Chehalem Ridge Natural Area

Dan Moeller

Signature _____ Date 4/1/14

Jonathan Soll

Signature _____ Date 4/2/14

- assuming minor edits completed

Kathleen Brennan-Hunter

Signature _____ Date 4/2/14

SITE STEWARDSHIP PLAN

Chehalem Ridge Natural Area

Metro Natural Areas Program

Ryan Jones

Natural Resources Specialist

January 31, 2014

SITE NAME PROPERTY INFORMATION

Location:

Address: This property has no physical address. It is located near Gaston, Oregon (south of Forest Grove and Cornelius) off of Dixon Mill Road.

Main Gate (Northern Portion): Latitude 45°26'14.33"N; Longitude 123° 4'17.48"W

- Access to main road system; 1A & 2A

Southern Gate (Southern Portion): Latitude 45°26'6.37"N; Longitude 123° 4'37.64"W

- Access to road 4A

Secondary Gate 1 (SW Gnos Rd.): Latitude 45°27'17.69"N; Longitude 123°04'43.19"W

- Access off of SW Gnos Rd. to the NE portion of the property
- Access to road 3D

Secondary Gate 2 (SW Withycombe Rd.): Latitude 45°26'54.69"N; Longitude 123° 5'59.36"W

- Immediately east of 41329 SW Withycombe Rd, Gaston, Oregon 97119
- Road unimproved – limited access

Secondary Gate 3 (SW Hummingbird Lane): Latitude 45°27'5.13"N; Longitude 123° 5'57.44"W

- Access to Road 1D
    - Road is unimproved and blocked with debris – limited access

NW Access (SW Burgarsky Road)

- 40845 SW Burgarsky Road, Gaston, Oregon 97119
- No road access

County: Washington

Number of acres: 1196

Metro File no.: S 48.01

Metro natural area bond purchased land for Chehalem Ridge Natural Area

Property name (previous owner)	Acres	Bond year	Date acquired	Management
Luisa, Nancy, & Richard Ponzi	4.20	2006	12/31/2007	Metro
Eric Hamacher & Luisa Ponzi	36.30	2006	02/11/2008	Metro
Trust for Public Land	1143.00	2006	01/07/2010	Metro
Sharon C. McKenzie	19.17	2006	09/22/2011	Metro

Directions to site:

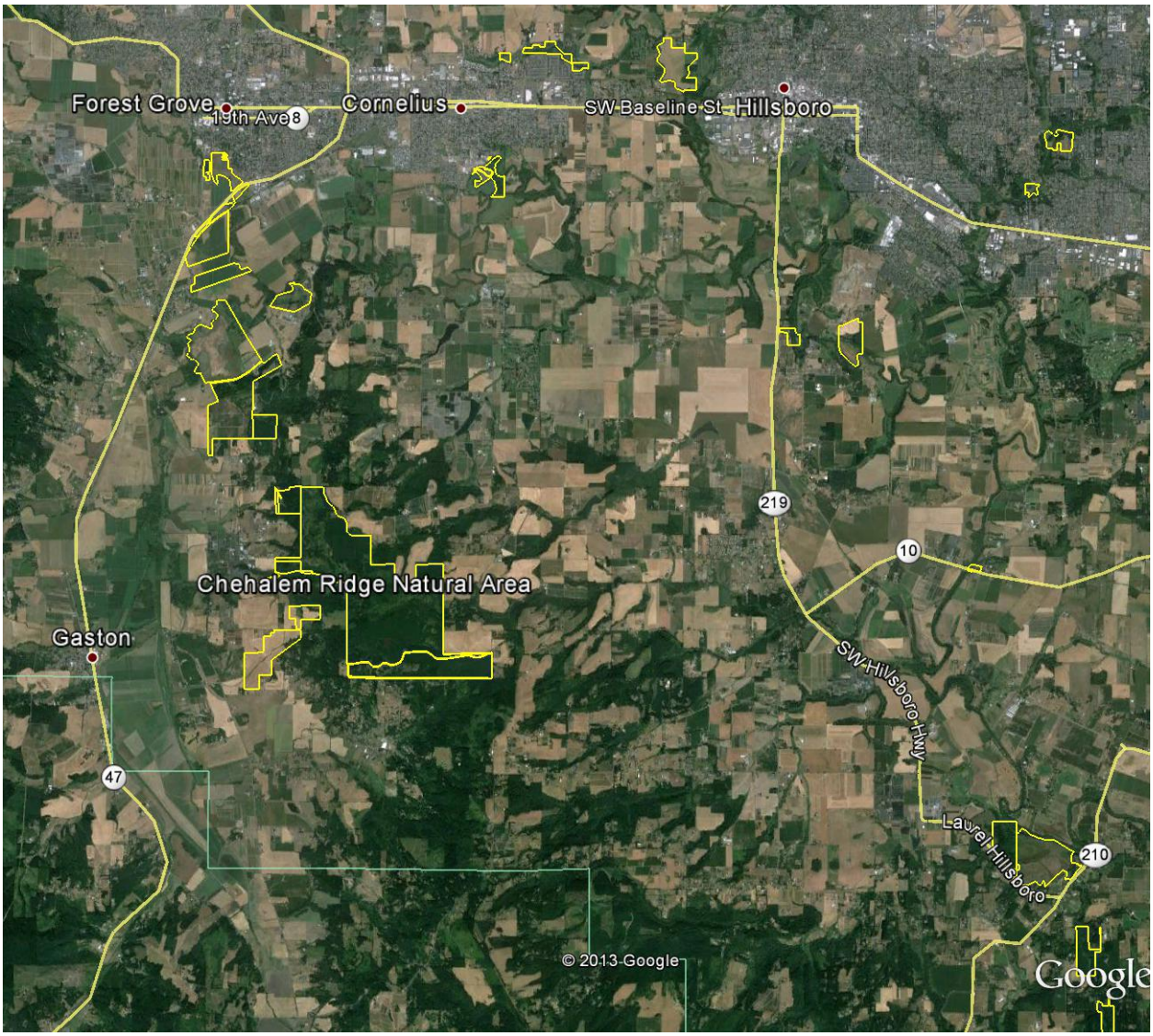
From Wankers Corner Field Station (2661 SW Borland Road, Tualatin, OR 97062) to the main gate:

2661 SW Borland Rd
Tualatin, OR 97062

1. Head **south** toward **SW Borland Rd** 0.4 miles

2. Turn right onto **SW Borland Rd** 1.9 miles
3. Turn right onto **SW 65th Ave** 0.4 miles
4. Slight left onto **SW Nyberg St** 0.5 miles
5. Slight left onto **SW Tualatin Sherwood Rd** 4.5 miles
6. Continue onto **SW Roy Rogers Rd** 1.3 miles
7. Turn left onto **SW Scholls-Sherwood Rd** 0.5 miles
8. Take the 1st right to stay on **SW Scholls-Sherwood Rd** 4.3 miles
9. Turn left onto **OR-210 W/SW Scholls Ferry Rd** 0.7 miles
10. Turn right onto **OR-219 N/Laurel Hillsboro** 1.8 miles
11. Turn right to stay on **OR-219 N/Laurel Hillsboro** 3.4 miles
Continue to follow OR-219 N
12. Turn left onto **SW Unger Rd** 3.0 miles
13. Turn left onto **SW Dixon Mill Rd** 2.4 miles
14. Main gate is on right. To get to the southern gate, continue on Dixon Mill Rd. for 0.35 miles. Gate is on the left.

Vicinity Map



SECTION 1: INTRODUCTION

1.1 Context

Chehalem Ridge Natural Area lies at the north end of the Chehalem Mountains in rural Washington County. The 1196 acre property extends over the ridge on both the east and west slopes above the Tualatin River and its floodplains, including parts of the Upper Tualatin-Scoggins and Middle Tualatin sub-basins. Iowa Hill, at 1122 feet, is the highest elevation on the property and is located near the property center. Most recently managed as an industrial tree farm owned by Stimson Timber Company, the property was purchased from the Trust for Public Lands by Metro as part of the 2006 Natural Area bond measure in 2010.

The Property is located in T1S R3W Sections 28, 29, 30, 32 and 33. It is divided by Dixon Mill Road into north and south sections. The larger portion of the property lies to the north of the road (996 acres) with the smaller portion to the south (200 acres). It is approximately 5 miles east of Gaston and 10 miles from Hillsboro, Oregon

1.2 Site Stewardship Plan goals and uses

The Chehalem Ridge Natural Area Site Conservation Plan (SCP) documents conservation targets, desired future conditions, and key threats (Appendix A), 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 NRTs will take to reduce threats and increase conservation target health.

Site Stewardship Plans (SSPs) provide a 5-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. SSPs address vegetation management and infrastructure maintenance, such as fences, gates, water control structures. SSPs are updated annually or more frequently 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 Chehalem Ridge Natural Area include:

- Invasive species
- Unauthorized access
- Hunting
- Revegetation – deer browse

Appendix B1 outlines stewardship actions, tasks, timing and approximate costs. Maps are appended to the end of this document.

SECTION 2: CONSERVATION TARGETS AND DESIRED FUTURE CONDITIONS

2.1 Major habitat types

Historically, the area around Chehalem Ridge Natural Area was mapped primarily as Upland Conifer Forest and Oak Woodland. The historic vegetation of the Chehalem Ridge Natural Area was influenced by climate, soils and human activity such as anthropogenic fire. Oak woodlands probably extended to the ridgeline in many places on the west slopes of the CRNA. Forests on the eastern slopes were described as scattered Douglas-fir timberlands. These were relatively open forested lands that included western red cedar and bigleaf maple in the drainages and occasional western hemlock at the highest elevations.

Currently the Chehalem Ridge Natural Area can be characterized by Chehalem Ridge natural habitat types (Table 1; Map 1). More detailed descriptions are available in the SCP.

Table 1. Major habitat types at Chehalem Ridge Natural Area.

Habitat type	Acres
Developed – (Pervious/non ag)	5.47
Riparian	96.19
Upland Forest - Coniferous	727.68
Upland Forest - Deciduous	22.21
Upland Forest - Mixed	115.97
Upland Forest – Shrub (stage)	205.41
Wetland - Forested	3.94
Woodland - Oak	19.68
Total	1196.56

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 this site are:

- Riparian habitats (headwater streams, wetlands and ponds)
- Upland shrub habitat
- Upland forest
- Oregon white oak woodland

The habitat Conservation Targets represent the most regionally rare and threatened major habitat types present at the site, as well as patches of coniferous forest, one of the region's most representative habitats. The site's habitat diversity, connectivity at the landscape level and importance to anadromous fish can help conserve rare and at-risk species and keep our common native species common. More detail about each of these Conservation Targets can be found in the Chehalem Ridge Natural Area 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 (see Appendix A). Appendix B1 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.

Appendix A summarizes conservation targets, key ecological attributes, threats and strategic short- and long-term stewardship actions that can help address threats to conservation targets. For more information see the Site Conservation Plan, Section 4.1 and Appendices A, B-1 & 2, and C.

SECTION 3: STEWARDSHIP ACTIONS

Stewardship actions are broken up into five primary stewardship categories: monitoring, vegetation management, access and infrastructure, wildlife, and water resources as described below. Terramet (Query: Chehalem Ridge Natural Area (S 41.01)) includes the full list of stewardship categories, actions and tasks. Appendix B1 describes strategic stewardship actions for each category needed over the next five years, and Appendix B2 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 the Chehalem Ridge Natural Area is an integral part of an adaptive management approach to restoration and Chehalem Ridge Natural Area 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 (See Site Conservation Plan):

- Regular site walks to identify issues such as illegal access and inappropriate public use
- Visual estimates of success of vegetation monitoring actions
- Early detection and rapid response (EDRR) surveys for species such as false brome and garlic mustard

3.2 Vegetation management

Key vegetation management actions for the next 1-3 years at the Chehalem Ridge Natural Area relate primarily to:

- Controlling invasive species
- Reducing seedling competition
- Precommercial thinning (preserving native shrub layer)
- Revegetating forest understory and gaps after commercial thin

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

Metro has initiated an early detection and rapid response (EDRR) program for false brome and garlic mustard, which have been documented in the area. 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 and signs. This category of stewardship actions may also include managing property encroachments or surveying property lines. See Map 2 for spatial information on access and infrastructure at Chehalem Ridge Natural Area.

All of the boundaries are marked with blue Carsonite posts. Many of the boundaries were established using a compass and past surveys. A small amount of boundary footage was established and marked using recent surveys.

Key access and infrastructure tasks at this site are:

- Culvert maintenance/monitoring
- Road maintenance – grading, rocking, ditching
- Gate maintenance – possible replacement(s)
- Unauthorized access fence maintenance
- Property encroachment/unauthorized access monitoring
- Signage maintenance/replacement

3.5 Wildlife habitat

Wildlife habitat structures are specific features installed to improved wildlife habitat. Examples include nest boxes, turtle logs or platforms, beaver exclusion fencing and other associated wildlife related actions and tasks. Wildlife structures currently installed at Chehalem Ridge Natural Area include:

- Deer/beaver exclusion caging in some planting units
- Snags created during commercial thin (2012-2013)
- Wildlife piles/down wood piles created during commercial thin (2012-2013)

SECTION 4: COORDINATION

This Site Stewardship Plan outlines strategic development and restoration actions to be carried out at the Chehalem Ridge Natural Area site over the next five 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

- Commercial thin
    - Kate Holleran, Senior Scientist (503) 813-7543

- Ryan Jones, Natural Resource Technician (503) 964-0513
- Barry Sims, Trout Mountain Forestry (503) 222-9772
- Scott Ferguson, Trout Mountain Forestry (503) 222-9772

- Major road improvements/redirection off of Withycombe Rd. (McKenzie Parcel)
  - Kate Holleran, Senior Scientist (503) 813-7543
  - Ryan Jones, Natural Resource Technician (503) 964-0513
  - Alex Hurley, AKS Engineering & Forestry (503) 925-8799

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 the Chehalem Ridge 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.

Table 2. Strategic volunteer opportunities

Activity	Goal	Est. number & type of volunteers	Time of year
Dixon Mill Rd. trash cleanup	Remove Trash	5 – 10 adults	2 - 4 times a year - ongoing
Dixon Mill pond trash cleanup	Remove Trash	5 adults – may not be feasible	Late summer – one time
Plant survival monitoring in thinned units	Determine survival rates per species – will help with replanting opportunities and future plant choice	10 – 20 teenagers and/or adults	Early summer – 2-4 years
Manual weed control	Reduce use of herbicide(s) in riparian restoration unit	10 – 15 teenagers and/or adults	Spring and fall - ongoing
Site steward recruitment	Extra set of eyes and ears on site	1 -5 adults	All year - ongoing
Nest box installation	Create bird nesting habitat	5-15 all ages	TBD – Need to further investigate nest box possibilities at this site

SECTION 6: SITE MANAGEMENT

Metro's management of the site 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 described key elements to management of the site.

6.1 Fire Response Plan

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

6.2 Public access

To date there has been no formal master plan for public use and public access is not encouraged. However, legacy roads from logging provide pleasant trails for neighbors and a limited number of people from other areas. While this in itself is not necessarily harmful, people do sometimes block the fire lane road at the main gate, and some people bring in leashed and unleashed dogs. There have been significant problems with trails created by off-highway vehicles and to a lesser degree equestrian trails; these have been closed and staff continues to monitor the site for this type of unauthorized use. A master planning process is planned for 2015/16.

6.3 Special Use Permits

Special use permits 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 Special Use Permits for Metro Natural Areas can be found here: M:\pes\projects\Parks & Prop Svcs\SUP\Natural Areas

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:

- Berry Property Water Easements
    - Document can be found on Terramet – query Berry (Hamacher/Ponzi) (48.001); Click the Due Diligence tab and scroll to the Water Rights section

6.5 Rental 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.

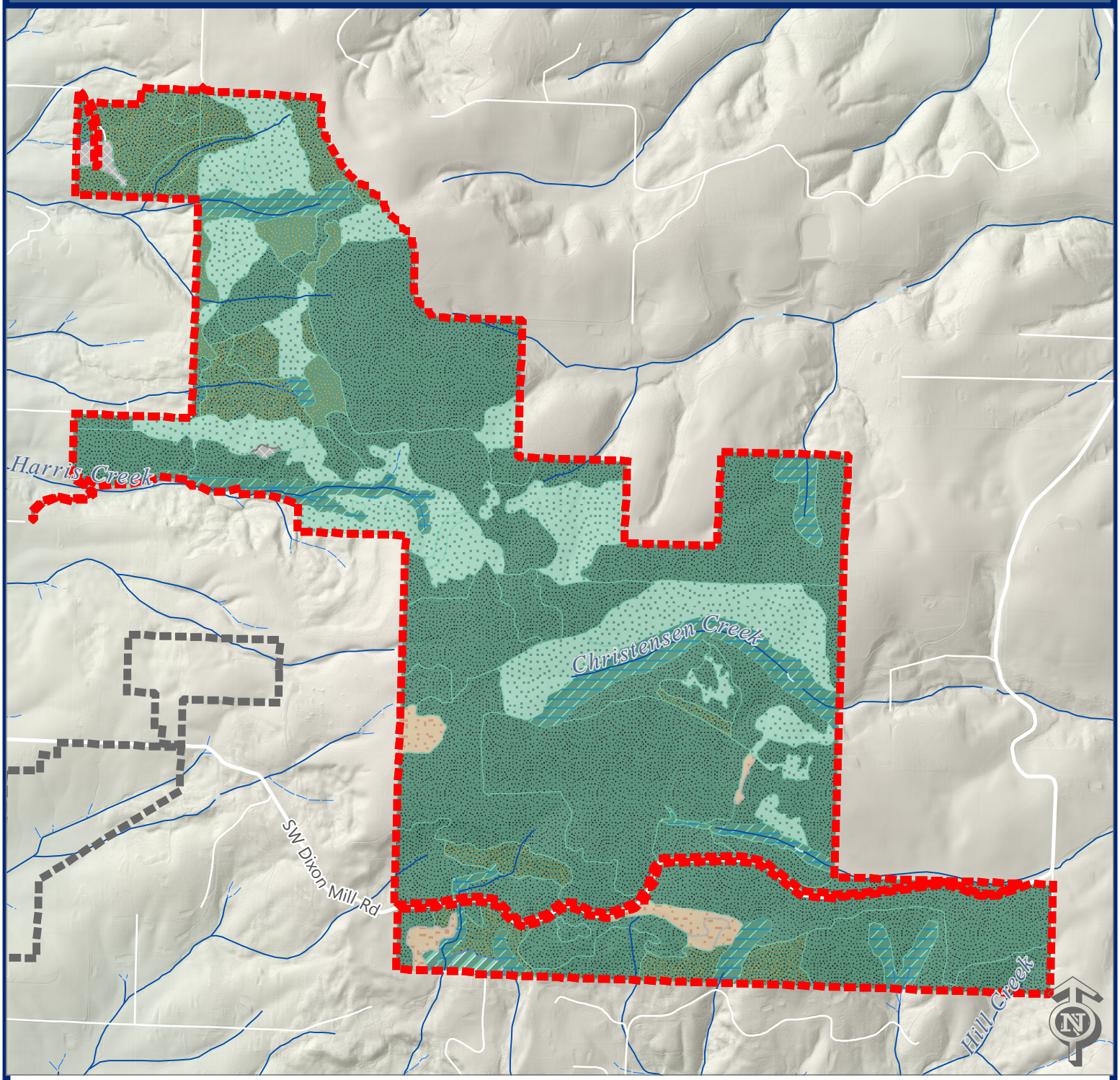
[1] More information regarding policies, guidelines, and applications can be found at www.oregonmetro.gov/specialuse.

Existing rental and agricultural lease agreements include:

- Residential lease on NW portion of property (Berry/Ponzi)
    - Terry and Steve O'day
    - 40845 SW Burgarsky Road, Gaston, OR 97119

Current Cover

MAP 1



Chehalem Ridge Natural Area

Other Metro sites

NHD Flowlines

Intermittent stream

Perennial stream

Artificial path

Current cover

Developed - (Pervious/non ag)

Riparian Forest

Upland Forest - Coniferous

Upland Forest - Deciduous

Upland Forest - Mixed

Upland Forest - Shrub (stage)

Wetland - Forested

Woodland - Oak

0 1,500 3,000 Feet

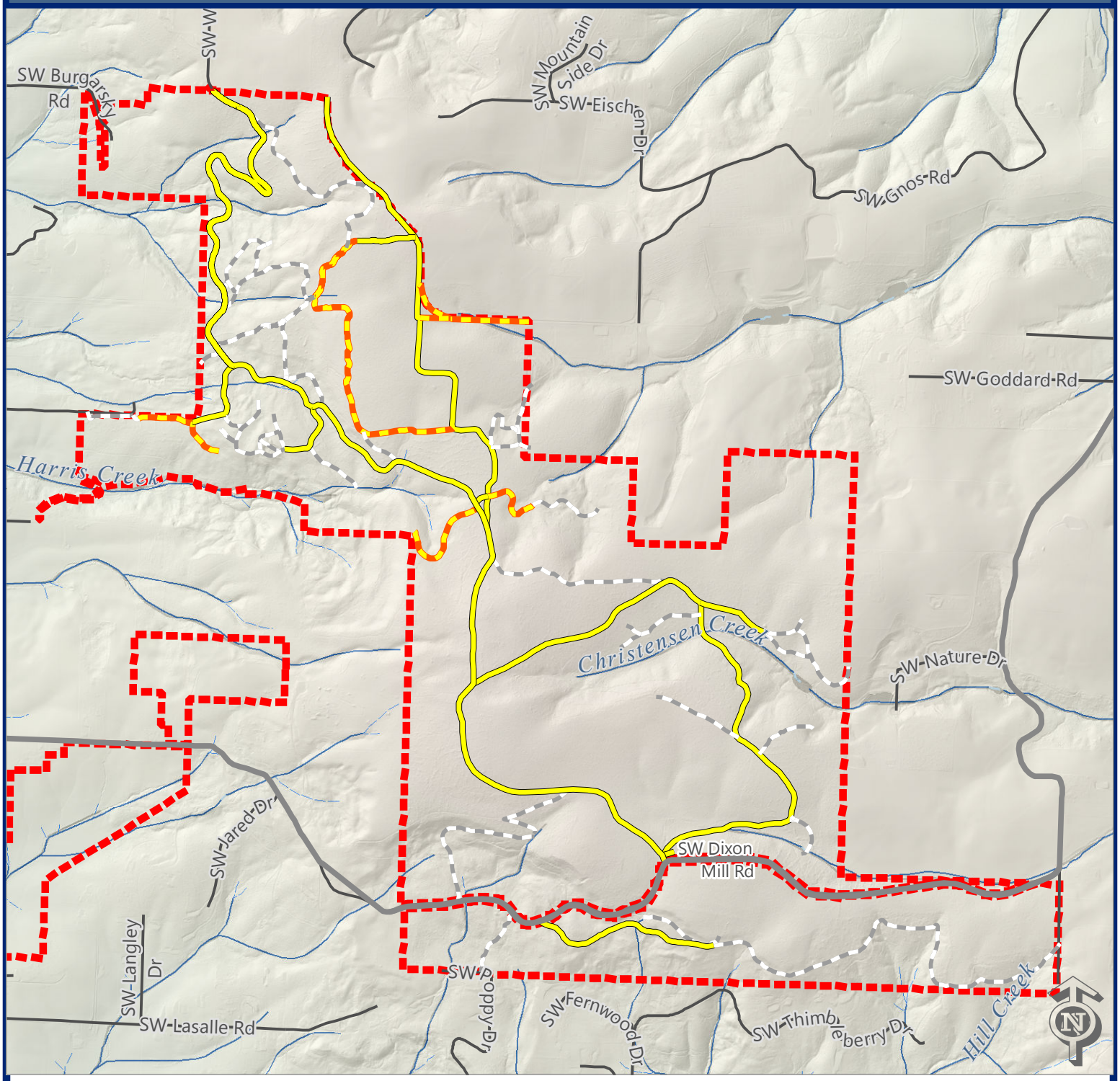
Metro

Chehalem Ridge Natural Area

map date: 12/19/2013

Access & Recreation

MAP 2



Sites

Streets

Roads for Fire Plan

- 4x4 / Dry season
- All access
- County road
- Trail/skid road

NHD Flowlines

- Intermittent stream
- Perennial stream
- Artificial path

0 1,500 3,000 Feet

Metro

APPENDIX A

Appendix A. Conservation Target Summary Table for Chehalem Ridge Natural Area. Summary of conservation target key ecological attributes (KEAs), significant threats, and short 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	Significant Threats	KEAs outside normal range of variation	Short-term goals (by 2017)	Long-term goals	Strategic restoration actions
Early successional shrub habitat	➢ Size of habitat ➢ Low tree cover ➢ Mix of native shrub species ➢ Snags & down wood	➢ Competition: trees overtopping shrubs; invasive species issues	➢ Vegetative structure: Douglas fir and bigleaf maple overtopping shrubs	Maintain or increase # shrub species to ≥20. Decrease cover of non-native grass and shrub species. In designated early seral stands, remove competing trees.	All condition KEAs at good levels; suitable habitat for shrub- dependent wildlife species.	➢ Control invasive species ➢ Create shrubby gaps in forest as part of thinning process
Upland coniferous forest	➢ Size of habitat ➢ Native woody vegetation ➢ Dead wood/snags	➢ Conversion to single-age, single species forest ➢ Past management; lack of snags, dead wood	➢ Native tree richness and shrub cover low ➢ Tree density too high ➢ No significant snags/dead wood	Thin forest with variable density prescription. Create snags and retain as much dead wood from thinning as is feasible.	Move toward old growth conditions and all KEAs functioning at a good level.	➢ Variable density thinning ➢ Increase native tree species, shrub cover ➢ Create snags ➢ Control invasives
Oregon white oak woodlands	➢ Size of habitat ➢ Native forbs, grasses ➢ Oak dominated, age mix	➢ Species competition is the key issue, due to encroaching conifers and invasive species	➢ Size: conifer, maple encroachment reducing extent ➢ Native grass and forb species richness: number of native plant species is low ➢ Canopy cover vegetation structure: canopy cover of oaks vs. other tree species	Maintain current trees with selective release. Decrease non-native broadleaf weed species to <20% cover; maintain <10% non-oak canopy over oak trees; increase native herb species richness by seeding and planting bulbs and plugs. Plant additional oak as restoration actions occur.	The desired future condition is to have all condition KEAs ranked as good (size may not be feasible), thereby maintaining and restoring habitat suitable for oak dependent wildlife species.	➢ Strategic non-oak tree removal ➢ Plant annual grass and forb species ➢ Control invasive species incl. thistle, ivy, clematis and Scots broom. ➢ Remove poison oak patches as needed to open up ground for grass/forb plantings.
Riparian habitats	➢ Riparian width ➢ Native woody vegetation ➢ Contiguity/ connectivity ➢ Dead wood/snags	➢ All threats are currently at a low to medium range	➢ Vegetative structure: tree and shrub layers are ranked poor or fair along some wetlands and streams ➢ Native tree & shrub species richness is low in certain areas ➢ Standing and dead wood lacking in many riparian habitats	All culverts should be modified as needed and stabilized to reduce negative effects on water and upland resources.	All key ecological attributes ranked as good, thereby maintaining and restoring riparian habitats suitable for the species that depend on them.	➢ Remove reed canarygrass and invasives ➢ Replant native shrubs and trees ➢ Possible culvert work ➢ Address gaps in riparian forest canopy as needed

APPENDIX B1

Summary of Stewardship Actions

Action	Description	Timing / frequency	Completed by
STEWARDSHIP CATEGORY: MONITORING			
Conduct Site Walks	• Evaluate status of vegetation management and other stewardship actions • Identify property line encroachments and unauthorized use of the site • Evaluate condition of infrastructure – fences, signs, roads, culverts, gates	Spring, summer, fall Periodic Periodic	Staff
STEWARDSHIP CATEGORY: VEGETATION MANAGEMENT			
Treat invasive weeds; Vegetation management	• Treat invasive weeds using chemical, mechanical, or mechanical methods or a combination of methods • Seedling release (circle spray)	See Appendix C for list of species and treatment timing. See appendix B2 for frequency Spring – release for three years after planting or until “free to go”	Contractors
STEWARDSHIP CATEGORY: ACCESS AND INFRASTRUCTURE			
Mow roadside vegetation; Signage maintenance; fence maintenance; culvert maintenance; road maintenance	• Mow all roads to be accessed by motor vehicle during the months of high fire danger – mow middle and sides • Repair/replace damaged, vandalized, and/or old/outdated signage • Repair/replace access control fencing • Culverts o Clean out as needed o Replace damaged/nonfunctioning culverts • Roads o Grading o Ditching o rocking	Mow roads at the end of June/ beginning of July Replace/repair signage as needed Replace/repair fencing as needed Clean out and replace culverts as needed Grade and ditch roads every 3-5 years or as needed. Rock as needed.	Contractors
STEWARDSHIP CATEGORY: WILDLIFE HABITAT			
Monitor habitat infrastructure	• Install deer/beaver exclusion caging • Remove deer/beaver exclusion caging	Install – as needed after planting Remove (deer) – once plants are tall and established: “free to grow” Remove (beaver) – once plant communities are well established	Contractors and/or staff
STEWARDSHIP CATEGORY: WATER RESOURCES			
N/A			

Stewardship actions planned for the next five years at Chehalem Ridge Natural Area. Estimated costs and potential additional actions that could take place, depending on time and resources, are in Appendix B2.

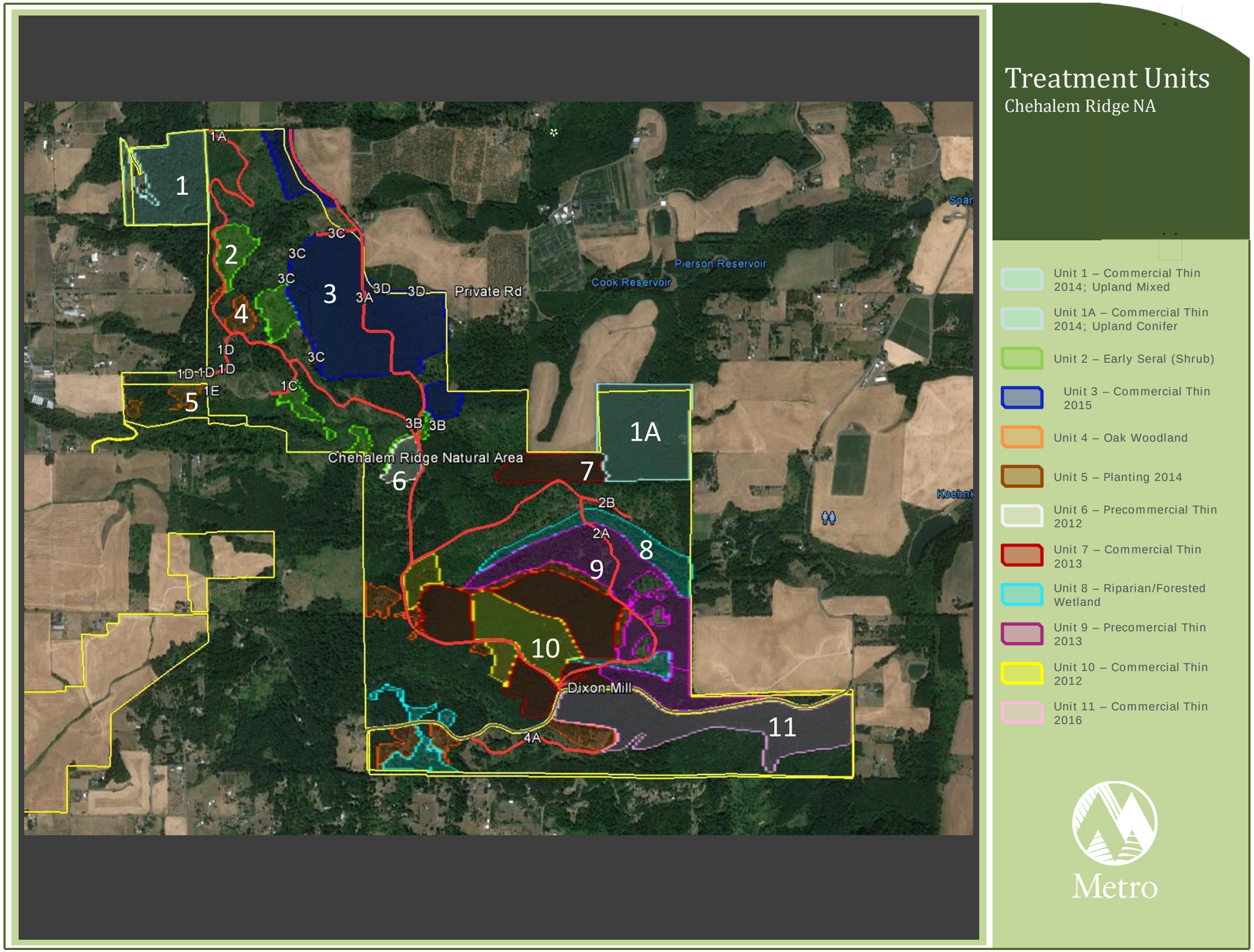
Appendix B2

1/31/2014

Appendix B2. Chehalem Ridge Natural Area 5-year budget for stewardship actions.

Unit/Area	Maintenance Category (Terramet)	Action (Terramet)	Task (VM Contract or Write In)	Stewardship Habitat Type or Conservation Target	Completed by Staff, Volunteer or Contractor	Frequency	Priority	Cost By Fiscal Year					Notes for Budget
								FY13/14	FY14/15	FY15/16	FY16/17	FY17/18	
Unit 1 - Commercial Thin 2014	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Mixed	Conrtactor	Spring/Fall	M	$0	$7,700	$15,400	$0	$15,400	
Unit 1A - Commercial Thin 2014	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Conrtactor	Spring/Fall	L/M	$0	$9,900	$19,800	$0	$0	Note that these estimates are base on a per acre rate. Many of these units will
Unit 1A - Commercial Thin 2014	Vegetation Management	Implement Tree/Shrub Planting	Circle Spray	Upland Forest - Conifer	Conrtactor	Spring	H	$0	$11,800	$11,800	$11,800	$0	only need a simple spot spray that may cost far less at an hourly rate.
Unit 2 - Early Seral (Shrub)	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Shrub (stage)	Conrtactor	Spring/Fall	H	$6,000	$12,000	$0	$0	$12,000	
Unit 3 - Commercial Thin 2015	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Conrtactor	Spring/Fall	L/M	$0	$0	$20,000	$40,000	$0	
Unit 3 - Commercial Thin 2015	Vegetation Management	Implement Tree/Shrub Planting	Circle Spray	Upland Forest - Conifer	Conrtactor	Spring	H	$0	$0	$24,000	$24,000	$24,000	
Unit 4 - Oak Woodland	Vegetation Management	Treat Invasive Weeds	Spot Spray	Woodland - Oak	Conrtactor	Spring/Fall	H	$7,500	$0	$15,000	$0	$15,000	
Unit 5 - Planting 2014	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Conrtactor	Spring/Fall	M	$925	$1,850	$1,850	$0	$0	
Unit 5 - Planting 2014	Vegetation Management	Implement Tree/Shrub Planting	Circle Spray	Upland Forest - Conifer	Conrtactor	Spring	H	$2,000	$2,000	$2,000	$0	$0	
Unit 6 - Precommercial Thin 2012	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Conrtactor	Spring/Fall	L/M	$1,400	$1,400	$0	$2,800	$0	
Unit 7 - Commercial Thin 2013	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Conrtactor	Spring/Fall	L/M	$15,000	$30,000	$0	$0	$0	
Unit 7 - Commercial Thin 2013	Vegetation Management	Implement Tree/Shrub Planting	Circle Spray	Upland Forest - Conifer	Conrtactor	Spring	H	$18,000	$18,000	$18,000	$0	$0	
Unit 8 - Riparian/Forested Wetland	Vegetation Management	Treat Invasive Weeds	Spot Spray	Riparian Forest	Conrtactor	Spring/Fall	H	$7,500	$7,500	$0	$15,000	$0	
Unit 9 - Precommercial Thin 2013	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Mixed	Conrtactor	Spring/Fall	H	$14,000	$14,000	$0	$28,000	$0	
Unit 10 - Commercial Thin 2012	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Contractor	Spring/Fall	L/M	$7,700	$15,400	$0	$0	$0	
Unit 10 - Commercial Thin 2012	Vegetation Management	Implement Tree/Shrub Planting	Cirlce Spray	Upland Forest - Conifer	Contractor	Spring	H	$7,700	$7,700	$0	$0	$0	
Unit 11 - Commercial Thin 2016	Vegetation Management	Treat Invasive Weeds	Spot Spray	Upland Forest - Conifer	Contractor	Spring/Fall	L/M	$0	$0	$0	$12,500	$25,000	
Unit 11 - Commercial Thin 2016	Vegetation Management	Implement Tree/Shrub Planting	Circle Spray	Upland Forest - Conifer	Contractor	Spring	H	$0	$0	$0	$15,000	$15,000	
Main Road System	Vegetation Management	Mow Roadside Vegetation	Mow	Non Habitat	Contractor	Sping or Early Summer	H	$2,500	$2,500	$2,500	$2,500	$2,500	
								$90,225	$141,750	$130,350	$151,600	$108,900	

See Treatment Map for Unit Locations


1
1A
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2B
3A
3B
3C
3D
4A
Private Rd
Pierson Reservoir
Cook Reservoir
Chehalem Ridge Natural Area
Dixon Mill
Spar
Koehn
Treatment Units
Chehalem Ridge NA
Unit 1 – Commercial Thin 2014; Upland Mixed
Unit 1A – Commercial Thin 2014; Upland Conifer
Unit 2 – Early Seral (Shrub)
Unit 3 – Commercial Thin 2015
Unit 4 – Oak Woodland
Unit 5 – Planting 2014
Unit 6 – Precommercial Thin 2012
Unit 7 – Commercial Thin 2013
Unit 8 – Riparian/Forested Wetland
Unit 9 – Precomercial Thin 2013
Unit 10 – Commercial Thin 2012
Unit 11 – Commercial Thin 2016
Metro

APPENDIX C

Invasive species

The table below summarizes a preliminary list of invasive plants requiring control in all or parts of Chehalem Ridge Natural Area, 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. The EDRR species listed below have not been found at Chehalem Ridge, but should be monitored for. Photos of EDRR species for identification are listed below. A list of noxious weeds for Oregon, including descriptions and photos, can be found at: www.oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml.

Appendix C. Working list of priority non-native species for control at the Chehalem Ridge Natural Area (EDRR species common names are bolded in red, with photos after list):

Genus	Species	Common name	Focus area for detection/control	Control timing
Allarium	*petiolata*	**Garlic Mustard**	EDRR - All	Spring
Brachypodium	*sylvaticum*	**False Brome**	EDRR - All	Spring/Fall
Daphne	*laureola*	**Spurge Laurel**	EDRR - All	Spring/Fall
Cirsium	*spp.*	Thistle	Oak Woodlands, Riparian, Early Seral	Spring/Fall
Clematis	*vitalba*	Old man's beard	Forest	Spring/Fall
Conium	*maculatum*	Poison Hemlock	Near main gate/along Dixon Mill Road	Spring
Crataegus	*laevigata*	English hawthorn	All	Fall
Cytisus	*scoparius*	Scotch broom	Oak Woodland, Early Seral, Open Riparian, Roadsides	Fall
Prunus	*ssp.*	Nonnative Cherry and plum	All	Fall
Geranium	*lucidum*	Shiny Geranium	Oak Woodland, Riparian	Winter/Spring
Hedera	*helix*	English Ivy	All	Winter
Verbascum	*spp.*	Mullein	Oak Woodland, Open Riparian	Spring/Fall
Digitalis	*spp.*	Foxglove	Oak Woodland, Riparian	Spring/Fall
Phalaris	*arundinacea*	Reed canarygrass	Ash Forested Wetland, Open Riparian	Fall
Rubus	*armeniacus*	Himalayan blackberry	All	Fall
Robinia	*pseudoacacia*	Black locust	All	Fall
Vinca	*major/minor*	Bigleaf/Common periwinkle	All	Winter

APPENDIX D

Metro

Incident Action Plan
Chehalem Ridge Natural Area

Address/Access Points:

- Address: This property has no physical address. It is located near Gaston, Oregon (south of Forest Grove and Cornelius) off of Dixon Mill Road.
- Main Access (Northern Gate): Latitude 45°26'14.33"N; Longitude 123° 4'17.48"W
    - Red gate with Metro "A" lock and Knox boxes for Gaston, Forest Grove, and Cornelius Fire Departments
    - Access to main portion of the property and main road system
- Secondary Access 1 (SW Gnos Rd.): Latitude 45°27'17.69"N; Longitude 123°04'43.19"W
    - Yellow gate with Metro "A" lock and Knox boxes for Gaston, Forest Grove, and Cornelius Fire Departments
    - Access off of SW Gnos Rd. to the NE portion of the property
- Secondary Access 2 (SW Withycombe Rd.): Latitude 45°26'54.69"N; Longitude 123° 5'59.36"W
    - Immediately east of 41329 SW Withycombe Rd, Gaston, Oregon
    - Cable gate and green farm gate both with Metro "A" locks – currently no Knox boxes for fire department access
    - Road is unimproved – access is very limited
        - Access to "panhandle" – West portion of the property
- Secondary Access 3 (SW Hummingbird Lane): Latitude 45°27'5.13"N; Longitude 123° 5'57.44"W
    - Cable gate with Metro "A" lock –no Knox boxes for fire department access
    - Access to Road 1D
    - Road is unimproved and blocked with debris – limited access
- Southern Access (Southern Gate): Latitude 45°26'6.37"N; Longitude 123° 4'37.64"W

Prepared by Ryan Jones – Metro Natural Areas Program
01/31/14

- Red gate with Metro "A" lock and Knox boxes for Gaston, Forest Grove, and Cornelius Fire Departments
- Access to smaller, southern portion of the property

Location:

The Property is located in T1S R3W Sections 28, 29, 30, 32 and 33. It is divided by Dixon Mill Road into north and south sections. The larger portion of the property lies to the north of the road (996 acres) with the smaller portion to the south (200 acres).

Acreage: 1196

Structures: Yes

Metro residential lease (house): 40845 SW Burgarsky Road, Gaston, OR 97119

Water Sources and Staging Area:

One potential water source is located in the west-central section of the property near the panhandle. It is next to the road and could serve as a drafting site depending on seasonal water levels. A wetland area near Dixon Mill road on the Northern parcel could serve as a draft site depending on water level. Small perennial streams on the property could potentially serve as a water source. Potential water sources are indicated on the map. Fire hydrants within close proximity of the Chehalem Ridge Natural Area will be indicated on the map.

A small staging area is located just inside the North gate off of Dixon Mill Road. It is a gravel parking area approximately 200ft x 200ft. There is the potential for building a larger staging area/heli-spot during future thinning operations.

Contact Information

Metro Natural Areas Program

503-797-1819 (office) 503-449-7951 (cell) 503-460-9123 (home)	Dan Moeller, Natural Areas Land Manager
503-964-0513 (cell)	Ryan Jones, Natural Resource Technician
503-539-3350 (cell)	Kate Holleran, Natural Resources Scientist

Local Fire Department(s)

503-985-7575	Gaston Rural Fire District
503-357-3840	Cornelius Fire Department
503-992-3240	Forest Grove Fire and Rescue

Other relevant contacts (*e.g., ODF at Chehalem Ridge*)

503-357-2191	Oregon Department of Forestry – Forest Grove Office

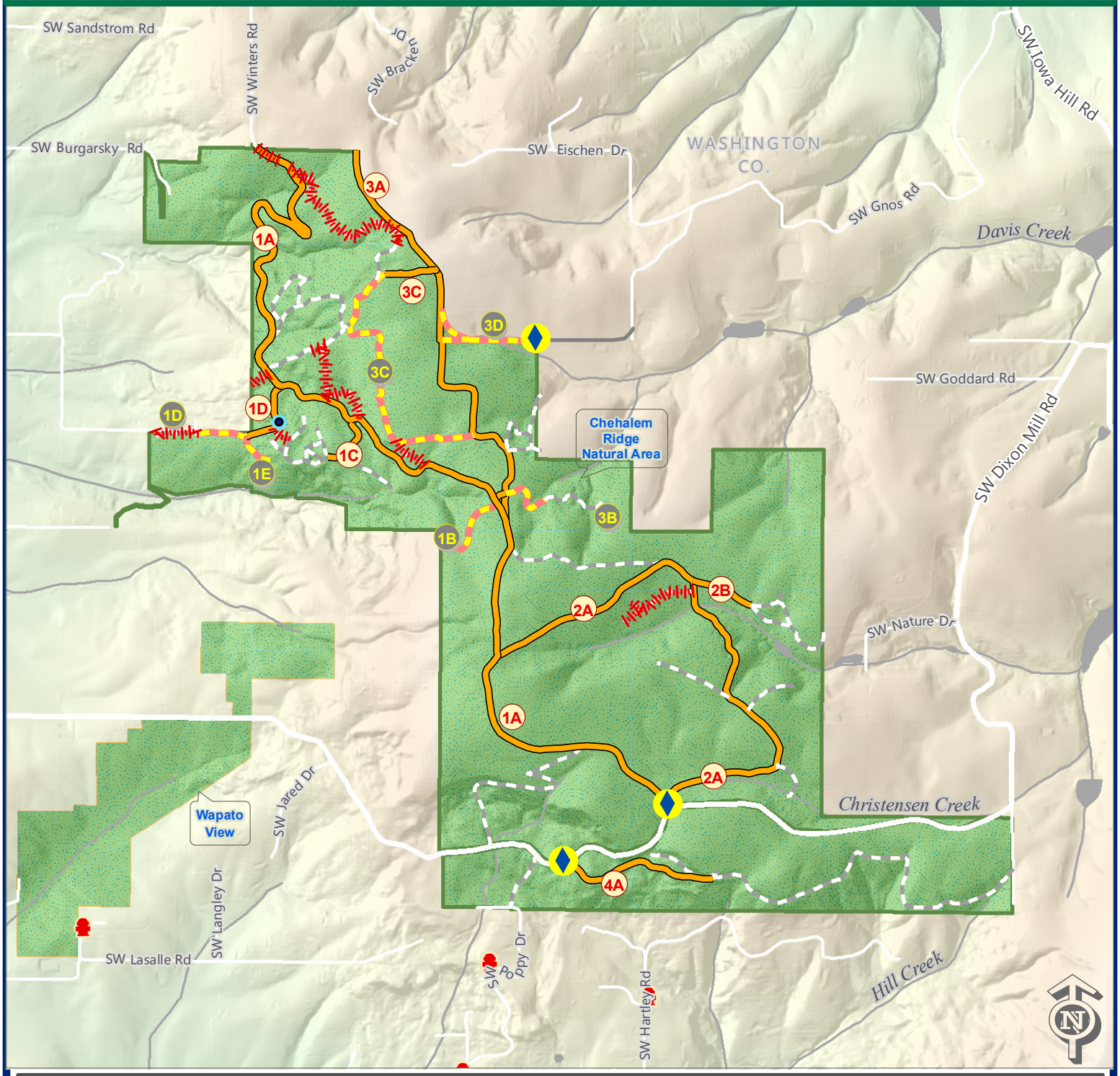
Sheriff / Police Department

911	***Emergency***
503-629-0111	Washington County Sheriff – Non-emergency dispatch

Renters:

503-985-0215 (daytime phone)	Terry and Steve O'day
503-352-2765 (cell)	

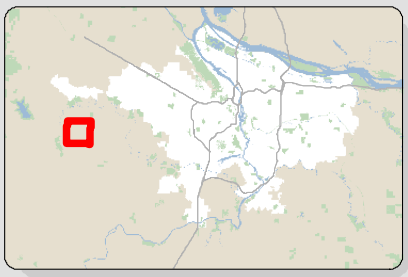
Fire Incident Action Plan



- Chehalem Ridge Natural Area site
- Other Metro sites
- Park and/or natural area
- Potential water source
- Hydrants
- Main Gate
- Roads Decommissioned

Road Network

- 4x4 / Dry Season
- All Access
- Private Rd
- trail/skid road



0 0.25 0.5 Miles

Metro

Chehalem Ridge Natural Area Site Conservation Plan

created by planning team with illustrator
map date: 3/27/2014