# ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT



# **VOLUME 1**

Project Overview, Zoning Amendments, Ezone Remapping



# **Recommended Draft**

January 2022





# **How to Testify**

You may submit comments to Portland City Council on the Environmental Overlay Zone Map Correction Project Recommended Draft in the following ways:

### **Use the Map App:**

Go to <a href="https://www.portlandmaps.com/bps/mapapp">www.portlandmaps.com/bps/mapapp</a>
Click on "Ezone Project" and then click the "Testify" button.

By email: <a href="mailto:cctestimony@portlandoregon.gov">cctestimony@portlandoregon.gov</a>

By U.S. Mail

Council Clerk 1221 SW 4th Avenue Room 130 Portland, OR 97204

#### In person at the public hearings

City Council will hold a public hearing on the Environmental Overlay Zone Map Correction Project on February 16, 2022. The meeting will be held virtually, by video conference. It can be viewed live, or after the meeting concludes. City Council meetings can be viewed on the City of Portland website: <a href="www.portlandoregon.gov/video">www.portlandoregon.gov/video</a> or on the Portland eGov PDX YouTube channel:

https://www.youtube.com/channel/UCcPIUh7CWwtBXisMPHWG65g

To register to testify verbally during the hearing, please visit the Portland City Council Agenda website: <a href="https://www.portland.gov/council/agenda">https://www.portland.gov/council/agenda</a>. The deadline to sign up for the February 16 hearing is Tuesday, February 15 at 4:00 p.m.

The City of Portland is committed to providing meaningful access. To request translation, interpretation, modifications, accommodations, or other auxiliary aids or services, contact 503-823-7700, Relay: 711

Traducción e Interpretación | Biên Dịch và Thông Dịch | अनुवादन तथा व ा । 口笔译服务

| www.portland.gov/bps/accommodation

### Acknowledgements

This plan is the culmination of three years of work across the City of Portland. Many thanks to the thousands of stakeholders, property owners, renters, business owners and interested people who attended dozens of neighborhood and community meetings and invited staff to their homes and businesses to perform site visits.

#### **Portland City Council**

Ted Wheeler, Mayor Carmen Rubio, Commissioner in Charge Jo Ann Hardesty, Commissioner Mingus Mapps, Commissioner Dan Ryan, Commissioner

# Portland Planning and Sustainability Commission

Eli Spevak, Chair
Steph Routh, Vice Chair
Jeff Bachrach, Vice Chair
Johnell Bell
Jessica Gittemeier
Katie Larsell
Oriana Magnera
Valeria McWilliams
Gabe Shoeships
Erica Thompson

### **Bureau of Planning and Sustainability**

Andrea Durbin, Director
Eric Engstrom, Principal Planner
Sallie Edmunds, River and Environmental Planning
Manager



#### **Core Team**

Daniel Soebbing, Project Manager Mindy Brooks, Project Manager (through September 2021) Emma Kohlsmith, Planner (BPS and BES) Neil Loehlein, GIS Analyst

#### **Contributing Staff**

Shannon Buono, Eden Dabbs, Krista Gust, Carmen Piekarski, Derek Miller, Joe Zehnder, Xanthia Wolland

Bureau of Environmental Services: Marc Peters, Chad Smith, Matt Vesh, Kaitlin Lovell, Marie Walkiewicz, Paul Ketcham, Jennifer Antak, Heidi Berg, Ethan Brown, Melissa Brown, Lisa Moscinski, Darian Santer, Naomi Tsurumi, and Christa Von Behren

Bureau of Parks and Recreation: Brett Horner, Laura Lehman, Emily Roth, Katie Dunham, Kendra Peterson-Morgan, Laura Guderyahn, Christian Haaning, Marshall Johnson, Steve Lower, Nathan Schulte and Becca Shivelly

**Bureau of Development Services:** Stephanie Beckman and Morgan Steele

**Consultants:** Barney & Worth, facilitation services

# **Table of Contents**

Part A	: Project Background and Approach	
A.	Project Purpose	1
В.	Introduction	1
C.	Project Outcomes	9
D.	Why Protect Natural Resources	11
E.	Environmental Overlay Zones Explained	17
F.	Natural Resource Mapping	21
G.	Project Approach and Methodology	27
	G.1. Metro Title 13 Compliance	29
	G.2. Statewide Land Use Planning Goal 5 Compliance	32
Н.	Public Engagement	33
Part B	: Zoning Code Amendments	38
A.	Introduction	38
В.	Zoning Code Updates	40
	33.430, Environmental Zones	41
	33.475, River Overlay Zones	107
	33.480, Scenic Resource Zones	111
	33.537, Johnson Creek Basin Plan District	115
	33.564, Pleasant Valley Plan District	117
	33.910, Definitions	121
Part C	: Proposed Ezones	123
A.	Summary of Resource Site Results	123
	A.1 Forest Park and Northwest District	124
	A.2 Skyline West	141
	A.3 Tryon Creek and Southwest Hills East	147
	A.4 Fanno Creek	156
	A.5 East Buttes and Terraces	162
	A.6 Johnson Creek	168
	A.7 Boring Lava Domes	178
В.	Remapping Environmental Overlay Zones	184
	B.1 Scenic Overlay Zones	184
	B.2 Protection Overlay Zone Conversions	184
	B.3 Edits to Match Previously Adopted Policies	188
C.	Maps of Proposed Ezone Corrections	188

Ma	ps
----	----

	1.	Environmental Overlay Zone Map Correction Project Area	3
	2.	2019 Environmental Overlay Zones	4
	3.	Environmental Overlay Zone Map Correction Project Area	27
	4.	Ezone Map Correction Site Visits Conducted	37
	5.	Forest Park and Northwest District Resource Sites	125
	6.	Skyline West Resource Sites	142
	7.	Tryon Creek and Southwest Hills East Resource Sites	147
	8.	Fanno Creek Resource Sites	157
	9.	East Buttes and Terraces Resource Sites	163
	10	Johnson Creek Resource Sites	169
	11	Boring Lava Domes Resource Sties	179
	12	Protection to Conservation Zone Conversions	187
Table	S		
	1.	Ecosystem Services Valuation	14
	2.	Methodology for Determining Habitat Conservation Areas	31
	3.	Forest Park and Northwest District – Summary of Decisions	126
	4.	Skyline West – Summary of Decisions	143
	5.	Tryon Creek and Southwest Hills East – Summary of Decisions	148
	6.	Fanno Creek – Summary of Decisions	158
	7.	East Buttes and Terraces – Summary of Decisions	164
	8.	Johnson Creek – Summary of Decisions	170
	9.	Boring Lava Domes – Summary of Decisions	180
Figure	es		
	1.	City of Portland History of Protection Plans	2
	2.	Inventory of Natural Resource Features, Southwest Hills Resource	5
		Protection Plan (1992), Resource Site 111	
	3.	Stream Mapping using LiDAR	6
	4.	Urban Heat Islands in Portland	13
	5.	Relationship of Natural Resources to Public Health	16
	6.	Environmental Overlay Zones on a Residential Site	19
	7.	Environmental Overlay Zones on an Industrial Site	20
	8.	River/Stream Channel Cross Section	22
	9.	Forest Patch	24
	10	Trees on Steep Slopes	25
	11	Example of an Unprotected Stream Segment	27

The Environmental Overlay Zone Map Correction Project documents have been reorganized. After the Planning and Sustainability Commission voted to recommend the Ezone Project to City Council, the Proposed Draft – As Amended Volume 1 Part A and Volume 1 Part B were consolidated into Volume 1 of the Recommended Draft. Volumes 3, 4, and 5 of the Proposed Draft – As Amended were consolidated into Volume 3 of the Recommended Draft.

# **Part A: Project Background and Approach**

# A. Project Purpose

The purpose of the *Environmental Overlay Zone Map Correction Project* is to adjust the boundaries of the conservation and protection overlay zones to better align with existing natural resources including streams, wetlands, flood area, vegetation, steep slopes, and wildlife habitat. The project areas include the Northwest Hills, Forest Park, Southwest Hills, Tryon Creek Watershed, Fanno Creek Watershed, East Buttes and Terraces, Johnson Creek, and Boring Lava Domes (see Map 1: Project Area).

### **B.** Introduction

Environmental overlay zones and their associated regulations in Zoning Code Chapter 33.430 protect Portland's natural resources, including rivers, streams, wetlands, tree canopy, vegetation, and wildlife habitat, and minimize risk of damage to homes, business and infrastructure from natural hazards, including landslides, flooding and erosion. The protections also mitigate the effects of climate change, such as reducing air temperature, improving air quality, managing stormwater and maintaining access to nature in the city. The environmental regulations encourage flexibility and innovation in site planning and provide for development that is carefully designed to be sensitive to natural resources.

Beginning in 1989, Portland adopted 13 natural resource conservation and protection plans for areas in the city where there are significant natural resources (Figure 1). The *Environmental Overlay Zone Map Correction Project* is repealing and replacing all or portions of 9 of the area specific natural resource protection plans (Map 1). Each of these plans were originally adopted to comply with Oregon Statewide Planning Goal 5, Natural Resources, Scenic and Historic Areas, and Open Spaces, as well as contributing towards compliance with Goal 6, Air, Water and Land Resources Quality and Goal 7, Areas Subject to Natural Hazards. By 2004, environmental overlay zones had been applied to natural resources citywide, and Portland was fully in compliance with Goal 5 (Map 2).

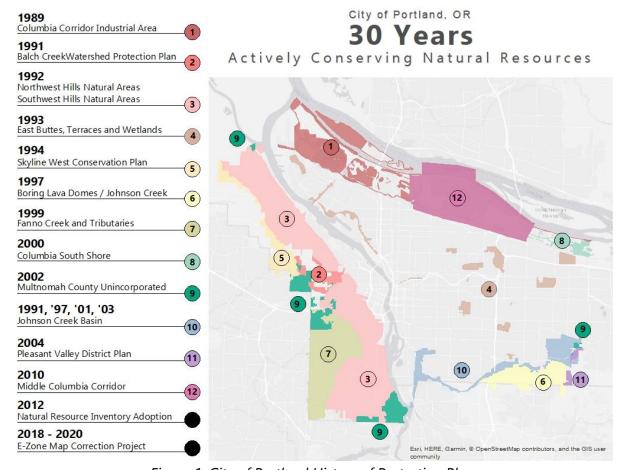
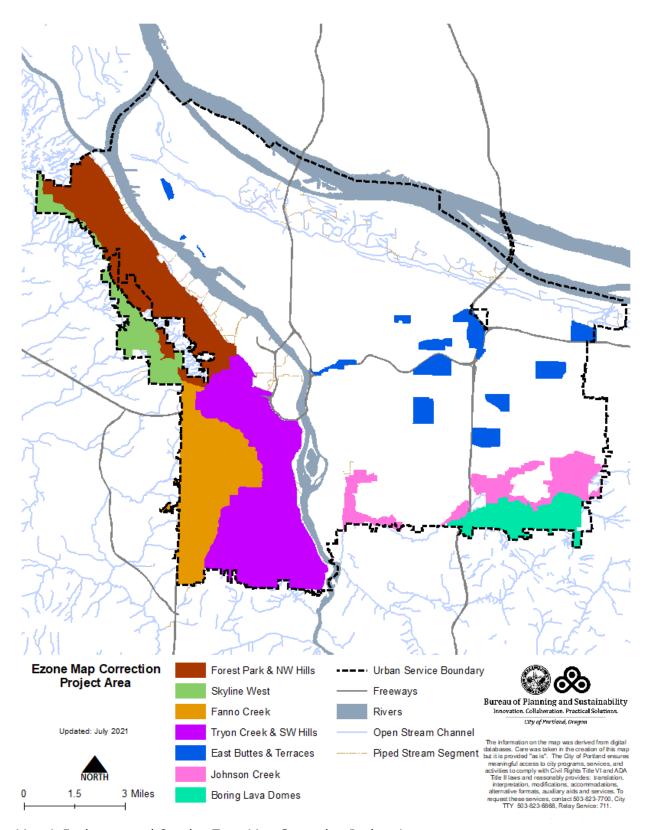
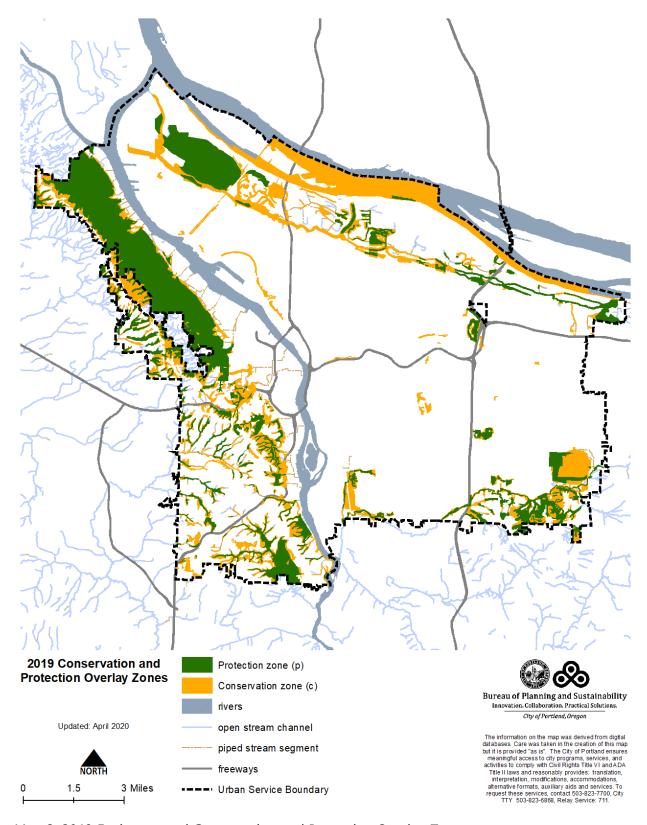


Figure 1: City of Portland History of Protection Plans



Map 1: Environmental Overlay Zone Map Correction Project Area



Map 2: 2019 Environmental Conservation and Protection Overlay Zones

In the 1990s, the City's environmental overlay zones were mapped using relatively "low-tech" methods. Many of the original plans used hand drawings to represent stream channels and tree canopy (Figure 2). Global Positioning Systems (GPS) and digital imagery were not available or were not accurate enough for use until the early 2000s.

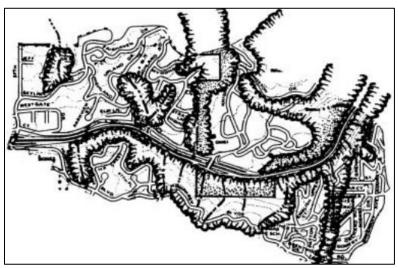


Figure 2: Inventory of Natural Resource Features, Southwest Hills Resource Protection Plan (1992), Resource Site 111

Today, technology has advanced significantly and can be used to produce more accurate maps of natural resource features. For example, LiDAR is a remote sensing tool that detects light reflected off objects on the ground. LiDAR can be used to accurately map topography, stream channels, wetlands and vegetation – even the height of individual trees. Figure 3 is topographic and stream mapping for the same geography as shown in Figure 2. Other tools and data sources include aerial photography updated annually, Google Earth, city infrastructure maps, etc.

Using this new technology, the City updated maps of Portland's natural resources in 2005. Over 160 miles of stream alignments were remapped and approximately 75 miles of previously unmapped streams were added. In 2007, mapping of vegetation patches was updated across the city using new aerial photography. The consistent and replicable approach to mapping natural resource features and functions was documented in the <u>National Resources</u> <u>Inventory</u> (available online at www.portlandoregon.gov/bps/47529) and adopted by City Council in 2012.

In 2005, Metro adopted Urban Growth Management Function Plan Title 13, Nature in Neighborhoods. Title 13 demonstrates regional compliance with Goal 5 for riparian corridors and wildlife habitat. After 2005, local jurisdictions were required to demonstrate compliance with Title 13 instead of Goal 5 for only those resources. By 2005, Portland already had an environmental program that complied with Goal 5. In 2012, the City used the new *Natural Resources Inventory* and the existing environmental program, including the conservation and

protection overlay zones, to demonstrate substantial compliance with Metro Title 13. The *Title 13 – Nature in Neighborhoods Request for Metro Determination of Substantial Compliance* report is a separate document available online (https://www.portland.gov/sites/default/files/2020-02/2012\_metrotitle13\_compliancereport.pdf)

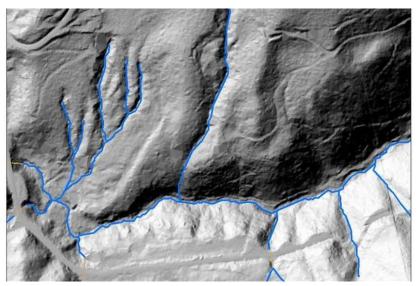


Figure 3: Stream Mapping using LiDAR

In 2018, City Council adopted the 2035 Comprehensive Plan, which directs Portland to comply with the following policies:

**Policy 7.19, Natural resource protection.** Protect the quantity, quality, and function of significant natural resources identified in the City's natural resource inventory, including:

- Rivers, streams, sloughs, and drainageways.
- Floodplains.
- Riparian corridors.
- Wetlands.
- Groundwater.
- Native and other beneficial vegetation species and communities.
- Aquatic and terrestrial habitats, including special habitats or habitats of concern, large anchor habitats, habitat complexes and corridors, rare and declining habitats such as wetlands, native oak, bottomland hardwood forest, grassland habitat, shallow water habitat, and habitats that support special-status or at-risk plant and wildlife species.
- Other resources identified in natural resource inventories.

- **7.20 Natural resource inventory.** Maintain an up-to-date inventory by identifying the location and evaluating the relative quantity and quality of natural resources.
- **7.21 Environmental plans and regulations.** Maintain up-to-date environmental protection plans and regulations that specify the significant natural resources to be protected and the types of protections to be applied, based on the best data and science available and on an evalution of cumulative environmental, social and economic impacts and tradeoffs.

The Ezone Map Correction Project is updating the city's existing environmental program, as directed by the *2035 Comprehensive Plan*, and amending compliance with Metro Title 13 and Oregon Goal 5.

#### **Natural Resource Feature Definitions**

**Land:** The ground itself and any features associated with or located on the ground including but not limited to flood area, vegetation, rip rap, paved areas, structures, buildings, trails, etc.

#### **Vegetation**

**Forest**: Half-acre or larger patch of trees with their crowns overlapping, generally forming 60-100% of cover. **Woodland**: Half-acre or larger patch of open stands of trees with crowns not usually touching, generally forming 25-60% of cover.

**Shrubland**: Half-acre or larger patch of shrubs generally greater than 0.5 m tall with individuals or clumps overlapping to not touching, generally forming more than 25% of cover with trees generally less than 25% of cover. Vegetation dominated by woody vines (i.e., blackberry) is generally included in this class.

**Herbaceous**: Half-acre or larger patch of herbs (graminoids, forbs, ferns and shrubs less than 0.5m tall) dominant, generally forming at least 25% of cover. This may include shrubs less than 0.5 m tall.

#### Waterbodies

**Wetlands:** Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions; although due to landscaping, seeding, mowing or grazing wetadopted vegetation (hydrophytes) may not be present.

**Stream:** A stream is a channel that has a defined bed and bank and carries water continuously for a week or more during at least the wet season (October through April). Streams may be naturally occurring or may be a relocated, altered or created channel. Streams may contribute water into another waterbody or the water may flow into a pipe or culvert. Streams may flow for some distance underground. Streams are also referred to as *drainageways, ditches,* or *drainages* in other City of Portland reports, codes and rules or by other agencies including but not limited to Oregon Department of State Land or US Army Corps of Engineers. Streams include:

- A. the water itself, including any vegetation, aquatic life or habitat;
- B. the channel, bed and banks located between the tops-of-bank; the channel may contain water, whether or not water is actually present;
- C. intermittent streams, which flow continuously for weeks or months during the wet season and normally cease flowing for weeks or months during dry season;
- D. sloughs, which are slow-moving, canal-like channels that are primarily formed by tidal influences, backwater from a larger river system, or groundwater;
- E. oxbows and side channels connected by surface flow to the stream during a portion of the year; and
- F. drainage from wetlands, ponds, lakes, seeps or springs, which may or may not form a defined bed and bank.

**Drainage:** A drainage is an area on the land that conveys flowing water for only hours or days following a rainfall. If a drainage drains water from a wetland, pond, lake, seep, or spring, even if it does not have a defined bed and bank, then it is classified as a *stream*.

**Roadside Ditch:** A roadside ditch is a constructed channel typically parallel and directly adjacent to a public or private road. A roadside ditch is designed to capture and convey stormwater runoff from the road and is routinely cleaned (i.e., mechanically scoured or scraped of vegetation and debris) to maintain water conveyance capacity. Naturally occurring streams and drainages that have been relocated due to the construction of a road are not considered a *roadside ditch*.

#### **Hazards**

**Floodplain:** The combination of the FEMA 100-year floodplain (those areas with a 1% or greater chance of flooding in any given year) and areas that were inundated with water during the February 1996 floods. (The FEMA designation for the 100-year floodplain is Special Flood Hazard Area.)

**Steep slopes:** Land with a 25% or greater slope.

# **C.** Project Outcomes

The *Environmental Overlay Zone Map Correction Project* accomplishes the following things within the geographic scope of the project (Map 1):

- 1. Repeals the previously adopted Goal 5 inventories and Economic, Social, Environmental and Energy analyses and decisions and replaces with a combination of Metro Title 13 and Oregon Goal 5 compliance updates;
- 2. Amends Metro Title 13 compliance by following the rules of 3.07 to verify habitat areas, identify urban development value, confirm Habitat Conservation Areas and amend the location of the conservation and protection overlay zone to substantially align with the Habitat Conservation Areas;
- 3. Adopts new Oregon Goal 5 compliance by following the rules of OAR 660-023 for significant habitat that is not a Metro Title 13 Habitat Conservation Area; and
- 4. Amends Metro Title 13 compliance to demonstrate a *de minimis* impact on conservation and protection overlay zones applied to upland habitat.

Below is a description of the project report volumes:

#### Volume 1: Project Overview, Zoning Amendments, Ezone Remapping

The document provides an overview of the project, summarizes the approach and methodology (including relationship to Title 13 and Goal 5), and summarizes the results of the watershed reports. Volume 1 also includes the implementation tools – amended zoning codes and maps.

- **Part A Project Background and Approach**
- Part B Zoning Code Amendments
- Part C Ezone Remapping

#### Volume 2: Resource Site Inventory and Resource Protection Decisions

There are separate reports for each subarea in Portland:

- Part A Forest Park and Northwest District
- Part B Skyline West
- Part C Tryon Creek and Southwest Hills
- Part D Fanno Creek
- Part E East Buttes and Terraces
- Part F Johnson Creek
- Part G Boring Lava Domes

Within each subarea there are defined resource sites and for each resource site there is an inventory of riparian corridors and wildlife habitat features and functions. Following the inventory, for resource sites that contain significant features that are not a Metro Title Habitat

Conservation Area, there is a site-specific Economic, Social, Environmental and Energy Analysis and recommendations. Each resource site section concludes with the decisions for the level of protection recommended for each significant natural resource feature. The results are also presented in the maps for each resource site:

- 1. Water Features
- 2. Vegetation and Steep Slopes
- 3. Special Habitat Areas
- 4. Riparian Area Habitat Classifications
- 5. Wildlife Habitat Classifications
- 6. Urban Development Values
- 7. Habitat Conservation Areas and Goal 5 Areas
- 8. Goal 5 Resources
- 9. Draft Proposed Environmental Overlays

#### Volume 3: Natural Resources Inventory, Compliance, and Appendix

**Part A** Includes the approach and methodology used to produce the Natural Resources Inventory plus the citywide results. The results are presented in greater detail in Volume 2 by resource site.

**Part B** Demonstrates compliance with Oregon State Planning Goal 5 and Metro Functional Plan Title 13.

#### **Part B.1 – Metro Title 13 Compliance**

A detailed explanation that demonstrates compliance for Habitat Conservation Areas. The results and recommended updates to the conservation and protection overlay zones are reported in Volume 2. Implementation is reported in Volume 1, Part B.

#### Part B.2 - Oregon Goal 5 Compliance

For Class III riparian corridors and wildlife habitat, the necessary Goal 5 steps are documented. The specific results and recommended updates to the conservation and protection overlay zones are reported in Volume 2 by resource site. Implementation is reported in Volume 1, Part B.

**Appendix** Includes the reference list, examples of the public notices, properties with protection-to-conservation zone conversions and the special status species list.

# **D.** Why Protect Natural Resources?

Portland is located at the confluence of the Willamette and Columbia rivers. Humans have lived in this area for tens of thousands of years in part because of the abundant natural resources like salmon, lamprey, elk, Wapato and Camas for food and cedar and oak for housing, transportation and fuel. The area is also home to thousands of fish, mammals, birds, amphibians, reptiles and insect species. Over the years, the land has been altered by urbanization but still provides important functions. Today, the scarcity of natural resources, both in quantity and quality, makes those remaining resources even more important.

Portland is experiencing hotter and dryer summers as well as warmer and wetter winters than the city experienced historically. These changes will have a negative impact on public health through more frequent and longer heat waves, more air quality advisory days, more flooding, and potentially less access to nature if certain habitats cannot adjust to the changes in the local climate. Natural resources provide functions that play an important role in mitigating the risks associated with a changing climate.

Rivers, streams, wetlands and undeveloped flood areas are important for minimizing the risks and costs associated with floods. Studies have found that the relative flood storage capacity in Portland is relatively small as compared to the entirety of the Willamette River and Columbia River basins. Dams along the Willamette and Columbia River are managed, in part, to control flooding. However, the flood storage capacity along smaller water bodies, such as Johnson Creek and Tryon Creek, is much more significant.



Image: Flooding in Rivergate, Portland, Oregon (1996)

Flooding can cause significant damage to homes and businesses as well as public infrastructure like roads. Lands around Johnson Creek have experienced frequent and repeated flooding for many years. Following a 1996 flood that had widespread impacts around Portland, the Bureau of Environmental Services (BES) developed the Johnson Creek Willing Seller Land Acquisition Program, which has facilitated the acquisition and preservation of over 250 acres of land that has a high potential for flood mitigation or a high risk of flooding. The land is then restored to increase flood storage capacity, improve fish and wildlife habitat, restore wetlands and create passive recreational activities for city residents. By increasing flood storage capacity in natural areas, the risk of flood damage to nearby properties is minimized. BES has spent approximately \$20M on acquisition to support this program through June 2020.

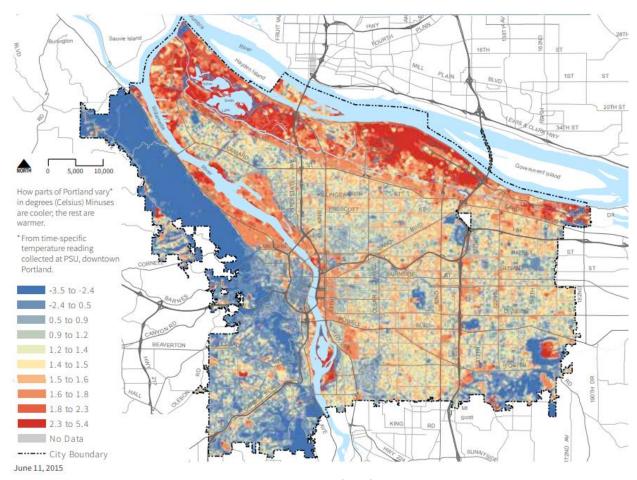
Other examples of the economic impacts of flooding are below:

- 1. On July 31, 1976 a flash flood in Big Thompson Canyon, Colorado, resulted in damages exceeding \$30 million. In 2013, a second Big Thompson flood destroyed Vistenz-Smith Park and Sylvan Dale Ranch, two locations that commemorated the 1976 flood.
- 2. Following the 1993 Mississippi River Floods the town of Valmyer, Illinois took roughly \$28 million in recovery funds and moved the entire town.
- 3. In 1997 in Grand Forks, North Dakota (population of roughly 50,000 at the time), sustained more than \$1 billion in damages from flooding.

By protecting rivers, streams, wetlands and undeveloped flood areas, including riparian areas around the water features, the stormwater management and flood storage functions can be maintained. This reduces costs associated with property damage and displacement of people.

Extreme heat events are becoming more common in Portland. In the United States, extreme heat causes more deaths annually than all other weather events and natural hazards (Luber, 2008). Areas with more tree canopy experience less ambient heat than areas with less tree canopy, as shown in Figure 4. Trees also filter the air improving air quality and provide shade for people to escape heat and recreate.

Trees also provide soil stabilization functions, particularly on steep slopes. Tree canopy attenuates rain fall, roots uptake ground water and roots hold soil in place. This reduces landslide risks and damage to private property and public infrastructure.



Source: Sustaining Urban Places Research Lab (SURP), Portland State University, 2015

Figure 4: Urban Heat Islands in Portland



Image: Landslide in Southwest Portland (2008)

The functions provided by natural resources are called ecosystem services and have associated economic value. Ecosystem services include water conveyance, purification, and flood control, air cooling and purification, carbon sequestration, soil fertilization, and pollination. Ecosystem goods include commodities like food, fuel, fisheries, timber, minerals, etc.

Table 1 provides a summary of the economic value of the ecosystem services provided by different natural resource features. These numbers come from the study of functions like the amount of pollutants removed from the air by trees. Trees remove carbon dioxide, nitrogen dioxide, sulfur dioxide, ozone and particulate matter. This has economic benefits including reduced health care costs associated with respiratory illness. Another example are streams and wetlands which manage stormwater, remove pollutants from water and regulate floods. Maintaining existing streams and wetlands reduces the need for additional infrastructure like stormwater pipes, thus reducing the public cost burden. Another example is shallow water which is critical habitat for salmon and supports the commercial fishing industry.

Table 1: Ecosystem Services Valuation (2011\$/Acre/Year)

Habitat Tuna	Air	Carbon	Water	Wildlife	Total Value	
Habitat Type	Purification	Sequestration	Purification	Habitat Value	i otai value	
Forest/Woodland	\$73-\$267	\$26–\$92	Not Quantified	\$309–\$516	\$408–\$875	
Wetland	\$74-\$266	Not Quantified	\$153–\$664	\$3,095–\$11,347	\$3,322-\$12,277	
Shrubland	\$30-\$110	\$24–\$88	Not Quantified	\$309–\$516	\$363–\$714	
Grassland	\$24–\$89	\$24–\$88	Not Quantified	\$309–\$516	\$357–\$693	
Shallow Water	Not Quantified	Not Quantified	Not Quantified	\$1,037–\$15,473	\$1,032–\$15,473	
Source: ECONorthwest (2012)						

There are direct economic benefits for properties too. A Portland-based study done by Donovan and Butry in 2010 found that trees within 100 feet of houses added approximately \$8,870 to the price of a house, which represents 3.0% of sale price. Those trees also provide benefits such as cooling the air in the summer and attenuating rain in the winter.

Some ecosystem services are more difficult to quantify but do have an economic benefit. For example, bird watching is part of the eco-tourism industry and has an estimated value of \$43-\$339/acre/year (Woodward, 2001; Dodds, 2008). Access to natural areas and open spaces has an impact on human behavior and psyche. Access can mean a range of things from viewing vegetation to bird watching to hiking or boating. Dr. Roger Ulrich of Texas A&M's Center for Health Systems and Design found that passive scenic values, such as looking at trees, reduces stress, lowers blood pressure and enhances medical recovery (Ulrich et al. 1991). The presence of trees and grass can lower the incidence of aggression and violent behavior (Kuo and Sullivan, 2001b). Common green areas in neighborhoods can also increase community ties and support social networks, which a determining factor in overall health.

Recreation has multiple health benefits. For people who are inactive, even small increases in physical activity can yield numerous health benefits (Mult. Co. Health Department, 2012). Exercise improves overall health, which reduces public and private health care costs, improves quality of life, and may help people live longer (Nieman, 1998). Activities such as walking in forested areas help boost the immune system (Sachs and Segal, 1994). In addition, the Centers for Disease Control and Prevention strongly recommends improving access to places for physical activities such as biking or hiking trails to reduce the risk of cardiovascular disease, diabetes, obesity, selected cancers and musculoskeletal conditions.

The British Columbia Center for Disease Control developed a toolkit that makes links between protecting natural resources and public health (Figure 5). The first planning principle is to preserve and connect open space and environmentally sensitive areas. This is particularly important in neighborhoods with limited existing natural resources like street trees or parks. By protecting the resources that remain, a strategy can be developed to enhance and reconnect nature in neighborhoods, thus improving physical and mental health.

#### HEALTH PLANNING PRINCIPLE IMPACT RELATED OUTCOME 1. Preserve and connect open space and environmentally sensitive areas soil nutrient concentration — A ecosystem services biodiversity required to sustain life Ensure natural areas water quality protect the ecosystem crop pollination services that we depend ecosystem functioning 2. Maximize opportunities to access and engage with the natural environment physical activity · > 🕟 physiological health Cognitive health stress Enable natural social interaction nsychological health environments to be Social well-being spiritual inspiration experienced and accessed biodiversity spiritual well-being attention restoration vitamin D mediated health outcomes 3. Reduce urban air pollution particulate matter — > 🖖 hospitalization for Careful community ground-level ozone respiratory illness planning can limit harmful emissions (NO, SO,) cardiovascular production of, and mortality exposure to, air pollution. 4. Mitigate urban heat island effect 🖖 ambient air temperature — Expand the use of mortality and morbidity vegetation in the urban environment to mitigate the formation of heat islands. 5. Expand natural elements across the landscape This planning principle was studied in the context of Increase vegetation across principles 2 8 0 the built environment including in developments, Positive effect 🎧 😍 Negative effect neighbourhoods and transit No effect hubs. Conflicting evidence on direction of effect 🎧 🕕 👔 For future evidence revie HEALTHY BUILT ENVIRONMENT LINKAGES A TOOLKIT FOR DESIGN - PLANNING - HEALTH

Figure 5: Relationship of Natural Resources to Public Health (British Columbia Centre for Disease Control, 2018)

# E. Environmental Overlay Zones Explained

Environmental overlay zones, or ezones, and the regulations that accompany them, are a tool used by the City to help protect important natural resources in Portland.

Examples of natural resources identified for protection include:

- Rivers, streams, and wetlands this is where fish and wildlife live; these features move
  water from land to larger rivers and the ocean; they also cool the air and provide places
  for people to recreate.
- Flood areas this is where the water goes when it floods; development, like houses, businesses and parking areas, can be damaged during floods; filling in the floodplain can make flooding worse elsewhere.
- Forests and woodlands this is where wildlife live and people go to hike, bird watch, and relax; trees cool the air and improve air quality, and trees help hold steep slopes in place and reduce the risk of erosion and landslides.
- Unique habitats large meadows, oak groves, bluffs and other unique features in the city provide habitat and respite for wildlife.

Ezones apply to the portions of a site that contain natural resources or areas, that if disturbed, would have a negative effect on those natural resources or the surrounding property. Ideally, the portion of a site that is in an ezone should be left natural and undeveloped. However, many of the natural resources in Portland have been altered by yards, driveways, parking areas, docks, and even portions of houses and buildings. These areas still provide functions, like flood storage, and additional impacts should be avoided.

When new development, like an addition to a house or a new parking area, is proposed in an ezone, impacts to the resources need to be minimized as much as possible and any resources negatively impacted or destroyed must be replaced.

In Portland there are multiple types of environmental overlay zones. However, this project is only addressing two: protection 'p' zone and conservation 'c' zone. Each has slightly different regulations and requirements.

#### Protection Overlay Zone ('p' zone)

The 'p' zone is applied to the most critical natural resources where new development and impacts should be avoided, except under rare circumstances. The 'p' zone is typically applied to open rivers, streams and wetlands, as well as areas within roughly 50 feet of the waterbodies. The 'p' zone may be applied to areas that provide unique upland habitat or are at a high risk of natural hazards like flooding, landslides or wildfire. New impacts to resources in the 'p' zone should be avoided except under special circumstances, such as when a public road or utility needs to cross a stream.

#### Conservation Overlay Zone ('c' zone)

The 'c' zone is applied to significant natural resources where new development can be designed to minimize impacts to the resources and mitigation for unavoidable impacts can often be achieved through on-site actions. The 'c' zone is typically applied to vegetated areas that are located more than 50 feet from open waterbodies or areas that provide unique wildlife habitat. Development that minimizes impacts to the resources in the 'c' zone may be permitted. Mitigation for impacts is required.

Figure 6 shows an example of a house with ezones and what is generally allowed. (Please refer to Portland Zoning Code 33.430 for exact requirements.) Existing structures, including a house, deck or garage, can stay, be maintained and repaired, and be replaced in the current footprint. Existing gardens, lawns, and other landscaped areas in 'c' or 'p' zones can be maintained and new plants can be installed if they are not listed as a nuisance species on the Portland Plant List. A permitted lawn or landscaped area in either the 'c' or 'p' zone can be converted to a garden if no trees are removed. In a portion of the 'c' or 'p' zone that is not already landscaped, a new garden can be added if the garden is less than 500 square feet in size, no trees are removed, it is no closer than 50 feet to a stream or wetland, and cumulatively the site doesn't exceed the maximum disturbance area limitations for the base zone. However, if the garden can be placed within an existing lawn or completely outside the environmental overlay zones, that is the preferred alternative.

Figure 7 shows an example of a business with ezones and what is generally allowed. (Please refer to Portland Zoning Code 33.430 for exact requirements.) In both the 'c' and 'p' zones, existing structures, like buildings, and parking areas can be maintained, repaired or replaced in the current footprint. Also, in the both the 'c' and 'p' zones, existing landscaped areas can be maintained, and new plants can be installed if they are not listed as a nuisance species on the Portland Plant List.

In either example (Figure 6 or 7), expanding the footprint of development within the ezones – making it bigger – is more complicated. It depends on how much of the site is in the ezone and how much of the site has already been developed or disturbed. (Please refer to Portland Zoning Code 33.430 for exact requirements.) However, new or expanded development is typically allowed in the 'c' zone through standards or Environmental Review.

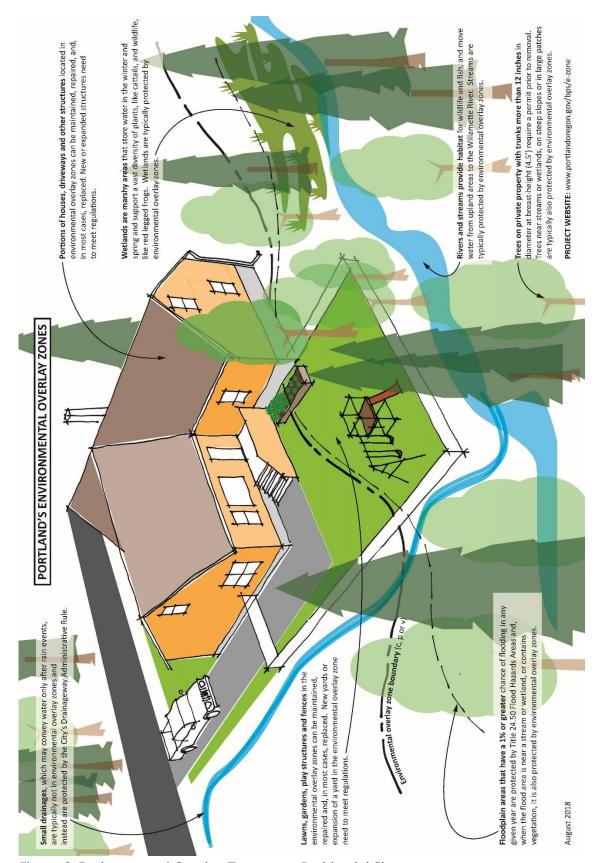


Figure 6: Environmental Overlay Zones on a Residential Site

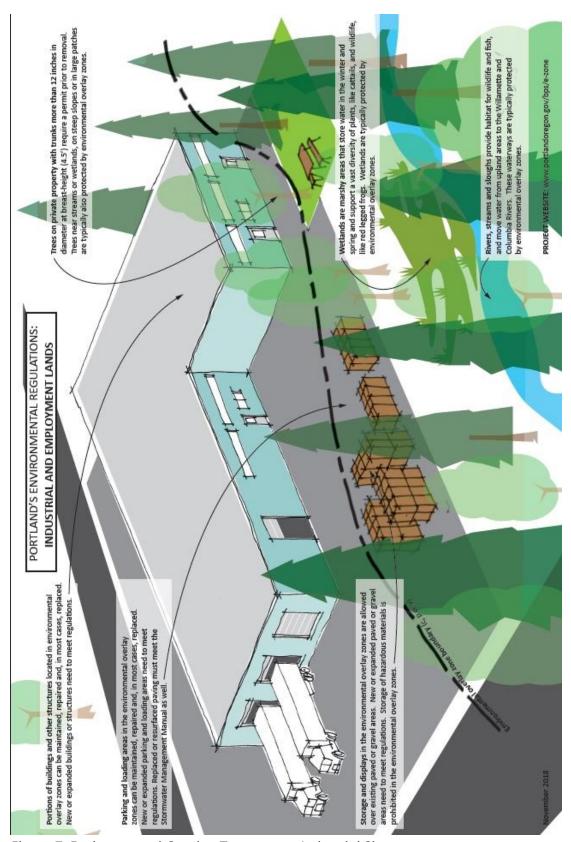


Figure 7: Environmental Overlay Zones on an Industrial Site

# F. Natural Resource Mapping

This project used a combination of best available GIS data and site visits to verify and update the maps of natural resource features and to amend the environmental overlay zone boundaries to better align with existing features. However, the GIS data is not perfect and some data, such as a mapped top-of-bank, is not available for every resource feature in Portland. It is anticipated that at the time of land use review, site design or permitting, applicants will provide site-specific survey data that accurately documents the location of significant natural resource features. The survey data, or new and better GIS data (e.g., updated 100-year floodplain maps), should be used to correct or modify the environmental overlay zone boundaries to align with the natural features those zones are intended to protect. Corrections and modifications to zone boundaries are allowed through land use reviews; please refer to chapters 33.855 and 33.430 of the Portland Zoning Code.

The following guidance is the legislative intent to be used when correcting or modifying the environmental overlay zone boundaries:

### F.1. Rivers and Streams

The river and stream channels include the river or stream bottom and banks from top-of-bank to top-of-bank (Figure 8). In Portland, the Willamette River, Columbia River and Columbia Slough have a surveyed the top-of-bank included in the City's GIS data that can be used by applicants. However, for many streams the top-of-bank is not surveyed. When there is no mapped top-of-bank, the top-of-bank should be surveyed and documented based on Portland Zone Code 33.930.150 Measuring Top of Bank.

<sup>&</sup>lt;sup>1</sup> Data sources include citywide aerial imagery that is provided on an annual basis to the city by the US Army Corps of Engineers and elevation data that is generated by converting Lidar imagery into digital elevation models. Lidar is used to generate terrain maps and to determine the location of streams and drainageways. The stream data is supplemented with information about the location of infrastructure that is provided by the Bureau of Environmental Services. Wetland determinations are also provided by the Bureau of Environmental Service and follow state approved mapping methodologies.

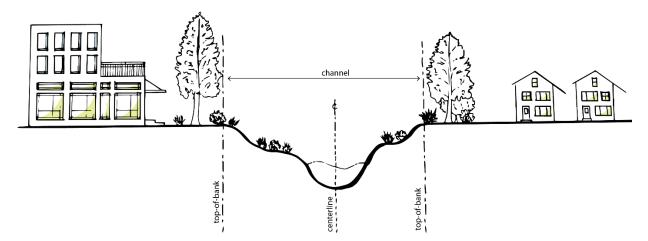


Figure 8: River/Stream Channel Cross Section

In resource sites where the location of the environmental overlay zone is based on distance from a river or stream, the boundary of the overlay zone should be corrected or modified to match the surveyed top-of-bank. For example, if the decision is to apply a protection 'p' overlay zone to a stream and land within 50 feet of the stream, then the 'p' zone should be corrected or modified to apply to the stream channel (top-of-bank to top-of-bank) and land measured 50 feet measured horizontally from the top-of-bank landward, including any existing disturbance areas or structures.

In some resource sites, the decision explicitly states that the location of the environmental overlay zone should be based on a distance measure from the ordinary high water mark instead of top-of-bank. The ordinary high water mark is defined in 33.910.030. Similar to top-of-bank, ordinary high water has been surveyed and mapped for the Willamette River and Columbia River. For other streams, ordinary high water should be surveyed at the time of permitting. If the decision is to apply a 'p' zone to a stream and the flood area within 170 feet of the ordinary high water mark, then the 'p' zone should be corrected or modified to apply to the stream channel (top-of-bank to top-of-bank) and the flood area within 170 feet, measured horizontally, from the ordinary high water mark landward, including any existing disturbance areas or structures. If the flood area does not extend to the top-of-bank, then the 'p' zone should be corrected to apply to the stream from top-of-bank to top-of-bank.

### F.2. Wetlands

The City's wetland data is incorporated into the City's Natural Resources Inventory. The wetland data is continuously updated using permit data provided by Oregon Department of State Lands, US Army Corps of Engineers or City of Portland, or using on-site wetland determinations or delineations performed by a certified environmental consultant using the most current state or federal determination and delineation methodology. In resource sites where the location of the

environmental overlay zone is based on distance from a wetland, the boundary of the overlay zone should be corrected or modified based on a state, federal or city permit or a wetland determination or delineation. For example, if the decision is to apply a 'p' zone to a wetland and land within 50 feet of the wetland, then the 'p' zone boundary should be corrected or modified to apply to the wetland itself and land measured horizontally from the edge of the wetland landward, including any existing disturbance areas or structures.

## F.3. Forest or Woodland Vegetation

Vegetation is mapped using the mapping protocol adopted with the Natural Resources Inventory (see Volume 3 for an explanation of the vegetation mapping methodology). Patches of vegetation a half-acre in size or larger with 60% or greater canopy coverage are forests (Figure 9). Patches of vegetation a half-acre in size or larger with 20-60% canopy coverage are woodland. The vegetation is mapped to follow the edge of the canopy, as determined by the current aerial photography or verification through a site visit. When the environmental overlay zones are applied to forest or woodland vegetation, then the boundary of the overlay zone should be corrected or modified to follow the edge of the tree canopy.

In some neighborhoods, there are groves of trees spanning multiple backyards that combined form a half-acre or larger patch of forest or woodland vegetation. When this occurs, if there are single trees or single lines of trees that extend out between houses or driveways from the larger patch, those single trees or single lines of trees are excluded from the forest or woodland patch. These single trees do provide functions such as stormwater management, slope stabilization and reducing heat island, but the edge effects (e.g., light intrusion, pets) of the development on either side of the narrow strip of trees significantly impact wildlife habitat functions. These single trees should not be included in the environmental overlay zone, unless located within 50 to 100 feet of a stream or wetland or on steep slopes. Title 11, the tree code, is intended to protect single trees throughout Portland.

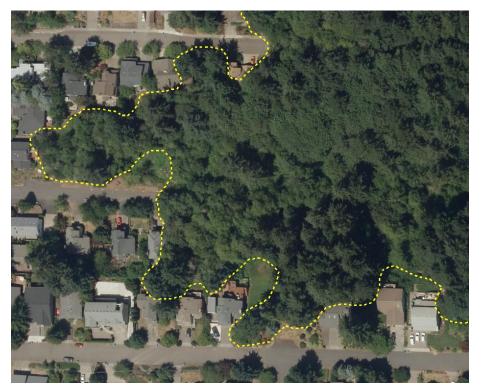


Figure 9: Forest Patch

When the environmental overlay zone is corrected or modified based on tree canopy, the boundary of the conservation or protection overlay zone should be adjusted to follow the edge of the tree canopy.

When the decision states that the edge of the environmental overlay zone is intended to follow the edge of tree canopy and trees have been removed without a required permit, the edge of the environmental overlay zone should be corrected or modified to follow the edge of the tree canopy based on aerial photography before trees were removed and a retroactive permit for the tree removal should be obtained.

### F.4. Forest or Woodland Vegetation on Steep Slopes

Steep slopes are land with a 25% slope or steeper. Steep slopes are determined using LiDAR-derived contours and may be verified through a site visit. The steep slope data is updated periodically using more recent satellite imagery. Forest vegetation is a patch, a half-acre or greater in size, with 60% or more closed canopy (Figure 9). Woodland vegetation is a patch, a half-acre or greater in size, with 25-60% closed canopy. Vegetation mapping is continuously updated using the most recent aerial photography or through site visit verifications.

In resource sites where the location of the environmental overlay zone is based on forest or woodland vegetation located on steep slopes, the overlay zone boundary should be corrected or modified to include the area of steep slope plus the canopy of trees where any portion of the tree trunk is located on the steep slope (See Figure 10). Disturbance areas or structures located under the tree canopy, where the tree is located on the steep slope, should be included within the corrected or modified environmental overlay zone.

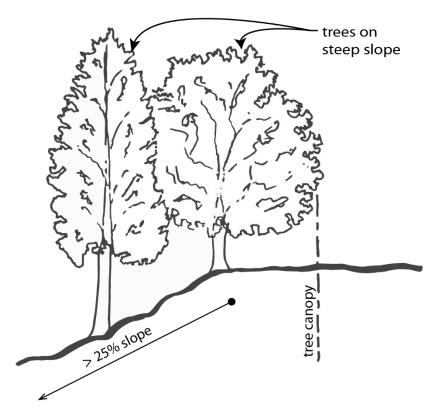


Figure 10: Trees on Steep Slopes

### F.5. Scenic Overlay Zones

The methodology used to apply the 'c' or 'p' zones within <u>scenic corridors</u> is as follows:

- 1) If resource site decision is to apply the 'c' or 'p' zone to streams, wetlands and land within 50 feet of streams or wetlands, the 'c' or 'p' zone boundary may be corrected or modified without regard to where the 's' zone applied and the 'c'/'p' zone may overlap with the 's' zone;
- 2) If resource site decision is to apply the 'p' zone to natural resource features, the 'p' zone boundary may be corrected or modified without regard to where the 's' zone applied and the 'p' zone may overlap with the 's' zone; and

3) If the resource site decision is to apply a 'c' zone to natural resource features located more than 50 feet from a streams or wetlands, and those features are located within a scenic corridor, the 'c' zone is not applied and the 's' zone is retained. Corrections to the 'c' zone in these circumstance should end at the 's' zone boundary.

If the 'c' or 'p' zone is corrected or modified, the above methodologies should be used to adjust the 's' zone based on changes to the 'c' or 'p' zone.

Within a 's' zone that is applied to a <u>view corridor</u>, both the 's' zone and 'p' or 'c' zone apply to the full extent of the resource site decisions, including waterbodies, riparian areas and upland habitat. The 'p' or 'c' zone boundary may be corrected or modified without regard to where the 's zone applied to a view corridor. The 'p' or 'c' zone should not be removed within a 's' zone applied to a view corridor unless warranted by new natural resource feature data.

# G. Project Approach and Methodology

The purpose of the *Environmental Overlay Zone Map Correction Project* is to align the location of the conservation 'c' and protection 'p' overlay zones with the location of existing natural resources identified in the *Natural Resources Inventory* (Figure 11). This project is part of bringing the zoning maps into compliance with the 2035 Comprehensive Plan, while maintaining compliance with Metro Title 13 and Oregon Planning Goal 5 as well as ensuring resources across Portland are mapped accurately and are regulated in a consistent way.

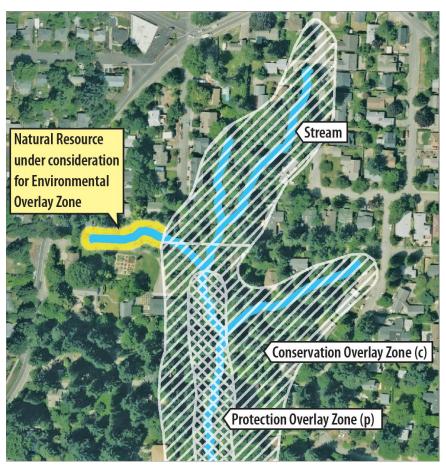
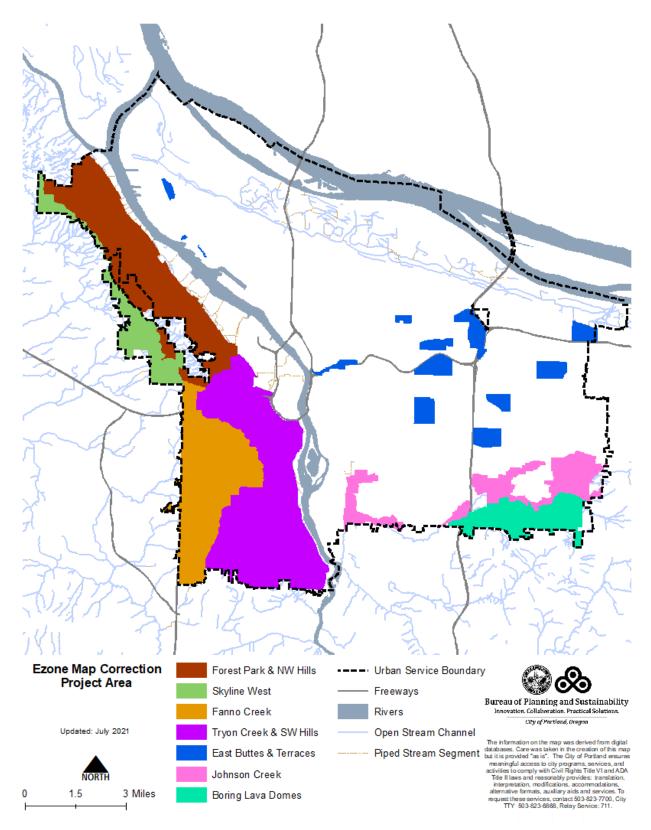


Figure 11: Example of an Unprotected Stream Segment

The geographic scope of the project includes the Northwest Hills, Southwest Hills, Johnson Creek, Boring Lava Domes and East Buttes and Terraces (Map 3). The Willamette River, Columbia River, Columbia Slough and Pleasant Valley are not part of this project and will be addressed separately. Properties with a prime industrial 'k' overlay zone are also excluded from the project. These geographies and properties are addressed through separate natural resource plans.



Map 3: Environmental Overlay Zone Map Correction Project Area

Metro Title 13 requires that local jurisdictions adopt or amend programs that protect Habitat Conservation Areas (HCAs). HCAs are rivers, streams, wetlands, vegetated flood areas, riparian corridors (areas within 100-300 feet of waterbodies) and Habitats of Concerns (specific unique habitat areas). Metro Title 13 stated that other natural resources, primarily upland habitats, are not HCAs and if a local jurisdiction intends on protecting those resources, the local jurisdiction must follow Oregon Planning Goal 5 rule OAR 660-023. Title 13 also stated that if a local jurisdiction had existing protections for resources that are not HCAs, changes to those protections could not be rolled back for than a *de minimis* amount (3.07 1330(a)(2)).

Based on the requirements of Metro Title 13, this project will:

- A. Demonstrate compliance with Title 13 Habitat Conservation Areas by following the rules set out in 3.07; and
- B. Demonstrate compliance with Goal 5 for natural resources that are not a Habitat Conservation Area by following the rules set out in OAR 660-023-0110.

The approach to each is described below.

### **G.1.** Metro Title 13 Compliance

To demonstrate compliance with Title 13, the *Ezone Map Correction Project* will use the methodology set out by 3.07.1330(b)(2): "Demonstrate that its existing or amended comprehensive plan and existing, amended, or new implementing ordinances substantially comply with the performance standards and best management practices described in Metro Code Section 3.07.1340, and that maps that it has adopted and uses substantially comply with the Metro Habitat Conservation Areas map."

In demonstrating that the amended implementation program complies with Title 13, the city followed 3.07.1340(d) "Administering the Habitat Conservation Areas Map and Site-Level Verification of Habitat Location. (1) Each city and county shall be responsible for administering the Habitat Conservation Areas Map, or the city's or county's map that has been deemed by Metro to be in substantial compliance with the Habitat Conservation Areas Map, within its jurisdiction, as provided in this subsection (d) of this section."

The specific Title 13 steps that city followed to demonstrate compliance are:

- Verifying habitat locations by following the Title 13-compliant Natural Resource Inventory methodology (3.07.1340(d)).
- Confirming Habitat Conservation Area using the steps found in 3.07.1340(e) and 3.07.1340(f).
- Determining that the city's amended environmental program is in substantial compliance per 3.07.1330(b)(2).

### **G.1.a.** Verifying Habitat Areas

The *Title 13 – Nature in Neighborhoods, Request for Metro Determination of Substantial Compliance* report (BPS, December 2012) provides a detailed explanation regarding how the City's NRI feature definitions and mapping methodologies meet the requirements of 3.07.1340(d)(4) for verifying habitat areas (report available separately). The NRI feature definitions and mapping methodologies for verifying habitat areas have not changed, with the exception of wetlands<sup>2</sup>, and the approved NRI GIS models are being rerun to reflect updated feature data. Below is a summary of how NRI habitat verification is completed.

- 1. <u>Locate water features</u> rivers, streams, wetlands, other open water and flood area.
- 2. <u>Identify vegetation cover</u> half-acre or larger patches of forests, woodland, shrubland and herbaceous vegetation.
- 3. <u>Verify steep slopes</u> land with greater than 25% slope upward from river, streams and open water.
- 4. <u>Confirm Habitats of Concern</u> habitats that meet specific criteria adopted by the Title 13 inventory.
- 5. <u>Identify habitat class</u> ranks associated with natural resource features; see Title 13 Table 3.07-13d.

Metro determined that all riparian corridors and all but the Class C wildlife habitats were regionally significant under Goal 5. Metro determined that Class C wildlife habitats may be locally significant. Habitats of Concerns, called Special Habitat Areas in Portland, are treated as Class I Riparian Areas in all cases per Title 13, Table 3.07-13d: Locating Boundaries of Class I and Class II Riparian Areas.

### **G.1.b.** Determining Urban Development Value

Title 13 included an Economic, Social, Environmental and Energy (ESEE) analysis that resulted in urban development value. The Title 13 ESEE replaces the previously adopted City ESEE analyses for Habitat Conservation Areas within the project area. To determine the Urban Development Value as it applies in Portland, the requirements of 3.07.1340(e) are:

- A. Properties designated as the Central City, Regional Centers, Town Centers and Regionally Significant Industrial Areas, as well as regionally significant educational or medical facilities, are of high development value;
- B. Properties designated as Main Streets, Station Communities, Other Industrial Areas and Employment Centers are of medium development value; and
- C. Properties designated as Neighborhoods and Corridors are low development value.

The 2035 Comprehensive Plan designated the property classifications throughout Portland.

Recommended Draft Page 30 January 2022

<sup>&</sup>lt;sup>2</sup> The Bureau of Environmental Services updated wetland mapping through the Wetland Inventory Project and using state-approved wetland mapping methodology. The methodology provided a more comprehensive and consistent map of wetlands across Portland.

### **G.1.c.** Confirming Habitat Conservation Areas

Habitat Conservation Areas (HCA) are the areas for which local jurisdictions must provide a program to protect and conserve the natural resources. Title 13, Table 3.07-13a is the methodology used for confirming HCA. HCAs are Class I and Class II Riparian Areas; Habitats of Concern (aka Special Habitat Areas) are treated as Class I Riparian Areas. All upland wildlife habitat and Class III Riparian Areas are not HCAs, except within Parks and Open Space (see Goal 5 Compliance).

Table 2: Methodology for Determining Habitat Conservation Areas (Title 13, Table 3.07-13a)					
Rank	High Development Value	Medium Development Value	Low Development Value	Parks and Open Space	
Riparian Class I (High Rank)	Moderate HCA	High HCA	High HCA	High HCA	
Riparian Class II (Medium Rank)	Low HCA	Low HCA	Moderate HCA	Moderate HCA	
Wildlife Class A (High Rank)	No HCA	No HCA	No HCA	High HCA	
Wildlife Class B (Medium Rank)	No HCA	No HCA	No HCA	High HCA	
Riparian Class III Wildlife Class C	No HCA				

# **G.1.d.** Applying the Environmental Program to Habitat Conservation Areas

The City's Environmental Program includes many elements; however, the primary tool used for Title 13 compliance are the environmental overlay zones. The location of conservation 'c' and protection 'p' overlay zones are updated to apply to the confirmed HCAs – Class I Riparian Areas and Class II, as well as Class A and Class B Wildlife Habitat within parks and open space.

Title 13 3.07.1330(a)(2) states "A city or county that, prior to December 28, 2005, adopted any comprehensive plan amendments or land use regulations that (a) apply to areas identified as upland wildlife habitat on the Inventory Map but not identified as riparian habitat on the Inventory Map, (b) limit development in order to protect fish or wildlife habitat, and (c) were adopted in compliance with division 23 of OAR chapter 660, shall not repeal such amendments or regulations, nor shall it amend such provisions in a manner that would allow any more than a de minimis increase in the amount of development that could occur in areas identified as upland habitat."

Portland's environmental overlay zones do apply to upland habitats. By completing Goal 5 steps to demonstrate compliance for significant habitat that has not been identified by Metro as HCA, Portland demonstrates a *de minimis* change in the amount of development that could occur within previously protected upland habitats. Prior to the *Ezone Map Correction Project*, there were 7,876 acres of 'p' overlay zone and 5,114 acres of 'c' zone in the project area. With the

corrections that are proposed by this project, there are 9,197 acres of 'p' overlay zone and 4,186 acres of 'c' zone in the project area. The total change in area of overlay zone (combined 'p' and 'c') is 3%, which is a de minimis change. There is a significant increase in the acres of 'p' overlay zone, over 1,300 acres (17% increase). Much of this increase is due to corrected stream mapping within areas that already had 'c' overlay zones protecting forests and steep slopes. Mapping the existing streams and land within approximately 50 feet results in a shift from conservation to protection overlay zone. The addition of 'p' overlay zones to newly mapped wetlands also played a significant role in the increase.

### **G.2. Statewide Land Use Planning Goal 5 Compliance**

Oregon Planning Goal 5 only applies directly to habitat not identified as Habitat Conservation Areas (HCA) under Metro Title 13. Upland habitat and Class III (low rank) Riparian Areas are not HCAs, unless located within a Park or Open Space, and are addressed through direct application of OAR 660-023-0110 by completing the following steps:

#### G.2.a. Establish resource sites.

The existing adopted resource site boundaries are consistent with OAR 660-023-0030 and are maintained with minor modifications.

### **G.2.b.** Conduct an inventory of natural resources.

The Natural Resources Inventory (adopted in 2012 as factual basis for the 2035 Comprehensive Plan) is consistent with OAR 660-023-0030.

# G.2.c. Conduct an Economic, Social, Environmental and Energy Analysis.

The ESEE is conducted only for resources that are not identified as Habitat Conservation Areas (HCAs) under Metro Title 13. OAR 660-023-0040 specifies the process that local jurisdictions must follow to conduct an ESEE. This project breaks the ESEE analysis into two parts, both of which are consistent with the OAR: 1) general ESEE and 2) resource site-specific ESEE. The General ESEE evaluates the tradeoffs between protecting types of natural resources and other city goals for economic development, housing, public health, etc. The General ESEE provides an overall recommendation regarding which natural resource features should be protected. The General ESEE recommendation is then affirmed, clarified or modified for resource sites that contain Class III Riparian Areas and/or Upland Habitat. An ESEE decision is made for each resource site that contains these resource areas.

# G.2.d. Adopt comprehensive plan provisions and land use regulations to implement the decisions.

# G.2.d. Adopt comprehensive plan provisions and land use regulations to implement the decisions.

Portland has an established and state-acknowledged program applies environmental overlay zones and codes found in 33.430, Environmental Zones, to significant natural resources. The boundaries of the environmental overlay zones will be updated based on the Natural Resources Inventory and resource site-specific ESEE decisions. The program requirements are consistent with OAR 660-023-0050.

### G.2.e. Notice and Landowner Involvement.

Landowners will be informed about and involved in this project consistent with OAR 660-023-0060. Please see section G. Public Engagement for a detailed description of the noticing and landowner involvement activities done with this project. These engagement activities have occurred in both Metro Title 13 HCAs and upland habitats that are being considered for correction to the overlay zone boundaries. Public hearings were first noticed in June 2020 and the first evidentiary hearing was on July 28, 2020. Substantial changes to the proposal occurred in November 2020 and July 2021. Additional notices of public hearing were sent to affect properties in January 2020 and August 2021.

# H. Public Engagement

The *Environmental Overlay Zone Map Correction Project* brings together three years of work and voices of thousands. Below is a description of the public engagement events and activities. The public will continue to play a crucial role moving forward as the project is heard by the Planning and Sustainability Commission in 2020/2021 and City Council in 2022. Additional information about public engagement will be added to this section as the project proceeds.

A summary of the public engagement is below and a detailed description follows:

- Informational mailings were sent to geographic areas within the larger project area on 7/27/18 (Johnson Creek/Boring Lava Domes), 12/5/18 (East Buttes and Terraces), 2/1/19 (Northwest Hills/Skyline), 3/28/19 (Southwest Hills/Tryon Creek), and 6/21/19 (Columbia Corridor). A total of 16,838 postcards were sent to all owners of properties with existing or draft corrected environmental overlay zones.
- Between August 2018 and October 2019, staff presented at 36 neighborhood association meetings to inform people about the project, answer questions and demonstrate how to use the interactive online map. A total of 622 people attended the meetings.
- In December 2019, staff notified property owners in the Columbia Corridor that the industrial lands and surrounding areas would be moved from the Ezone Project to a future project.
- o Between 8/19/18 and 7/25/19, staff held six drop-in hours to engage people in the project. These were held in east, northwest and southwest Portland. A total of 48 people attended the drop-in hours.

- Between 09/5/18 and 08/1/21, staff conducted site visits at 622 properties to confirm the location and extent of natural resource features and help property owners understand how the project may impact them (Map 4).
- On 11/15/19 and 11/21/19, 24,714 letters were sent to all impacted property owners and all renters/leases notifying them of the opportunity to review and comment on the Discussion Draft.
- Between 12/4/19 and 1/8/20, three open house events were held in east, northwest and southwest Portland to provide information about the project and an opportunity for people to meet one-on-one with staff. A total of 152 people attended.
- o On 6/25/20, 1/26/21 and 8/4/21 Measure 56 notices were sent to affected property owners in advance of public hearings at Planning and Sustainability Commission.
- Public hearings were held before the Planning and Sustainability Commission on 7/2/20, 2/23/21 and 8/24/21.
- o On [to be added], a public hearing was held before City Council.

#### Mailings and Notices

People living or working on properties that are impacted by environmental overlay zones received mailings and notices from the City of Portland. Examples of the postcard, letters and notices are found in Appendix C.

Between July 2018 and June 2019, 16,838 postcards were sent to all property owners with existing or proposed environmental overlay zones on their site. The postcards included contact information and two-three upcoming community meetings where people could find out more about the project. Also included was a link to the project website and online interactive map.

On November 15, 2019 and November 21, 2019, 24,714 letters were sent to impacted properties. The letters were sent to property addresses and site addresses, so that not only were owners contacted but also renters and those leasing properties. In addition, all properties within 50 feet of a property impacted by the project also received a letter about the project.

Properties with wetlands received a specific letter because concurrent with the Ezone Map Correction Project, the Bureau of Environmental Services is undertaking the Wetland Inventory Project (WIP). WIP is systematically updating wetlands mapping following a US Army Corps of Engineers wetland determination process. The Ezone Map Correction Project is using the WIP wetland data to update the Natural Resources Inventory. Property owners with potential wetlands identified on their site were offered the opportunity to have a wetland scientist perform a free, on-site wetland determination to formally document the location and extent of the wetland.

The City performed an analysis to determine, of those properties impacted by updates to the overlay zones, what are the most common languages other than English spoken. There were

five languages that make up the majority of impacted people with limited English proficiency: Spanish, Russian, Ukrainian, Vietnamese and Chinese. Information was provided in the letters in each of the five languages.

On June 25, 2020, staff sent the Measure 56 notice to 16,371 property owners. Properties with existing or proposed conservation or protection overlay zones within the project area received the notice. The first evidentiary hearing was on July 28, 2020. The public was invited to provide written or oral testimony. Additional Measure 56 notices were sent to property owners on January 26, 2021 and July 28, 2021 in advance of public hearings; these notices were sent to property owners where the proposal had been significantly changed since the previous opportunity to testify. Additional hearings were held on February 23, 2021 and August 24, 2021.

### **Neighborhood Meetings**

Between June 2018 and June 2019, staff contacted all neighborhood associations that have environmental overlay zones within the boundaries and offered to attend an upcoming meeting to provide information about the project. Between August 2018 and October 2019, staff presented at 36 neighborhood association and community meetings to inform people about the project, answer questions and demonstrate the interactive online map. A total of 662 people attended the meetings.

#### Open House Events

Between August 2018 and July 2019, staff held six drop-in hours: two in outer east Portland, two in the Southwest Hills and two in north Portland. In each area, one of the drop-in hours was held from 11:00am to 1:00pm and the second was held on a different date from 5:00pm to 7:00pm. The events were held at libraries or other community buildings. These drop-in hours were an opportunity for people to meet one-on-one with staff, look at the proposed changes to the environmental overlay zones on their site and ask questions. A total of 48 people attended the drop-in hours.

On December 4, 2019, December 11, 2019 and January 8, 2020 staff held three in-person open house events. Information about the time and location were included in mailings sent on November 15, 2019 and November 21, 2019. At the events, attendees could get additional information about the project, watch a self-guided presentation and meet with staff one-on-one to discuss changes proposed for their property. A total of 152 people attended the open house events.

Between July 8 and July 22, 2020, staff held seven online events where the public could request a 30-minute one-on-one meeting via Zoom (or other virtual meeting application) to discuss proposed changes to the overlay zones for their property. Online meetings were held instead of drop-in hours due to the COVID-19 pandemic.

#### **Help Line**

A phone line was dedicated to the Ezone Map Correction Project. Between August 2018 and March 2020, 317 phone calls were received on the help line. The help line provides an opportunity to add real-time language interpretation services if needed. Phone calls have continued since March 2020 at a slower pace. Due to COVID-19, staff were not in the office after March 17, 2020 and accessed voicemail remotely. Staff returned phone calls within five business days.

#### Online Interactive Map

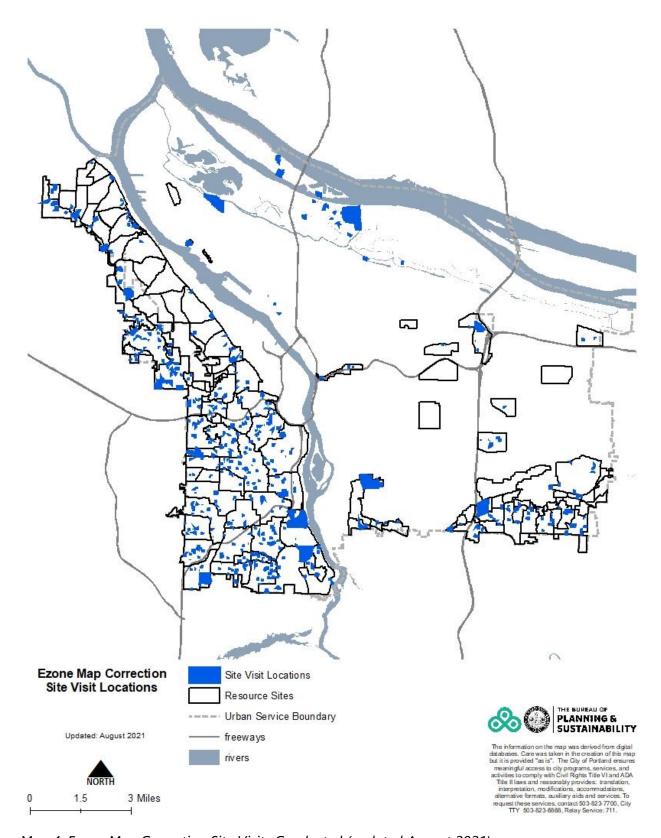
Staff developed an online, interactive map to present the draft corrected environmental overlay zones to the public. Starting in July 2018, as the overlay zones were drafted for each geography of the city (see Map 2), the map was updated. The postcards and letters sent to impacted people included a link to the map.

When people accessed the online map, they were able to search for their property or zoom in to areas of the city. Users could turn on and off different information including the existing overlay zones, proposed draft overlay zone, streams, wetlands, flood area, vegetation and steep slopes. The online map provided links to the report volumes. Also, the online map offered an option to request a site visit directly from the map.

The online interactive map was deactivated when the project moved from the Discussion Draft to the public hearings phase of the project. The online interactive map was replaced with the City's Map App, which is a tool that allows people to see the zoning changes and submit formal testimony as part of the hearings. The Measure 56 notice included a link to the City's Map App.

#### Site Visits

Site visits were a critical component of public engagement as well as updating the Natural Resources Inventory of mapped features. The postcards and letters sent to impacted people encouraged them to invite staff to perform site visits. Staff never enter private property without expressed consent from the property owner. At the site visits, staff documented the location of streams, wetlands, vegetation and steep slopes and then used that information to correct the Natural Resources Inventory maps. Staff also answered people's questions about the project and how it impacts their property. Between August 2018 and June 2020, 356 site visits were conducted. Site visits were postponed during March – June 2020 due to the COVID-19 pandemic. Site visits resumed on June 1, 2020 with new safety standards including no indoor meetings, six feet of physical distance between participants, masks, and disinfection protocols for equipment between site visit locations. Between June 2020 and July 2021, 441 site visits were conducted (Map 4).



Map 4: Ezone Map Correction Site Visits Conducted (updated August 2021)

# **Part B: Zoning Code Amendments**

### A. INTRODUCTION

The primary tool Portland uses to protect natural resources are environmental overlay zones (ezones). Ezones were applied throughout the city between 1989 and 2004, following guidance from Title 33 and Goal 5. This project is updating the boundaries of the ezones to better align with existing natural resource features. This is done using GIS models to apply the ezones based on the decisions summarized in Volume 1, and further explained in Volume 2, Part A - G, and Volume 3.

Volume 1 Part B includes the proposed amendments to the zoning code and maps. The majority of the amendments are clarifications or minor corrections. Substantive updates include the following:

- 1. Allowing new septic systems in already disturbed areas of a site and allowing replacement septic systems to create new disturbance within the ezones when specific standards are met that protect streams and wetlands.
- Creating a new standard to allow for minor improvements to existing flood and water control facilities to improve safety for maintenance crews, such as adding handrails or access ramps.
- 3. Allow fire breaks that are surface with gravel or sand to create breaks in vegetation and slow the spread of a wildfire.
- 4. Interment within existing burial plots will be exempt if less than 20 cubic yards of soil is removed, if the disturbance area is further than 5 feet from the edge of a protection overlay zone and if no trees or native vegetation are removed; replanting is required. Previously, interment in an existing burial plot would have required Environmental Review.
- 5. Keeping portions of removed trees on site is only required on sites over 7,000 square feet. Previously, keeping portions of removed trees on site was required for all sites, regardless of size.
- 6. Disturbance area for stormwater outfalls will no longer count towards the maximum disturbance area limits and the size of stormwater outfall that can meet standards is increased from 4-inches to 6-inches diameter.

Rationale for each change is provided within the code commentary.

The proposed amendments to zoning maps follow the code amendments. Each map includes the existing and the proposed ezones. Existing ezones are shown as black lines and the proposed ezones are shown in color (dark green for protection 'p' overlay zones and light green

for conservation 'c' overlay zones.) In addition, there are some proposed changes to the scenic 's' overlay in areas where the ezones boundaries have been adjusted (the s zone is shown in yellow on the zoning maps). The 's' zone is being removed where there is corrected 'p' zone. The 'c' zone is being removed where there is 's' zone applied to a scenic corridor (see Section C.1 for further explanation). Other overlays, such as the buffer overlay, design overlay or the historic resource overlay, are not affected by this project. There are no proposed changes to the base zones.

### **B. ZONING CODE UPDATES**

During the process of reviewing land use cases that addressed zoning code requirements of 33.430, Environmental Zones, staff identified minor clarifications that would make the zoning code clearer and easier to implement without changing the policies or intent of the code. In addition, other code chapters are clarified or updated for consistency. Those code amendments are presented with strikethrough for text that is to be deleted and underline for new text. Code commentary further explains the edits.

### 33.430 Environmental Zones

Code amendments to this chapter include a number of minor changes or clarifications. See code amendment sections for more information.

### 33.430 Environmental Zones

430

Sections:
General
33.430.010 Purpose
33.430.015 Purpose of the Environmental Protection Zone
33.430.017 Purpose of the Environmental Conservation Zone
33.430.020 Environmental Reports
33.430.030 Relationship to Other Environmental Regulations
33.430.033 Relationship to Scenic Resources Zone
33.430.035 Other City Regulations
33.430.040 Overlay Zones and Map Symbols
33.430.050 Subareas of Environmental Zones
33.430.060 Where These Regulations Apply
33.430.070 When These Regulations Apply
33.430.080 Items Exempt From These Regulations
33.430.090 Prohibitions
Development Standards
33.430.110 Purpose
33.430.120 Procedure
33.430.130 Permit Application Requirements
33.430.140 General Development Standards
33.430.150 Standards for Utility Lines
33.430.155 Standards for Repair and Replacement of Existing Septic Systems
33.430.160 Standards for Land Divisions and Planned Developments
33.430.165 Standards for Property Line Adjustments
33.430.170 Standards for Resource Enhancement Projects
33.430.175 Standards for Right-of-Way Improvements
33.430.180 Standards for Stormwater Outfalls
33.430.185 Standards for Certain Flood and Water Control Facilities
33.430.190 Standards for Public Recreational Trails
33.430.195 Standards for Tree Removal in the Scenic Resources Zone
Environmental Review
33.430.210 Purpose
33.430.220 When Review is Required
33.430.230 Procedure
33.430.240 Supplemental Application Requirements
33.430.250 Approval Criteria
33.430.260 Use of Performance Guarantees
33.430.270 Special Evaluation by a Trained Professional
33.430.280 Modification of Base Zone Development Standards
Natural Resource Management Plans
33.430.310 Purpose
33.430.320 Scope
33.430.330 Procedure
33.430.340 Components

Chapter 33.430, Environmental Zones

33.430.350 Approval Criteria for Adoption and Amendment

### Maps and 33.430.020 Environmental Reports

The Balch Creek, Fanno Creek, Skyline West, Southwest Hills and Johnson Creek protection plans (inventories, ESEE analyses and decisions) are being repealed and replaced by the Ezone Map Correction Project. The East, Buttes, Terraces and Wetlands and Northwest Hills plans are revised to only apply to specific resources sites; the remaining resource sites (inventories, ESEE analyses and decisions) are repealed and replaced by the Ezone Map Correction Project. Volume 2 of the Ezone Map Correction Project includes the inventories and decisions for each resource site.

The Columbia Corridor and Middle Columbia Corridor/Airport Plan are not repealed or revised and remain in effect in their entirety.

There are three Natural Resource Management Plans that also remain in effect and provide supplemental regulations - East Columbia Neighborhood NRMP, Forest Park NRMP and Peninsula One NRMP

Language to be added is <u>underlined</u>.

Language to be deleted is shown in strikethrough.

Corrections to Violations of This Chapter

33.430.400 Purpose

33.430.405 Correction Options

33.430.407 Recurring Violations of This Chapter

Notice and Review Procedure

33.430.410 Purpose

33.430.420 When These Regulations Apply

33.430.430 Procedure

Map 430-1 Balch Creek Watershed Protection Plan Area

Map 430-1 Environmental Overlay Zone Map Correction Project Area

Map 430-2 Columbia Corridor Industrial and Environmental Mapping Project Area

Map 430-3 East Buttes, Terraces and Wetlands Conservation Plan Area

Map 430-4 Fanno Creek and Tributaries Conservation Plan Area

Map 430-54 Johnson Creek Basin Protection Plan Area

Map 430-65 Northwest Hills Natural Areas Protection Plan Area

Map 430-7 Skyline West Resource Protection Plan Area

Map 430-8 Southwest Hills Resource Protection Plan Area

Map 430-96 East Columbia Neighborhood Natural Resources Management Plan Area

Map 430-10 (Smith and Bybee Lakes Natural Resources Management Plan Area — repealed on 12/31/13)

Map 430-127 Peninsula One Natural Resources Management Plan Area

Map 430-118 Forest Park Natural Resources Management Plan Area

Map 430-139 Middle Columbia Corridor/Airport Natural Resource Inventory Environmental Mapping Project Area

Map 430-1410 Bank Reconfiguration and Basking Features Area

#### 33.430.020 Environmental Reports

The application of the environmental zones is based on detailed studies that have been carried out within <u>sixten</u> separate areas of the City. The City's policy objectives for these study areas are described in the reports. Each study <del>report</del> identifies the <u>natural</u> resources <u>features</u> and describes their functional values—of the <u>within</u> resource sites. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of these reports.

The City has adopted the following sixten environmental study reports:

- Environmental Overlay Zone Map Correction Project
  - Balch Creek Watershed Protection Plan
- Columbia Corridor Industrial and Environmental Mapping Project
- East Buttes, Terraces and Wetlands Conservation Plan
- Fanno Creek and Tributaries Conservation Plan
- Johnson Creek Basin Protection Plan
- Northwest Hills Natural Areas Protection Plan
- Skyline West Conservation Plan
- Southwest Hills Resource Protection Plan
- ESEE Analysis and Recommendation for Natural, Scenic and Open Space Resources within Multnomah County Unincorporated Areas
- Middle Columbia Corridor/Airport Economic, Social, Environmental and Energy (ESEE) Analysis

#### 33.430.030

The maps are renumbered.

#### 33,430,033

With the Central City 2035 Plan, the text in 33.480, Scenic Resources, about the relationship to the environmental overlay zones was moved from 33.480 to 33.430. This was done because it would be the environmental overlay zone that triggers the code relationship. However, when the language was moved, it was edited slightly, which has caused a problem when reviewing new development along a designated scenic corridor when there is no scenic 's' zone applied but there is a conservation 'c' or protection 'p' zone applied. The proposed amendments return the language to the original that was in 33.480, but keep it in 33.430 so it is triggered by the environmental overlay zones. The South Reach Scenic Resources Protection Plan, recently adopted, is also added.

#### 33.430.030 Relationship To Other Environmental Regulations

Some of the eightsix study areas discussed under Section 33.430.020 impose additional environmental regulations in Plan Districts. These additional regulations either supplement or supersede the regulations of this Chapter. Paragraph 33.700.070.E describes the hierarchy of regulations within the Zoning Code.

Additionally, Natural Resource Management Plans may contain regulations that supersede or supplement the regulations of this chapter. Whenever natural resource management plan provisions conflict with other provisions of this chapter, the natural resource management plan provisions supersede. Non-conflicting provisions supplement the provisions of this chapter. Maps 430 9, 11 and 12430-6, 7 and 8 show Natural Resource Management Plan areas.

The following Plan Districts and Natural Resource Management Plans have additional regulations that may supersede or supplement the environmental regulations of Chapter 430:

- The Balch Creek Watershed (see Chapter 33.563, Northwest Hills Plan District)
- Cascade Station / Portland International Center Plan District (see Chapter 33.508, Cascade Station / Portland International Center [CS/PIC])
- The Columbia South Shore within the Columbia Corridor (see Chapter 33.515, Columbia South Shore Plan District)
- Johnson Creek Basin (see Chapter 33.537, Johnson Creek Basin Plan District)
- Northwest Hills Natural Areas (see Chapter 33.563, Northwest Hills Plan District)
- Skyline West Conservation Plan area (see Chapter 33.563, Northwest Hills Plan District)
- East Columbia Neighborhood Natural Resources Management Plan (separate document)
- Forest Park Natural Resources Management Plan (separate document)
- Natural Resources Management Plan for the Peninsula Drainage District No. 1 (separate document)
- Portland International Airport Plan District (see Chapter 33.565, Portland International Airport Plan District)

This chapter contains only the City's environmental regulations. Activities which the City regulates through this chapter may also be regulated by other agencies. In cases of overlapping City, Special District, Regional, State, or Federal regulations, the more stringent regulations will control. City approval does not imply approval by other agencies.

#### 33.430.033 Relationship to Scenic Resources Zone

When <u>an environmental zone has been applied at the location of a designated scenic resource, a Scenic Resource zone has been applied at the location of an environmental zone environmental review must include consideration of the <u>development standards of Chapter 33.480</u>, and the scenic qualities of the resource as identified in the <u>Scenic Resources Protection Plan</u>, or <u>River Plan</u> / <u>South Reach Scenic Resources Protection Plan</u>, and any relevant development standards of 33.480.</u>

### 33.430.050

Updated to clarify that the city limits and urban service boundary are treated the same with regards to the transition area.

### Figure 430-1

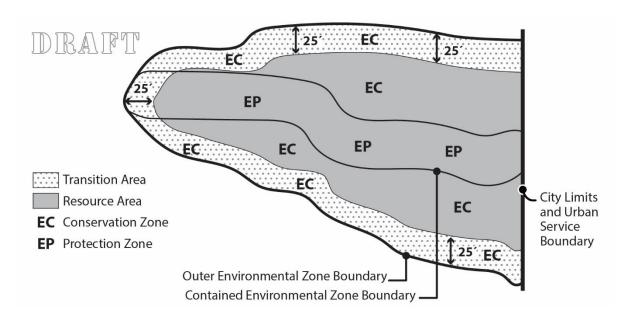
Updated to add urban service boundary with city limits.

#### 33.430.050 Subareas of Environmental Zones

Environmental overlay zones contain resource areas and transition areas. Resource areas contain significant resources and functional values. Transition areas surround the resource areas. Resources and functional values within transition areas are not significant, but they provide a buffer for the significant resources and functional values within the resource area. The transition area is measured as the first 25 feet inward from an environmental zone boundary. The remaining area is the resource area. See Figure 430-1. The following are three exceptions:

- A. Where part of an environmental zone boundary is also the City Limits <u>or Urban Service</u> <u>Boundary</u>, there is no transition area.
- **B.-C.** [No Change]

Figure 430-1
Environmental Zone Subareas



#### 33.430.080

The language that references Title 11 is not necessary and is removed. All other city Titles and permit requirements always apply.

#### 33.430.080.C

This is a new exemption that allows expansion of an existing right-of-way. It only applies to the dedication of land. Improvements within the right-of-way will need to meet exemptions (33.430.080.E.2), standards (33.430.175) or be approved through land use review.

#### 33,430,080,D,3

The exemption for changes to existing outdoor disturbance areas is being revised to provide clarity and to allow septic systems. The intention is to allow gardens, raised beds, tool sheds, green houses, play structures or similar small structures within existing yards. Permanent foundations or concrete pads are not allowed. Cinder blocks or gravel pads, used to support structures, are not considered a permanent foundation and are allowed. In addition, a septic system can be installed under an existing yard.

#### 33.430.080.D.7

The exemptions for trimming or removing trees and plants is replaced and separated from the exemptions for other plants. The information is reordered for clarity.

### 33.430.080.D.7.a.1

The code is clarified to state that diseased trees or diseased portions of trees can be removed when they pose an immediate threat to the ecosystem. Diseases in trees can spread very quickly and destroy entire forests.

The intention of D.7.a.1 is to retain large portions of trees on site to maintain habitat functions. Downed trees create cover and places for wildlife to den and nest. Downed trees also decompose, enriching the soil, and providing ideal conditions for new trees to sprout naturally. Sites less than 7,000 square feet are small and typically do not have room to place large portions of trees. Sites larger than 7,000 square feet typically have space to retain large portions of trees. This edit makes it clear that on sites smaller than 7,000 square feet, downed trees do not have to remain on site. In addition, if a site of any size has only transition area and no resource area, downed trees do not have to remain on site.

#### 33.430.080 Items Exempt From These Regulations

The following items, unless prohibited by Section 33.430.090, below, are exempt from the regulations of this chapter. Other City regulations such as Title 10, Erosion Control, and Title 11, Trees, must still be met. When no development or other activities are proposed that are subject to the development standards or review requirements of this chapter, tree removal or pruning allowed under the exemptions below is subject to the tree permit requirements of Title 11, Trees.

- A.-B. [No change]
- C. Dedicating right-of-way to widen an existing right-of-way;
- **C.D.** Existing development, operations, and improvements, including the following activities:
  - 1. 2. [No change]
  - 3. Changes to existing disturbance areas to accommodate outdoor activities such as gardens and play areas the following, so long as when plantings do not include plants on the Nuisance Plants List and no trees 6 or more inches in diameter are removed;:
    - a. Gardens, including raised beds no greater than 2 feet in height, and play areas surfaced with grass, groundcover plants, bark chips, sand or gravel;
    - b. Accessory structures with a footprint no larger than 100 square feet that are not on a foundation or concrete pad; and
    - c. Septic systems.
  - 4. 6. [No change]
  - 7. Removing or pruning the following trees and plants:
    - a. Trees. The following trees may be removed or pruned if no development or other activities subject to the regulations of this chapter are proposed and all removal or pruning activities are surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site.

      Permanent erosion control, such as replanting areas of bare soil must be installed after removal or pruning:
      - (1) Dead, dying, diseased, or dangerous trees, or portions of trees, when they pose an immediate danger as determined by the City Forester or an arborist. On sites 7,000 square feet or larger in area, all sections of wood more than 12 inches in diameter must remain or be placed in the resource area of the site on which they were cut or within a commonly-owned environmental resource tract. These sections of wood are not required to remain when:
        - The site contains only transition area; or
        - The City Forester authorizes removal of diseased wood because it will threaten the health of other trees;

33.430.080.D.7.b

Other plants is separated from trees for clarity. There are no substantive changes to the exemptions for other plants

- (2) Non-native trees and trees listed on the Nuisance Plants List;
- (3) Trees or portions of trees that are within 10 feet of an-existing building or structure attached to a building, such as deck, stairs, and carport; or
- (4) Trees or portions of trees that exceed the height restriction of a view corridor with special height restrictions designated in the Scenic Resources

  Protection Plan, Central City Scenic Resources Protection Plan or River Plan / South Reach Scenic Resource Protection Plan.
- Other plants. The following may be removed or pruned if removal or pruning
   activities are surrounded or protected to prevent erosion and sediment from
   leaving the site or negatively impacting resources on the site. Permanent erosion
   control, such as replanting areas of bare soil, must be installed after removal or
   pruning:
  - (1) Plants that exceed the height restrictions of a view corridor with special height restrictions designated in the Scenic Resources Protection Plan,

    Central City Scenic Resources Protection Plan or River Plan / South Reach Scenic Resources Protection Plan; or
  - (2) Plants that block signage along a public recreational trail, within a resource enhancement area, or required by a state or federal agency; or
  - (3) Non-native plants and plants listed on the Nuisance Plant List.
- 7. Removal or trimming of when no development or other activities subject to the development standards or review requirements of this chapter are proposed, if the following are met:
  - a. All vegetation removal or trimming activities must be surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site. Permanent erosion control, such as replanting areas of bare soil, must be installed.
  - b. The vegetation proposed for removal or trimming is one of the following:
    - (1) Trees or plants listed on the Nuisance Plants List
    - (2) Dead, dying, or dangerous trees or portions of trees when they pose an immediate danger, as determined by the City Forester or an arborist.

      Removing these portions is exempt only if all sections of wood more than 12 inches in diameter either:
      - Remain, or are placed, in the resource area of the same ownership on which they are cut; or
      - Are removed, if the City Forester authorizes removal of diseased wood because it will threaten the health of other trees;
    - (3) Non-native non-nuisance trees and plants;
    - (4) Trees or tree limbs that are within 10 feet of an existing buildings and structures attached to buildings, such as decks, stairs, and carports;

#### 33.430.080.E.2

The amendments clarifies that the exemption applies to improvements within an existing or newly dedicated right-of-way.

### 33.430.080.E.8

The amendment is based on a requirement by the Oregon Department of Environmental Quality who required the City of Portland to install signs visible from the Columbia Slough warning people about eating fish. These signs were not along a trail or part of a resource enhancement project. When a state or federal agency requires signs in the environmental overlay zones, those signs are now exempt as well.

#### 33.430.080.E.9

This is a new exemption that allows interment within existing burial plots in cemeteries. The exemption is intended to minimize impacts on significant resources by required the disturbance to be setback from the resources in the protection overlay zone. Interment within a protection overlay zone requires review.

#### 33,430,080,E,10

This exemption is being revised to be clear that only pervious materials are allowed when surfacing a new play area; impervious materials such as concrete are not allowed. The exemption is also expanded to include septic systems that meet the requirements of the exemption.

- (5) Trees or plants that exceed the height restriction of a view corridor with special height restrictions designated in the Scenic Resources Protection Plan or Central City Scenic Resources Protection Plan; or
- (6) Within the Scenic Resource zone, tree limbs may be trimmed to maintain a view. Tree removal is not exempt.
- 8. 11. [No change]
- **DE.** The following new development and improvements:
  - 1. [No change]
  - 2. Public street and sidewalk improvements meeting all of the following:
    - Improvements must be within an existing <u>a</u> public right-of-way used by truck or automobile traffic; and
    - b. [No change]
  - 3.-7. [No change]
  - 8. Installation of signage as part of public recreational trail, and as part of a resource enhancement projects, or as required by a state or federal agency;
  - 9. Additional disturbance within an existing cemetery when all of the following are met:
    - a. The disturbance is for soil removal for a burial plot;
    - b. No more than 10 cubic yards of soil is removed per burial plot;
    - c. The disturbance area is set back at least 5 feet from the resource area of the environmental protection zone; and
    - d. No native trees 6 inches or more in diameter are removed;
  - 910. Additional disturbance for outdoor uses such as gardens, and play areas surfaced with grass, groundcover plants, bark chips, sand or gravel, and septic systems where when the added disturbance area meets all of the following:
    - a. The added disturbance area does not exceed 500 square feet;
    - b. The total disturbance area on the site does not exceed standards in Table 430-1;
    - c. No native trees 6 or more inches in diameter are removed; and
    - d. The disturbance area is located at least 30 feet from the top of bank of a stream or drainage and at least 50 feet from the edge of a wetland.

### 33.430.080.E.11

The intention of the change is to allow fire breaks, which are similar to a trail in terms of dimensions and impacts. Fire breaks must meet the requirements as trails. The use of sand or gravel to surface the fire break. In addition, the allowed width of trail is being increased from 30 inches to 36 inches to meet federal ADA trail recommendations.

#### 33,430,120

Adding reference to the scenic resource standard 33.430.195.

1011. Trails and fire breaks meeting all of the following:

- a. The ‡trails or fire break must be confined to a single ownership or be within a public trail easement;
- b. Trail wWidths must not exceed 3036 inches. For trails, stair width must not exceed 50 inches, and trail grade must not exceed 20 percent except for the portion of the trail containing stairs;
- c. Plant trimming must not exceed a height of 8 feet and a width of 6 feet as shown in Figure 430-2;
- d. No native trees 6 or more inches in diameter and no native shrubs larger than 5 feet tall may be removed;
- e. The <del>Ttrails</del> or fire break must not be paved; and
- f. The ‡trails or fire break must be at least 15 feet from the top of bank of all water bodies.

1112. [No change]

**EF.** [No change]

#### 33.430.120 Procedure

**A. Generally.** Compliance with the development standards of this chapter is required for all development in the environmental zones and is determined as part of the building permit or development permit application process. For proposals that cannot meet all of the standards, Environmental Review is required. Where a proposal can meet all the standards, the applicant may choose to go through the discretionary environmental review process, or to meet the objective standards of this chapter.

The development standards are Sections 33.430.140 through .1905; Sections 33.430.150 through .1905 address specific types or aspects of development, while 33.430.140 applies to proposals not covered by the more specific sections. A proposal may be subject to several sections. For example, construction of a house may be subject to the General Development Standards of 33.430.140, the standards of 33.430.150, Utilities, and the standards of 33.430.180, Stormwater Outfalls. If the proposal can meet the general standards and standards for utilities, but not those for a stormwater outfall, environmental review is required only for the stormwater outfall. To be eligible to use the development standards for an aspect of a proposal, all of the standards within the relevant section must be met.

**B.** [No change]

### 33.430.140

This is not a substantive change. The edits are intended to make it clearer which standards apply in the resources area versus the transition area of the overlay zones. Note - Development includes landscaping.

### 33.430.140.C.1 and F.1

The original C.1 and F.1 are split into wetlands and other water bodies.

#### 33.430.140.C.4

To be consistent with the Natural Resources Inventory (2012) and 2035 Comprehensive Plan policies, all setbacks should be established from the top of bank, not centerline, of streams and drainageways. The top of bank is defined in 33.910 and 33.930.

#### 33,430,140,C.5

The intent is to encourage steep stream banks to be laid back to reduce the steepness and allow for establishment of native vegetation. When an applicant elects for lay back a stream bank, setbacks and location of the protection overlay zone may be established based on the original (pre-lay back) location of top-of-bank, instead of the new location of top-of-bank; provided a minimum five-foot setback from the new top-of-bank is maintained.

#### 33.430.140 General Development Standards

The standards below apply to all development in the environmental zones except as follows:

- Utilities subject to Section 33.430.150;
- Septic systems subject to Section 33.430.155;
- Land divisions subject to Section 33.430.160;
- Property line adjustment subject to Section 33.430.165;
- Resource enhancement projects subject to Section 33.430.170;
- Rights-of-way improvements subject to Section 33.430.175;
- Stormwater outfalls subject to Section 33.430.180; and
- Flood and water control facilities subject to Section 33.430.185;
- Public recreational trails subject to Section 33.430.190.; and
- Tree removal in scenic resources zone subject to Section 33.430.195.

Standards A through C and G through S apply to new development in the resource area. Standards D through S except L apply to alterations to existing development in the resource area. Only standards E, J, K, N, Q, R, and S apply to new development and alternations to existing development in the #transition areas. All of the applicable standards must be met.

#### A. - B. [No change]

- **C.** The disturbance area must be set back at least:
  - 1. Fifty feet from the edge of any identified wetland;
  - 2. Fifty feet from the top of bank of any identified water body within the Columbia Corridor, or any identified water body within a protection zone on lots zoned R10, R20, or RF. When reconfiguration of the bank is carried out in accordance with subsection 33.430.170.A, below, results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and the new top of bank line must be submitted for verification and then recorded with the County recorder. In all cases the disturbance area must be set back at least 5 feet from the new top of bank line;
  - 23. Thirty feet from the top of bank of any identified water body within a protection zone on all lots except those zoned R10, R20 or RF; and
  - <u>34</u>. Thirty feet from the <u>centerlinetop</u> of <u>bank</u> of any identified water <u>bodiesbody</u> within a conservation zone except those within the Columbia Corridor<u>-</u>; <u>and</u>
  - 5. When reconfiguration of the bank carried out in accordance with subsection 33.430.170.A results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and the new top of bank line must be submitted for verification and then recorded with the County recorder. In all cases the disturbance area must be set back at least 5 feet from the new top of bank line.

#### D. - E. [No change]

#### 33.430.140.F.3. Disturbance area setback

This edit is to be consistent with the 33.430.140.F.2. and to reflect current base zones.

#### 33.430.140.F.4

To be consistent with the Natural Resources Inventory (2012) and 2035 Comprehensive Plan policies, all setbacks should be established from the top of bank, not centerline, of streams and drainageways. The top of bank is defined in 33.910 and 33.930.

#### 33,430,140,F.5

The intent is to encourage steep stream banks to be laid back to reduce the steepness and allow for establishment of native vegetation. When an applicant elects for lay back a stream bank, setbacks and location of the protection overlay zone may be established based on the original (pre-lay back) location of top-of-bank, instead of the new location of top-of-bank; provided a minimum five-foot setback from the new top-of-bank is maintained.

### 33.430.140.J.4. Tree removal and replacement standards

In many cases the environmental overlay zones are not mapped to include an additional 25 feet of transition area around the significant natural resources documented in the adopted inventory. The result is that trees, which are significant and should be protected per Metro Urban Growth Management Act Title 13 or the Oregon Statewide Planning Goal 5 ESEE decisions, are located within the transition area not the resource area. To ensure that the functions those trees provide (e.g., stabilizing the soil, attenuating runoff from stormwater, reducing erosion and risk of landslide, shading and cooling the air and nearby water bodies, and providing fish and wildlife habitat) are maintained consistent with adopted policies, tree replacement must occur on site within the remaining Environmental overlay zone area.

#### 33,430,140,L

Minor edits for clarity.

- **F.** The proposed development must be set back at least:
  - 1. Fifty feet from the edge of any identified wetland;
  - 2. Fifty feet from the top of bank of any identified water body within the Columbia Corridor, or any identified water body within a protection zone on lots zoned R10, R20, or RF. When reconfiguration of the bank is carried out in accordance with subsection 33.430.170.A, below, results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and the new top of bank line must be submitted for verification and then recorded with the County recorder. In all cases the proposed development must be set back at least 5 feet from the new top of bank line;
  - 3. Thirty feet from the top of bank of any identified water body within a protection zone on lots except lots zoned R10, R20 or RF zoned R7 through IR; and
  - 4. Thirty feet from the centerlinetop of bank of any identified water bodies body within a conservation zone except those within the Columbia Corridor; and
  - 5. When reconfiguration of the bank carried out in accordance with subsection 33.430.170.A results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and the new top of bank line must be submitted for verification and then recorded with the County recorder. In all cases the disturbance area must be set back at least 5 feet from the new top of bank line.

#### G.-I. [No change]

- **J.** Tree removal and replacement standards.
  - 1.-3. [No change]
  - 4. For replacement of non-native trees-and trees in transition areas, applicants may pay a revegetation fee as described in Table 430-2 in lieu of planting on the site. The fee is based on the number of trees required under Table 430-3, Option A.
- K. [No Change]
- L. Nuisance plants.
  - 1.-3. [No change]
  - 4. The cleared area must be replanted as follows:
    - a. Seed the entire area of removal with a native grass seed.
    - b. Install seven groundcover plants and two shrubs per 50 square feet. Groundcover plants must be a minimum size of four\_inch pots and the shrubs a minimum size of one-gallon pots.
    - c. <u>Install one native tree that is at least one-half inch in diameter for every nuisance tree over 6 inches in diameter that is removed.</u> Removed native and non-native non-nuisance trees are replanted in accordance with Section 33.430.140.M.

#### 33.430.150 Standards for Utility Lines

This is to clarify that impacts to natural resources within the transition area must meet the standards in Section 33.430.150. E with regard to tree replacement.

#### 33.430.155 Standards for Septic Systems

Currently, most septic system replacements must go through Environmental Review. Because septic failures pose a public and environmental health risk, it is important that the system be repaired and replaced quickly. Therefore, this standard allows for repair and replacement of existing septic systems. The system does not need to be replaced in the same footprint as the original.

### 33.430.160 Standards for Land Divisions and Planned Developments

Currently, most land divisions that propose a stormwater outfall in an environmental overlay zone trigger an environmental review because the environmental development standards for a land division (33.430.160) do not include reference to the development standards for stormwater outfalls (33.430.180). In addition, triggering an environmental review also triggers a Type III review procedure regardless of the number of lots being proposed (automatic public hearing and decision by Hearings Officer). This amendment adds a reference in section 33.430.160 to the existing stormwater outfall development standards in 33.430.180, thereby reducing the time and cost of the land division when the stormwater needs of the site can be accommodated based on the environmental overlay zone development standards. The stormwater outfall standards have been included in this draft for informational purposes.

d. Planting native species listed on the Portland Plant List is required.

#### M.-S. [No change]

#### 33.430.150 Standards for Utility Lines

The following standards apply to private connections to existing utility lines and the upgrade of existing public utility lines in resource areas. All of the standards apply in the resource area. Only standard E applies in the transition area. must be met unless exempted by Subsection F.

#### A.-F. [No change]

### 33.430.155 Standards for Repair and Replacement of Existing Septic Systems

The following standards apply to the repair and replacement of an existing septic system. All of the standards must be met.

- A. The proposed disturbance area is no greater than 2,000 square feet;
- **B.** No trees greater than 6 inches in diameter may be removed with the exception of nuisance species trees. Nuisance species trees 6 inches in diameter or larger that are removed must be replaced with one tree meeting the standard of 33.430.140.K;
- <u>C.</u> The proposed disturbance area is located at least 50 feet from stream top-of-bank or wetlands; and
- <u>D.</u> The proposed disturbance area is replanted with a minimum of eight ground cover plants per 10 square feet. The ground cover plants must be a minimum size of four inch pots and must be native species listed in the *Portland Plant List*.

#### 33.430.160 Standards for Land Divisions and Planned Developments

The following standards apply to land divisions and Planned Developments in the environmental overlay zones. All of the standards must be met.

- **A.** All development, except for development associated with stormwater outfalls that meet Section 33.430.180, is outside the resource area of the environmental protection zone;
- B. The total amount of disturbance area allowed within the resource area of the environmental zone is either the amount listed in Table 430-4 or 1 acre, whichever is less, minus the amount of area outside the resource area. Disturbance area associated with construction or installation of stormwater outfalls that meets Section 33.430.180 are not counted towards maximum disturbance area;
- **C.** Where there is a house on the site that is in the environmental protection zone, it may remain if a new lot is created that meets the following:
  - 1. The existing house will remain; and
  - A new lot is created that is no larger than required to contain the existing house, garage, minimum required setbacks, a 12-foot wide driveway, and an open area of 20 feet by 20 feet.

### 33.430.170

Renumber the maps.

### 33.430.180

This clarification is to treat stormwater outfalls the same as other utilities lines, 33.430.150. The standards for utility lines only apply in resource areas, not transition areas.

- **DG.** Resource areas of the environmental protection zone that are outside of lots being created under the provisions of Subsection B., above, are located entirely within environmental resource tracts. The tracts must be owned in common by all of the owners of the land division site, by a Homeowners' Association, by a public agency, or by a non-profit organization; and
- D. The total amount of disturbance area allowed within the resource area of the environmental conservation zone is either the amount listed in Table 430-4 or 1 acre, whichever is less, minus the amount of area outside the resource area;
- E.-I. [No change]
- J. Utility construction must meet the applicable standards of Section 33.430.150. Private utility lines on a lot where the entire area of the lot is approved to be disturbed and where the private utility line provides connecting service directly to the lot from a public system are exempt from this standard-; and
- K. The standards of Subsection 33.430.180 must be met.

#### 33.430.170 Standards for Resource Enhancement Projects

The following standards apply to resource enhancement projects in the environmental zones. The applicant for projects that will take place within the area shown on Map 430-1410 may choose to meet all of the standards of subsection A, all of the standards of subsection B, or all of the standards of subsection C. Applicants for projects that will take place outside the area shown on Map 430-1410 must meet all of the standards in subsection C.

- **A. Bank reconfiguration.** The following standards apply to bank reconfiguration projects that take place in the Bank Reconfiguration and Basking Features Area shown on Map 430-1410. Slough and drainageway banks, which are the area between the ordinary high water mark and the top of bank, may be regraded when all of the following are met:
  - 1.-9. [No change]
- **B. Basking features.** The following standards apply to the placement of large wood or large rocks as basking features for wildlife in the Bank Reconfiguration and Basking Features Area shown on Map 430-1410. The placement of large wood or large rocks as basking features for wildlife within the Columbia Slough, Whitaker Slough, Buffalo Slough, Peninsula Canal, or other drainageways or identified wetlands is allowed when all of the following are met:
  - 1.-6. [No change]
- **C.** [No change]

#### 33.430.180 Standards for Stormwater Outfalls

The following standards apply to the installation of stormwater outfalls. All of the standards <u>apply in the resource areamust be met</u>. <u>Only standards B through E and H apply in the transition area.</u>

- A.-G. [No change]
- **H.** Only one outfall pipe may be used on a site. The outfall pipe size may not exceed **4**6 inches in diameter; and
- I. [No change]

#### 33,430,185

The intention of the new standard is to allow some minor safety improvements to existing flood control and water conveyance systems. These improvements are anticipated to have little impact on existing natural resource features and functions and will improve the safety for maintenance crews and meet ADA requirements. Resource enhancement will replace any potential impacted features and functions.

#### 33,430,190

The trail standard is intended to apply to all public trails located in environmental overlay zones, not just trails designated as "major public trails" on the official zoning maps. Therefore, the term major is deleted.

#### 33,430,195

This amendment clarifies that the standard only applies where the c- or p-zone overlaps with a s-zone. The intent of the standard is to allow tree removal to preserve a significant view.

#### 33.430.185 Standards for Certain Flood and Water Control Facilities

The following standards apply to minor improvements to certain existing flood and water conveyance control facilities. For the purposes of this Section, an existing flood or water conveyance control facility is defined as existing pump stations, wet wells, electrical panels or pads, and trash racks. The minor improvements that these standards apply to are defined as the addition or modification of handrails, access paths, ADA ramps, safety vaults, fall protection posts or pads, or Sewer Level Remote Telemetry (SLRT). All of the standards must be met.

- A. The disturbance area for the minor improvement is not greater than 10 feet wide, not greater than 500 square feet total, and is <u>contiguous</u> to the existing disturbance area for the flood or water conveyance control facility that is being altered;
- **B.** Temporary disturbance areas must be planted with native species listed in the *Portland Plant List* according to the following densities:
  - 1. Ten native shrubs for every 100 square feet of temporary disturbance area and a native grass and forb seed mix at a rate of 20 pounds per acre; or
  - 2. If on a levee, a native grass and forb seed mix at a rate of 50 pounds per acre or a grass seed mix approved by the US Army Corps of Engineers for use on levees at a rate of 50 pounds per acre.
- C. The proposed disturbance area must be located above the ordinary high water mark and outside of wetlands;
- D. No trees more than 6-inches in diameter are removed with the exception of nuisance species trees. Nuisance species trees 6 inches in diameter or larger that are removed must be replaced with one tree meeting the standard of 33.430.140.K; and
- E. At least one site enhancement option must be completed on the site. Applicants must show that an area equivalent in size to at least 100 percent of the proposed permanent disturbance area will be enhanced following one or more of the options described in Table 430-2. If the proposed permanent disturbance area is less than 100 square feet, the minimum required enhanced area must be 100 square feet. The site enhancement area must be located outside of the proposed permanent and temporary disturbance area.

#### 33.430.190 Standards for Major Public Trails

The following standards apply to major public trails and viewing areas developed in conjunction with the major public trail. All of the standards must be met.

**A.-E.** [No change]

#### 33.430.195 Standards for Tree Removal in the Scenic Resources Zone

The following standards apply to removal of native trees up to 12 inches in diameter and non-native trees of any size that are located within an Eenvironmental overlay zone and the Scenic Resource zone:

A.-D. [No change]

#### 33,430,405

There are three options for corrections to violations within ezones, depending on the situation. Two of the options allow for the violation to be corrected without environmental violation review. That means that the violation can be corrected through a permit process, which is quicker and less costly. However, many situations that could otherwise qualify to use "Option One, Remove and Repair" are not able to meet the requirements because it requires that all items and materials be removed with hand-held equipment.

The code is being amended to remove the requirement to only use hand-held equipment. This will allow more situations to be corrected without a land use review. The code currently requires that no additional disturbance be created to correct the violation, so the use of heavier equipment to remove materials would not add to the overall scope or impact of the violation.

To ensure any use of heavy equipment near a stream, wetland or other water body has appropriate evaluation through environmental violation review, the use of Option One is restricted to violations that do not impact water bodies. An additional amendment to the Option Three (review path) is included for consistent language and to provide more clarity on when this path is required.

#### 33.430.405 Correction Options

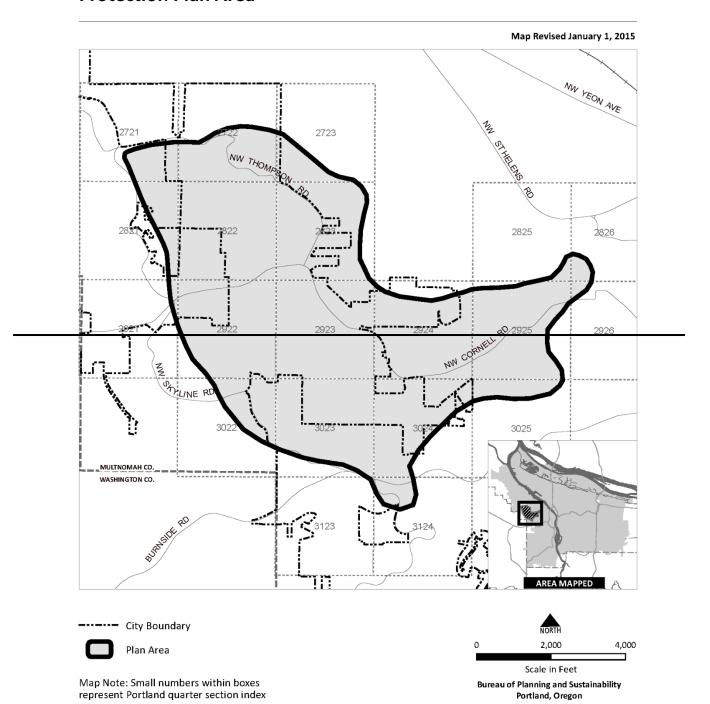
Applicants must choose one of the following options to correct environmental code violations.

- A. When these options may be used.
  - 1. If all of the following are met, the applicant may choose Option One, Option Two, or Option Three:
    - a. Tree removal:
      - (1) Only non-native trees have been removed;
      - (2) No more than 12 diameter inches of native trees have been removed; or
      - (3) No more than one of the following has been removed:
        - A Madrone 4 inches or less;
        - A Garry Oak 4 inches or less; or
        - A Pacific Yew 2 inches or less;
    - b. No development, exterior alteration, or exterior improvement has occurred below the top of bank or within a wetland, stream channel, drainageway, or waterbody.
    - bc. The proposal will remove all illegal development; and
    - $\epsilon \underline{d}$ . The proposal will replant illegal clearing.
  - 2. [No change]
- **B. Option One, Remove and Repair.** This option results in removal of illegal development and replanting and repair of any damage. All of the requirements of this subsection must be met, and the notice and review procedure described in Sections 33.430.410 through 33.430.430 must be followed. Adjustments and modifications to these requirements are prohibited.
  - 1. All items and materials placed in the area of violation are removed using hand-held equipment and no new disturbance area is created;
  - 2.-4. [No change]
- **C.** [No change]
- **D. Option Three, Environmental Review.** This option requires Environmental Review, using the approval criteria and procedures below:
  - 1. Approval criteria. The approval criteria of Subsection 33.430.250.G must be met.
  - 2. Review procedures. Reviews are processed as follows:
    - a. Type III. The following situations require a Type III review:
      - (1) The removal of trees that exceeds the quantity of environmental standard 33.430.140.J.
      - (2) Any development, exterior alteration, or exterior improvement within <u>or below</u> top of bank of a wetland, stream channel, drainageway, or waterbody.
    - b.-c. [No change]

Map 430-1 is deleted and fully replaced by new Map 430-1

# **Balch Creek Watershed Protection Plan Area**

## Map 430-1



Chapter 33.430, Environmental Zones

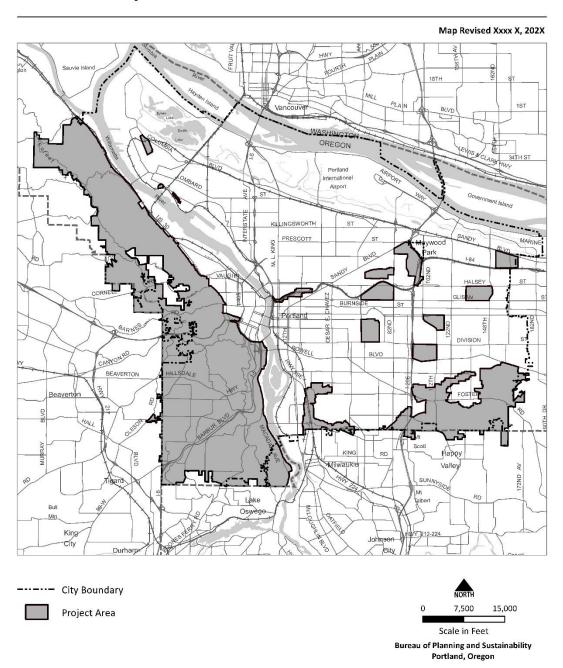
#### Map 430-1

This is a new map that replaces the following maps:

- Map 430-1 Balch Creek Watershed Protection Plan Area
- Map 430-4 Fanno Creek and Tributaries Conservation Plan Area
- Map 430-7 Skyline West Resource Protection Plan Area
- Map 430-8 Southwest Hills Resource Protection Plan Area

# **Environmental Overlay Zone Map Correction Project Area**

#### Map 430-1

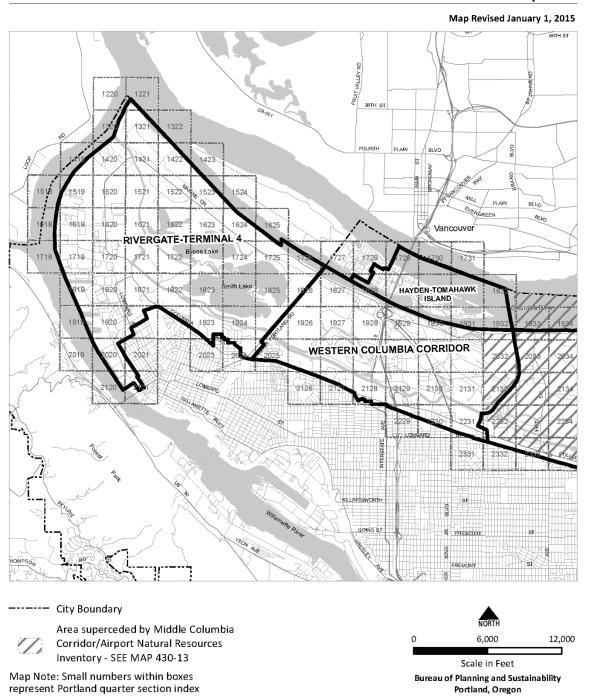


Map 430-2-1 is not changed and is included only for reference.

#### Columbia Corridor Industrial and Environmental Mapping Project Area

## Map 430-2

Map 1 of 2

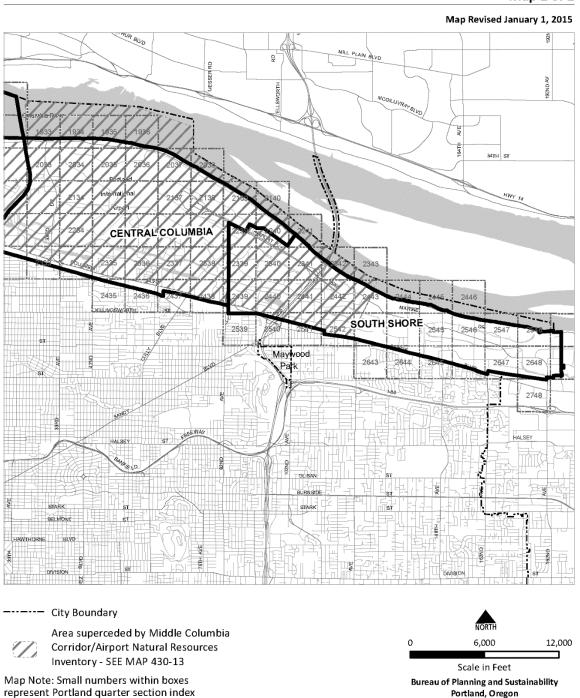


Map 430-2-2 is not changed and is included only for reference.

#### Columbia Corridor Industrial and Environmental Mapping Project Area

## Map 430-2

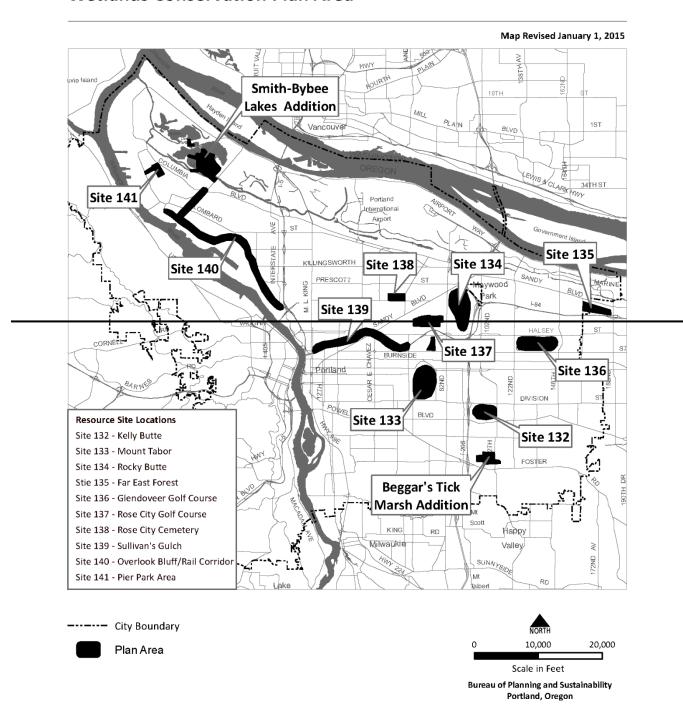
Map 2 of 2



Map 430-3 is deleted and replaced with a new 430-3

## East Buttes, Terraces, and Wetlands Conservation Plan Area

## Map 430-3

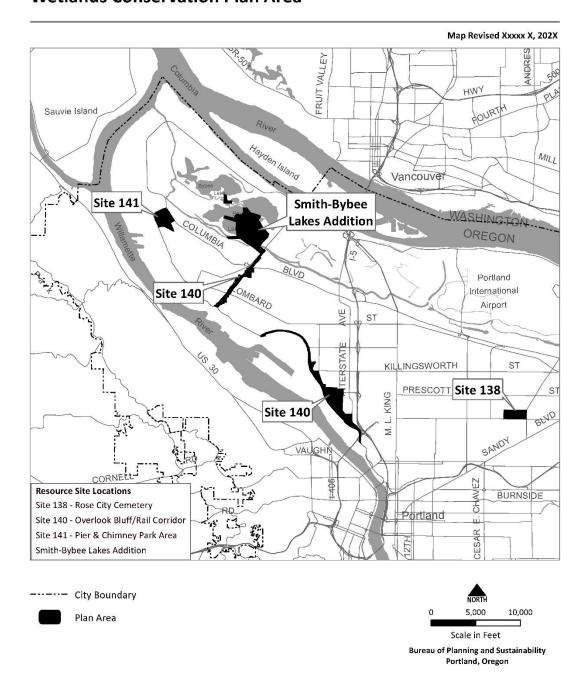


Chapter 33.430, Environmental Zones

New Map 430-3 includes only the resources sites are remained covered by the East Buttes, Terraces and Wetlands Conservation Plan. These resource sites remain covered by the original plan because they are industrial properties that will be addressed with the update to the Economic Opportunity Analysis. The other resource sites that were within the Conservation Plan are now addressed in the Environmental Overlay Zone Map Correction Project and shown on new Map 430-1.

## East Buttes, Terraces, and Wetlands Conservation Plan Area

#### Map 430-3

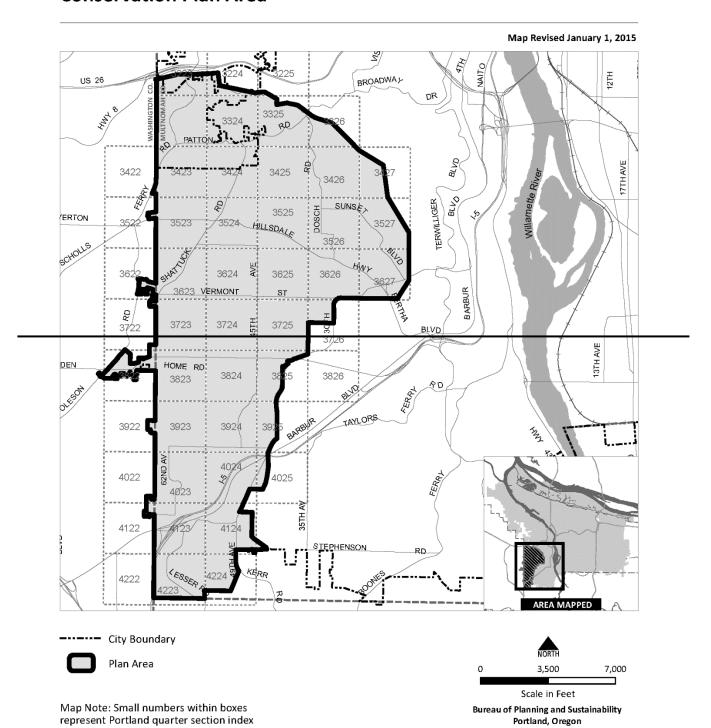


Chapter 33.430, Environmental Zones

Map 430-4 is deleted and fully replaced by the new Map 430-1. All land within the Fanno Creek and Tributaries Conservation Plan Area is now addressed in the Environmental Overlay Zone Map Correction Project.

# Fanno Creek and Tributaries Conservation Plan Area

#### Map 430-4

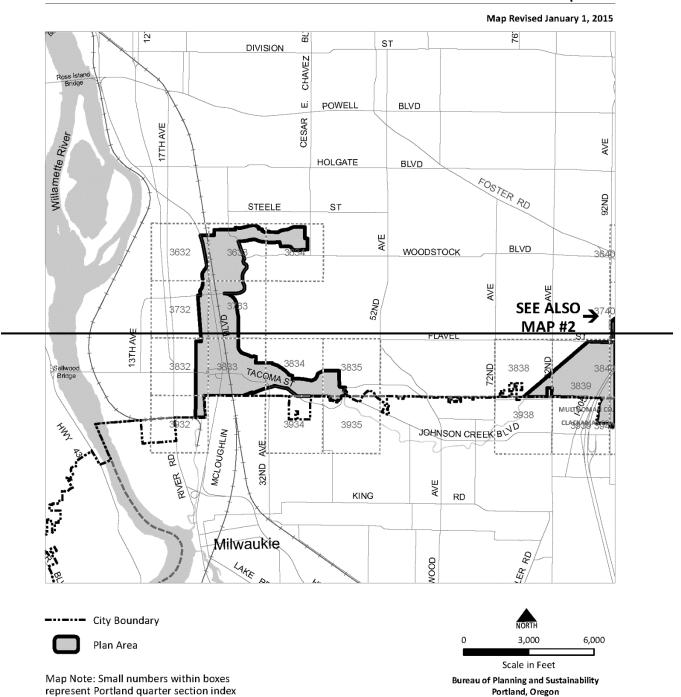


Map 430-5-1 is updated to remove all but one resource site. All the removed resources site are addressed in Map 430-1, Environmental Overlay Zone Map Correction Project. The one resources site, Freeway Lands, is zoned for industrial uses and will remain addressed in the Johnson Creek Basin Protection Plan Area until the Economic Opportunities Analysis is completed.

#### Johnson Creek Basin Protection Plan Area

## Map 430-5

Map 1 of 2



Map 430-5-2 is updated to remove all but one resource site. All the removed resources site are not address in Map 430-1, Environmental Overlay Zone Map Correction Project. The one resources site, Freeway Lands, is zoned or industrial uses and will remain addressed in the Johnson Creek Basin Protection Plan Area until the Economic Opportunities Analysis is completed.

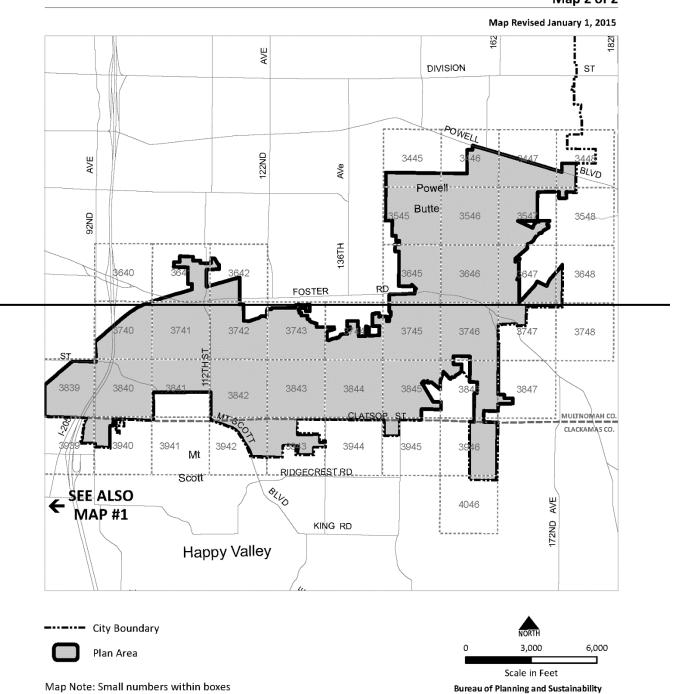
#### Johnson Creek Basin Protection Plan Area

represent Portland quarter section index

## Map 430-5

Portland, Oregon

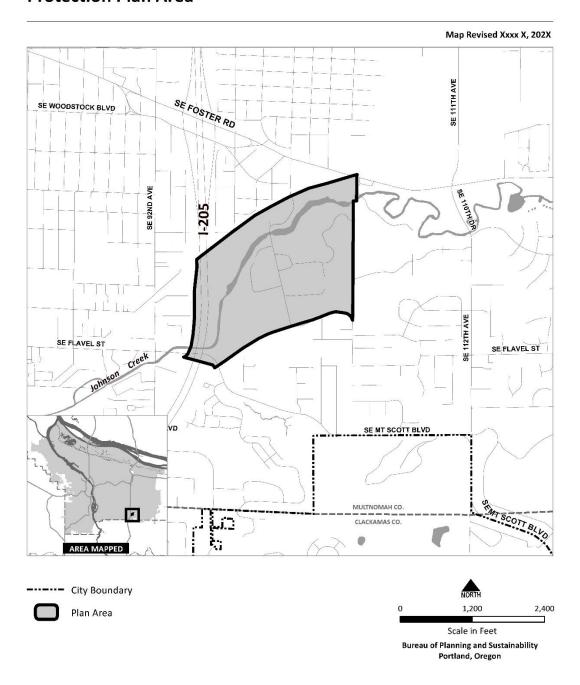
Map 2 of 2



May 430-4 replaced Map 430-5 and includes one resources site, Freeway Lands.

#### Johnson Creek Basin Protection Plan Area

## Map 430-4

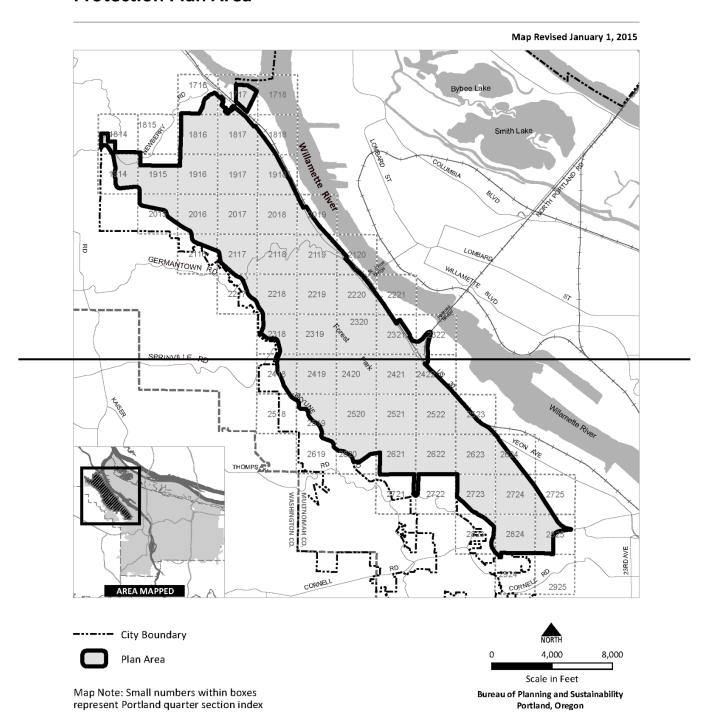


Chapter 33.430, Environmental Zones

Map 430-6 is deleted and replace by the new Map 430-5.

#### Northwest Hills Natural Areas Protection Plan Area

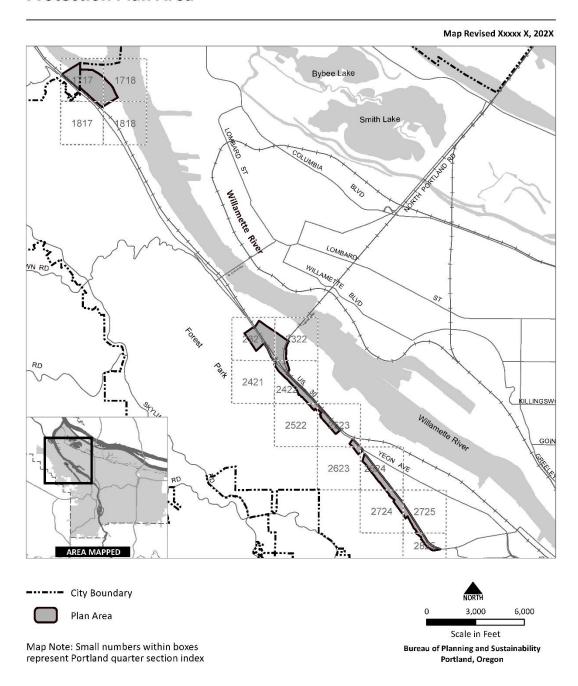
## Map 430-6



New Map 430-5 replaces Map 430-6 and is updated to reflect only the resources sites that remained covered by the Northwest Hills Natural Areas Protection Plan. These resource sites remain covered by the original plan because they are industrial properties that will be addressed with the update to the Economic Opportunity Analysis. The other resource sites that were addressed in the Protection Plan are now addressed in the Environmental Overlay Zone Map Correction Project and shown on new Map 430-1.

#### Northwest Hills Natural Areas Protection Plan Area

#### Map 430-5

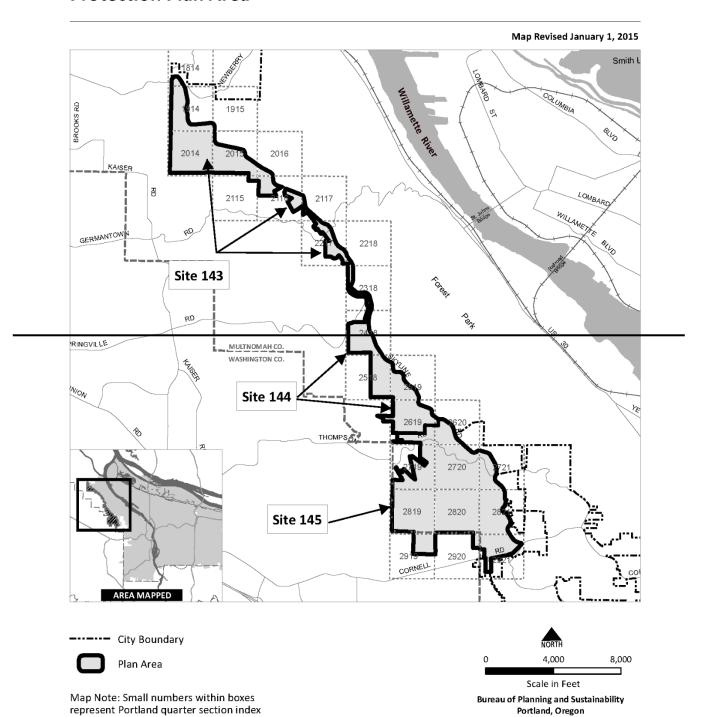


Chapter 33.430, Environmental Zones

Map 430-7 is deleted and fully replaced by new Map 430-1, Environmental Overlay Zone Map Correction Project.

## **Skyline-West Resource Protection Plan Area**

## Map 430-7

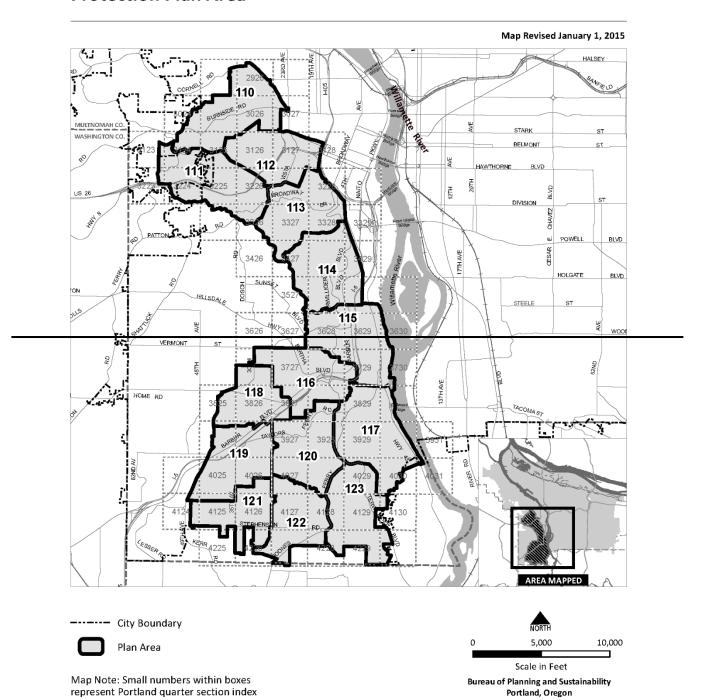


Chapter 33.430, Environmental Zones

Map 430-8 is deleted and fully replaced by new Map 430-1, Environmental Overlay Zone Map Correction Project.

## Southwest Hills Resource Protection Plan Area

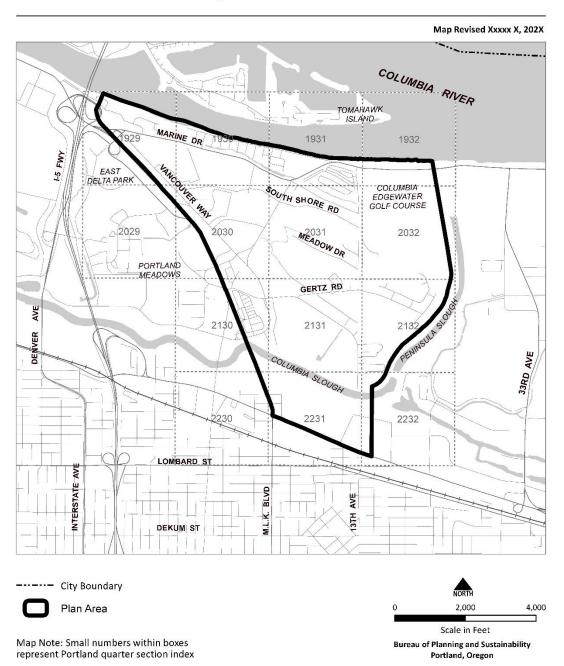
## Map 430-8



Map 430-9 is renumbered to 430-6, no other changes are made to the map.

# **East Columbia Neighborhood Natural Resources Management Plan Area**

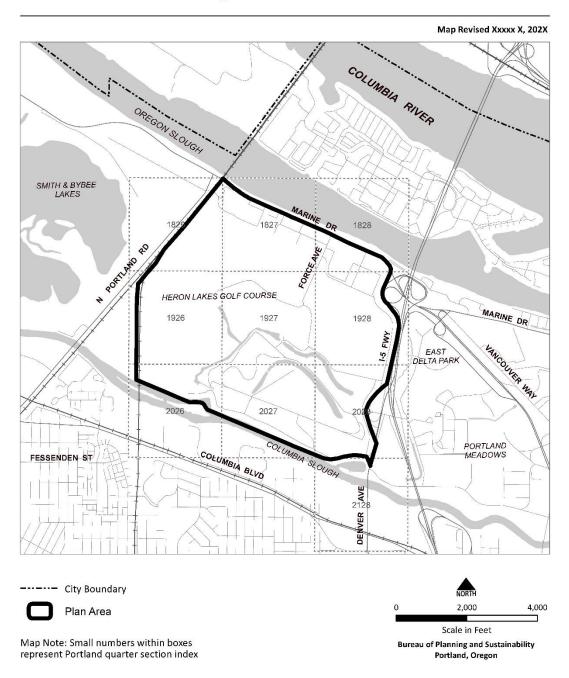
## Map 430-6



Map 430-12 is renumbered to 430-7, no other changes are made to the map.

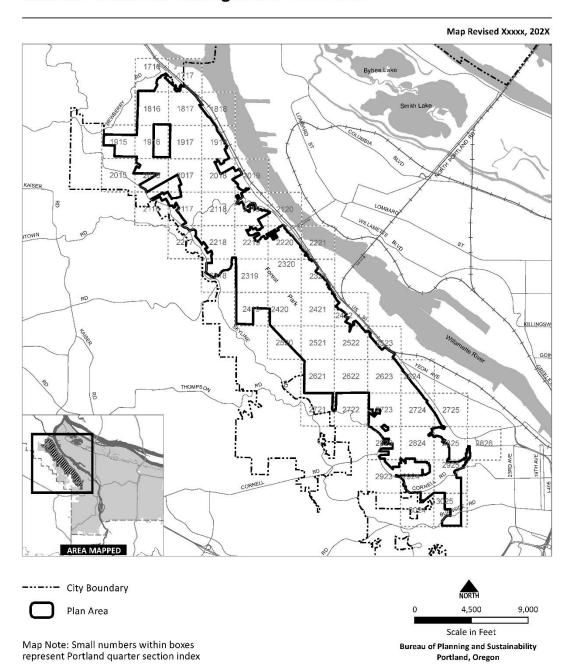
#### Peninsula One Natural Resources Management Plan Area

#### Map 430-7



Map 430-11 is renumbered to 430-8, no other changes are made to the map.

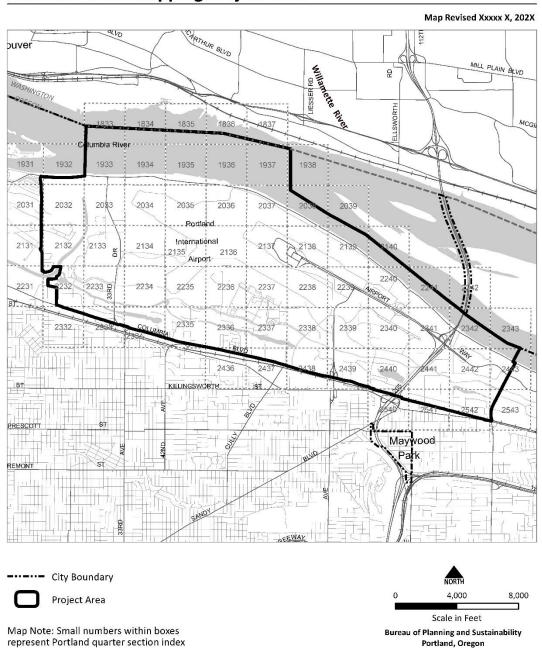
# Forest Park Natural Resources Management Plan Area Map 430-8



Map 430-13 is renumbered to 430-9, no other changes are made to the map.

# Middle Columbia Corridor/Airport Natural Resource Inventory Environmental Mapping Project Area

# Map 430-9



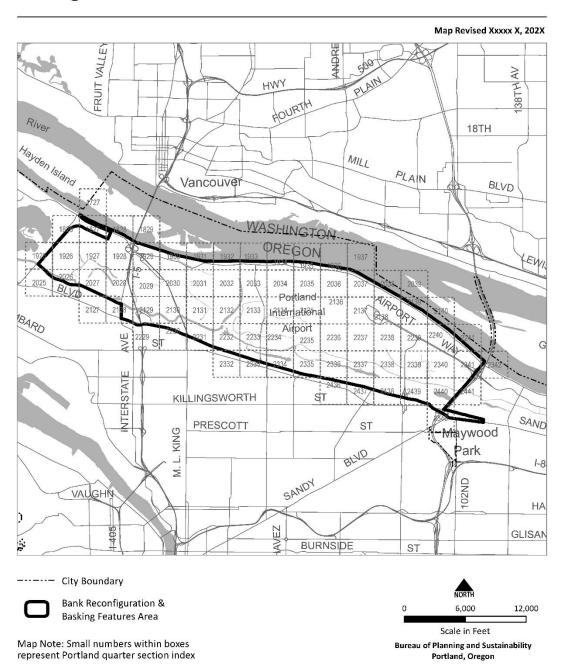
Chapter 33.430, Environmental Zones

Map 430-14 is renumbered to 430-10, no other changes are made to the map.

Chapter 33.430, Environmental Zones

# Bank Reconfiguration and Basking Features Area

# Map 430-10



Chapter 33.430, Environmental Zones

#### 33.475 River Overlay Zones

475

_							
ς	$^{\circ}$	rt	1	$\sim$	n	c	•

#### General

- 33.475.010 Purpose
- 33.475.020 River Overlay Zones
- 33.475.030 Where These Regulations Apply
- 33.475.050 Supplemental Permit Application Requirements

#### River General and River Recreational Overlay Zones

- 33.475.200 Use Regulations
- 33.475.210 River Setback
- 33.475.215 Marine Passenger Docks and Marine Passenger Terminals
- 33.475.220 Landscaping
- 33.475.225 Residential Docks
- 33.475.230 Exterior Lighting
- 33.475.235 Bird-safe Glazing
- 33.475.245 Archeological Resources Protection
- 33.475.250 Nonconforming Uses and Development
- 33.475.260 Property Line Adjustments

#### River Environmental Overlay Zone

- 33.475.400 Use Regulations
- 4433.475.403 When These Regulations Apply
- 33.475.405 Items Exempt From These Regulations
- 33.475.410 Environmental Report
- 33.475.420 Review Procedures
- 33.475.430 Prohibitions
- 33.475.440 Development Standards
- 33.475.450 Corrections to Violations of the River Environmental Overlay Zone Regulations

#### Clean Up of Contaminated Sites

- 33.475.500 Removal or Remediation of Hazardous Substances
- Map 475-1 River Overlay Boundary
- Map 475-2 Willamette River Top of Bank
- Map 475-3 Governor Tom McCall Waterfront Park and Eastbank Crescent
- Map 475-4 Archaeological Sensitivity Areas
- Map 475-5 Retail Sales and Service Allowed in OS
- Map 475-6 Riparian Buffer Area

## 33.475.405.L. Removal and Pruning of Vegetation

The added language was inadvertently left out of the newly adopted 33.475 for the River Plan/South Reach. Areas of bare soil that result from removal of trees or other vegetation need to be replanted per the landscaping standards.

#### 33.475.405.V. Trail Exemption

The allowed trail width is being increased in the 33.430 Environmental Zones chapter from 30 inches to 36 inches to meet ADA recommendations. This code section is being amendment to be consistent.

#### 33.475.405 Items Exempt From These Regulations

The following items are exempt from the River Environmental overlay zone regulations:

- A.-K. [No change]
- L. Removal or pruning of vegetation as follows:
  - Removal or pruning of non-tree vegetation listed on the Nuisance Plant List and other non-tree, non-native vegetation located within the riparian buffer area or within or riverward of the river setback. <u>Temporary disturbance must be replanted to meet the</u> relevant subarea standards of Table 475-1.
  - 2. [No change]
- M.-U. [No change]
- V. Trails meeting all of the following:
  - 1. [No change]
  - Trail widths must not exceed 3036 inches, stair width must not exceed 50 inches, and trail grade must not exceed 20 percent except for the portion of the trail containing stairs;
  - 3.-6. [No change]

#### 33.480.010, 33.480.030 and 33.480.040

The list of supporting documents needs to be updated to include the adopted <u>River Plan/South Reach Scenic Resources Protection Plan</u>, which went into effect on March 1, 2021. This change was intended to be a part of River Plan / South Reach adoption, but the addition was missed through an oversight.

The word "all" is being removed because in some cases a different overlay zone or zoning code regulatory tool is applied instead of the Scenic Resource zone. This includes the application of the environmental overlay zones where a protection of significant natural resources overlaps a scenic resource along designated scenic corridors, and the use of strict height limits in the Central City plan district to protect a designated view corridor through the Central City. In both cases, the identified values of the scenic resource are protected either through the reduced height or through consideration of the scenic values during an environmental review.

#### 33.480 Scenic Resource Zones

480

#### 33.480.010 Purpose

The Scenic Resource zone is intended to:

- Protect Portland's significant scenic resources that provide benefits to the public as identified by the City in the Scenic Resources Protection Plan (1991), and the Central City Scenic Resources Protection Plan (2017), and the River Plan / South Reach Scenic Resources Protection Plan (2020);
- Enhance the appearance of Portland to make it a better place to live and work;
- Create attractive entrance ways to Portland and its districts;
- Improve Portland's economic vitality by enhancing the City's attractiveness to people who live and work in Portland its citizens and to people who are visitorsing; and
- Implement the scenic resource policies, goals, and objectives of Portland's Comprehensive Plan.

The purposes of the Scenic Resource zone are achieved by establishing height limits within view corridors to protect significant views and by establishing additional landscaping and screening standards to preserve and enhance identified scenic resources.

#### **33.480.030** Application

The Scenic Resource zone is to be applied to all-significant view corridors, viewpoints, and scenic corridors identified in the Scenic Resources Protection Plan, or River Plan/South Reach Scenic Resources Protection Plan. Any changes to land or development, including rights-of-way, within the Scenic Resource zone are subject to the regulations of this chapter.

#### 33.480.040 Development Standards

The development standards of the Scenic Resource zone apply based on the mapping designations shown in the Scenic Resources Protection Plan, or the Central City Scenic Resources Protection Plan, or River Plan/South Reach Scenic Resources Protection Plan. The standards for each subsection below apply only to areas with that designation in the respective plan. The resource is defined as the width of the right-of-way or top of bank to top of bank for scenic corridors. Setbacks are measured from the outer boundary of the right-of-way unless specified otherwise in the ESEE Analysis and as shown on the Official Zoning Maps. In some cases, more than one development standard applies. For example, within a scenic corridor, a view corridor standard will apply where a specific view has been identified for protection.

**Chapter 33.480, Scenic Resource Zones** 

#### 33.480.040.B Scenic Corridors

The purpose of scenic corridor setback is to limit the amount of development that can be seen from the scenic right-of-way. However, in some places environmental overlay zones overlap or cross the scenic corridor. Where this occurs, there can be a conflict between the development standards of the environmental overlay zone and the scenic corridor setback. In general, the environmental overlay zone standards push development toward the right-of-way whereas the scenic corridor setback pushes development away from the right-of-way. The environmental overlay zone standards are aimed at limiting the impacts from development on the streams, wetlands, and wildlife habitat, including trees, that are being protected by the overlay zones. In addition, requiring development within an environmental zone to meet the scenic corridor setback has the potential to cause the development to trigger environmental review. In order to avoid this possibility, this amendment will exempt development in the environmental overlay zones from the scenic corridor setback.

#### Language to be added is <u>underlined</u>.

Language to be deleted is shown in strikethrough.

- **B. Scenic Corridors.** The following standards apply to development and vegetation within a scenic corridor.
  - 1. [No change]
  - 2. Standards.
    - a. Scenic corridor setback. A scenic corridor setback per Table 480-1 applies along street lot lines that abut the Scenic Corridor identified in the Scenic Resources Protection Plan. <u>Development within an environmental overlay zone is exempt from this setback standard.</u>
    - b.-h. [No Change]

**Chapter 33.480, Scenic Resource Zones** 

Recommended Draft Page 114 January 2022

#### 33.537.040. Items Exempt from Environmental Regulations

Exemption A is being deleted because all of the uses and activities listed in Chapter 8 of the Johnson Creek Basin Protection Plan (JCBPP) are either no longer relevant because they refer to conditional uses or approved plans that are long expired, or the use or activity is now exempt from the environmental overlay zones chapter by regulations in 33.430 (e.g. repair and replacement of bridges). In addition, almost all of the inventory information from the JCBPP is being updated and subsumed into the Environmental Overlay Zone Map Correction Project Area report which means the reference to Chapter 8 of the JCBPP will no longer be valid.

33.537 Johnson Creek Basin Plan District

#### 33.537 Johnson Creek Basin Plan District

**537** 

#### 33.537.040 Items Exempt from Environmental Regulations

The following items are exempt from environmental overlay zone regulations within the plan district, as they are compatible with the purposes of the plan district and will not adversely impact significant resources and functional values.

- A. Items and conditions listed in the Johnson Creek Basin Protection Plan document as "Site-Specific Compatible Uses and Activities" in Chapter 8, Inventory Site Summaries;
- **AB.** Construction and maintenance of a public recreation trail and support facilities within the Springwater Corridor; and
- **BC.** Maintenance within existing rights-of-way, including road widening, rebuilding of bridges, resurfacing, and installation of curbs and sidewalks.

33.537 Johnson Creek Basin Plan District

Recommended Draft Page 116 January 2022

#### 33.564 Pleasant Valley Plan District

The boundary of the Pleasant Valley Plan District is being revised to reflect the fact that several properties in the far southeast corner of the plan district (between SE Baxter Rd. and SE Sager Rd.) are no longer within the City's urban services boundary and as part of the adoption of the 2035 Comprehensive Plan, all City zoning was removed from the parcels. Amending the boundary of the Pleasant Valley Plan District was inadvertently missed when the Comprehensive Plan was updated.

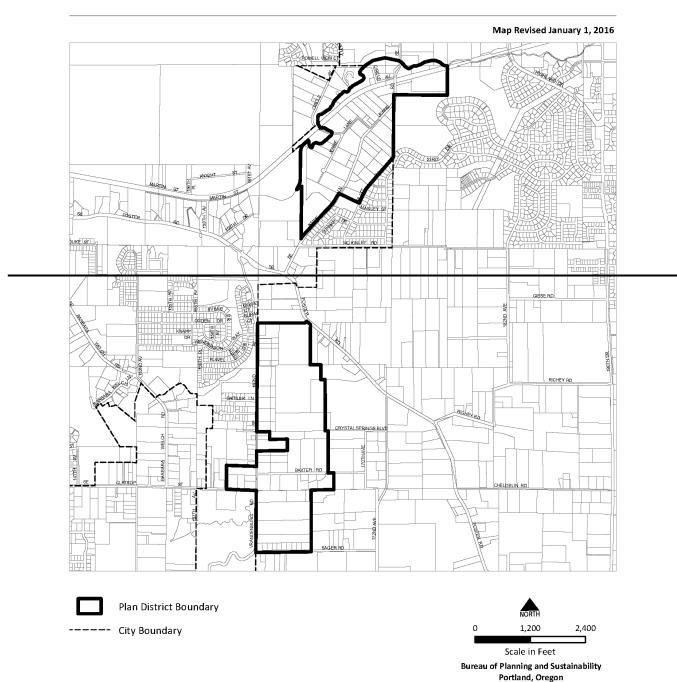
33.564 Pleasant Valley Plan District

# 33.564 Pleasant Valley Plan District

**564** 

# Pleasant Valley Plan District

# Map 564-1



33.537 Johnson Creek Basin Plan District

Map 564-1 is replaced

33.564 Pleasant Valley Plan District

# **Pleasant Valley** Map 564-1 **Plan District** Map Revised Xxxx XX, 202X --- City Boundary 2,400 Plan District Boundary Scale in Feet **Bureau of Planning and Sustainability** Portland, Oregon

33.537 Johnson Creek Basin Plan District

#### 33.910.030 Definitions

In 2020 as part of the River Plan/South Reach project, this sentence was added to the definition of resource enhancement in an attempt to differentiate between mitigation and enhancement. However, the addition of this clarification has caused more uncertainty than it has provided clarity. Therefore, the proposal is to delete the sentence and return the definition to its original wording.

#### 33.910 Definitions

910

#### 33.910.030 Definitions

Resource Enhancement. The modification of resources or functional values. This may include the short- term loss of resources or functional values, to achieve improved quality or quantity of the resource or functional values in the long term or for future desired conditions. It can include actions that result in increased animal and plant species, increased numbers of types of natural habitat, and/or increased amount of area devoted to natural habitat. It may also include improvements in scenic views and sites, increased capacity for stormwater detention or infiltration, increased or improved floodplain function, changes in water quantity or quality, changes in ecosystem type, or other improvements to resources or functional values. A resource enhancement project must result in a net gain in total functional value and improvement in the quality or quantity of resources on the site. Mitigation banks, which sell credits for off-site mitigation, are not considered resource enhancement.

# **Part C: Proposed Ezones**

Part C summarizes the proposed changes to the mapping of the Environmental Overlay Zones. Mapping protocols have been developed to determine where environmental overlay zones should be applied in each of the resource sites in the project area. When applied by a computerized Geographic Information System, the mapping protocols are intended to generate ezones that are consistent with previously adopted policy.

Section B of Part C describes unusual situations in which the Environmental Overlay Zone mapping on individual sites deviates from the mapping protocols. Section C of Part C is a series of maps that show the location of the proposed ezones throughout the project area.

# A. Summary of Resource Site Results

The application of the environmental overlay zones to the natural resources is summarized for each resource site<sup>3</sup> in the following geographies:

- 1. Forest Park and Northwest District (FP)
- 2. Skyline West (SK)
- 3. Tryon Creek and Southwest Hills East (SW)
- 4. Fanno Creek (FC)
- 5. East Buttes and Terraces (EB)
- 6. Johnson Creek Watershed (JC)
- 7. Boring Lava Domes (BL)

Part C is intended to be a quick guide to explain which resource features should be protected by which environmental overlay zones. Property owners, applicants, and reviewers of permits and land use decisions should refer to the more detailed resource protection decisions that apply to each resource site, which are provided in Volume 2, Parts A-G.

To find out how the project proposals apply on your property, identify the location of your property on the maps that precede Sections A.1 – A.7 to determine which resource site your property falls within. The resource protection decisions that apply for each resource site are listed in Tables 3-9. Then refer to the applicable map under Part C Section C that refers to the resource site in which your property is located.

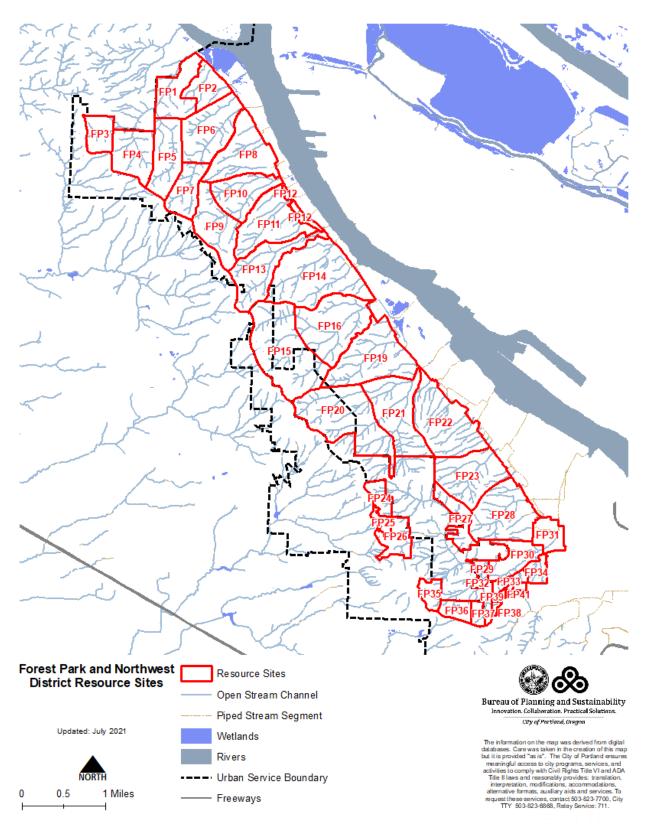
<sup>&</sup>lt;sup>3</sup> Resource sites are an organizing structure that has been maintained from the previous Goal 5 plans. Resource sites were developed to comply with Goal 5, which requires the economic, social, environmental and energy (ESEE) analysis to be conducted by resource site. A resource site can be one or more properties and has no other size limitations.

#### A.1. Forest Park and Northwest District

The Forest Park and Northwest District plan geography, shown in Map 5, includes 41 resource sites and is located generally east of NW Skyline Boulevard, north of W Burnside Road and west of the Willamette Greenway boundary.

Table 3 summarizes results of the analysis presented in Volumes 2-4 and the application of conservation and protection overlay zones to the natural resource features by resource sites within the Forest Park and Northwest District geography. Additional information is found in Volume 2, Part A; if there are discrepancies, Volume 2, Part A takes precedence over the summary table.

When the table states "land within" a certain distance of a river, stream or wetland the land includes all resources associated with the land including soils, flood area, vegetation and steep slopes, as well as developed land. Yards, decks, buildings, parking, loading, etc. located within that distance are also subject to the overlay zones.



Map 5: Forest Park and Northwest District Resource Sites

Resource	orest Park and Northwest District – Summary of Decis	Environmental
Site		Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands or from the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet from the top- of-bank of streams or wetlands	protection (p)
FP1	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams or wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands and the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet of the top-of-bank of streams	protection (p)
FP2	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams and wetlands	protection (p)
172	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams and wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)
	Outside of public parks, apply a protection zone to forest and woodland vegetation located in the parcel that is zoned RF that is completely surrounded by Forest Park.	protection (p)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
FP3	Land within 25 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet of top-of- bank of streams and wetlands	protection (p)
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams and wetlands	protection (p)
	Outside of public parks, land between 25 and 50 feet of top-of- bank of streams and wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams and wetlands	conservation (c)

Table 3: F	orest Park and Northwest District – Summary of Deci	sions
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FP4	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FP5	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)
FP6	Inside of public parks, all land between 25 and 50 feet of wetlands	protection (p)
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)

Resource	Natural Resource Feature	Environmental
Site	Characteristic to a Charle	Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
FP7	Inside of public parks, land between 25 and 50 feet of top-of- bank of streams and wetlands	protection (p)
	Areas of forest or woodland vegetation in RF-zoned lot that is surrounded by Forest Park	protection (p)
	Outside of public parks, forest and woodland vegetation contiguous to but more than 50 feet from top-of-bank of streams	conservation (c
	Outside of public parks, land between 25 and 50 feet of top-of- bank of streams and wetlands	conservation (c
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
FP8	Inside of public parks, land between 25 and 50 feet of streams	protection (p)
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c

Resource	Natural Resource Feature	Environmental
Site	Characteristic to the first	Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
500	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)
FP9	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
	Forest or woodland vegetation that is contiguous to but greater than 50 feet from the top-of-bank of streams or wetlands in RF-zoned parcel that is completely surrounded by Forest Park	protection (p)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FP10	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)

Table 3: F	orest Park and Northwest District – Summary of Deci	sions
Resource	Natural Resource Feature	Environmental
Site		Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)
FD44	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
FP11	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
FP12	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Outside of public parks, land between 25 feet and 50 feet of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FP13	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)

	Table 3: Forest Park and Northwest District – Summary of Decisions		
Resource Site	Natural Resource Feature	Environmental Overlay Zone	
	Stream channels to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 25 feet of wetlands	protection (p)	
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)	
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)	
FP14	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)	
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)	
	Outside of public parks, forest or woodland contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)	
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)	
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)	
	Stream channels to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 25 feet of wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
FP15	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)	
LP13	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams and wetlands	protection (p)	
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)	
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)	

Resource Site	Natural Resource Feature	Environmental Overlay Zone	
	Stream channels to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 25 feet of wetlands	protection (p)	
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)	
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)	
FP16	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)	
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)	
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c	
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c	
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c	
FP17	Resource Site FP17 is outside the scope of this project. Please refer to the Northwest Hills Natural Areas Protection Plan.		
FP18	Resource Site FP18 is outside the scope of this project. Please refer to the Northwest Hill Natural Areas Protection Plan.		
	Stream channels to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 25 feet of wetlands	protection (p)	
	Land within 25 feet of the top-of-bank of streams	protection (p)	
FP19	Inside of public parks, land between 25 and 50 feet of top-of- bank of streams and wetlands	protection (p)	
	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)	
	Outside of public parks, land between 25 and 50 feet of top-of-bank of streams or wetlands	conservation (c	
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c	

Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FP20	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
FP20	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	protection (p)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
FP21	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c

Table 3: F	orest Park and Northwest District – Summary of Deci	sions
Resource Site	Natural Resource Feature	Environmental Overlay Zone
0.00	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
FD22	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
FP22	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
FP23	Inside of public parks, land between 25 and 50 feet of top-of-bank of streams and wetlands	protection (p)
FFZ5	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams and wetlands	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams and wetlands	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FP24	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)

Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FP25	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)
	Forest vegetation patch that is contiguous to a stream that is located in Resource Site SK6	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FP26	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
FP27	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)

esource Site	Natural Resource Feature	Environmenta Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Inside of public parks, land within 50 feet of the top-of-bank of streams	protection (p)
	Inside of public parks, land between 25 and 50 feet of wetlands	protection (p)
FP28	Inside of public parks, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside of public parks, land within 25 feet of the top-of-bank of streams	protection (p)
	Outside of public parks, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (d
	Outside of public parks, land between 25 and 50 feet of wetlands	conservation (
	Outside of public parks, forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (d
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FP29	Land between 25 and 50 feet from wetlands	conservation (d
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams except for the portion of the forest patch noted below	protection (p)
	Portion of forest vegetation patch that is located immediately to the north of the Portland Audubon care center	conservation (d
	Stream channels to top-of-bank	protection (p)
FP30	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (
	Forest, woodland, shrubland or herbaceous vegetation contiguous to but more than 50 feet from the top-of-bank of	protection (p)

Resource	orest Park and Northwest District – Summary of Decision Natural Resource Feature	Environmental
Site		Overlay Zone
FP31	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams and wetlands	protection (p)
	In Forest Park, land between 25 and 50 feet of the top-of-bank of streams and wetlands	protection (p)
	In Forest Park, all vegetation that is contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside forest park, land between 25 and 50 feet of the top-of-bank of streams and wetlands	conservation (c)
	Outside Forest Park, all forest vegetation that is greater than 50 feet from the top-of-bank of streams and wetlands, including forest vegetation that is not contiguous to streams or wetlands.	conservation (c)
FP32	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 200 feet from top-of-bank	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 200 feet from the top-of-bank of streams	conservation (c)
FP33	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Woodland, shrubland or herbaceous vegetation	conservation (c)

Resource	Natural Resource Feature	Environmental
Site		Overlay Zone
FP34	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Within public parks, land between 25 and 50 feet of wetlands	protection (p)
	Within public parks, forest vegetation that is contiguous to and greater than 50 feet from streams and wetlands	protection (p)
	Outside public parks, land between 25 and 50 feet of wetlands	conservation (c
	Outside public parks, forest vegetation that is contiguous to and greater than 50 feet from the top-of-bank of streams and wetlands	conservation (c
FP35	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
FP36	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	land between 25 and 50 feet of wetlands	conservation (c
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c

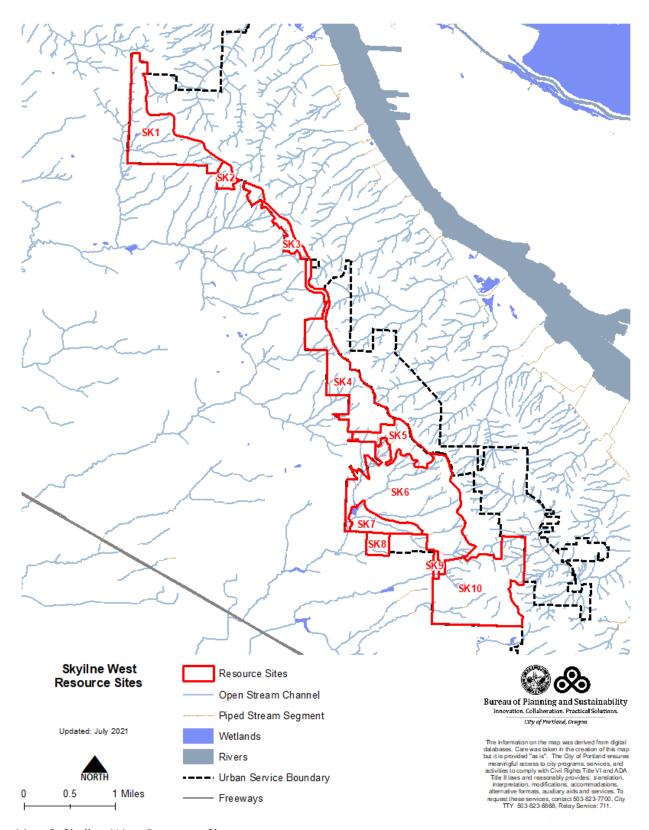
Table 3: Forest Park and Northwest District – Summary of Decisions				
Resource Site	Natural Resource Feature	Environmental Overlay Zone		
	Stream channels to top-of-bank	protection (p)		
	Wetlands	protection (p)		
	Land within 50 feet of the top-of-bank of streams	protection (p)		
	Land within 25 feet of wetlands	protection (p)		
FP37	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)		
	Land between 25 and 50 feet of wetlands	conservation (c)		
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)		
	Stream channels to top-of-bank	protection (p)		
	Wetlands	protection (p)		
FP38	Land within 50 feet of the top-of-bank of streams	protection (p)		
	Land within 25 feet of wetlands	protection (p)		
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)		
	Land between 25 and 50 feet of wetlands	conservation (c)		
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)		
FP39	Stream channels to top-of-bank	protection (p)		
	Wetlands	protection (p)		
	Land within 50 feet of the top-of-bank of streams	protection (p)		
	Land within 25 feet of wetlands	protection (p)		
	Land between 25 and 50 feet of wetlands	conservation (c)		
	Forest vegetation contiguous to but more than 50 feet from streams	protection (p)		

Table 3:	Forest Park and Northwest District – Summary of Deci	sions
Resource	Natural Resource Feature	Environmental
Site		Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
ED40	Land within 25 feet of wetlands	protection (p)
FP40	Forest vegetation contiguous to but more than 50 feet from the	protection (p)
	top-of-bank of streams and extending to 100 feet from top-of-bank	
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the	protection (p)
	top-of-bank of streams	
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FP41	Forest vegetation on steep slopes contiguous to but more than 50	protection (p)
	feet from the top-of-bank of streams	
	Forest vegetation contiguous to but more than 50 feet from the	protection (p)
	top-of-bank of streams	
	Land between 25 and 50 feet of wetlands	conservation (c)

# A.2 Skyline West

The Skyline West plan geography, shown in Map 6, includes 10 resource sites and is located generally west of NW Skyline Boulevard, north of W Burnside Road and east of the Portland Urban Service Boundary.

Table 4 summarizes results of the Title 13 process and the application of conservation and protection overlay zones to the natural resource features by resource sites within the Forest Park and Northwest District geography. Additional information is found in Volume 2, Part B and, if there are discrepancies, Volume 2, Part B takes precedence over the summary table.



Map 6: Skyline West Resource Sites

Table 4: S	kyline West – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SK1	On specific lots (see resource site-specific ESEE decision), forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
SK2	Land within 25 feet of wetlands	protection (p)
3NZ	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
SK3	Land between 25 and 50 feet of wetlands	conservation (c)
	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land between 25 and 50 feet of streams	conservation (c)
	Forest vegetation between 50 and 100 feet of top of bank streams	conservation (c)

Resource	Natural Resource Feature	Environmental
Site		Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
SK4	On lots zoned OS or RF, land between 25 feet and 50 feet of the top-of-bank of streams	protection (p)
3N4	On lots with other base zones, land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation in and contiguous to natural resource tract owned by Alder Ridge HOA	conservation (c)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
SK5	Land between 25 feet and 50 feet of the top-of-bank of streams on natural resource tracts to the northwest of NW Chapin Ln	protection (p)
	Land between 25 feet and 50 feet of the top-of-bank of streams or wetlands	conservation (c)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams or wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
SK6	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	On specific lots (see resource site-specific ESEE decision), forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)

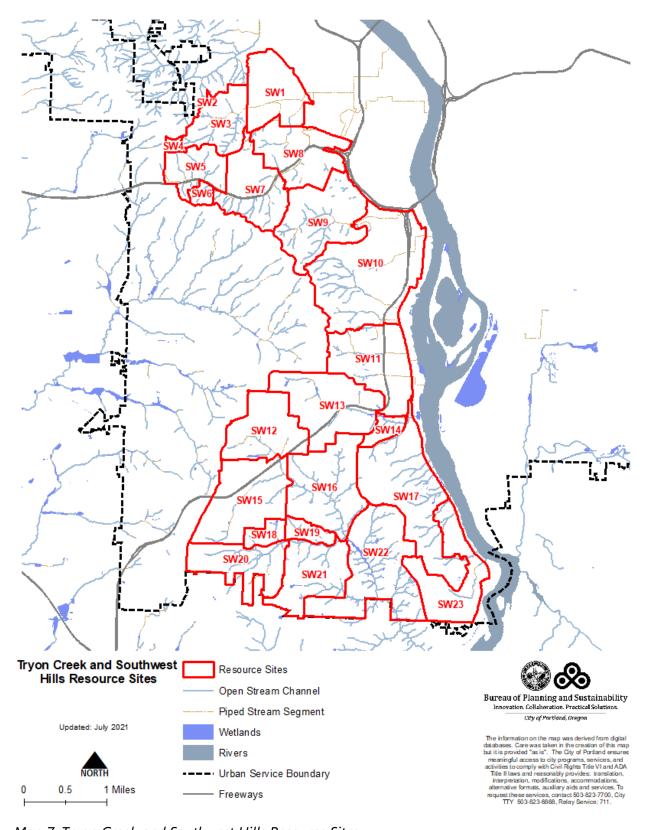
esource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
SK7	Land between 25 feet and 50 feet of the top-of-bank of streams and wetlands	conservation (c
	On specific lots (see resource site-specific ESEE decision), forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SK8	Land between 25 feet and 50 feet of wetlands	conservation (c
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	On specific lots (see resource site-specific ESEE decision), forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
SK9	Land within 50 feet of the top-of-bank of streams	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c

Table 4: Skyline West – Summary of Decisions		
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
CV4O	Land within 100 feet of the top-of-bank of streams	protection (p)
SK10	Land between 25 and 50 feet of wetlands	conservation (c)
	Two large patches of forest vegetation that are not contiguous to streams (see resource site specific ESEE for more information).	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)

## A.3 Tryon Creek and Southwest Hills East

The Tryon Creek and Southwest Hills East plan geography, shown in Map 7, includes 24 resource sites and is located generally west of NW Skyline Boulevard, north of W Burnside Road and east of the Portland Urban Service Boundary.

Table 5 summarizes results of the analysis presented in Volumes 2 – 4 and the application of conservation and protection overlay zones to the natural resource features by resource sites within the Tryon Creek and Southwest Hills geography. Additional information is found in Volume 2, Part C and, if there are discrepancies, Volume 2, Part C takes precedence over the summary table.



Map 7: Tryon Creek and Southwest Hills Resource Sites

	ryon Creek and Southwest Hills East – Summary of De	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW1	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Vegetation that is located in the Balch Creek Watershed Special Habitat Area	conservation (c)
	Forest vegetation contiguous to W Burnside Road right-of-way	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
SW2	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of the top-of-bank of streams and wetlands	conservation (c)
	Forest vegetation on steep slopes	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW3	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Inside Pittock Acres Park and Hoyt Arboretum, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
SW4	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)

Resource	Natural Resource Feature	Environmental
Site	Ctroom channels to ton of hank	Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of the top-of-bank of wetlands	protection (p)
SW5	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c
3003	Land between 25 feet and 50 feet of wetlands	conservation (c
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	conservation (c
	Patches of forest vegetation that are contiguous to and south of Highway 26	conservation (c
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW6	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (d
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
SW7	Land between 25 and 50 feet of wetlands	conservation (c
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	Forest vegetation in the northwest corner of the Vietnam Veterans of Oregon Memorial	conservation (c
	Forest vegetation in Hoyt Arboretum	protection (p)

Resource Site	Natural Resource Feature	Environmental Overlay Zone
<u> </u>	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW8	Land within 25 feet of wetlands	protection (p)
3000	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation that is contiguous to the SW College St	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW9	Land within 25 feet of wetlands	protection (p)
3113	In Marquam Hill Park, all forest vegetation	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Outside Marquam Nature Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 50 feet of wetlands	protection (p)
SW10	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest vegetation on steep slopes contiguous to and east of SW Terwilliger Blvd right-of-way	protection (p)
	Forest vegetation on steep slopes contiguous to SW Barbur Blvd or Interstate 5 right-of-way	conservation (c)
	In the Central Employment (EX) base zone, forest vegetation on steep slopes	conservation (c)

Table 5: T	ryon Creek and Southwest Hills East – Summary of De	ecisions
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 50 feet of wetlands	protection (p)
SW11	In George Himes Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams.	protection (p)
	Outside George Himes Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	conservation (c)
	Forest vegetation on steep slopes contiguous to SW Terwilliger Blvd, SW Barbur Blvd or Interstate 5 right-of-way	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
CW12	Land within 25 feet of the top-of-bank of streams	protection (p)
SW12	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Land between 25 feet and 50 feet of the top-of-bank of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
SW13	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 50 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW14	Land within 50 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Land between 50 and 75 feet of the top-of-bank of streams	conservation (c)
	Land between 50 and 75 feet of wetlands	conservation (c)

Resource Site	Natural Resource Feature	Environmental Overlay Zone
Site	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of the top-or-bank of streams  Land within 25 feet of wetlands	
SW15		protection (p)
	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
	Land between 25 feet and 50 feet of the top-of-bank of wetlands	conservation (c)
	Forest vegetation in subdivision at SW 31 <sup>st</sup> Ave, and forest vegetation in neighborhood between SW 41 <sup>st</sup> and SW 43 <sup>rd</sup> Ave	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 50 feet of wetlands	protection (p)
SW16	In Marshall Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside Marshall Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Land between 50 and 75 feet of streams and wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 50 feet of wetlands	protection (p)
SW17	In River View Natural Area, forest vegetation on steep slopes (25%) contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
3W17	In River View Natural Area, forest vegetation contiguous to but more than 50 feet from stream top-of-bank of streams on slopes that are not steep	conservation (c)
	Outside River View Natural Area, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Land between 50 and 75 feet of the top-of-bank of streams	conservation (c)
	Land between 50 and 75 feet of wetlands	conservation (c)

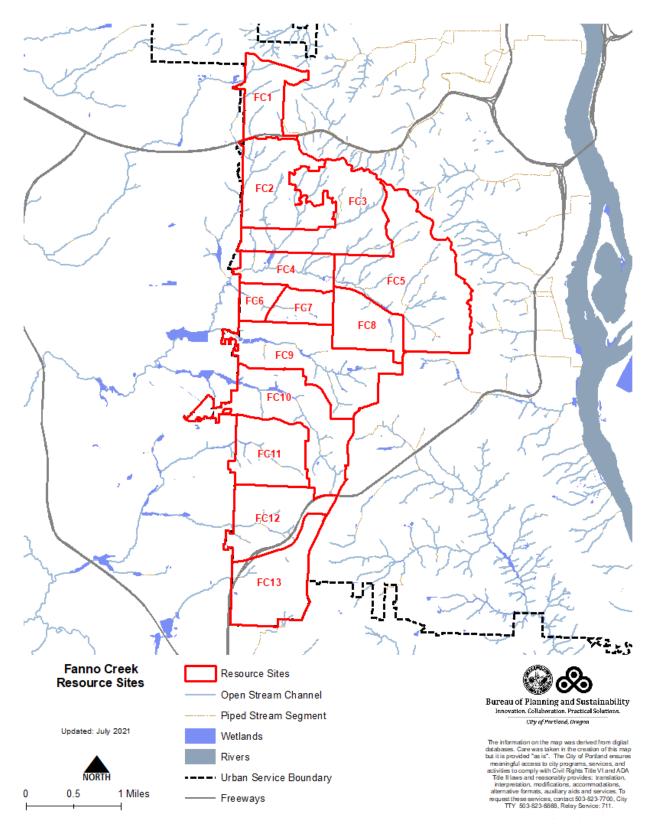
Table 5: T	ryon Creek and Southwest Hills East – Summary of De	ecisions
Resource Site	Natural Resource Feature	Environmental Overlay Zone
<u> </u>	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
SW18	Land within 50 feet of the top-of-bank of streams	protection (p)
34410	Land within 50 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
SW19	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
SW20	Land within 50 feet of the top-of-bank of streams	protection (p)
31123	Land within 50 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
SW21	Land within 50 feet of the top-of-bank of streams	protection (p)
0112	Land within 50 feet of wetlands	protection (p)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of wetlands or streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 50 feet of wetlands	protection (p)
SW22	In Tryon Creek State Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	protection (p)
	Outside Tryon Creek State Park, forest vegetation contiguous to Tryon Creek State Park and forest vegetation that is contiguous to but more than 50 feet from the top of bank of streams	conservation (c)
	Forest vegetation contiguous to SW Terwilliger Boulevard right- of-way	conservation (c)

Table 5: Tryon Creek and Southwest Hills East – Summary of Decisions		
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
CM22	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)
SW23	Land between 25 feet and 50 feet of wetlands	conservation (c)
	In River View Natural Area, all vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest vegetation on steep slopes that is contiguous to SW Terwilliger Blvd right-of-way	conservation (c)
	In Special Habitat Area W19, oak habitat	conservation (c)

#### A.4. Fanno Creek

The Fanno Creek plan geography, shown in Map 8, includes 13 resource sites and includes the Fanno Creek watershed in Portland.

Table 6 summarizes results of the analysis presented in Volumes 2 – 4 and the application of conservation and protection overlay zones to the natural resource features by resource sites within the Fanno Creek geography. Additional information is found in Volume 2, Part D and, if there are discrepancies, Volume 2, Part D takes precedence over the summary table.



Map 8: Fanno Creek Resource Sites

Table 6: F	anno Creek – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FC1	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from wetlands	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FC2	Land within 25 feet of wetlands	protection (p)
FC2	Forest vegetation between 50 and 100 feet of top-of-bank streams	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FC3	Land within 25 feet of wetlands	protection (p)
	Inside parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of parks, land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams extending to 200 feet from top of bank	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
FC4	Land within 25 feet of wetlands	protection (p)
	Inside parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of parks, land between 25 and 50 feet of wetlands	conservation (c)
	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)

Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FC5	Within Council Crest Park, all forest vegetation	protection (p)
. 55	Within Council Crest Park, land between 25 and 50 feet of wetlands	protection (p)
	Outside Council Crest Park, land between 25 and 50 feet of wetlands	conservation (c)
	Outside Council Crest Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FC6	Within parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside of parks, land between 25 and 50 feet of wetlands	conservation (c
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	Forest or woodland vegetation within the abandoned rail corridor	conservation (c
	Stream channels to top-of-bank	protection (p)
FC7	Wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest or woodland vegetation within the abandoned rail corridor	conservation (c)

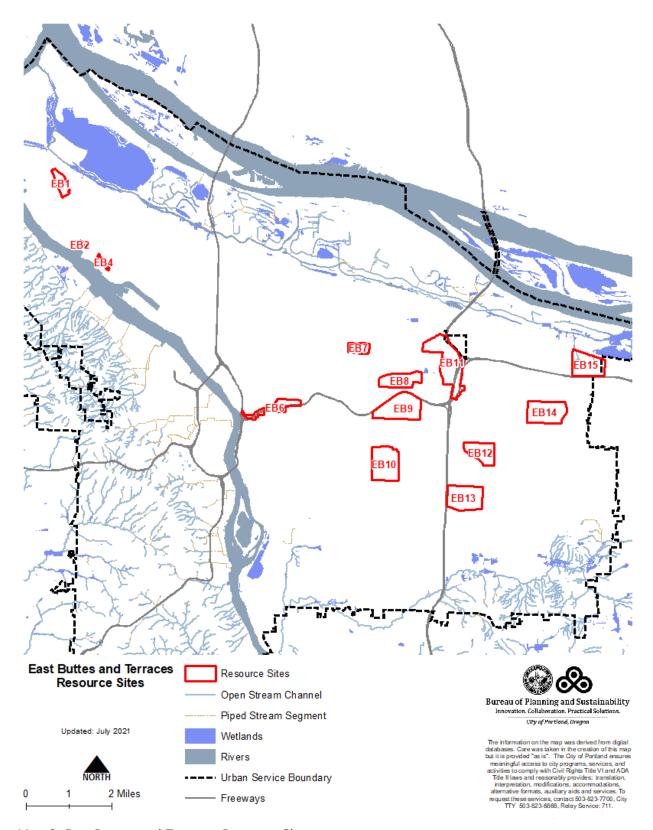
Table 6: F	anno Creek – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FC8	Land within 25 feet of wetlands	protection (p)
1 60	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest vegetation on steep slopes along SW Fairvale Dr	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FC9	Within parks, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Within parks, forest vegetation contiguous to but more 100 feet from the top-of-bank of streams	conservation (c)
	Within parks, land between 25 and 50 feet of wetlands	protection (p)
	Outside parks, land between 25 and 50 feet of wetlands	conservation (c)
	Outside parks, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 25 feet of wetlands	protection (p)
FC10	In Woods Memorial Nature Area, all forest vegetation	protection (p)
	Outside Woods Memorial Nature Area, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams and extending to 100 feet from top-of-bank	protection (p)
	Outside Woods Memorial Nature Area, land between 25 and 50 feet of wetlands	conservation (c)
	Outside Woods Memorial Nature Area, forest vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)

Resource Site	Natural Resource Feature	Environmental Overlay Zone
3.66	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FC11	Land within 25 feet of wetlands	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FC12	Land within 25 feet of wetlands	protection (p)
1012	Land between 25 and 50 feet of wetlands	protection (p)
	Outside of parks, land between 25 and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Stream channels to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
FC13	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest vegetation contiguous to but more than 50 feet from wetlands	conservation (c)
	Specific large patches of forest vegetation (see resource site- specific ESEE decision)	conservation (c)

#### A.5. East Buttes and Terraces

The East Buttes and Terraces plan geography, shown in Map 9, includes 15 resource sites in outer east Portland between SE Powell Boulevard and NE Columbia Boulevard.

Table 7 summarizes results of the analysis presented in Volumes 2 – 4 and the application of conservation and protection overlay zones to the natural resource features by resource sites within the East Buttes and Terraces geography. Additional information is found in Volume 2, Part E and, if there are discrepancies, Volume 2, Part E takes precedence over the summary table.



Map 9: East Buttes and Terraces Resource Sites

Table 7: E	ast Buttes and Terraces – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Wetlands	protection (p)
	Stream channels to top of bank	protection (p)
	Land within 25 feet of wetlands	protection (p)
EB1	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Land between 25 and 50 feet of the top-of-bank of streams	conservation (c)
	Forest and woodland vegetation contiguous to and greater than 50 feet from streams and wetlands	conservation (c)
	Wetlands	protection (p)
	Stream channels to top of bank	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
EB2	Land between 25 and 50 feet of wetlands	conservation (c)
	Land between 25 and 50 feet of the top-of-bank of streams	conservation (c)
	Forest and woodland vegetation (see resource site-specific ESEE decision)	conservation (c)
	In Special Habitat Area W4, all land	conservation (c)
EB3	Resource Site EB3 is outside the scope of this project. Please refer Terraces and Wetlands Conservation Plan.	to the East Buttes,
	Wetlands	protection (p)
	Stream channels to top of bank	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land within 25 feet of the top-of-bank of streams	protection (p)
EB4	Land between 25 and 50 feet of wetlands	conservation (c)
	Land between 25 and 50 feet of the top-of-bank of streams	conservation (c)
	Forest and woodland vegetation (see resource site-specific ESEE decision)	conservation (c)
	In Special Habitat Area W3.E and W3.F, all land	conservation (c)
EB5	Resource Site EB5 is outside the scope of this project. Please refer Terraces and Wetlands Conservation Plan.	to the East Buttes,

Table 7: E	ast Buttes and Terraces – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Wetlands	protection (p)
	Stream channels to top of bank	protection (p)
	Land within 25 feet of wetlands	protection (p)
EB6	Land within 25 feet of the top-of-bank of streams	protection (p)
	Land between 25 and 50 feet of wetlands	conservation (c)
	Land between 25 and 50 feet of the top-of-bank of streams	conservation (c)
	Areas designated as Special Habitat Areas	conservation (c)
EB7	There are no significant natural resources in Resourc	e Site EB7.
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
EB8	Wetlands	protection (p)
EB8	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest and woodland vegetation on steep slopes	conservation (c)
	Forest and woodland vegetation	conservation (c)
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
EB9	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest vegetation on steep slopes	conservation (c)
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
EB10	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest vegetation on steep and non-steep slopes except for specific forest patches (see site-specific ESEE)	conservation (c)

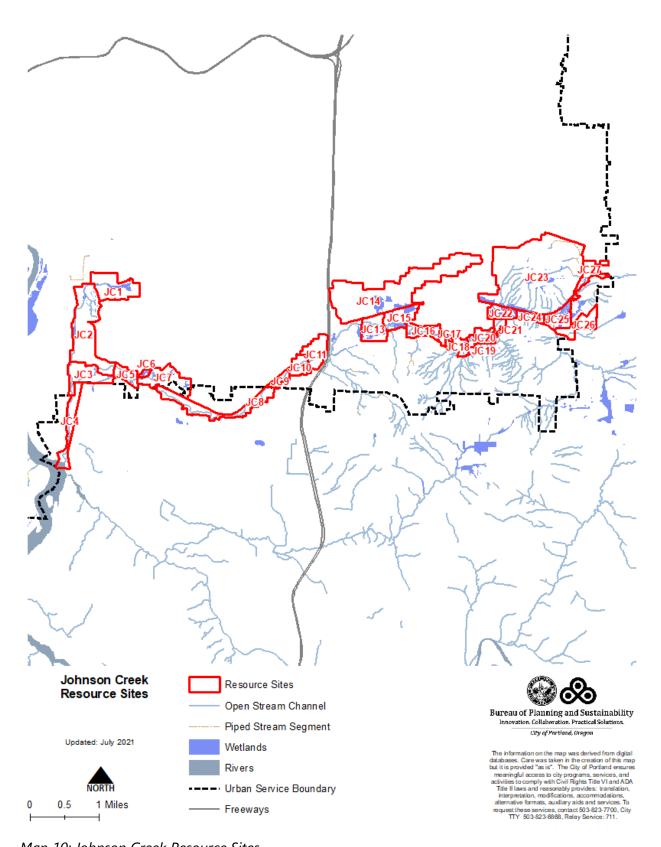
Table 7: E	ast Buttes and Terraces – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
	Wetlands	protection (p)
EB11	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest vegetation on slopes (25% or greater)	protection (p)
	Forest vegetation on steep slopes	conservation (c)
	Forest vegetation	conservation (c)
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
EB12	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest vegetation	conservation (c)
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
5540	Wetlands	protection (p)
EB13	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Forest vegetation on steep slopes	protection (p)
	Forest vegetation on not steep slopes	conservation (c)
	Stream channels to the top-of-bank	protection (p)
	Land within 25 of the top-of-bank of streams	protection (p)
	Land between 25 feet and 50 feet of streams	conservation (c)
EB14	Wetlands	protection (p)
	Land within 25 feet of wetlands	protection (p)
	Land between 25 feet and 50 feet of wetlands	conservation (c)
	Approximately 5-acre area of forest vegetation along the western edge of the golf course	conservation (c)

Table 7: E	Table 7: East Buttes and Terraces – Summary of Decisions		
Resource	Natural Resource Feature	Environmental	
Site		Overlay Zone	
	Stream channels to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 25 feet of the top-of-bank of streams or wetlands	protection (p)	
	Land between 25 feet and 50 feet of the top-of-bank of streams	conservation (c)	
EB15	or wetlands		
	Forest vegetation on steep slopes contiguous to but more than 50	conservation (c)	
	feet from the top-of-bank of streams or wetlands		
	Forest vegetation contiguous to but more than 50 feet from the	conservation (c)	
	top-of-bank of streams or wetlands		
	Forest vegetation (see site-specific ESEE)	conservation (c)	
EB16	Resource Site EB16 is outside the scope of this project. Please refe	r to the East Buttes,	
2510	Terraces and Wetlands Conservation Plan.		

### A.6. Johnson Creek

The Johnson Creek plan geography, shown in Map 10, includes 25 resource sites generally located between the Willamette River Greenway and the Urban Services Boundary south of SE Powell Boulevard.

Table 8 summarizes results of the analysis presented in Volumes 2 – 4 and the application of conservation and protection overlay zones to the natural resource features by resource sites within the Johnson Creek geography. Additional information is found in Volume 2, Part F and, if there are discrepancies, Volume 2, Part F takes precedence over the summary table.



Map 10: Johnson Creek Resource Sites

Table 8: J	ohnson Creek – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
JC1	Land within 30 feet of wetlands	protection (p)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC2	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Remaining vegetation within public parks	conservation (c)
	Forest or woodland vegetation contiguous to but outside of public parks	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
JC3	Land within 30 feet of wetlands	protection (p)
	Forest or woodland vegetation contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Remaining vegetation within public parks	conservation (c)
	Forest or woodland vegetation contiguous to but outside of public parks	conservation (c)

esource Site	Natural Resource Feature	Environmental Overlay Zone
JC4	Resource Site 4 is located outside of the Urban Service	•
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC5	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c
	Remaining vegetation within public parks	conservation (c
	Vegetation contiguous to but outside of public parks	conservation (c
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
JC6	Land within 30 feet of wetlands	protection (p)
	Forest or woodland vegetation contiguous to but more than 50 feet from top-of-bank of streams	conservation (c
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
JC7	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
	Forest or woodland vegetation contiguous to but more than 50 feet from top-of-bank of streams	conservation (c
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c

Table 8: J	ohnson Creek – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
JC8	Resource Site 8 is located outside of the Urban Service	Boundary
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC9	Forest or woodland vegetation contiguous to but more than 50 feet from top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 100 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC10	Forest or woodland vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)
JC10	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Remaining vegetation within public parks	conservation (c)
	Forest and woodland vegetation contiguous to public parks	conservation (c)
	Land between 100 and 125 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)
	Refer to Volume 2F for additional site specific ESEE decisions	protection (p)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC11	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)

Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC13	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)
	Stream channel to top-of-bank	protection (p)
164.4	Wetlands	protection (p)
JC14	Land within 75 feet of the top-of-bank of streams	conservation (c)
	Land within 75 feet of wetlands	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
JC15	Land within 30 feet of wetlands	protection (p)
	Forest or woodland vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)

Table 8: Johnson Creek – Summary of Decisions			
Resource	Natural Resource Feature	Environmental	
Site		Overlay Zone	
JC16	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
	Forest vegetation contiguous to streams between 75 and 200 feet of top of bank streams.	conservation (c)	
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)	
	Land between 30 and 55 feet of wetlands	conservation (c)	
JC17	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 40 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
	Forest or woodland vegetation contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)	
	Forest or woodland vegetation contiguous to but more than 30 feet from wetlands	conservation (c)	
	In public parks, all remaining vegetation in public parks	conservation (c)	
	Outside public parks, vegetation contiguous to public parks	conservation (c)	
JC18	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
	Forest or woodland vegetation within public parks	protection (p)	
	Outside public parks, forest or woodland vegetation contiguous to and greater than 50 feet from streams	conservation (c)	
	Outside public parks, forest or woodland vegetation contiguous to and greater than 30 feet from wetlands	conservation (c)	

Table 8: Johnson Creek – Summary of Decisions			
Resource	Natural Resource Feature	Environmental	
Site		Overlay Zone	
JC19	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
	Vegetated flood area	protection (p)	
	Forest vegetation outside the vegetated flood area that is contiguous to and greater than 50 feet from streams	conservation (c)	
	Forest vegetation that is contiguous to but outside of the vegetated flood area	conservation (c)	
	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
JC20	Vegetated flood area	protection (p)	
7020	Forest vegetation that is contiguous to but outside of the vegetated flood area	conservation (c)	
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)	
	Land between 30 and 55 feet of wetlands	conservation (c)	
	Land within 25 feet of the vegetated flood area	conservation (c)	
	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
JC21	Forest or woodland vegetation contiguous to but more than 75 feet from the top-of-bank of streams	conservation (c)	
	Forest or woodland vegetation contiguous to but more than 55 feet from wetlands	conservation (c)	
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)	
	Land between 30 and 55 feet of wetlands	conservation (c)	

Table 8: J	ohnson Creek – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC22	Forest or woodland vegetation contiguous to but more than 65 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 55 feet from wetlands	conservation (c)
	Land between 40 and 65 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 50 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC23	In Powell Butte Nature Park, forest vegetation	protection (p)
	In Powell Butte Nature Park, all remaining vegetation	conservation (c)
	Outside Powell Butte Nature Park, forest vegetation contiguous to but more than 50 feet from the top-of-bank of streams	conservation (c)
	Outside Powell Butte Nature Park, forest vegetation contiguous to but more than 30 feet from wetlands	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
	Land within 30 feet of wetlands	protection (p)
JC24	Forest or woodland vegetation contiguous to but more than 65 feet from the top-of-bank of streams	conservation (c)
	Forest or woodland vegetation contiguous to but more than 55 feet from wetlands	conservation (c)
	Land between 40 and 65 feet of the top of bank of streams	conservation (c)
	Land between 30 and 55 feet of wetlands	conservation (c)

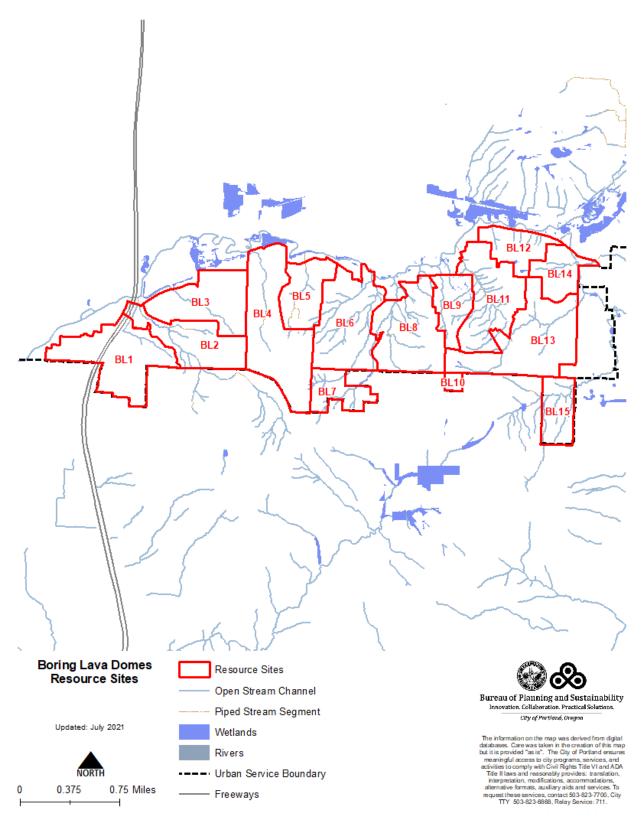
Resource Site	Natural Resource Feature	Environmental Overlay Zone	
JC25	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
	Forest or woodland vegetation contiguous to but more than 75 feet from the top-of-bank of streams	conservation (c)	
	Forest or woodland vegetation contiguous to but more than 55 feet from wetlands	conservation (c)	
	Land between 50 and 75 feet of the top of bank of streams	conservation (c)	
	Land between 30 and 55 feet of wetlands	conservation (c)	
	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
	Land within 30 feet of wetlands	protection (p)	
JC26	Forest or woodland vegetation contiguous to but more than 75 feet from the top-of-bank of streams	conservation (c	
	Forest or woodland vegetation contiguous to but more than 55 feet from wetlands	conservation (c)	
	Land between 50 and 75 feet of the top of bank of streams	conservation (c	
	Land between 30 and 55 feet of wetlands	conservation (c	
	Stream channel to top-of-bank	protection (p)	
	Wetlands	protection (p)	
	Land within 50 feet of the top-of-bank of streams	protection (p)	
JC27	Land within 30 feet of wetlands	protection (p)	
	Vegetated flood area	protection (p)	
	Forest vegetation contiguous to and greater than 50 feet from the top-of-bank of streams or contiguous to and greater than 30 feet from wetlands	conservation (c)	
	Forest vegetation contiguous to but outside of the vegetated flood area	conservation (c	

#### A.7. Boring Lava Domes

The Boring Lava Domes plan geography, shown in Map 11, includes 15 resource sites generally located between Johnson Creek south to the Urban Service Boundary.

Table 9 summarizes results of the analysis presented in Volumes 2 – 4 and the application of conservation and protection overlay zones to the natural resource features by resource sites within the Boring Lava Domes geography. Additional information is found in Volume 2, Part G and, if there are discrepancies, Volume 2, Part G takes precedence over the summary table.

When the table states "land within" a certain distance of a river, stream or wetland the land includes all resources associated with the land including soils, flood area, vegetation and steep slopes, as well as developed land. Yards, decks, buildings, parking, loading, etc. located within that distance are also subject to the overlay zones.



Map 11: Boring Lava Domes Resource Sites

Resource Site	Natural Resource Feature	Environmental
BL1	Stream channel to top-of-bank	Overlay Zone protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
	Land within 40 feet of the top-or-bank or streams	
		protection (p)
	Site specific decisions on natural resource tracts (see ESEE)	protection (p)
	Forest and woodland vegetation on not steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
	Land within 40 feet of wetlands	protection (p)
BL2	Forest and woodland vegetation contiguous to but more than 40 feet from the top-of-bank of streams and extending to 100 feet from streams	protection (p)
	Forest and woodland vegetation located on steep slopes contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c
	Forest and woodland vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
	Land between 25 and 40 feet of wetlands	conservation (c
BL3	Land within 25 feet of wetlands	protection (p)
	Woodland vegetation contiguous to and greater than 40 feet from top of bank streams	conservation (c
	Forest and woodland vegetation on steep slopes contiguous to and greater than 40 feet from the top-of-bank of streams	protection (p)
	Forest vegetation not on steep slopes contiguous to and greater than 40 feet from the top-of-bank of streams	conservation (c

Table 9: B	oring Lava Domes – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL4	Land within 40 feet of wetlands	protection (p)
	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation on not steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL5	Land within 40 feet of wetlands	protection (p)
513	Forest and woodland vegetation contiguous to but more than 40 feet from the top-of-bank of streams and extending to 100 feet from streams	protection (p)
	Forest and woodland vegetation contiguous to but more than 100 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL6	Land within 40 feet of wetlands	protection (p)
	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation on not steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL7	Land within 40 feet of wetlands	protection (p)
	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation on not steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)

Resource Site	Natural Resource Feature	Environmenta Overlay Zone
BL8	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
	Land within 40 feet of wetlands	protection (p)
	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation on not steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL9	Land within 40 feet of wetlands	protection (p)
	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation on not steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (d
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams, except along SE Barbara Welch Rd	protection (p)
	Land within 40 feet of wetlands	protection (p)
BL11	Along SE Barbara Welch Rd, land within 25 feet of the top-of-bank of streams (see resource site-specific ESEE decision)	protection (p)
	Along SE Barbara Welch Rd, land between 25 feet and 40 feet of the top-of-bank of streams (see resource site-specific ESEE decision)	conservation (c
	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (d
	Forest and woodland vegetation contiguous to but more than 40 feet from the top-of-bank of streams	conservation (d
	Forest vegetation that is located on steep slopes on tract that is owned by Metro at the end of SE Barbara Welch Ln	protection (p)

Table 9: B	oring Lava Domes – Summary of Decisions	
Resource Site	Natural Resource Feature	Environmental Overlay Zone
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL12	Land within 40 feet of wetlands	protection (p)
BLIZ	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation that is not on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL13	Land within 40 feet of wetlands	protection (p)
BLIS	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation that is not on steep slopes and that is contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL14	Land within 40 feet of wetlands	protection (p)
BL14	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation that is not on steep slopes and that is contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)
	Stream channel to top-of-bank	protection (p)
	Wetlands	protection (p)
	Land within 40 feet of the top-of-bank of streams	protection (p)
BL15	Land within 40 feet of wetlands	protection (p)
DLIJ	Forest and woodland vegetation on steep slopes contiguous to but more than 40 feet from the top-of-bank of streams	protection (p)
	Forest and woodland vegetation that is not steep slopes and that is contiguous to but more than 40 feet from the top-of-bank of streams	conservation (c)

## B. Remapping Environmental Overlay Zones

The zoning maps are produced using automated GIS models. The results are specific and follow the mapped natural resources in most circumstances. There are three situations where the overlay zones are adjusted manually:

- B.1. Scenic overlay zones
- B.2. Protection overlay zone conversions
- B.3. To better follow previously adopted policies

Each situation is explained below.

#### **B.1. Scenic Overlay Zones**

In 1991, the City adopted the *Scenic Resources Protection Plan* and applied a scenic 's' overlay zone to view corridors and scenic corridors.<sup>4</sup> While this project is not changing the designation of view corridors or scenic corridors, 's' zone boundaries are being adjusted to reflect the correct 'c' and 'p' zone boundaries, as described below.

This project is retaining the 1991 approach to applying a 's zone where it overlaps with natural resources that are recommended for protection. Where there is a 's' zone and the GIS model applies a 'c' zone, the 'c' zone is removed and the 's' zone is retained. This is appropriate because the 'c' zone is typically applied to tree canopy and the 's' zone code (33.480) includes tree preservation requirements. The exception is within 50 feet of streams or wetlands, where both the 'c' zone and 's' zone are retained and overlapped.

The 'p' zone is typically applied to streams and wetlands; and either the 'p' zone or 'c' zone is applied to land within 50 feet of waterbodies. Where there is a 's' zone and the GIS model produces a 'p' zone or a 'c' zone within 50 feet of water bodies, the 'p' or 'c' zone is retained and overlaps with the 's' zone. This is because the environmental zone code, 33.430, requires a setback from waterbodies to protect and maintain stream and wetland functions.

### **B.2. Protection Overlay Zone Conversions**

In rare circumstances, implementation of the decisions found in Volume 2, Part A – G resulted in the 'p' zone covering the majority of an undeveloped property such that there is insufficient area outside of the 'p' zone to reasonably develop the site per the minimum base zone allowances. Under these circumstances, a portion of the 'p' zone is converted to 'c' zone to provide sufficient

Recommended Draft Page 184 January 2022

<sup>&</sup>lt;sup>4</sup> A "view corridor" is the airspace between the viewpoint, where one stands/sits to taken in the view, and the focal feature of the view, such as Mt Hood. There are zoning requirements to keep the view corridor free from obstructions like buildings or trees that could block the view. A "scenic corridor" is a street or trail with vegetation on each side that provides a scenic walking, biking or driving experience. There are zoning requirements to preserve trees along the corridor and to setback new development.

area for the property to be reasonably developed. A total of 236 properties had a 'p' to 'c' zone conversion on a portion of the property (Map 1).

The size of the conversion is based on zoning code 33.430.140, Table 430-1, Maximum Disturbance Area Allowed. The conversion from 'p' zone to 'c' zone is intended to allow for development through 33.430 standards or Environmental Review. The application of 'c' zones in these cases ensures mitigation for impacts to the significant natural resource features and functions.

		Maxim		430-1 ance Area A	llowed	
	OS and RF Zone	R20	R10	R7	R5	All Other Zones
Maximum Disturbance Area	5,000 sq. ft. [1]	5,000 sq. ft. [1]	5,000 sq. ft. [1]	3,500 sq. ft. [1]	2,500 sq. ft. [1]	50% of the base zone building coverage or 1 acre, whichever is less [1]

Note:

[1] Subtract the amount of area on the site outside the resource area from the number given in the table.

Figure 1: 33.430 Table 430-4 Maximum Disturbance Area

Properties that are eligible for 'p' zone to 'c' zone conversions have greater than 68% 'p' zone coverage, as produced by GIS modeling, and are vacant or are developed but large enough to be divided in accordance with the base zone. Appendix B includes a full list and maps of all properties considered for p zone conversion and an explanation.

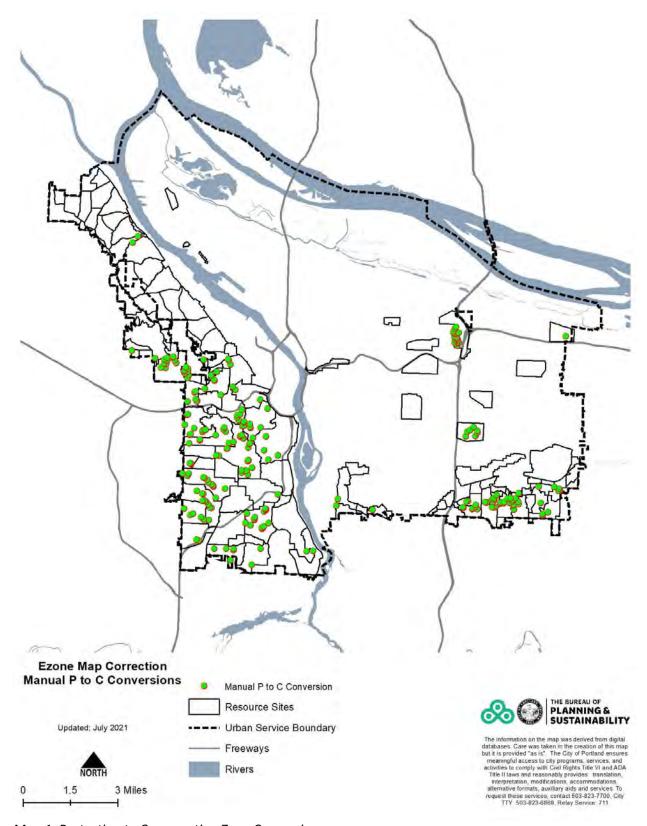
To determine the area suitable for conversion from 'p' zone to 'c' zone, the following criteria (A-D) are used. The list is hierarchical with the highest priority being protection of rivers, streams, wetlands and flood area followed by protection of vegetation on steep slopes. The protection of these features is critical to reducing the risks of flooding, erosion and landslides and mitigating heat islands as well as providing habitat and wildlife movement corridors. Following are the criteria for converting 'p' zone to 'c' zone on eligible properties:

- A. A 50-foot area surrounding rivers, streams, and wetlands should continue to be protected by the 'p' zone. The 50-foot area extends horizontally from the river/stream top of bank or edge of the wetland. Where greater than 68% of the site is within 50-feet of river or stream top-of-bank or edge of wetland, then a minimum 25-foot area of 'p' zone extending horizontally from the top-of-bank or wetland edge should be retained.
- B. The flood area should continue to be protected by the 'p' zone. The flood area includes the 100-year floodplain and the area inundated during the 1996 flood. Where greater than 68% of the site is within the flood area, then the minimum area of 'p' zone should be the floodplain within 170 feet from the ordinary high-water mark, measured horizontally.
- C. Forest and woodland vegetation located on steep slopes (>25% slope) should be protected by the 'p' zone to the greatest extent possible. Where greater than 68% of the

- site is steep, areas of the greatest steepness (>40% slope) should be protected by the 'p' zone.
- D. The conversion area should be located contiguous to a public street or an existing access easement. Where this is not possible, the conversion area should be located as close to a public street or an existing easement as possible, avoiding river, stream or wetland crossings to the maximum extent practical.

Providing sufficient area for development or lot division does not guarantee that any given property can be developed or divided. Besides the base zone and location of environmental overlay zones, other factors considered through the development review process include street access, street frontage improvements, access to utilities and services (e.g., sewer, water), stormwater management, street and side setback requirements, minimum lots size, compatibility with surrounding existing lots, etc. Please refer to 33.310 of the zoning code for additional information. Also, while it is a priority to preserve divisibility of large properties, the 'p' to 'c' zone conversions may not result in enough dividable land to achieve the maximum density allowed by the base zone.

Maps of each of the 'p' zone to 'c' zone conversions can be found in Volume 3 Part C: Appendix.



Map 1: Protection to Conservation Zone Conversions

### **B.3. Edits to Match Previously Adopted Policies**

Between 1989 and 2004, Portland adopted area plans that applied the original ezones to significant natural resources. Some of those plans made property-specific policy decisions about where to apply the 'p' or 'c' zone with the intent of balancing natural resource protection with other city goals. Where the GIS model applies a 'c' or 'p' zone to natural resource features for which a previously adopted plan explicitly made a different protection recommendation, the previously adopted plan's policy is followed to the maximum extent possible.

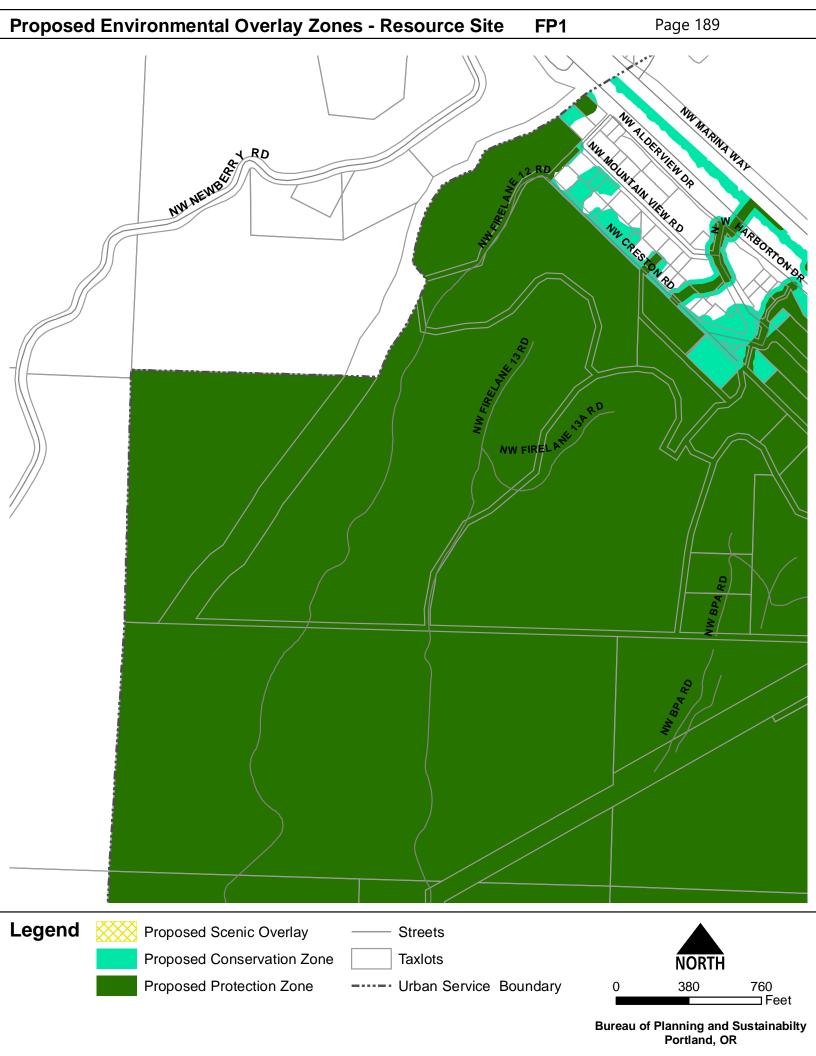
For example, on the Oregon Health and Sciences University (OHSU) campus the previous plan applied a 'p' zone to the forests along Terwilliger Boulevard and a 'c' zone to forests that were contiguous to but not along Terwilliger. There was no clear defining line where the 'p' zone should wrap around streets that intersect with Terwilliger. Therefore, the GIS model produced 'p' and 'c' zones were manually adjusted to reflect not only existing tree canopy and steep slopes but also the approximate location of 'p' zone previously applied to Terwilliger.

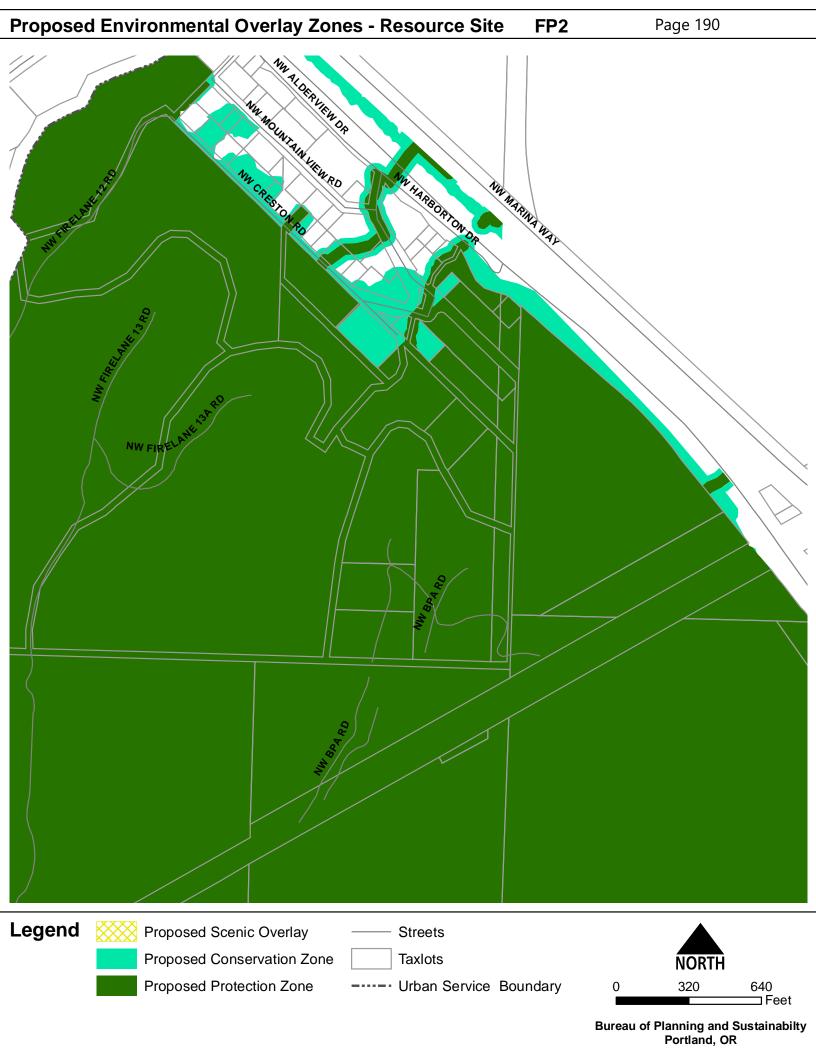
There are not strict rules associated with these manual changes. However, in Volumes 2, Part A – G, the manual changes are documented and explained as part of the resource site protection decisions.

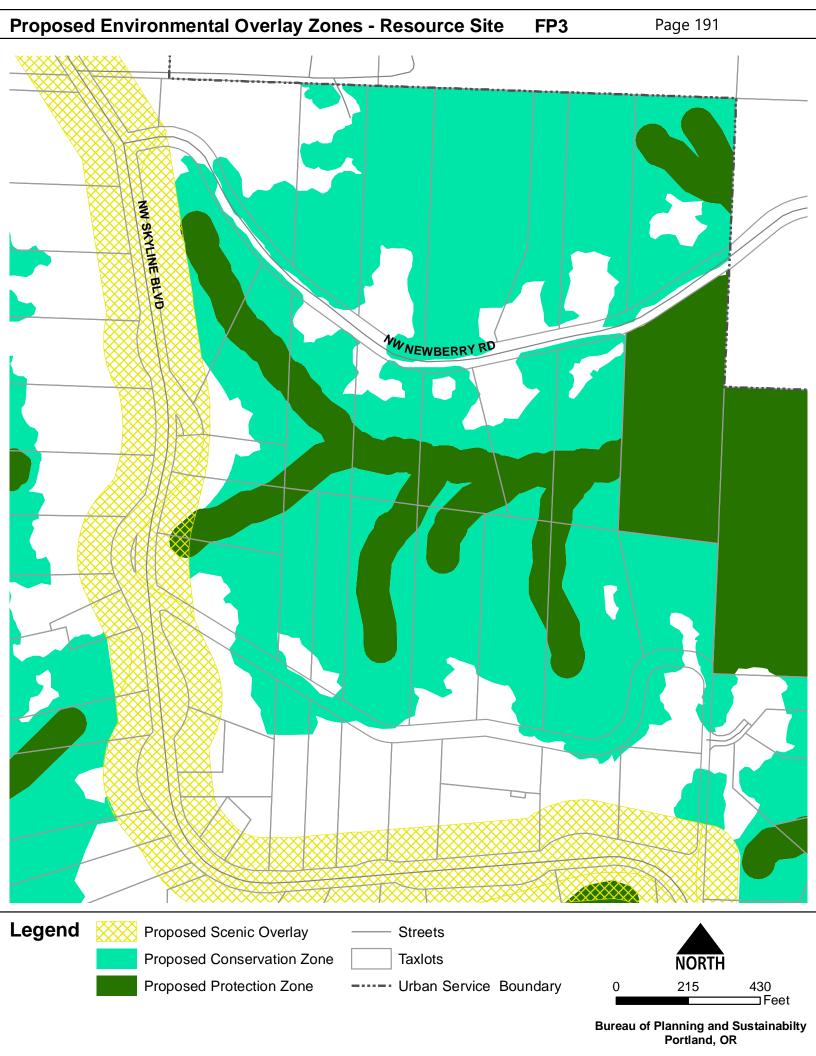
# C. Maps of Proposed Ezone Corrections

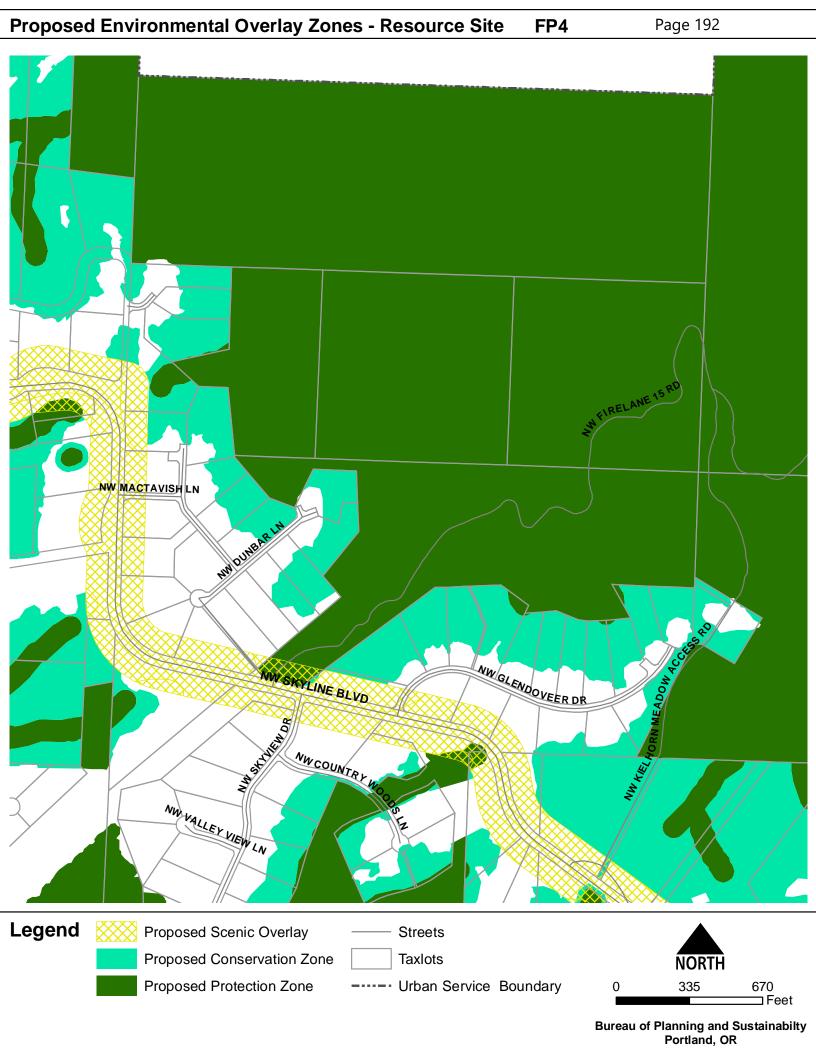
The following section is composed of maps that show the proposed ezone map corrections. The proposed 'c' zone and 'p' zone are generated by GIS mapping software that has been programed to apply the mapping protocols that were listed above in sections A and B.

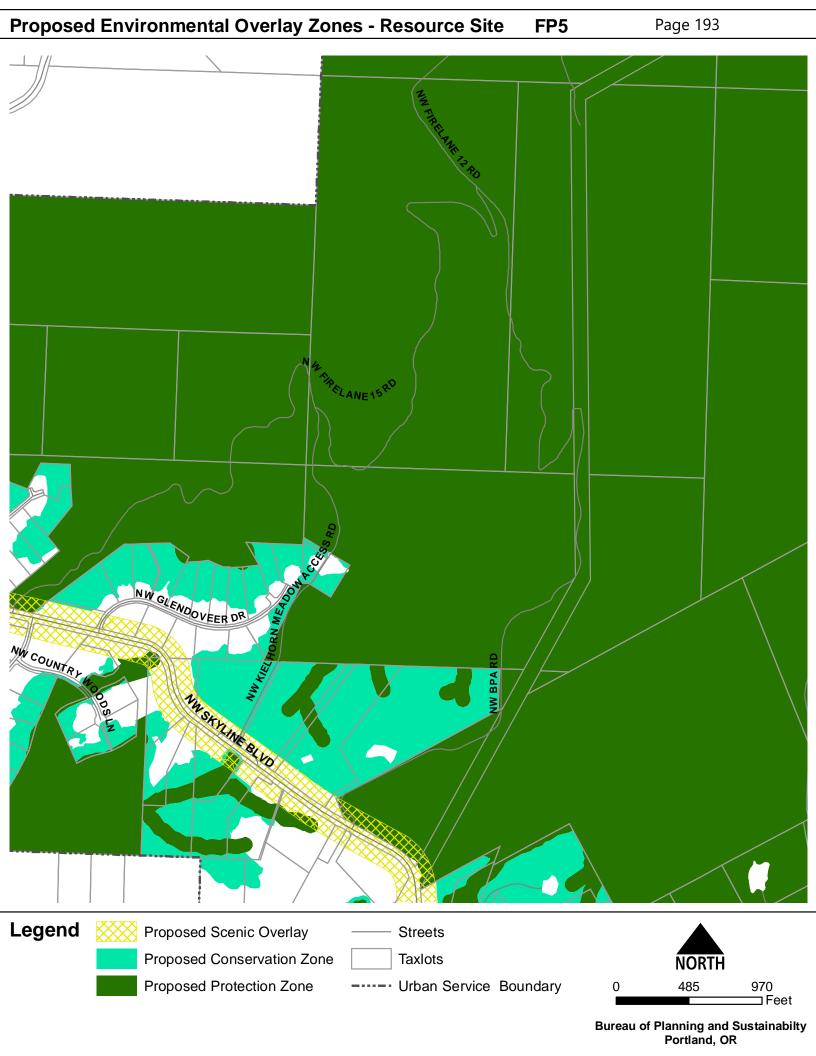
Volume 2 provides detailed information on each resource site, including detailed maps that display the natural resource mapping and the proposed ezones.

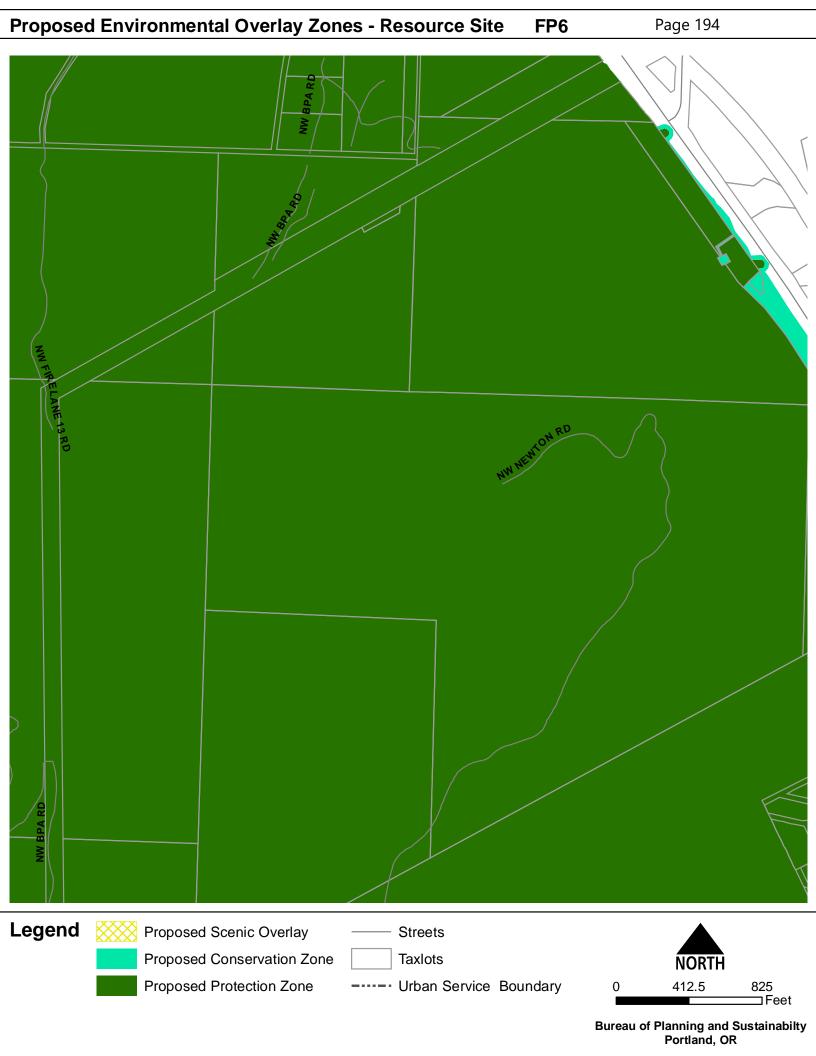


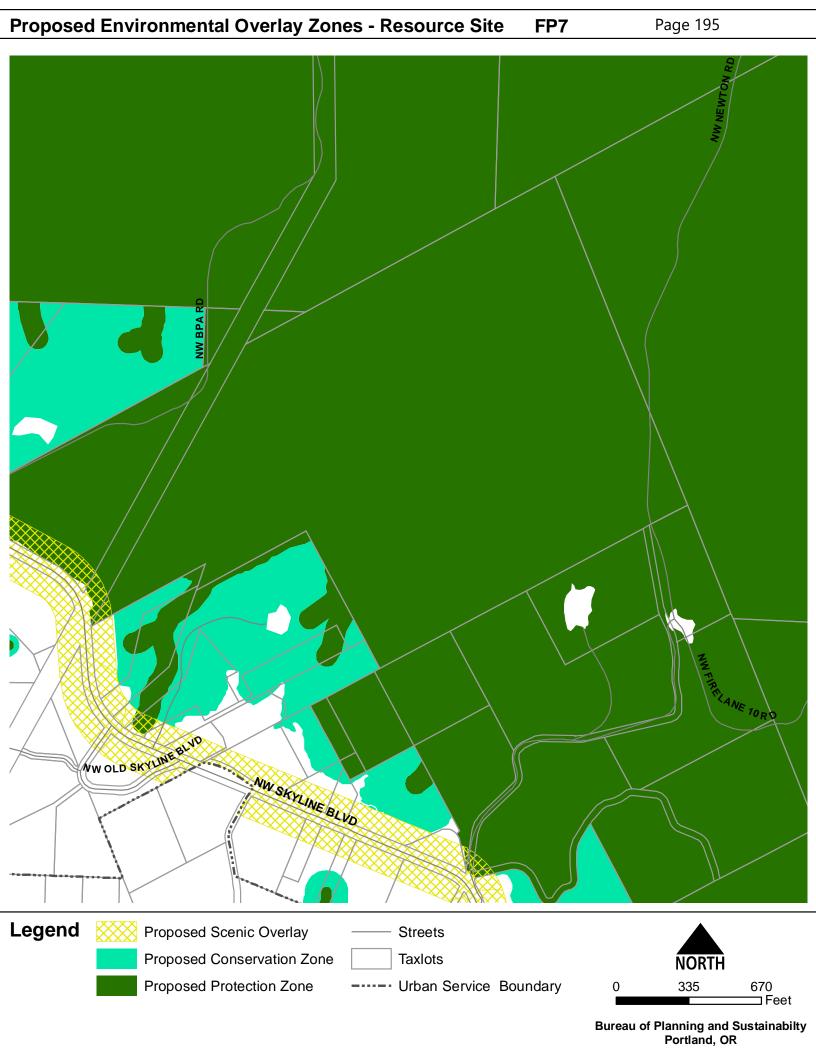


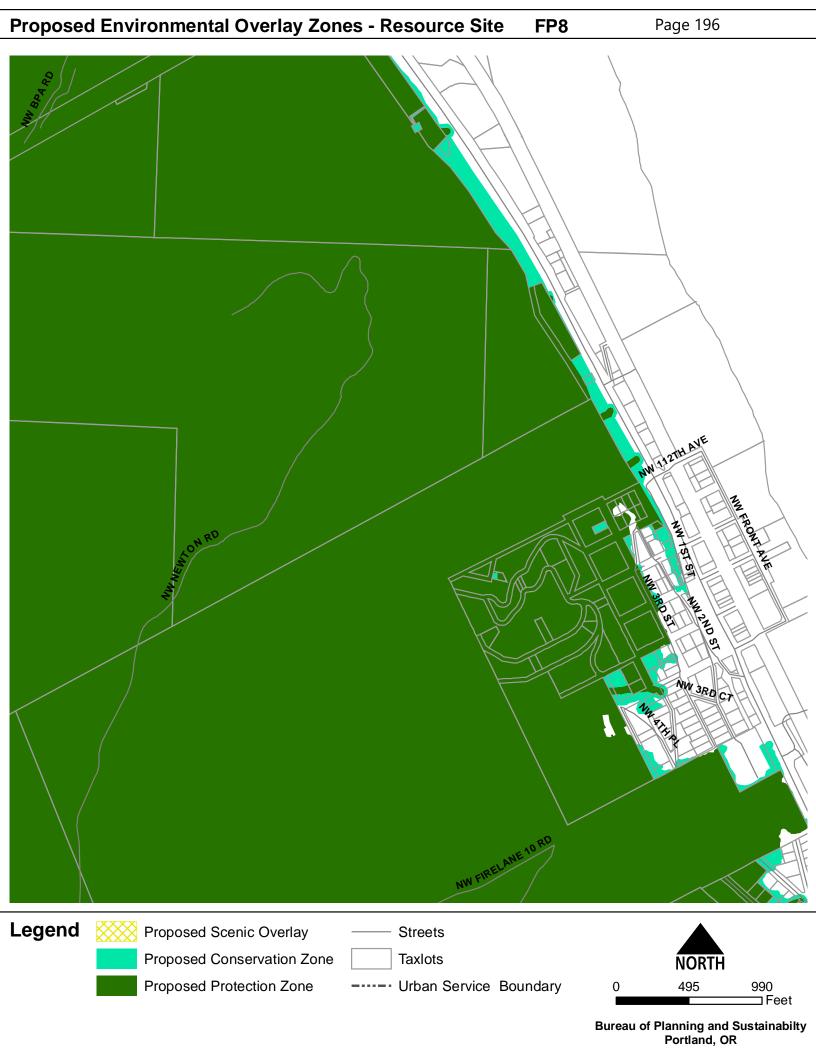


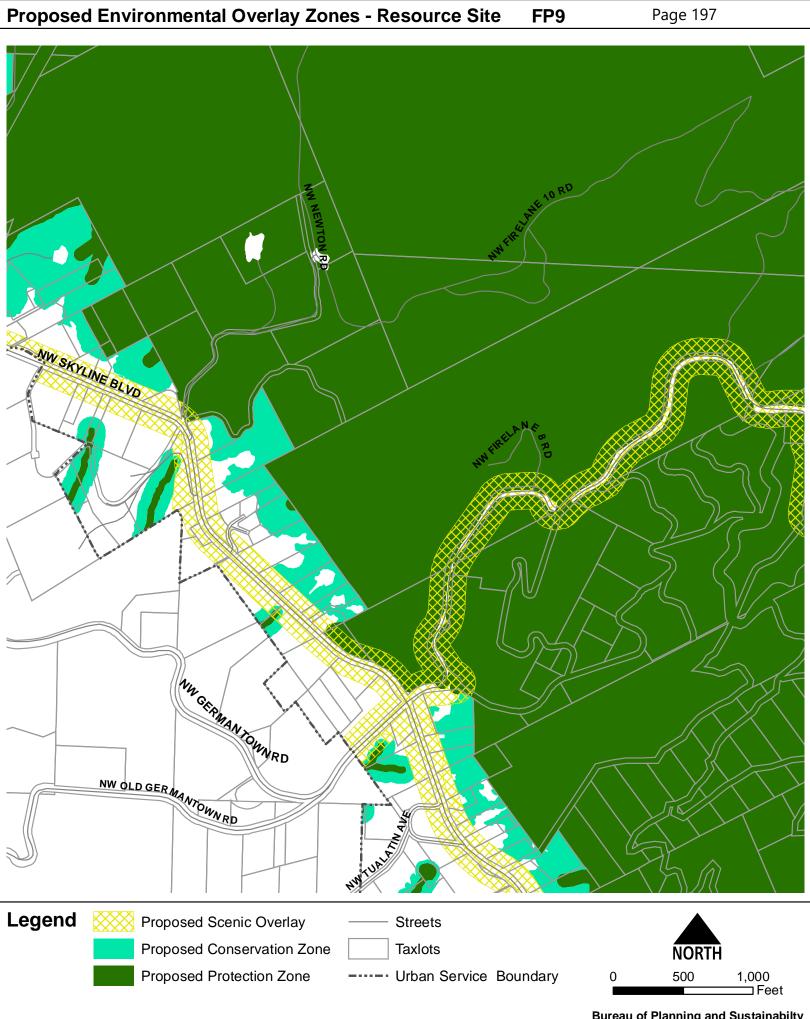


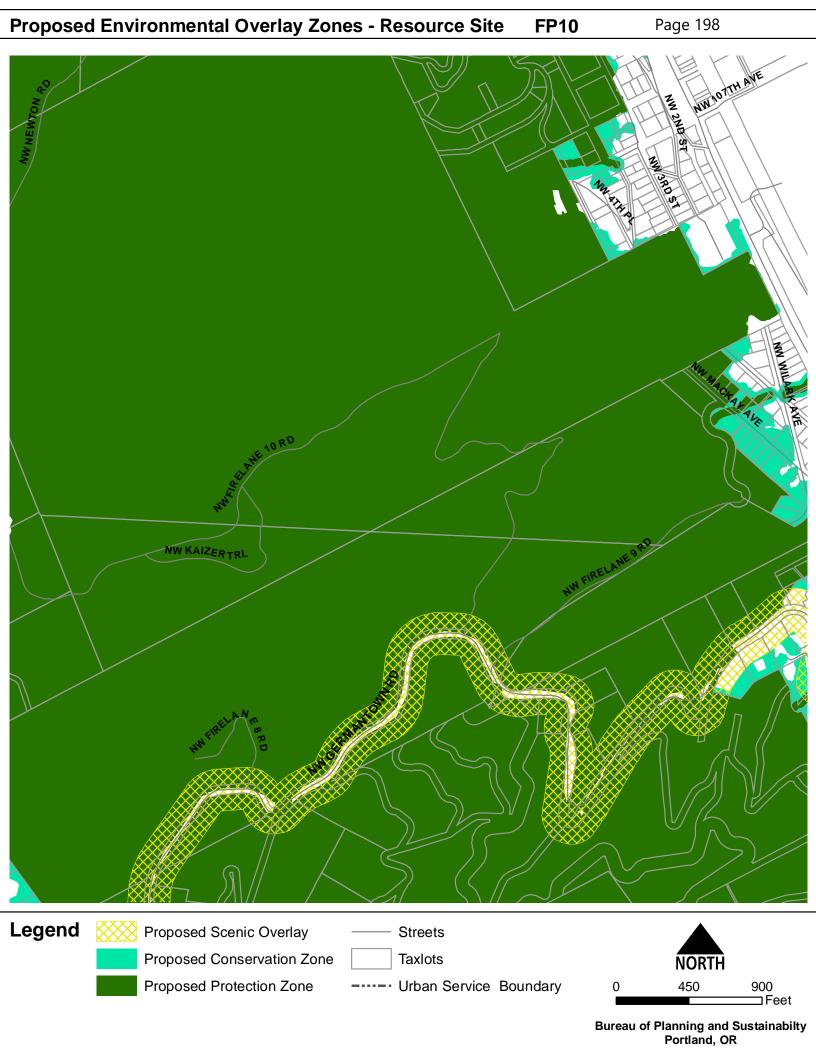


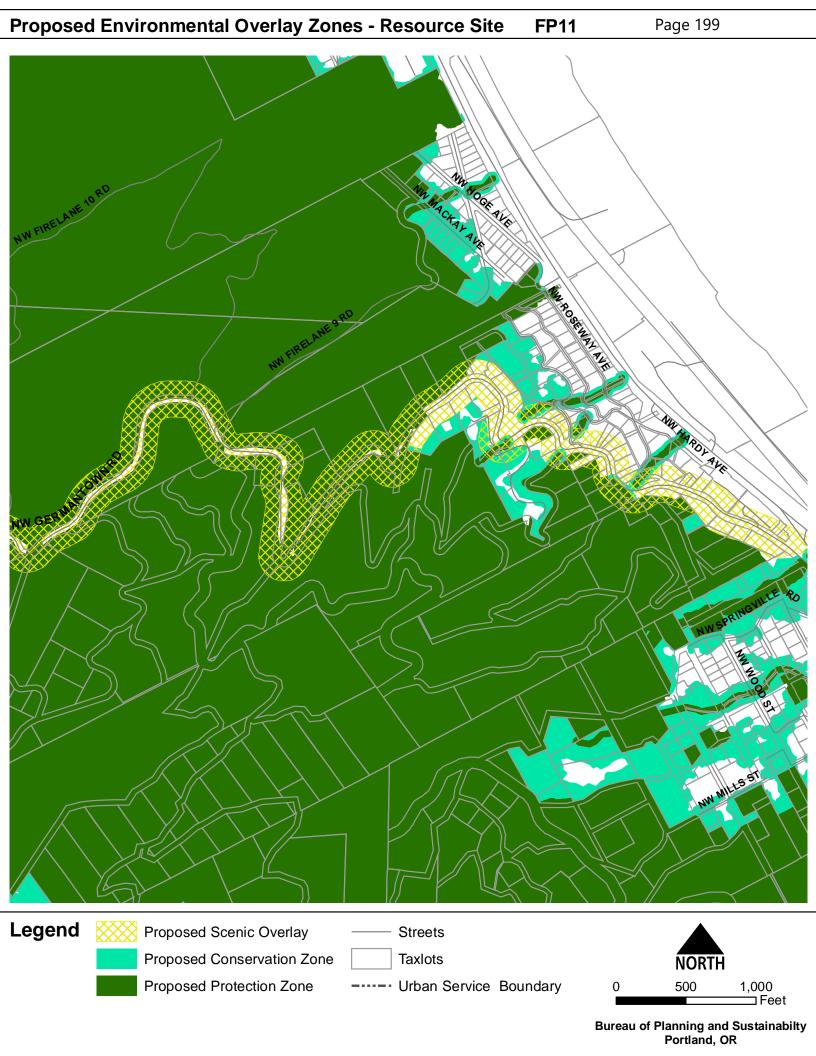


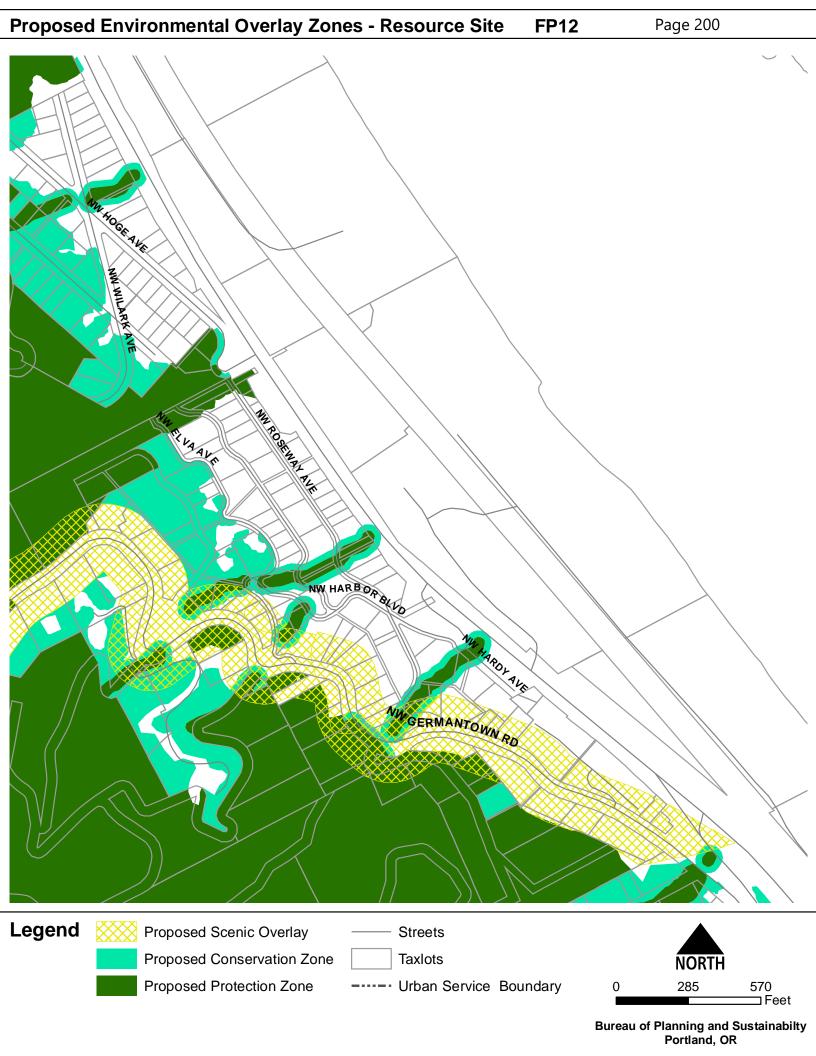


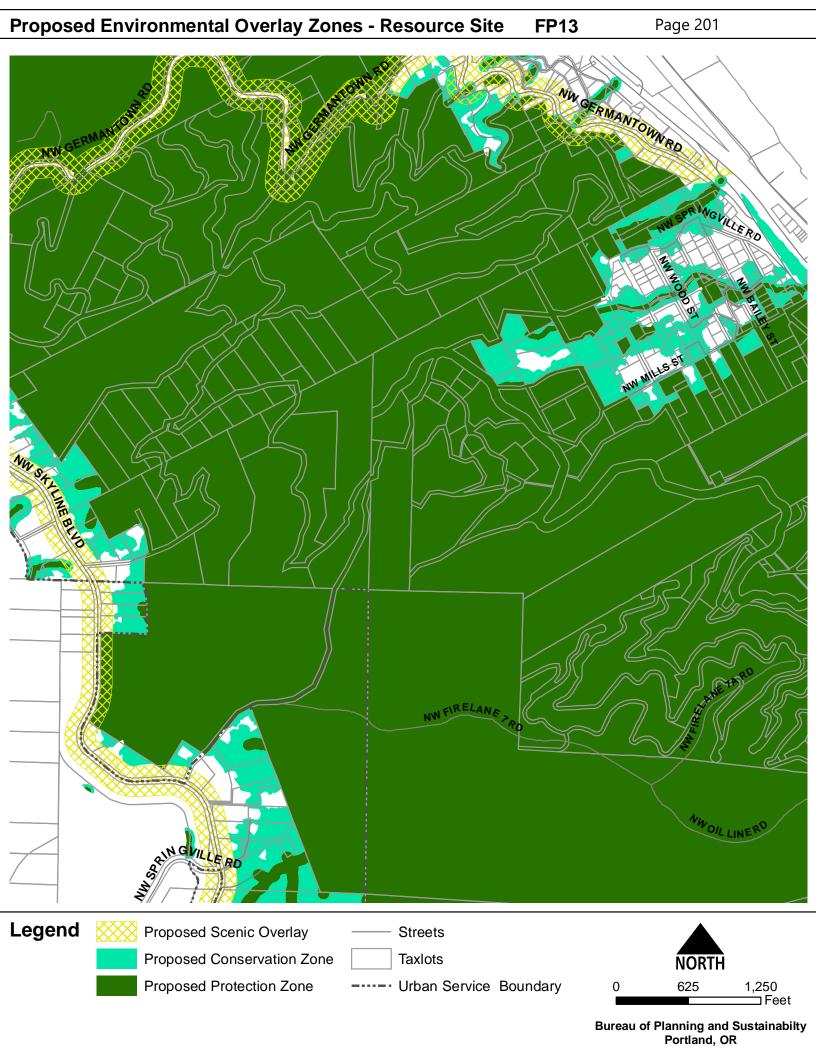


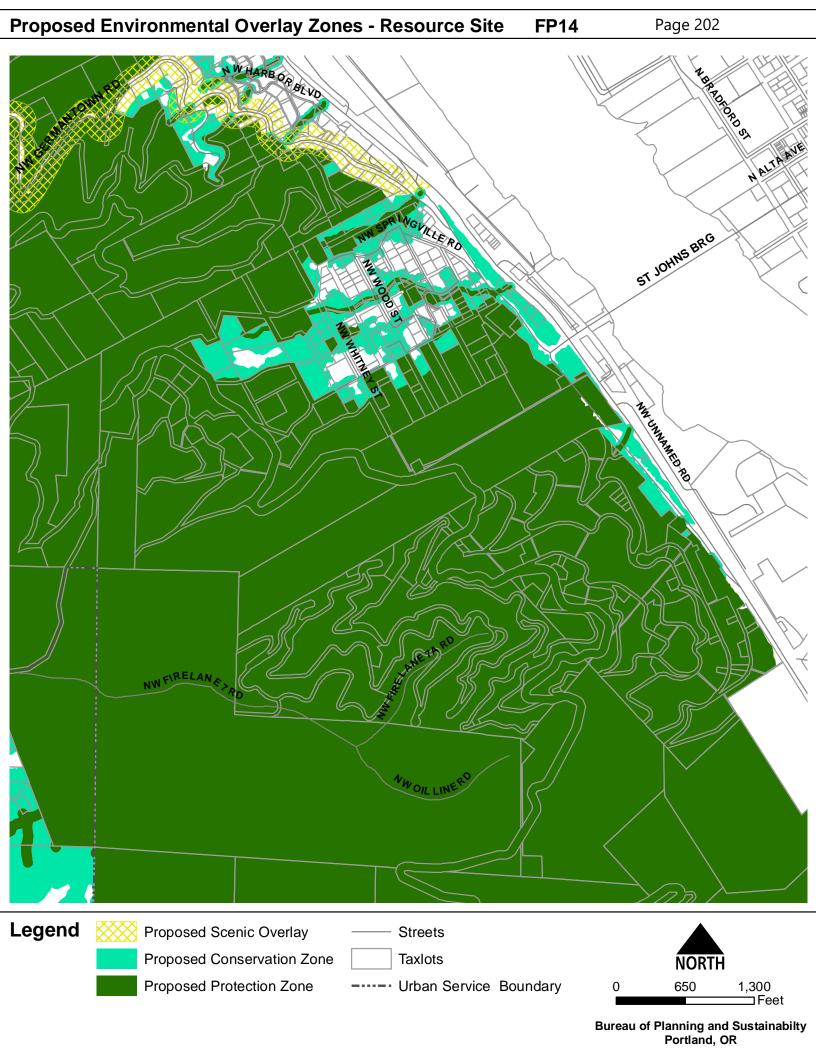


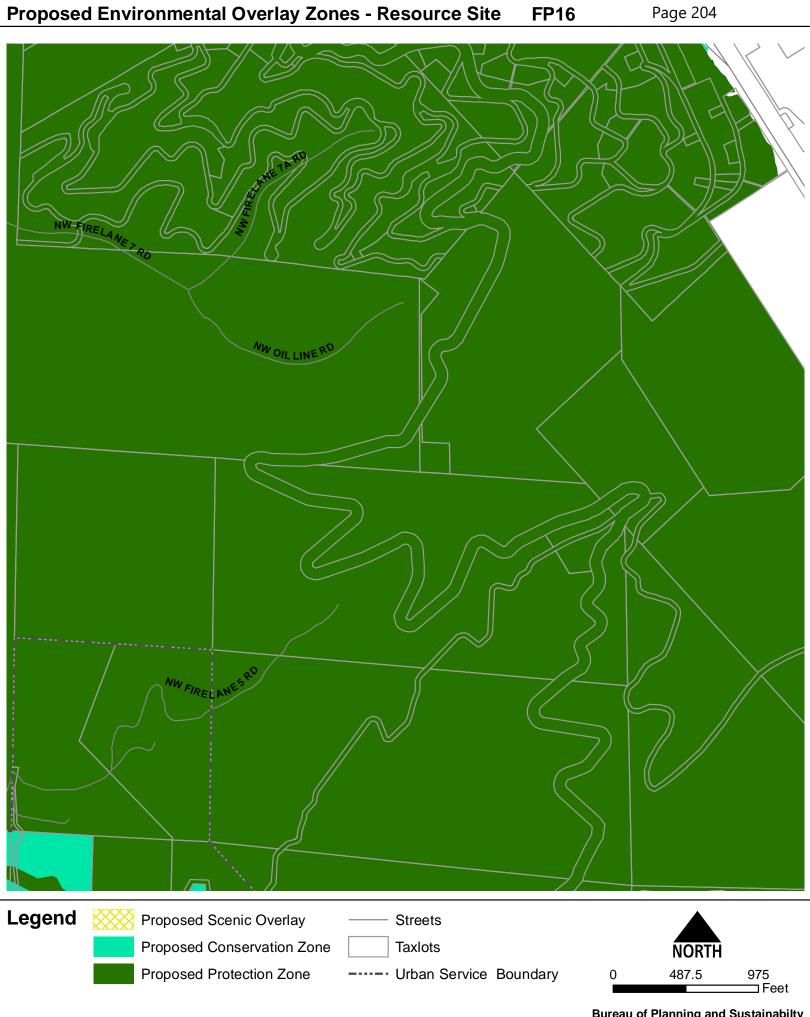


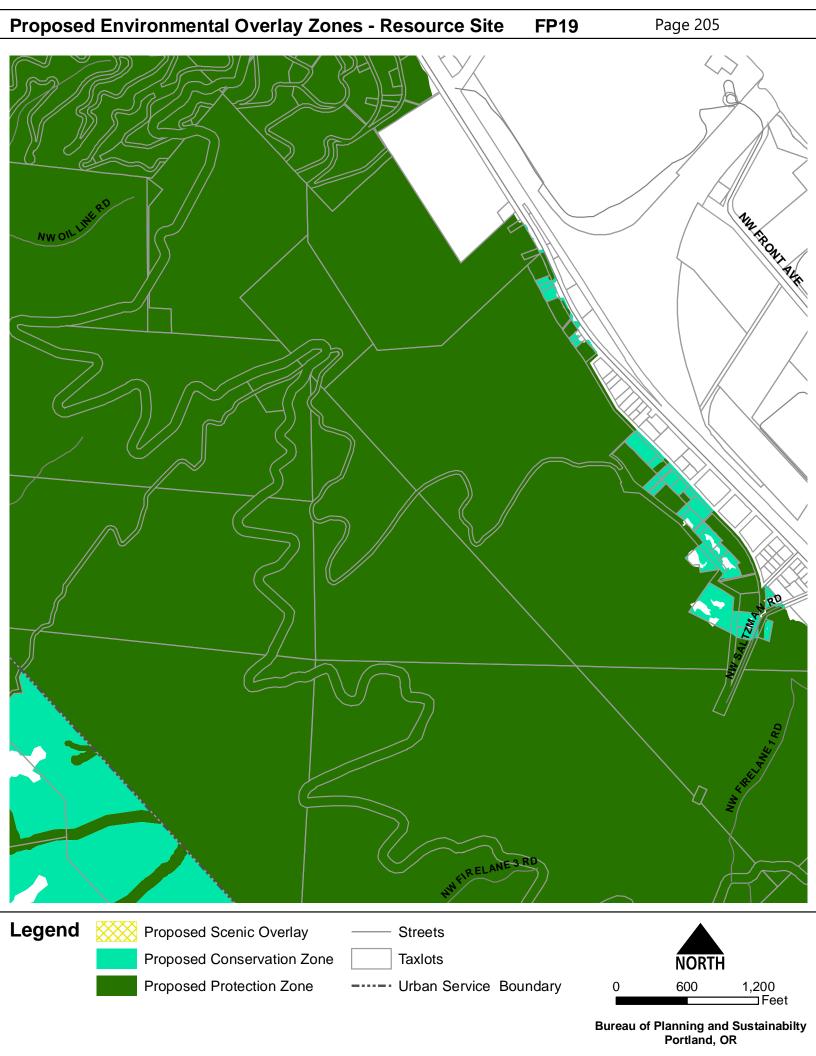


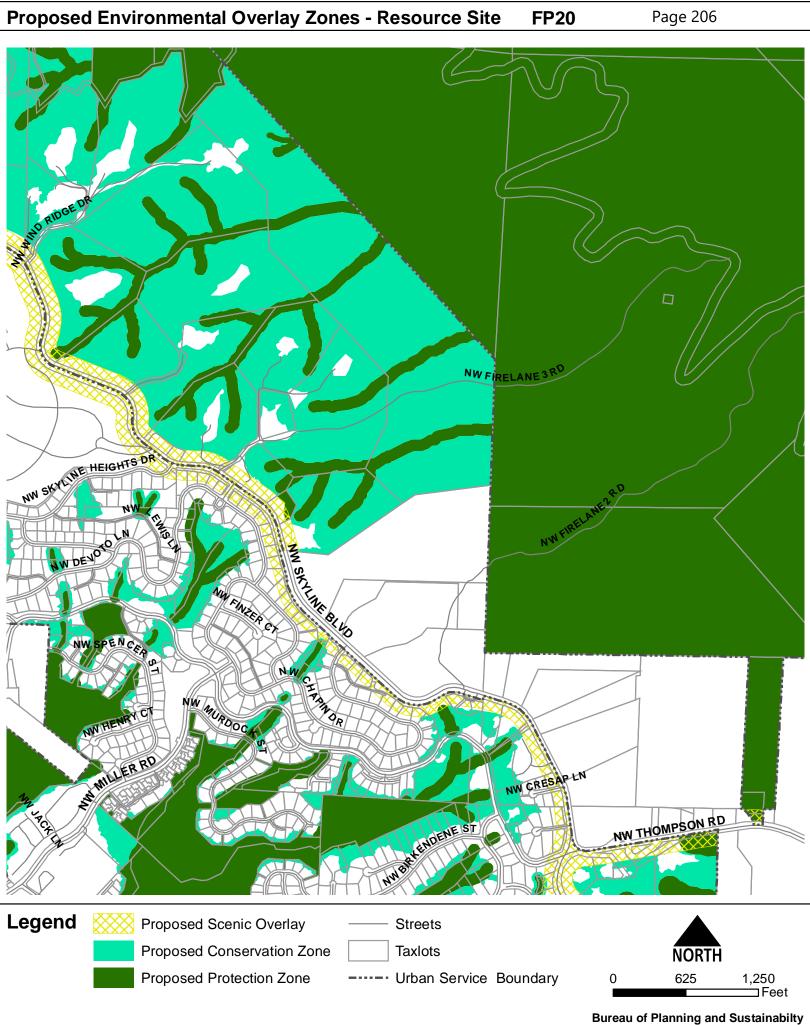


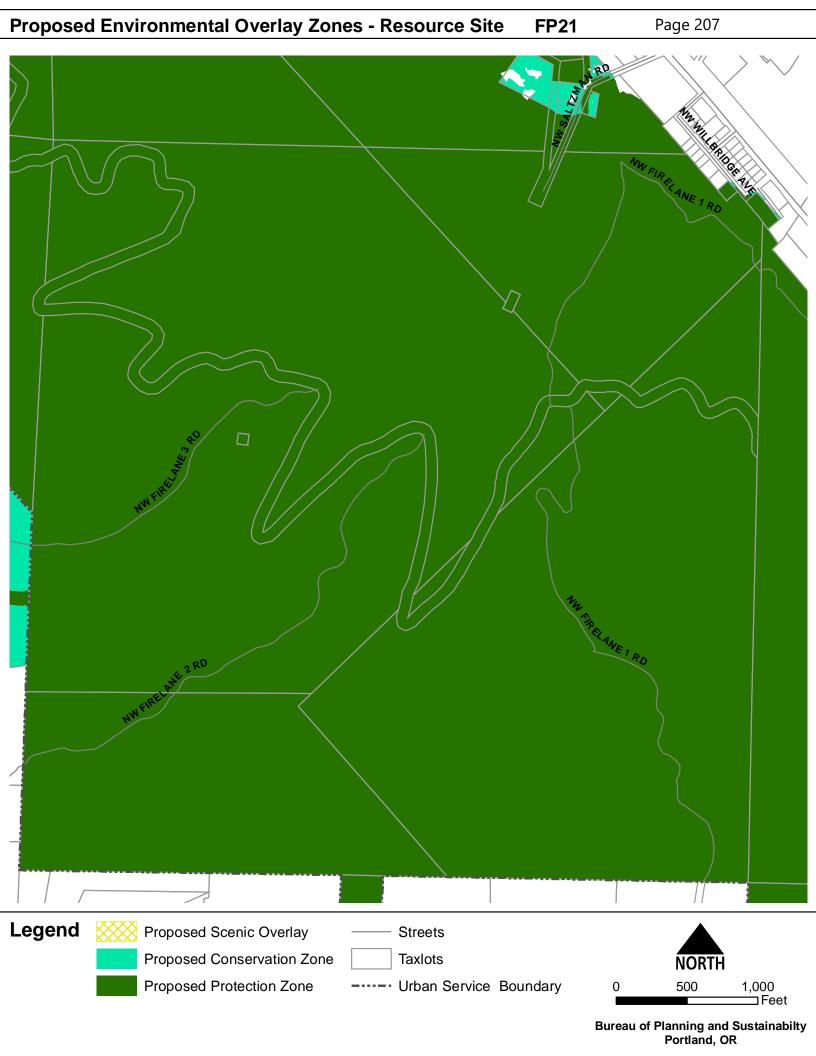


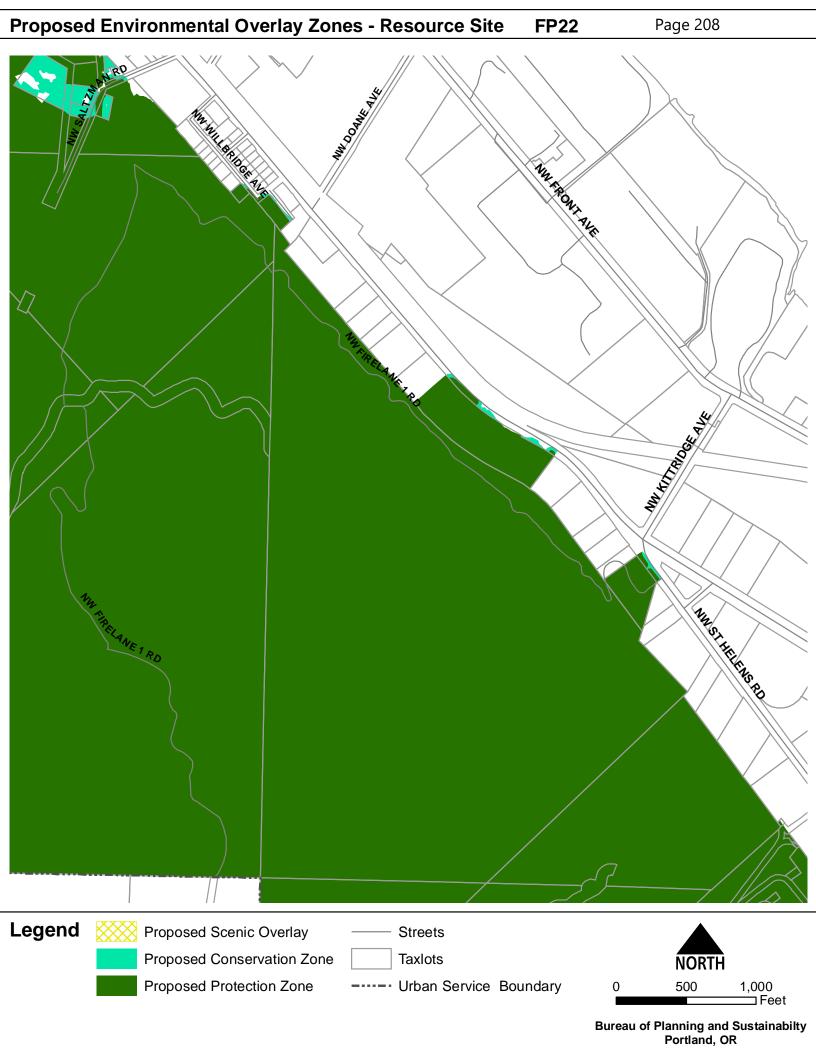




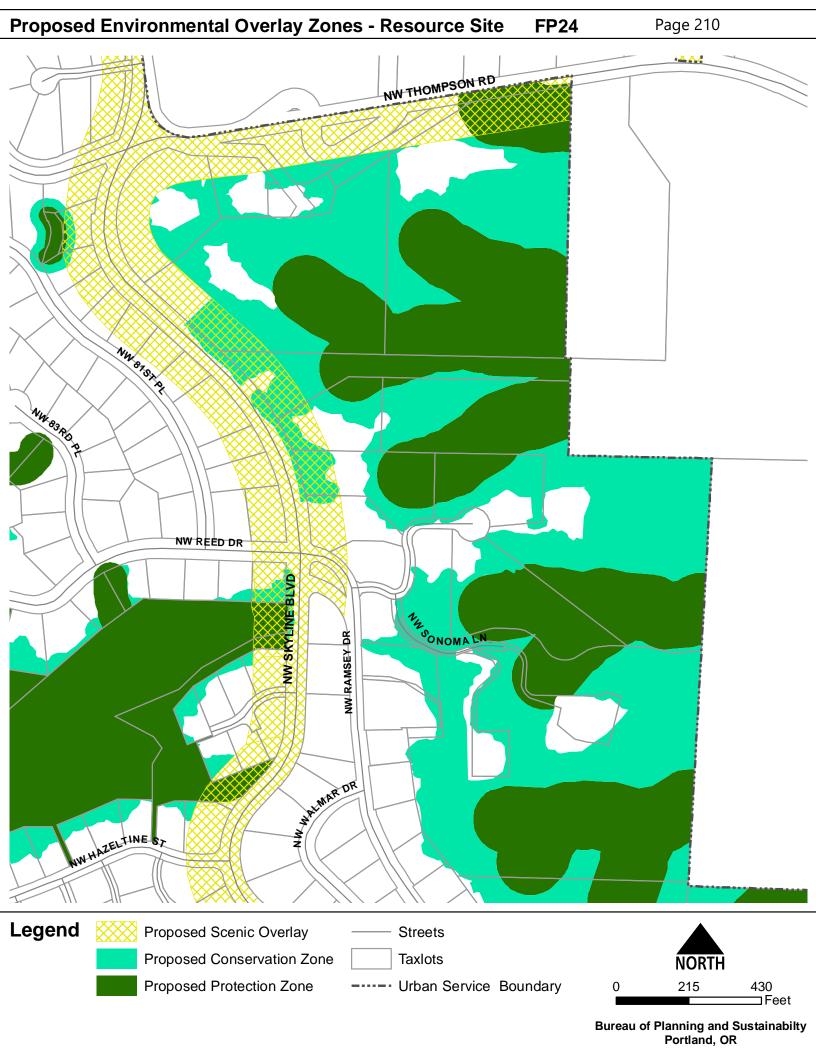


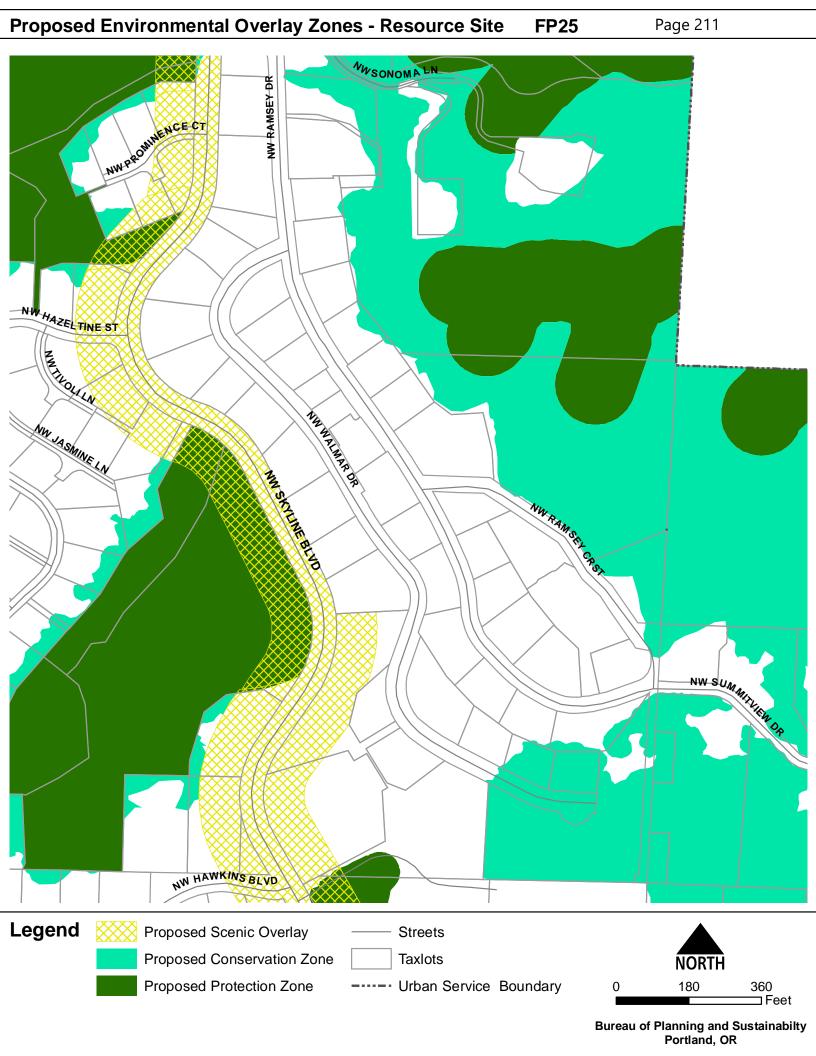


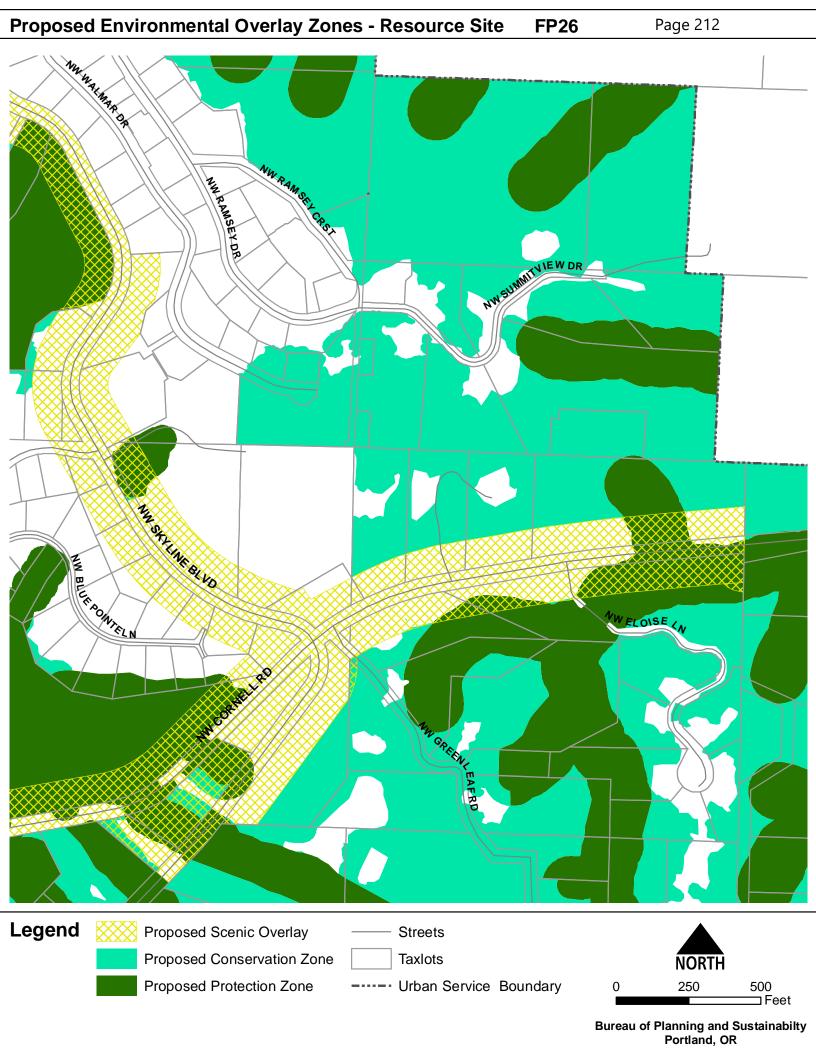


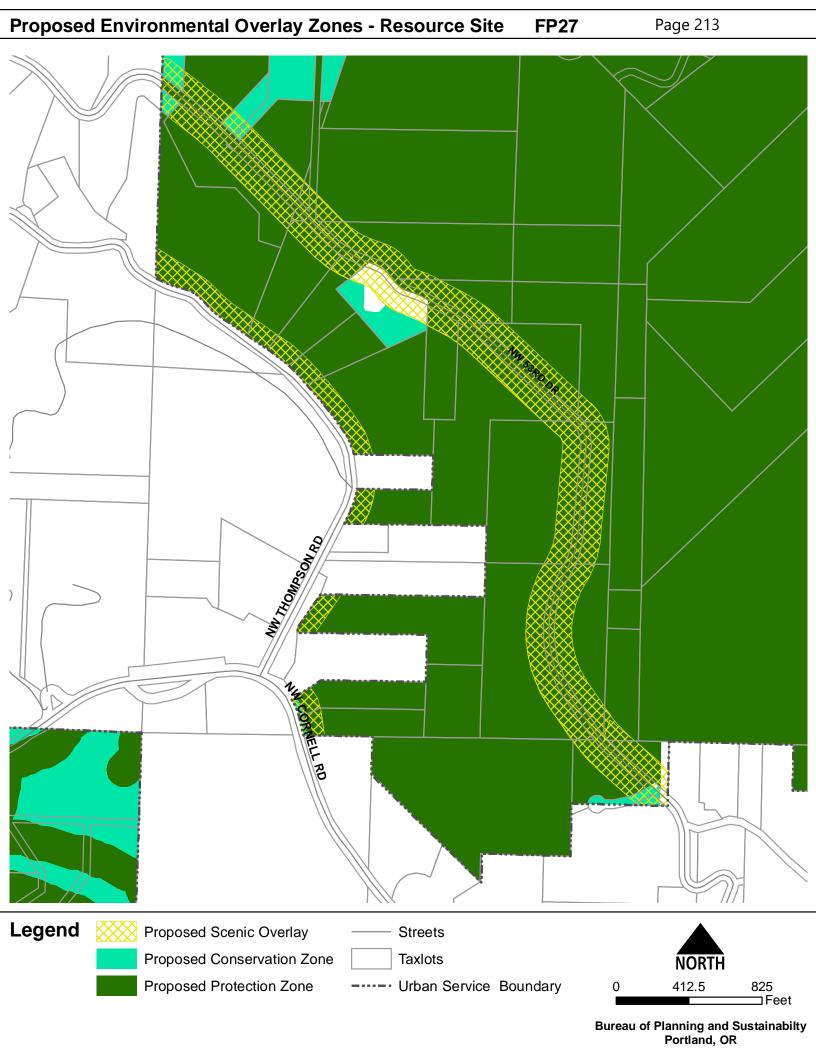


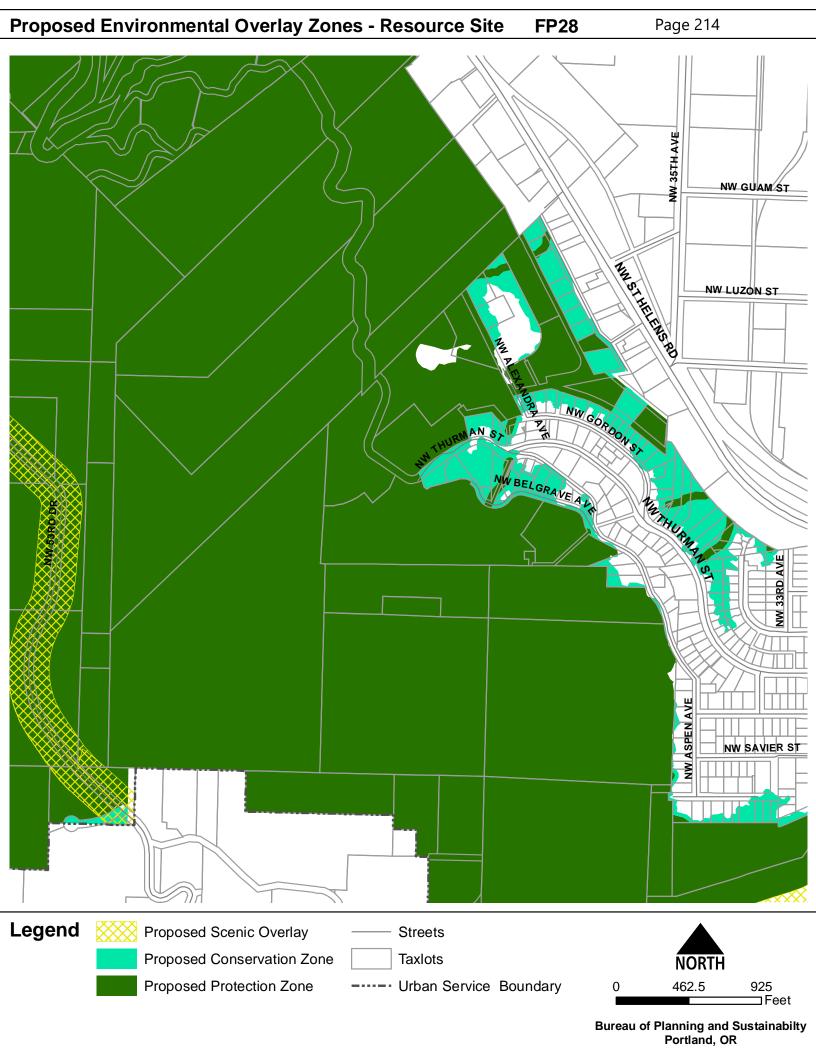


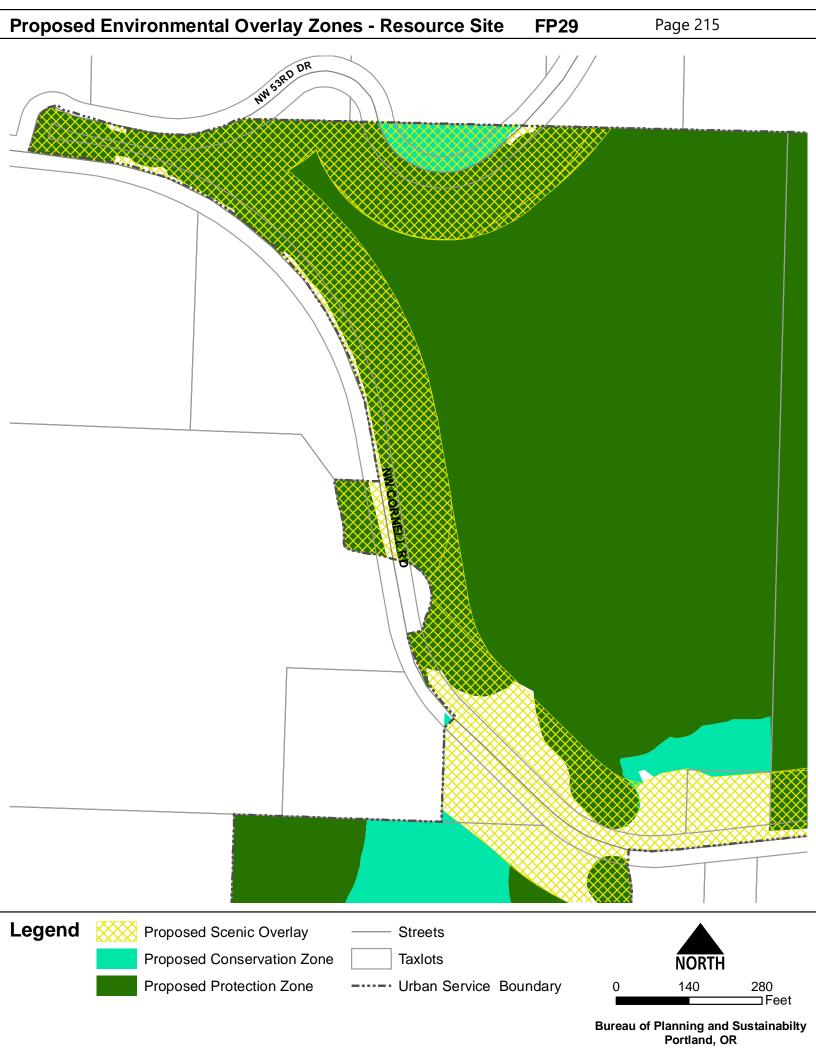




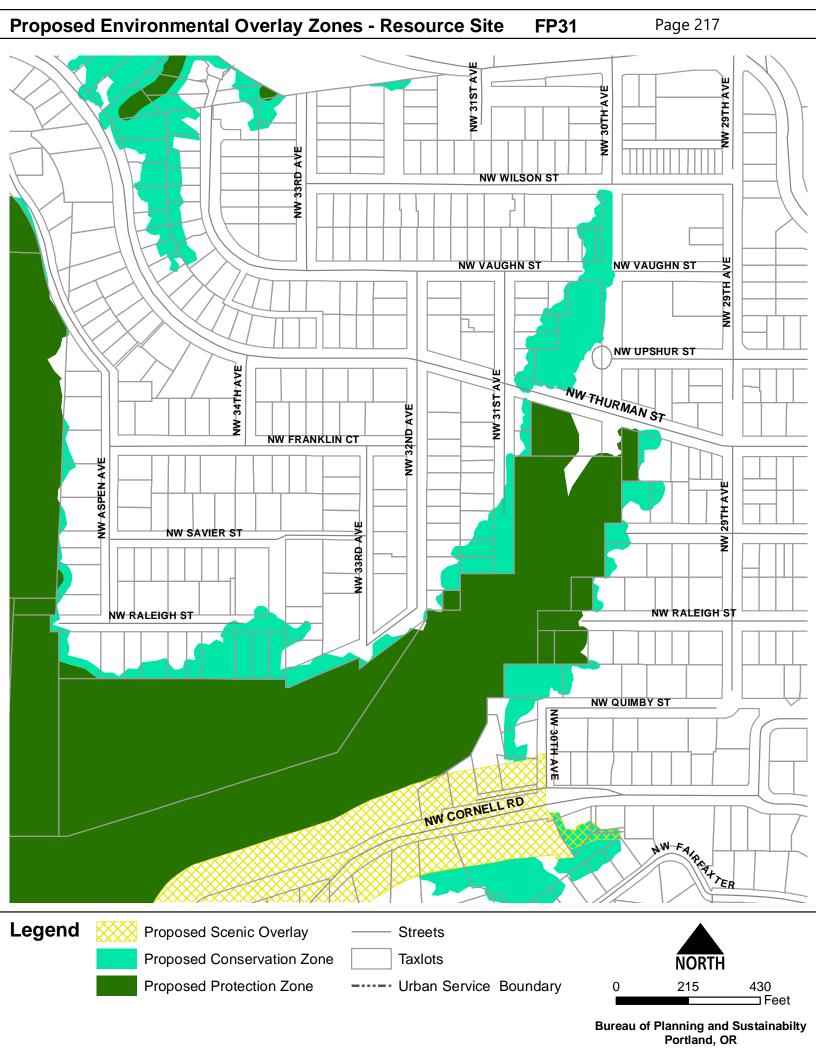


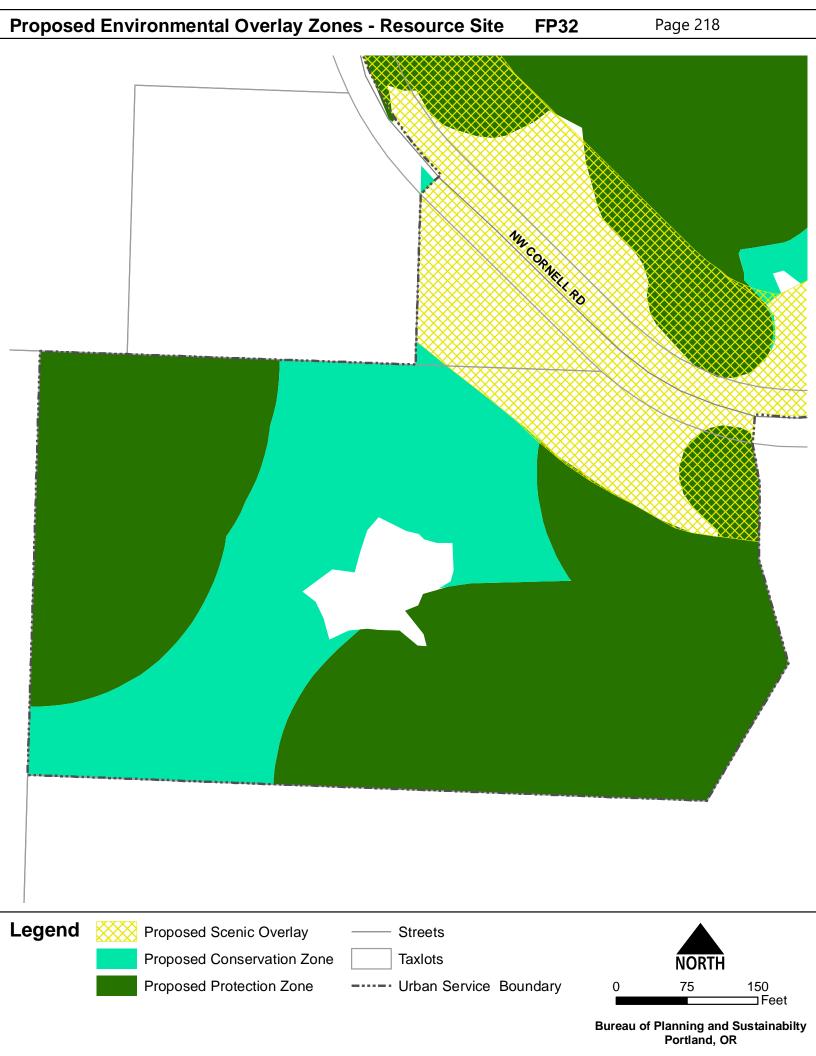


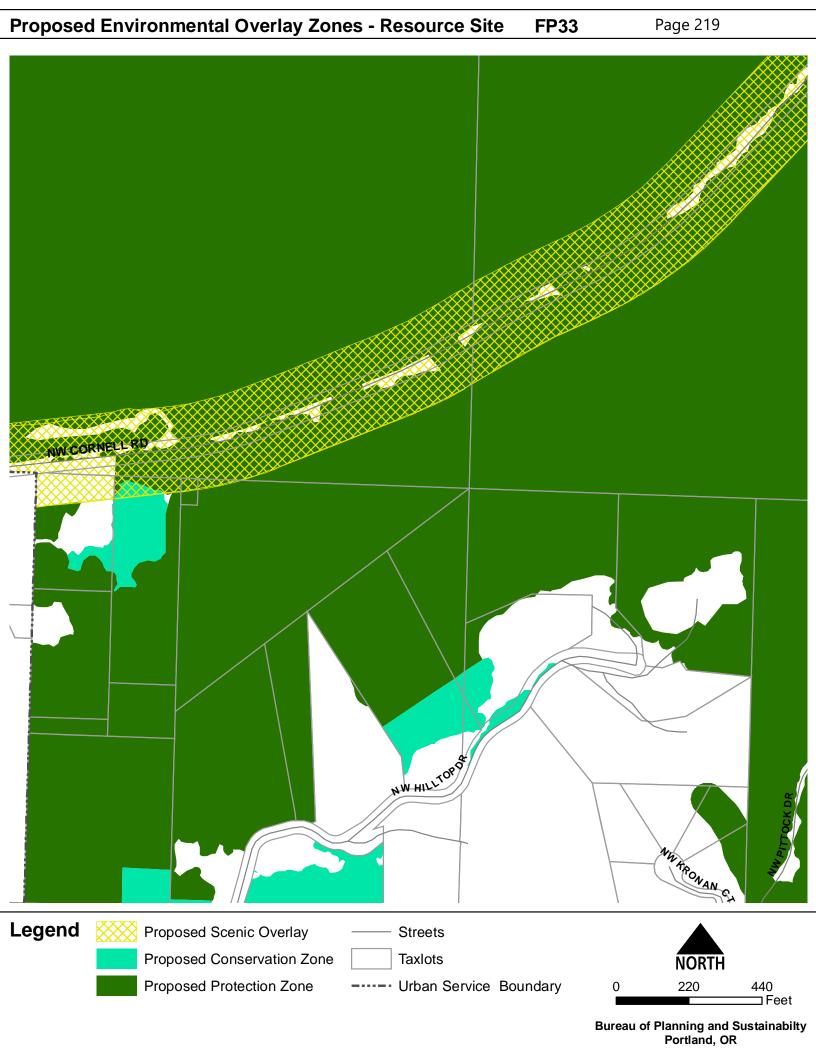


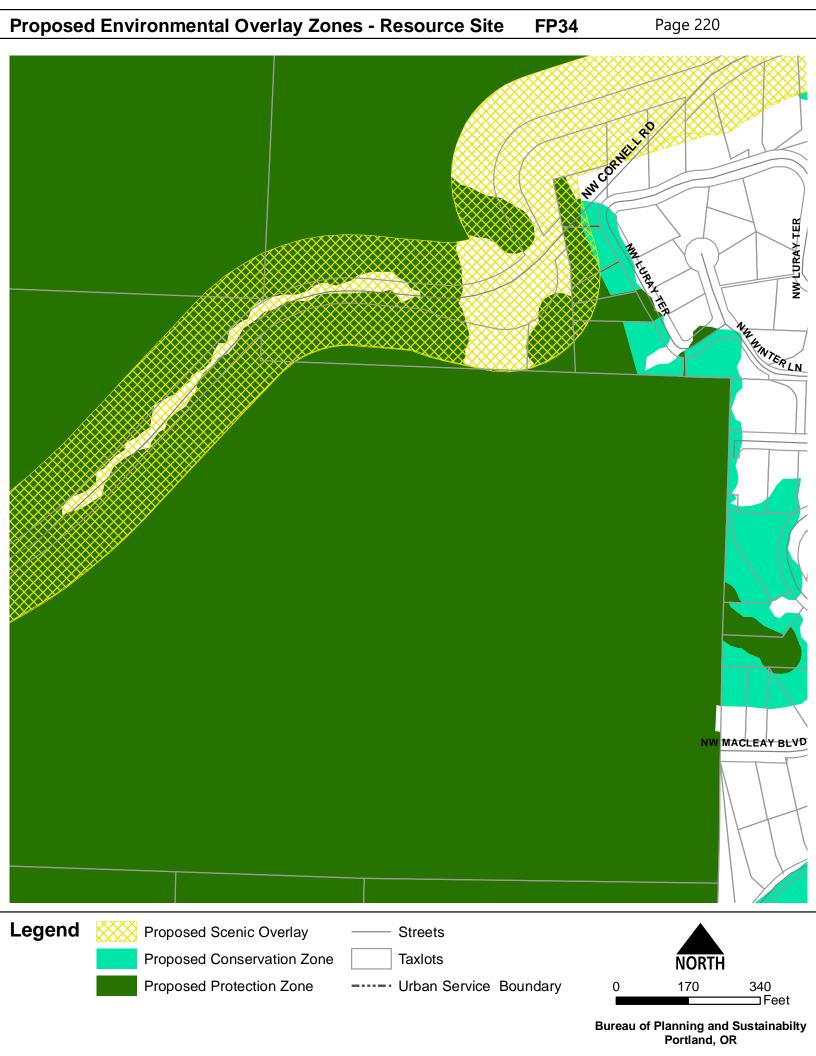


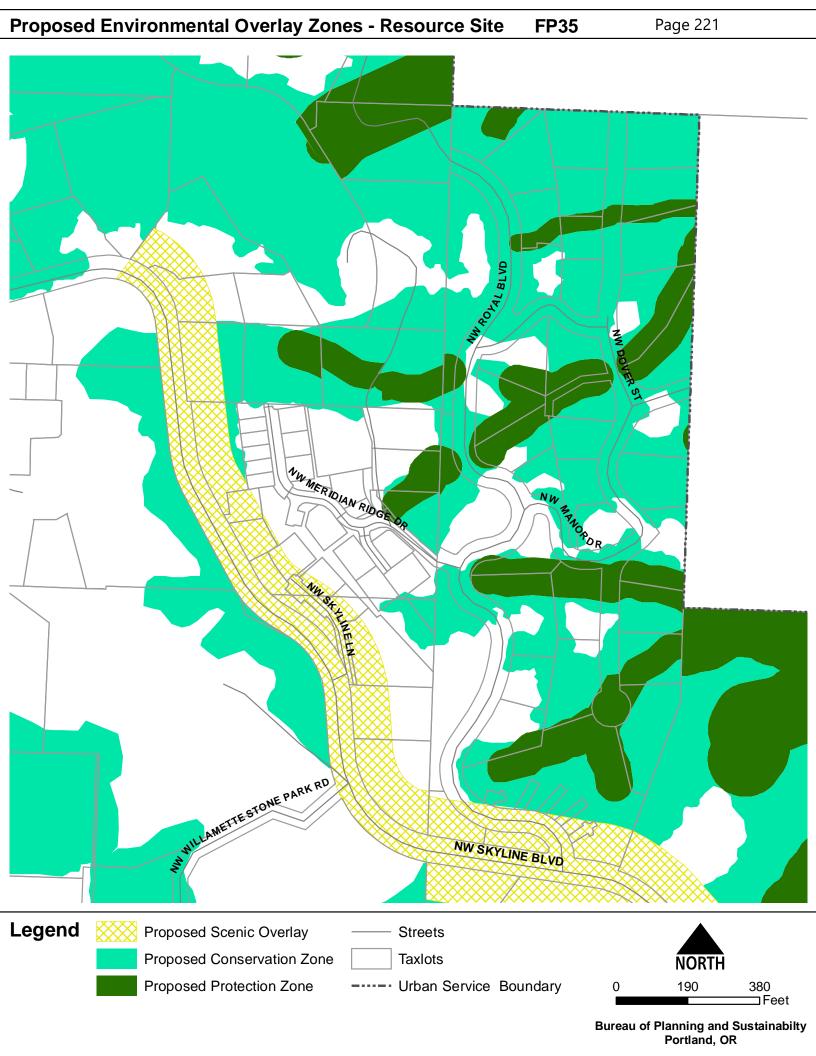


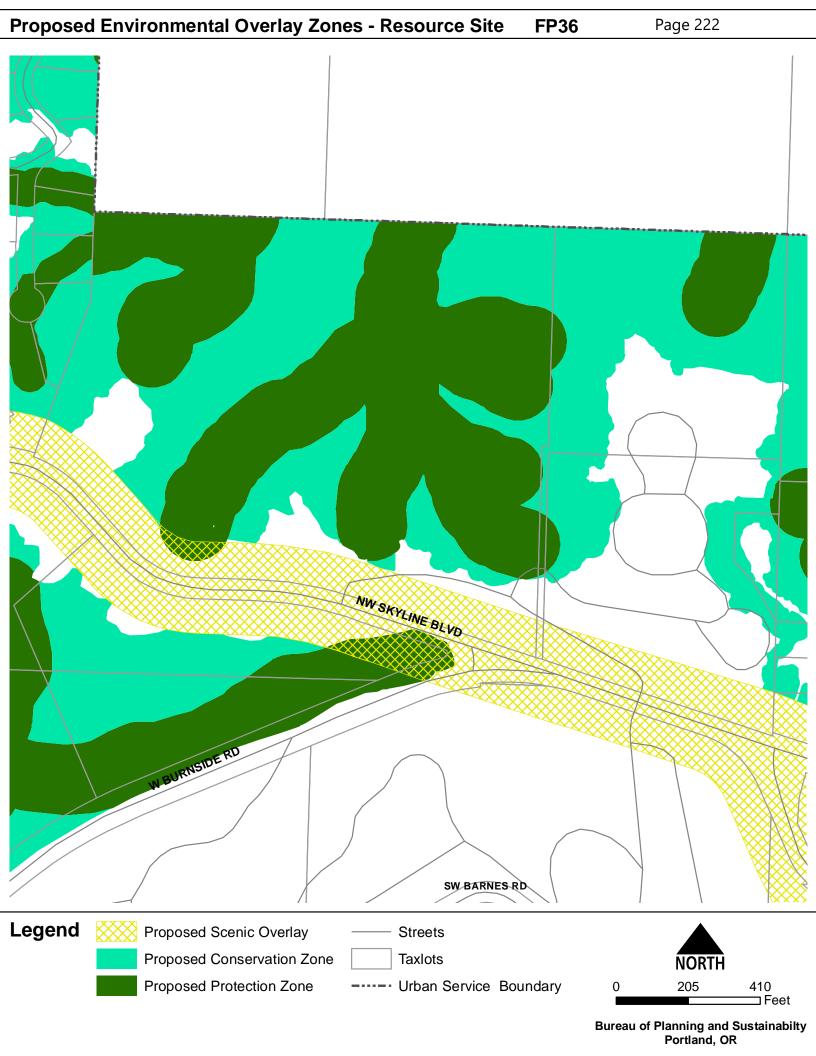


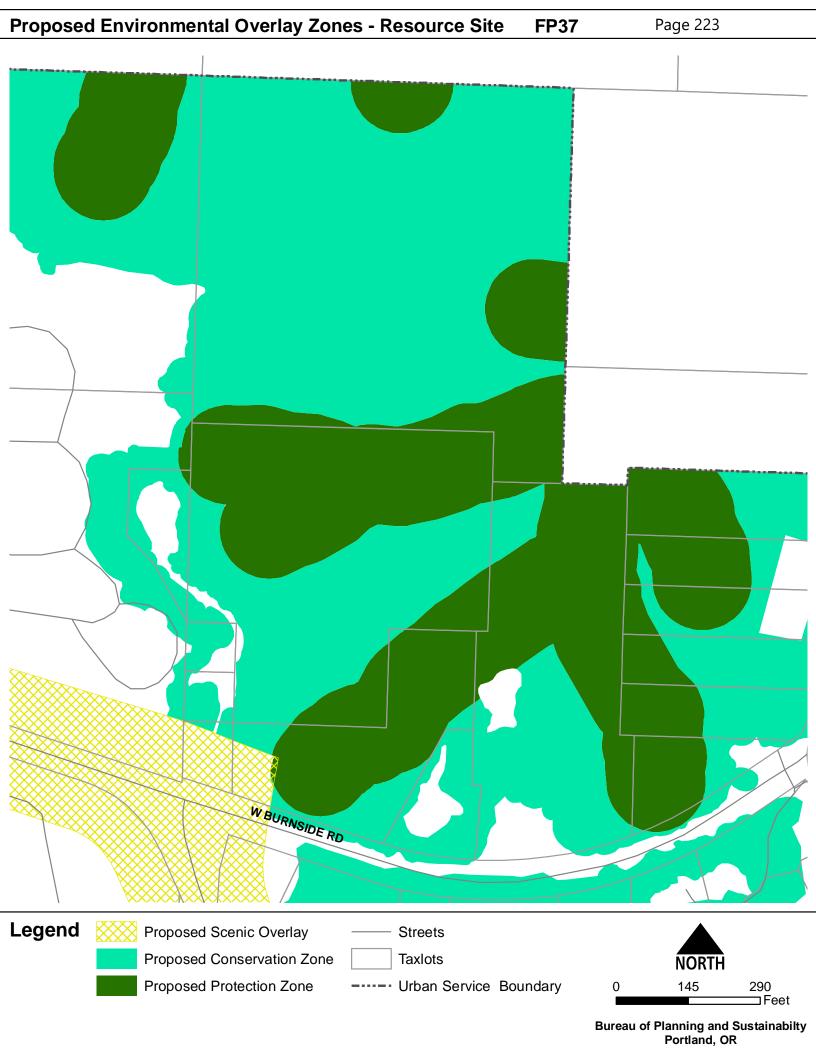


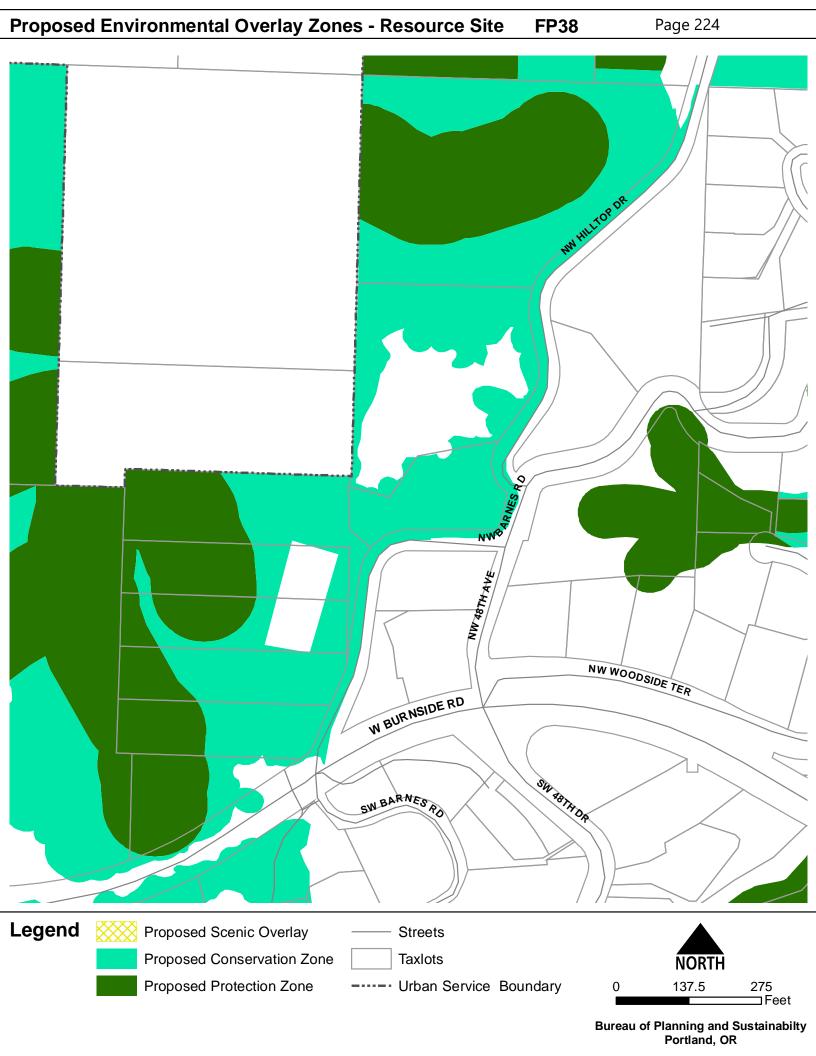


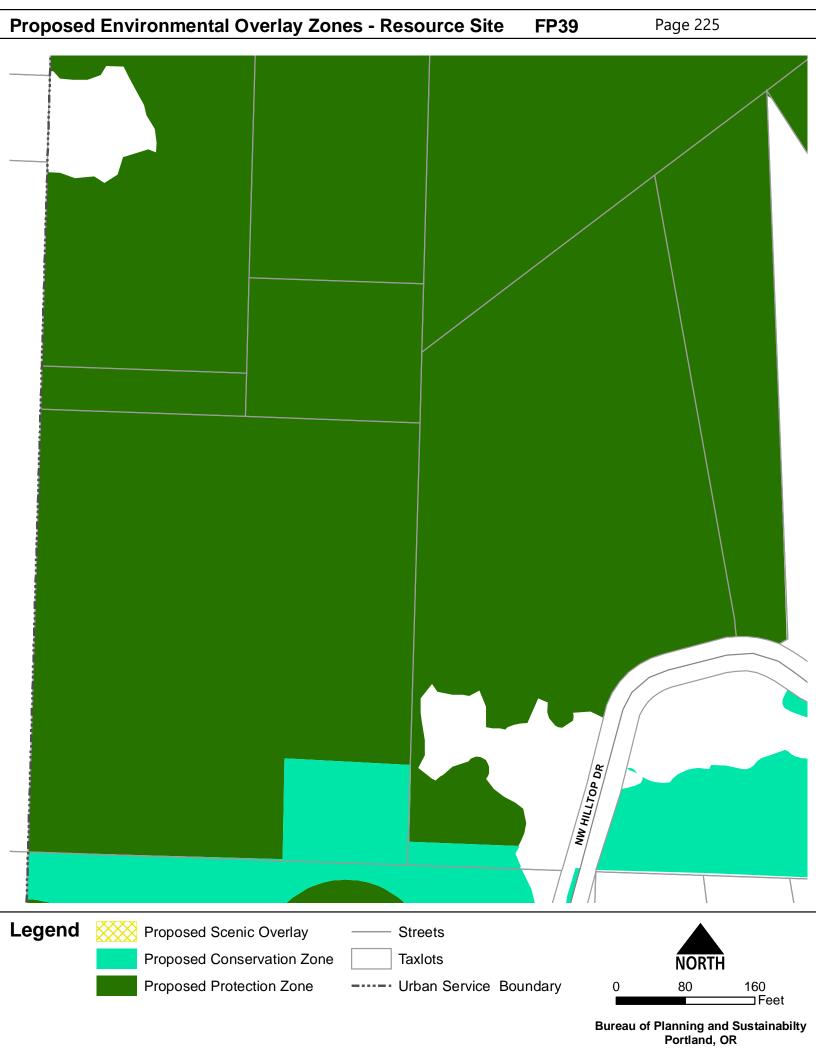


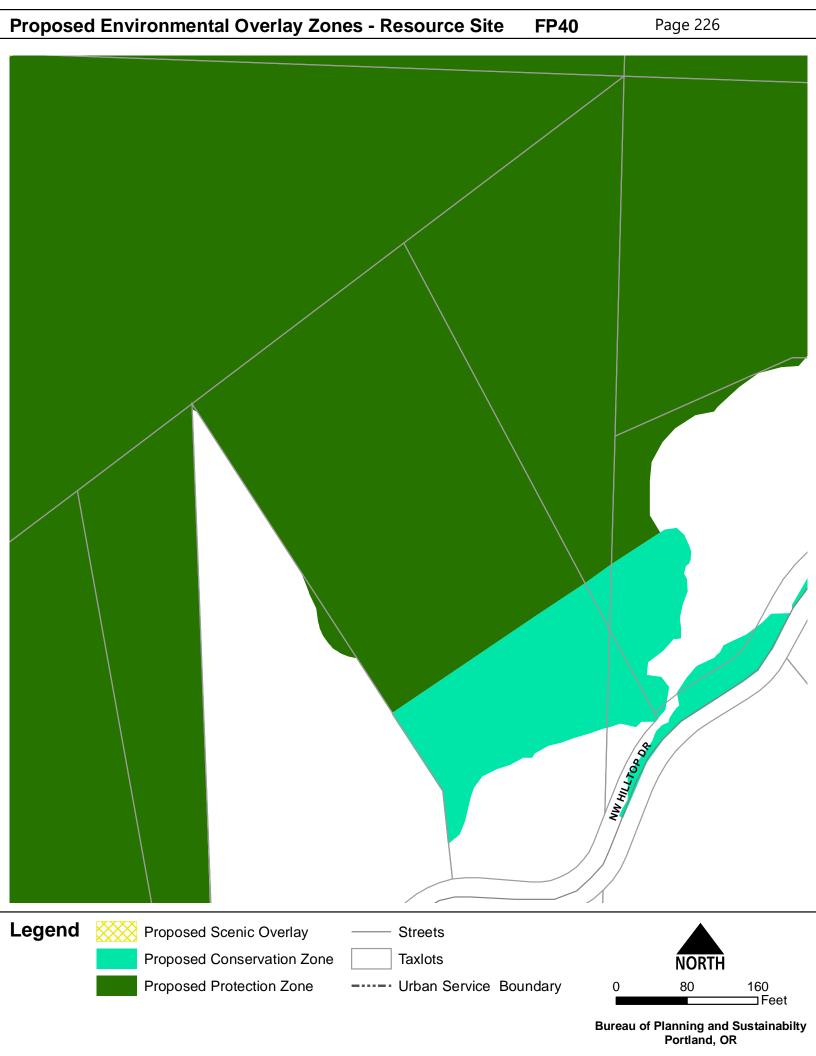


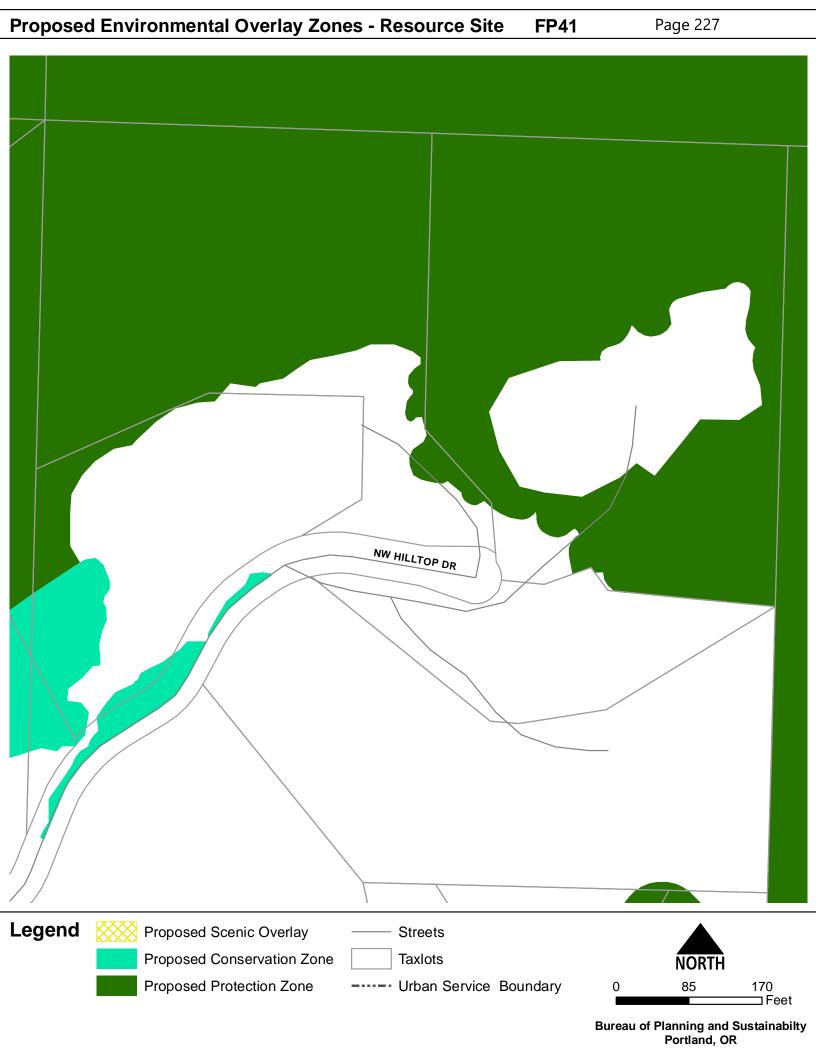


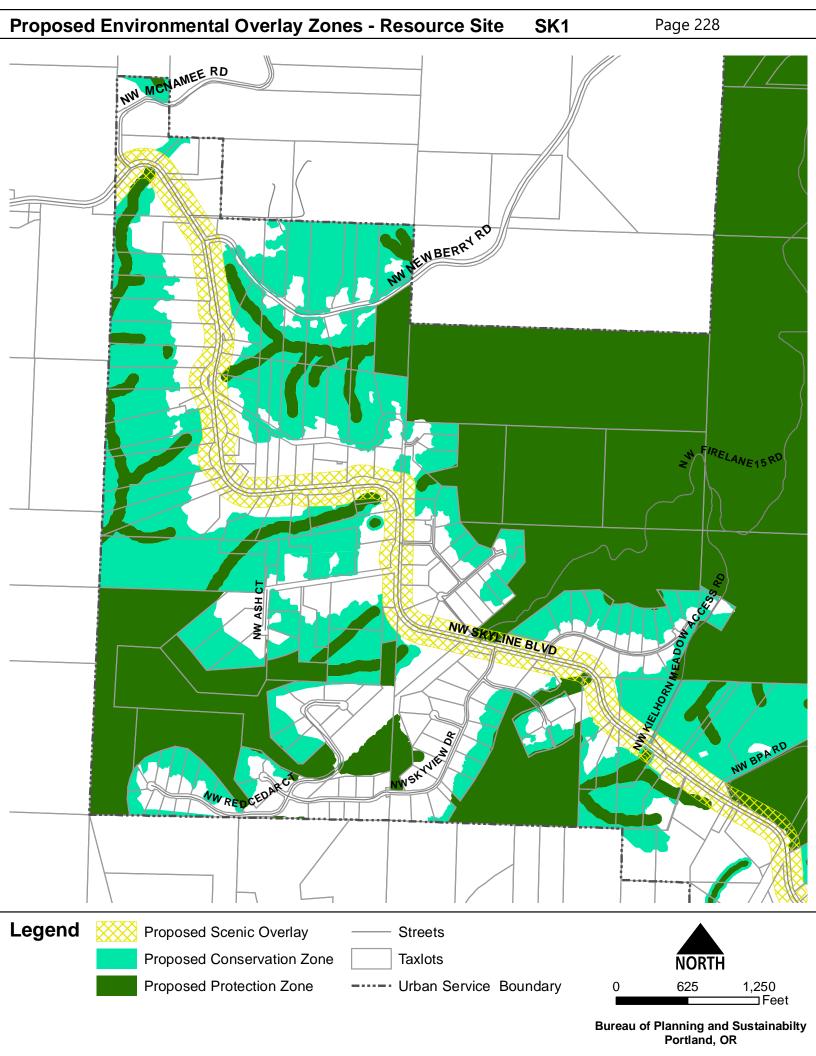


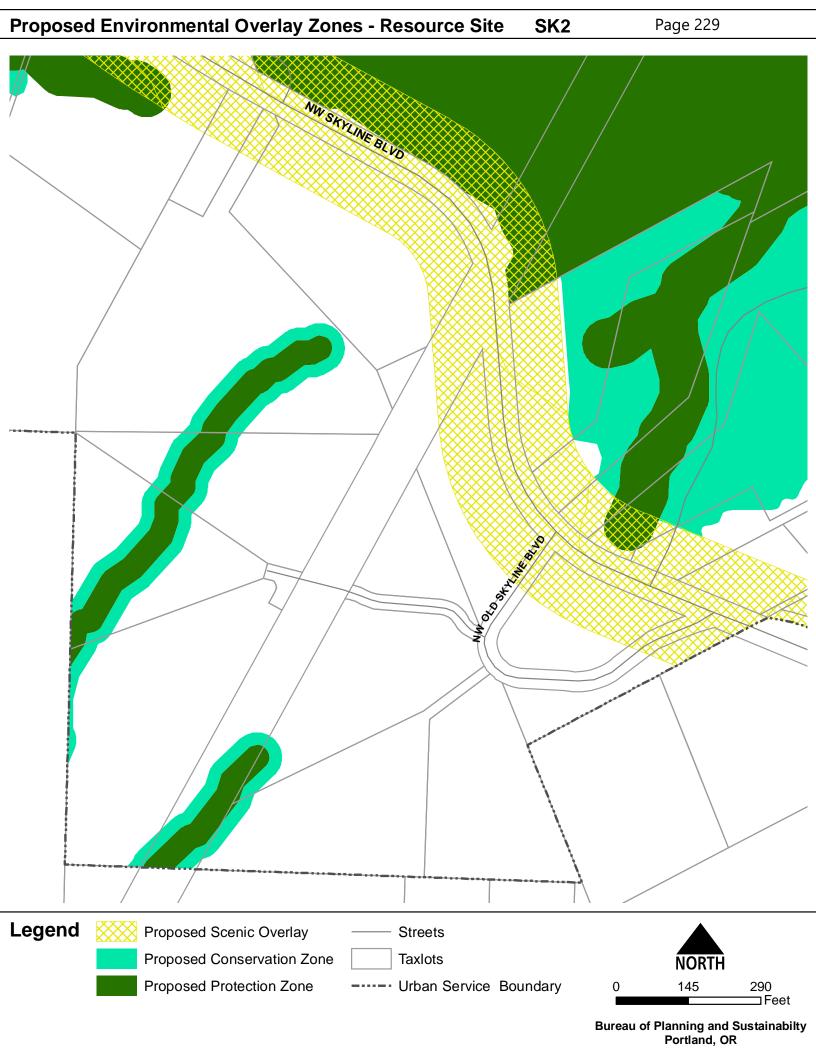


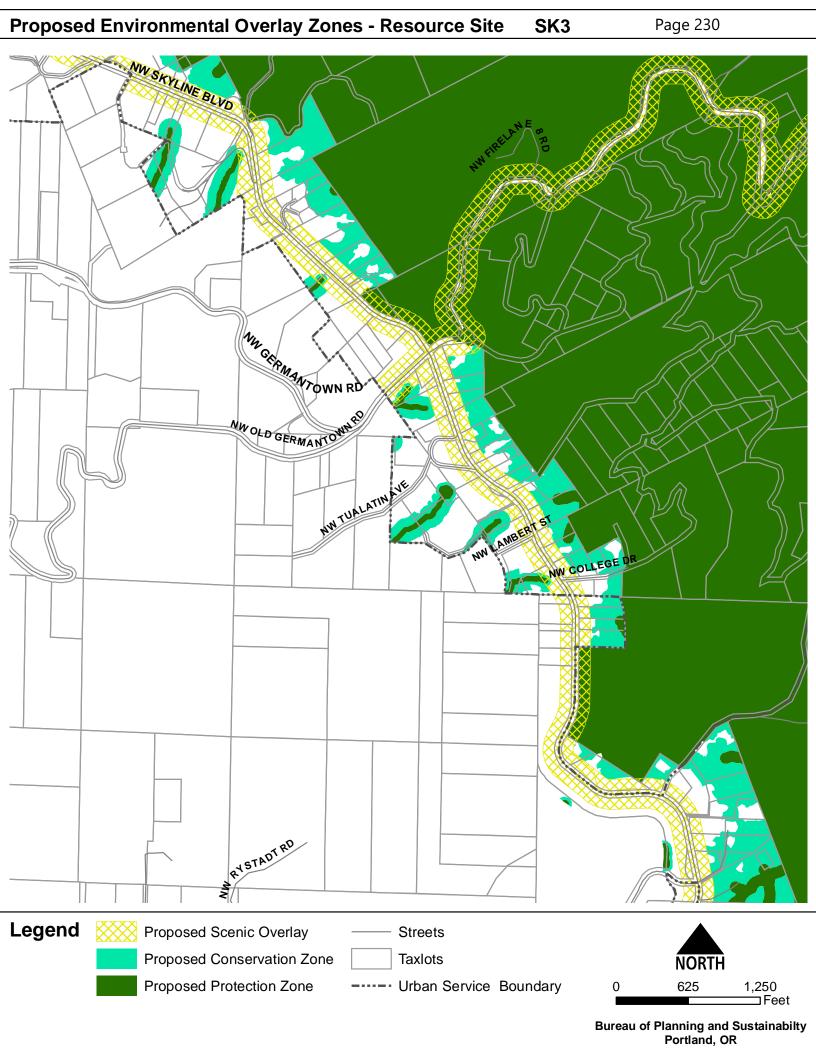


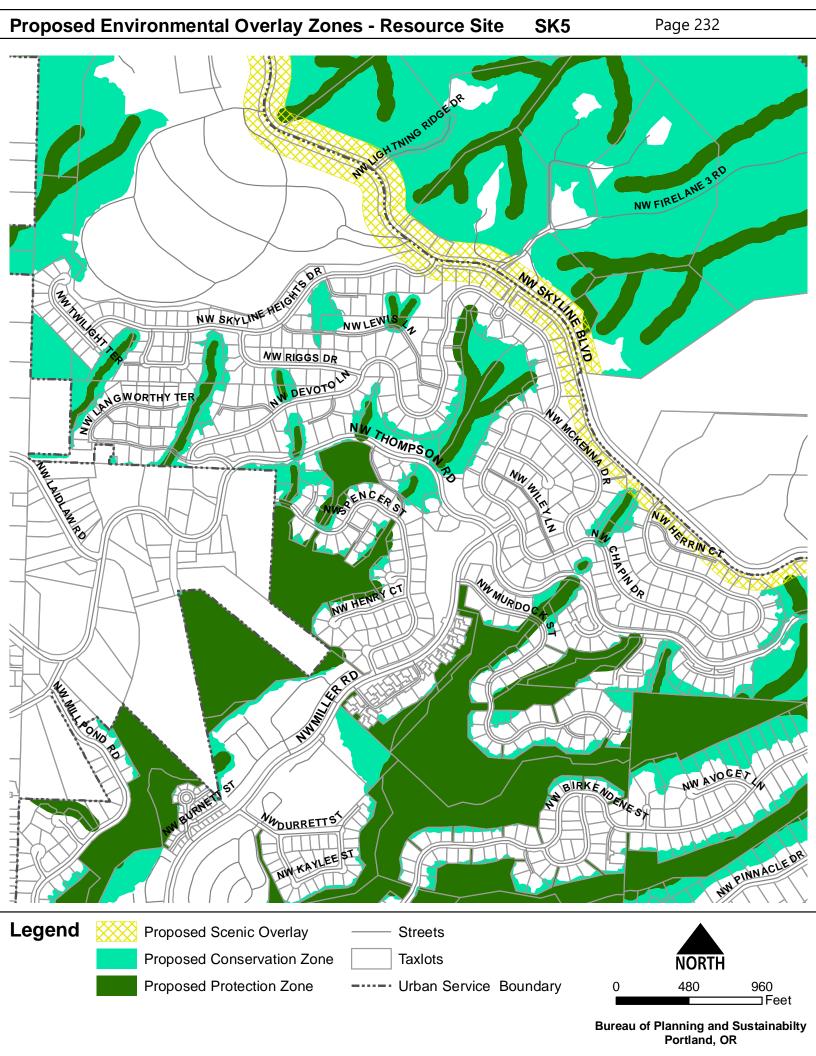


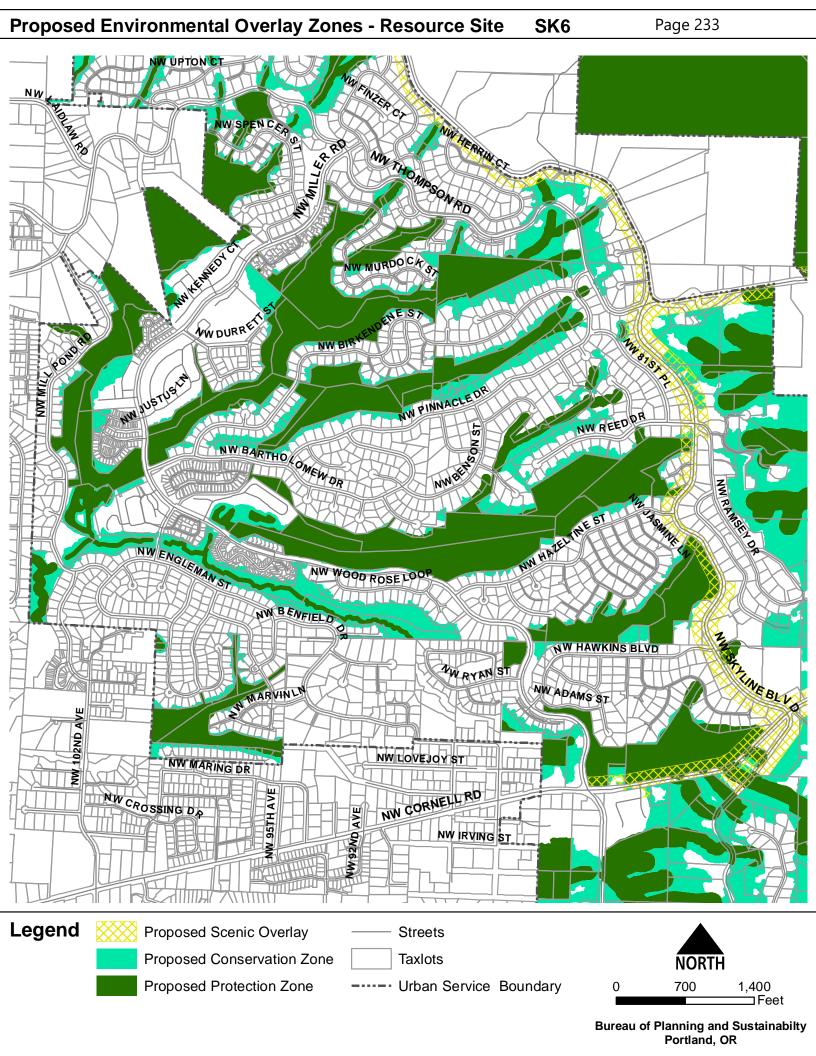


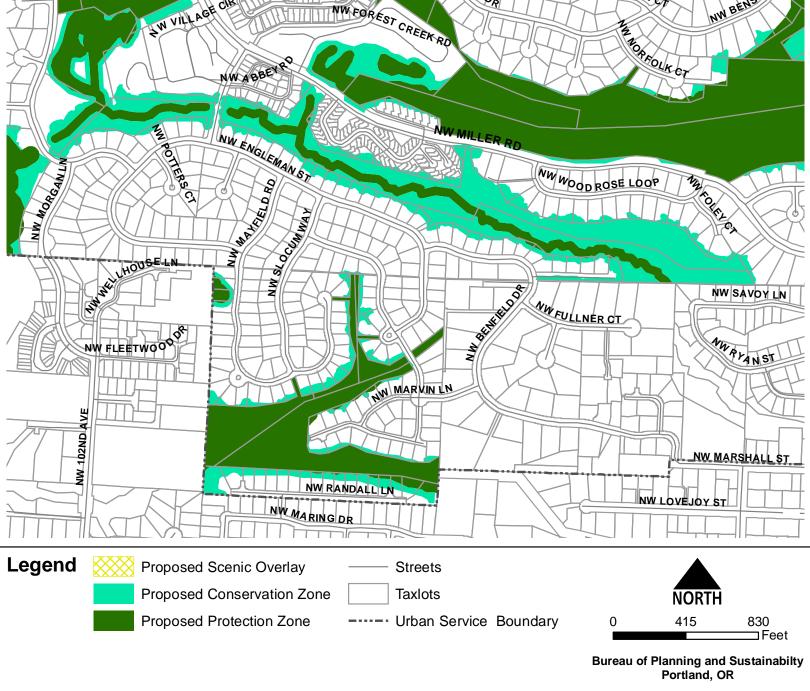




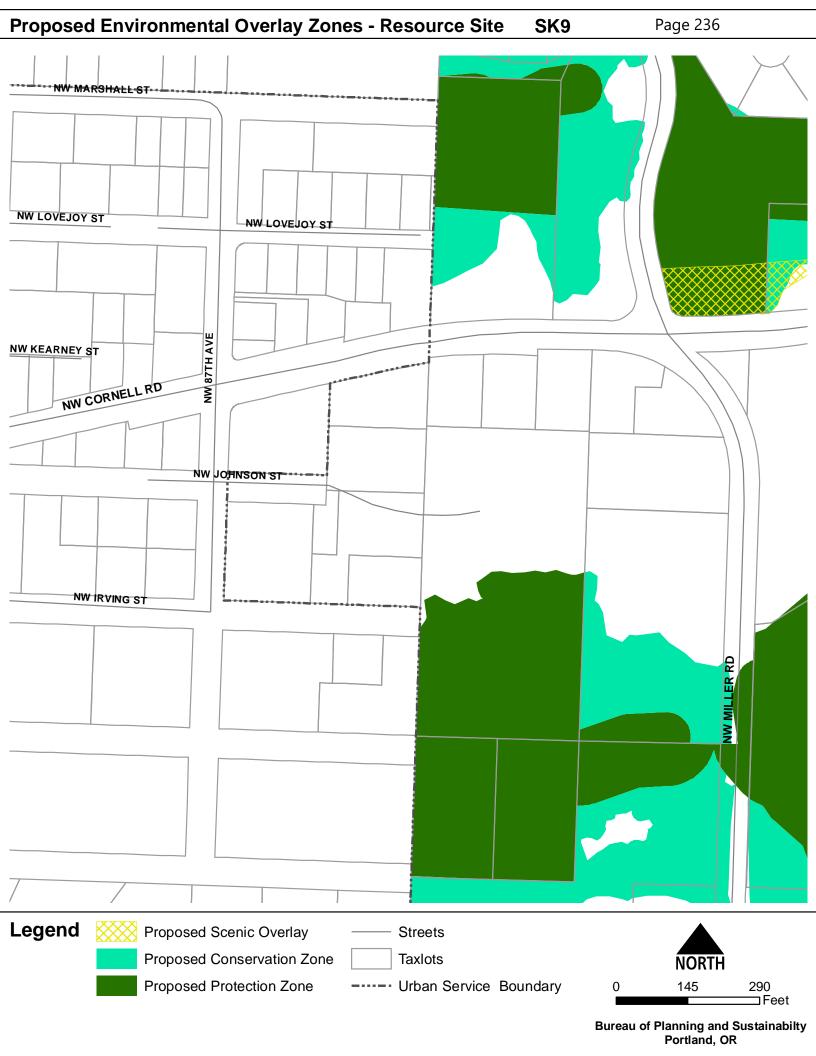


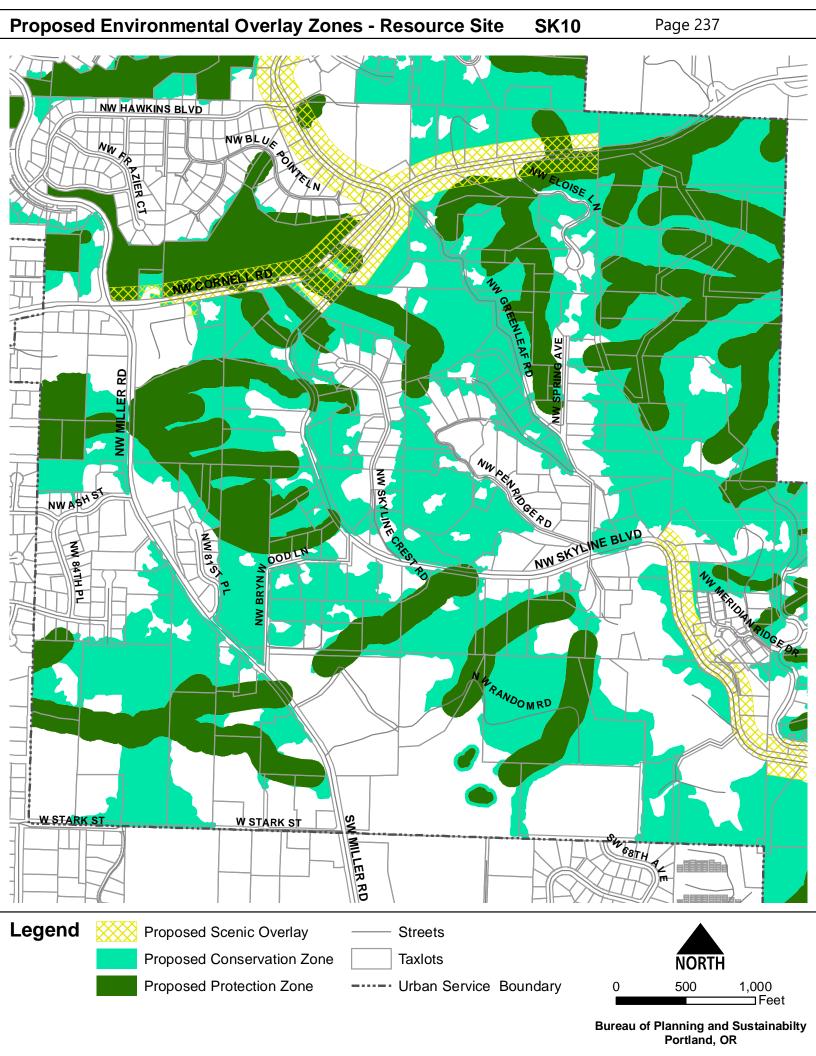


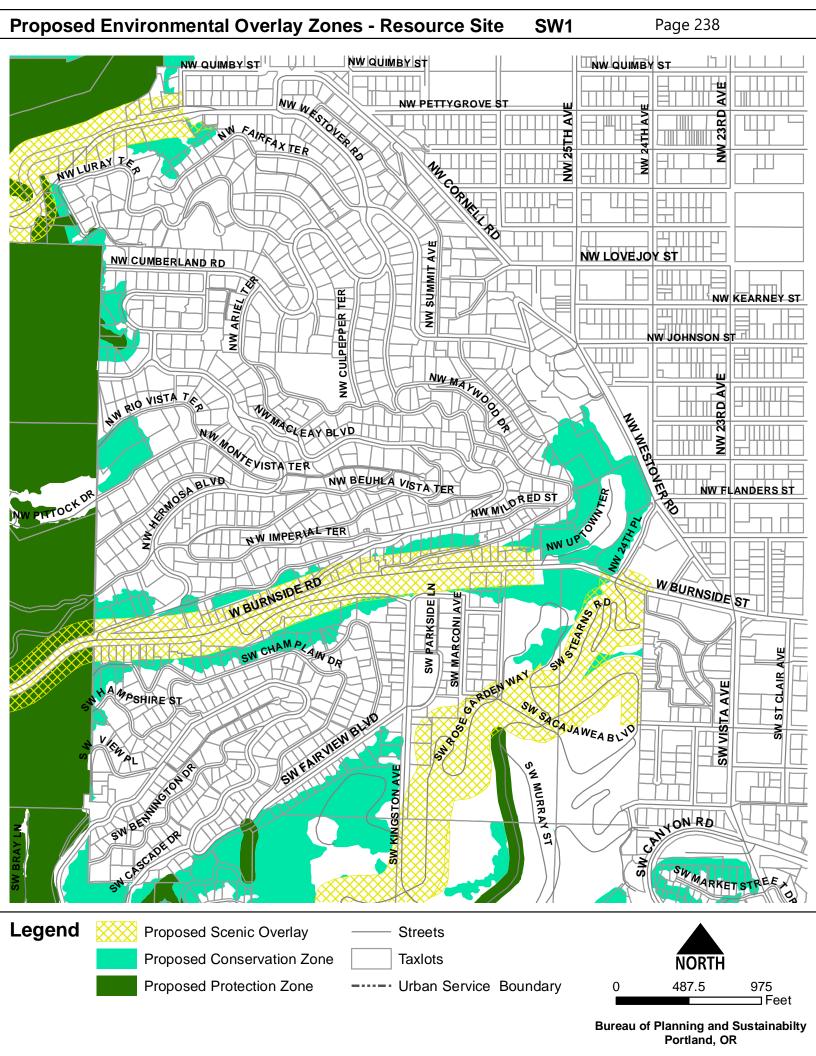


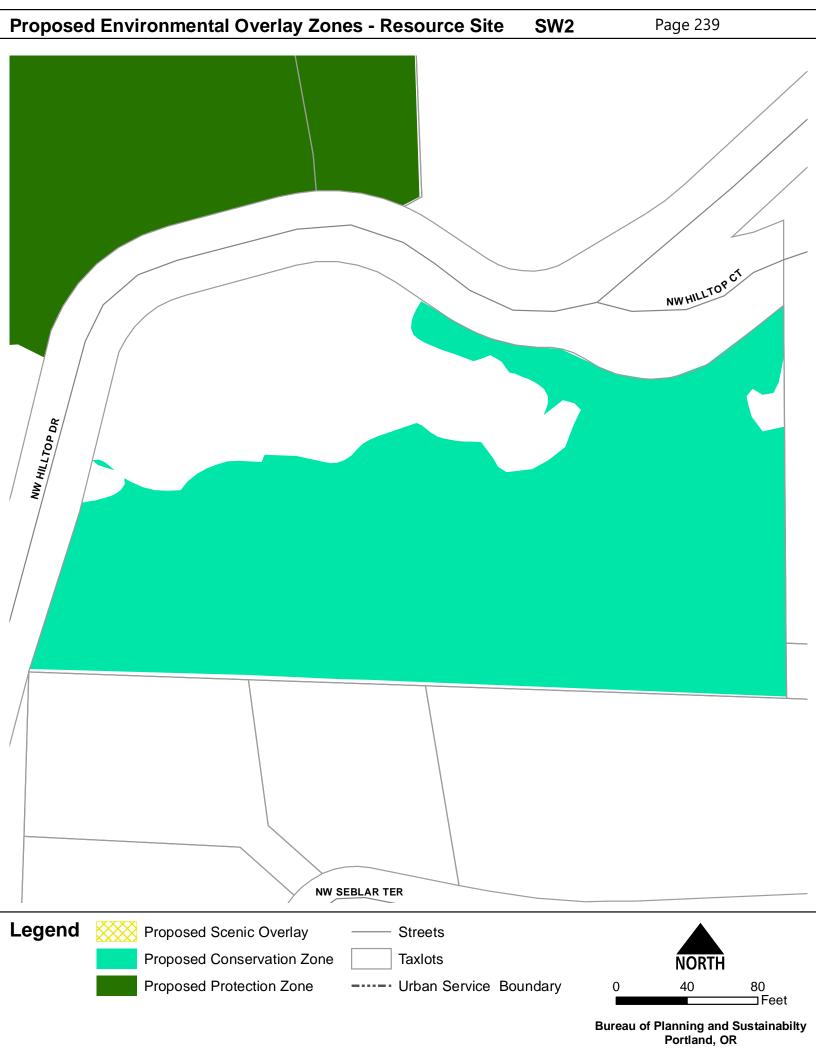




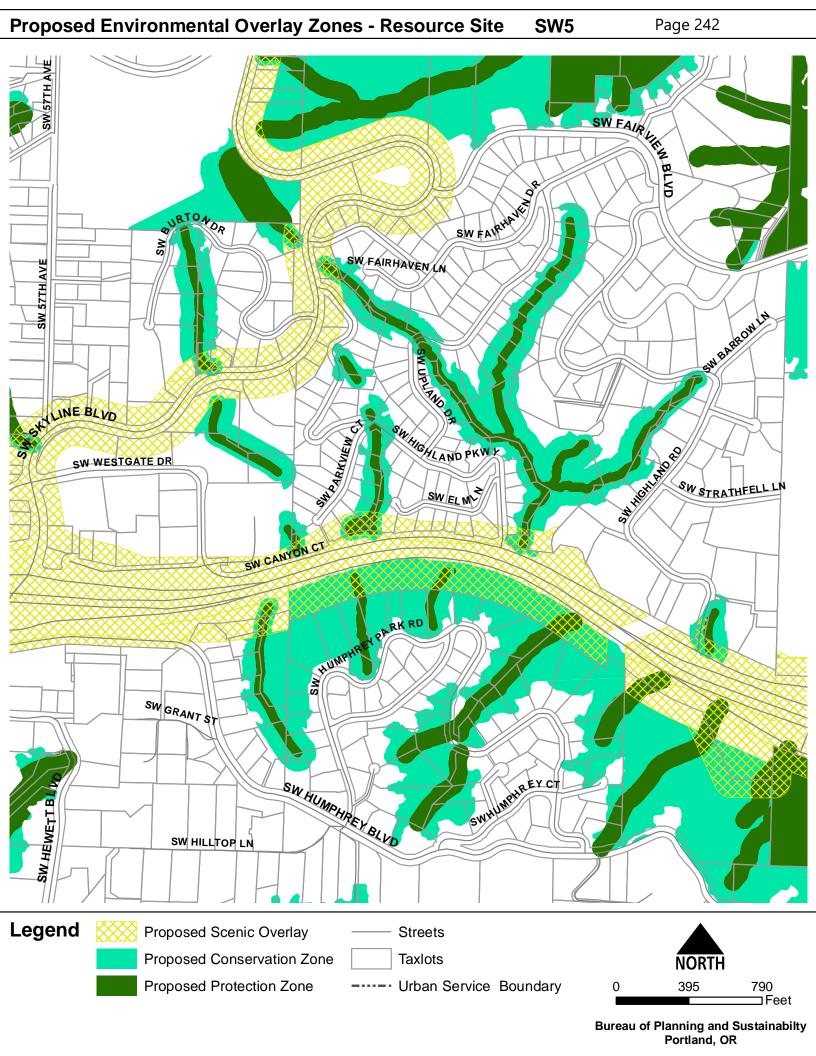




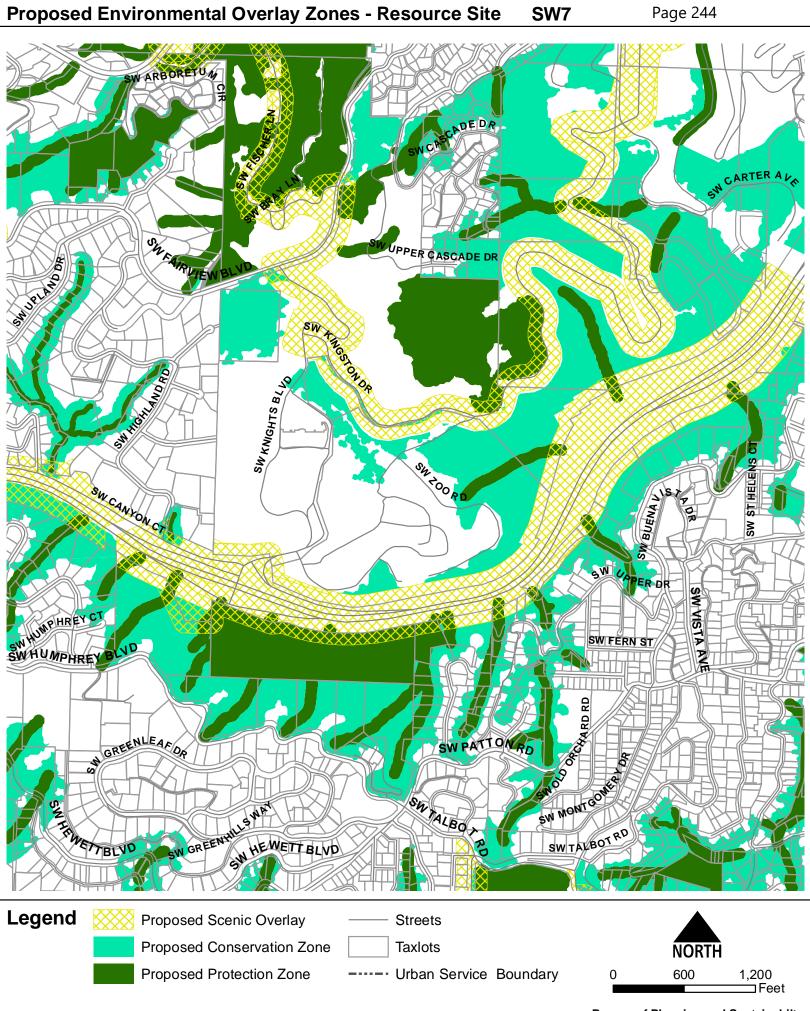




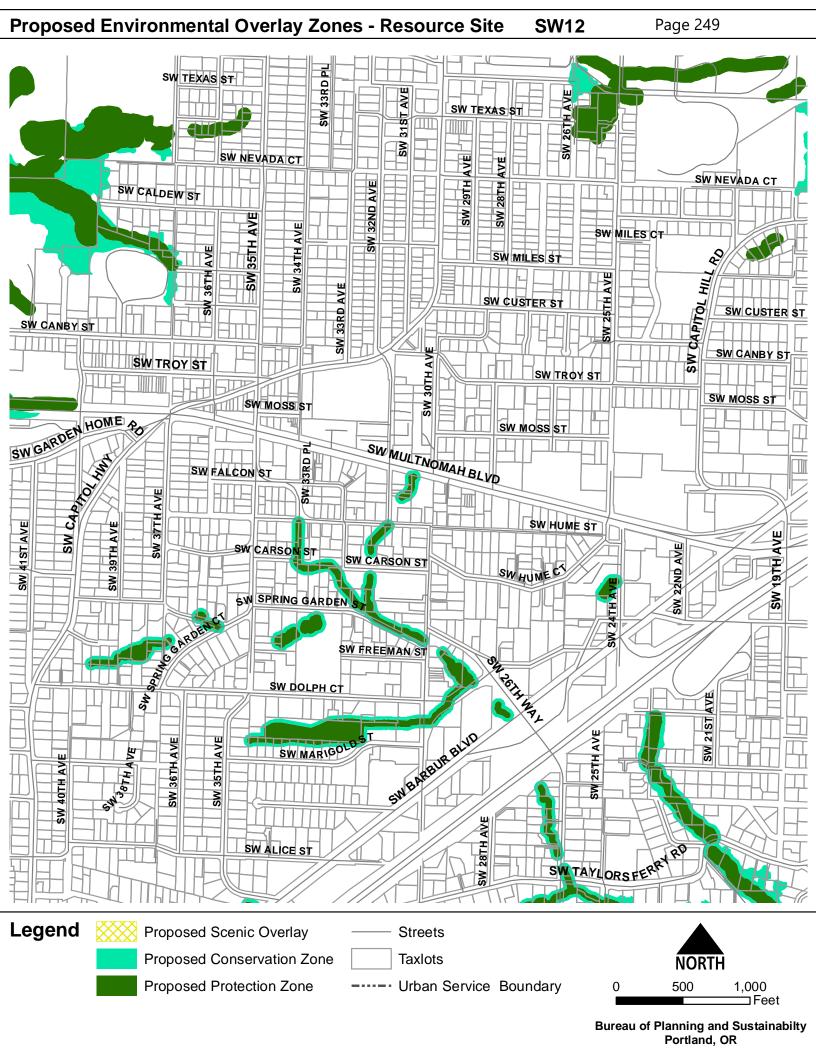


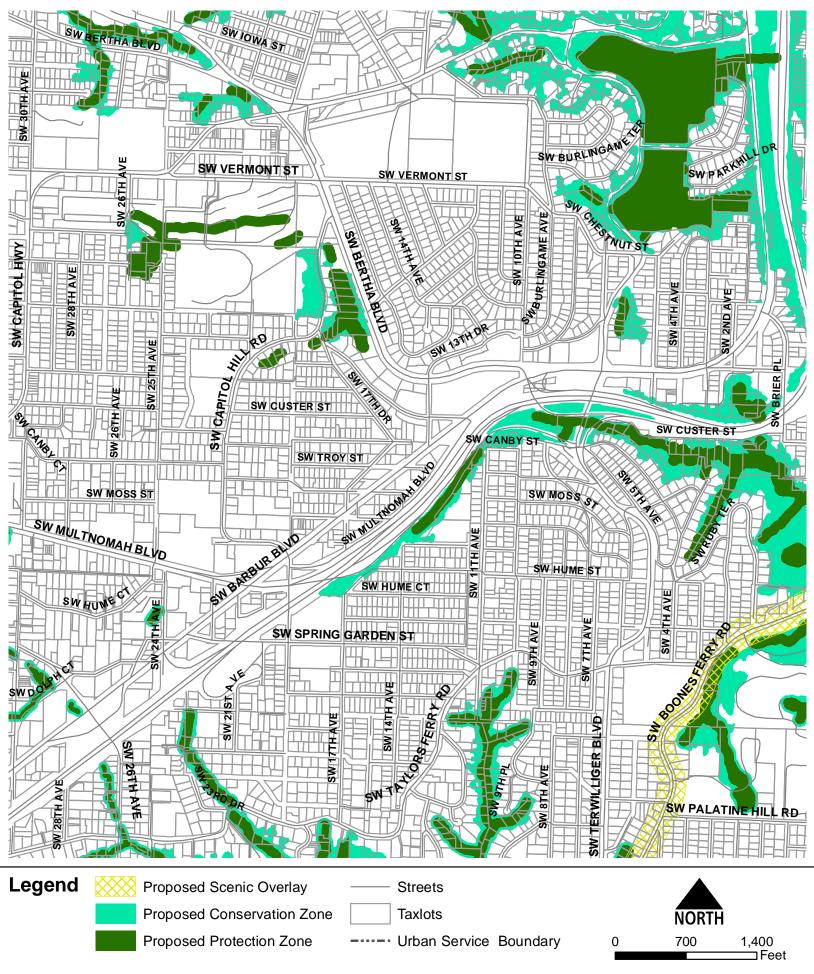


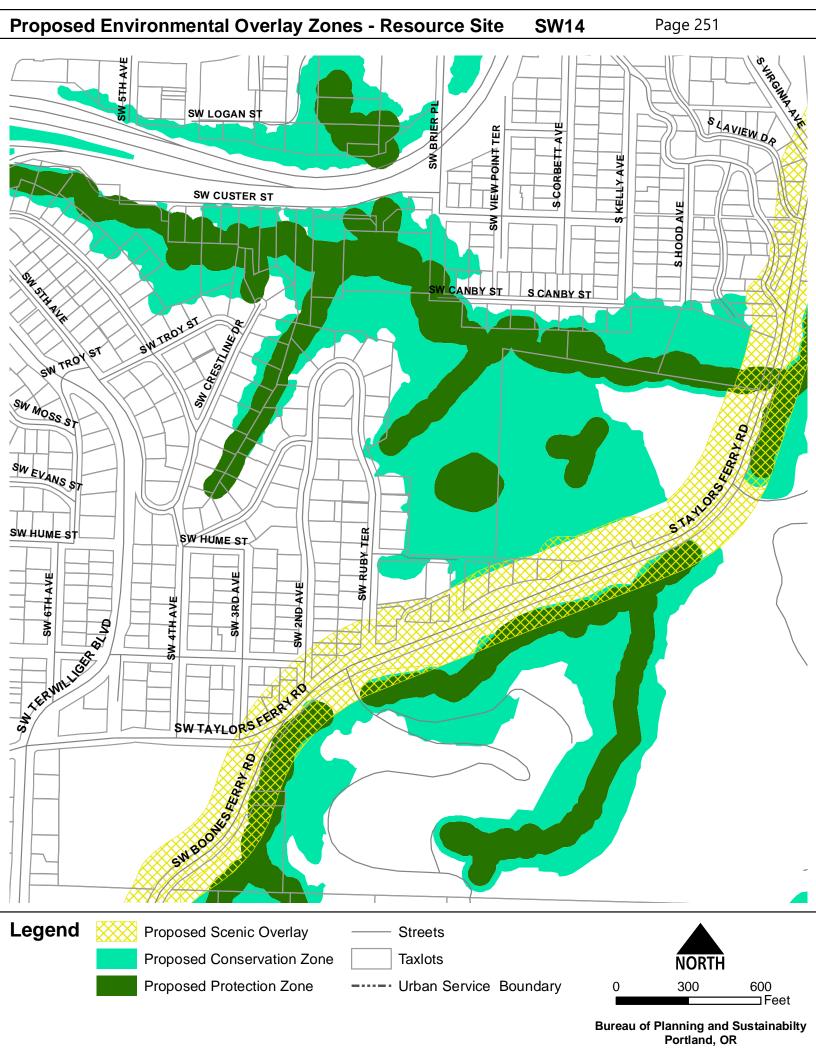


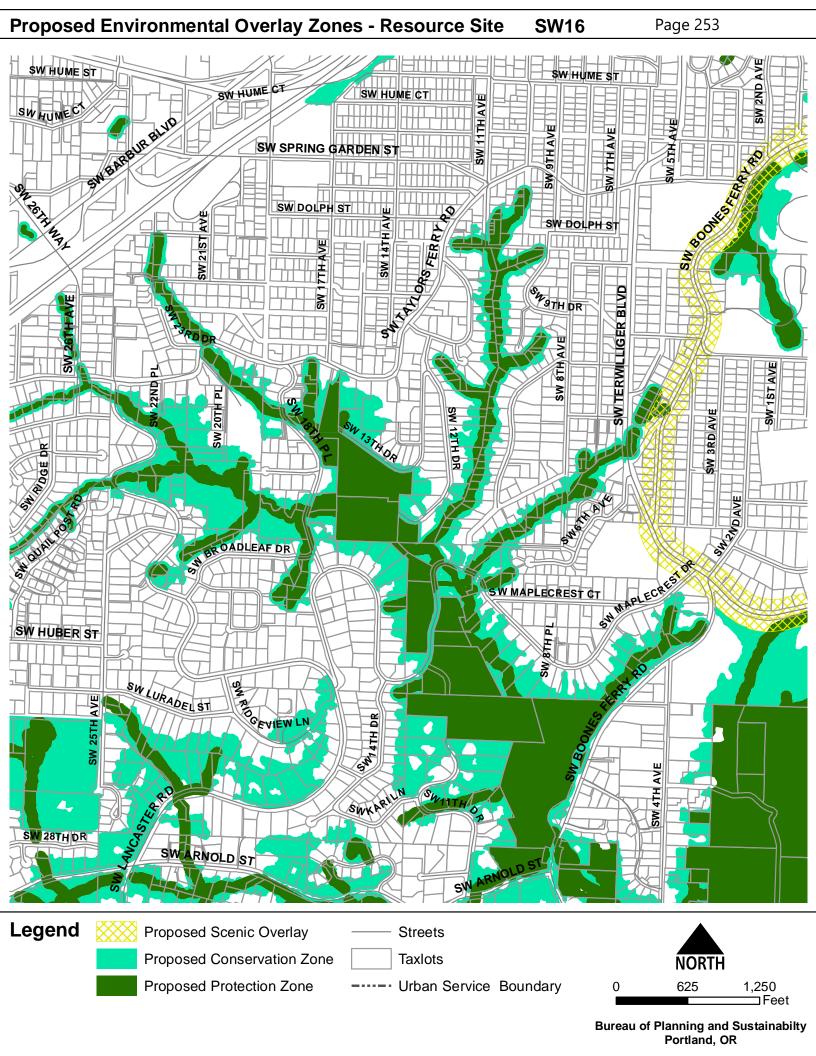


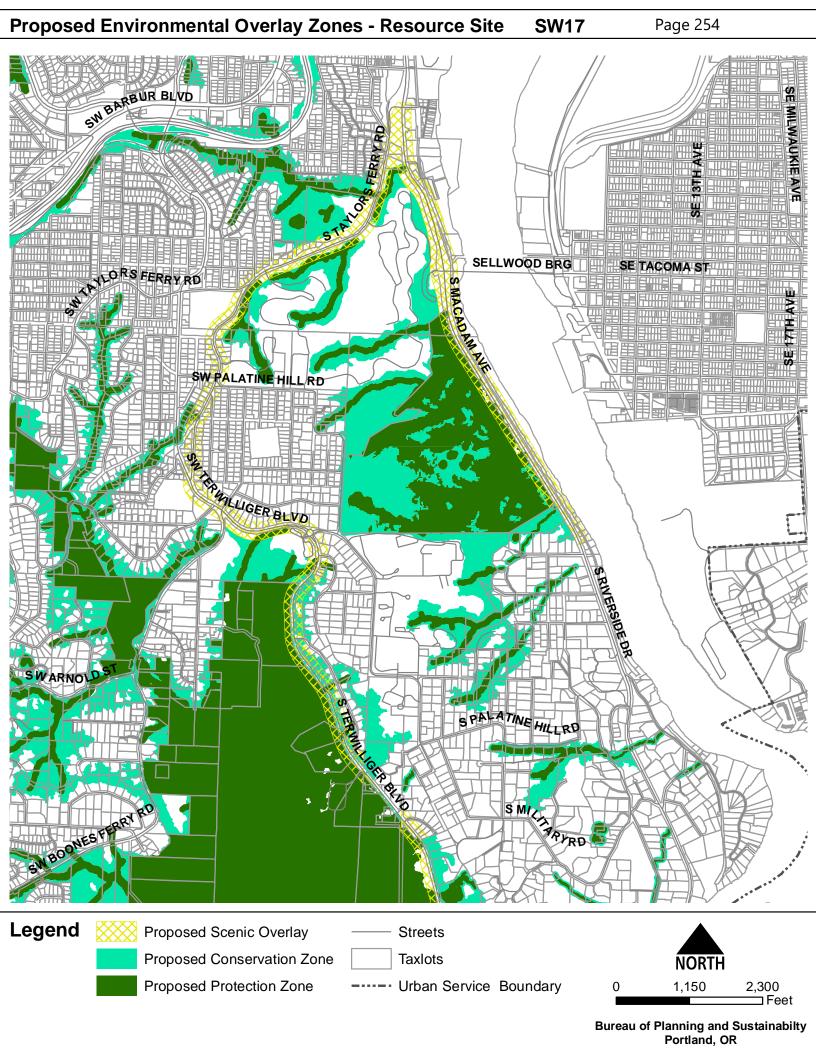
Portland, OR

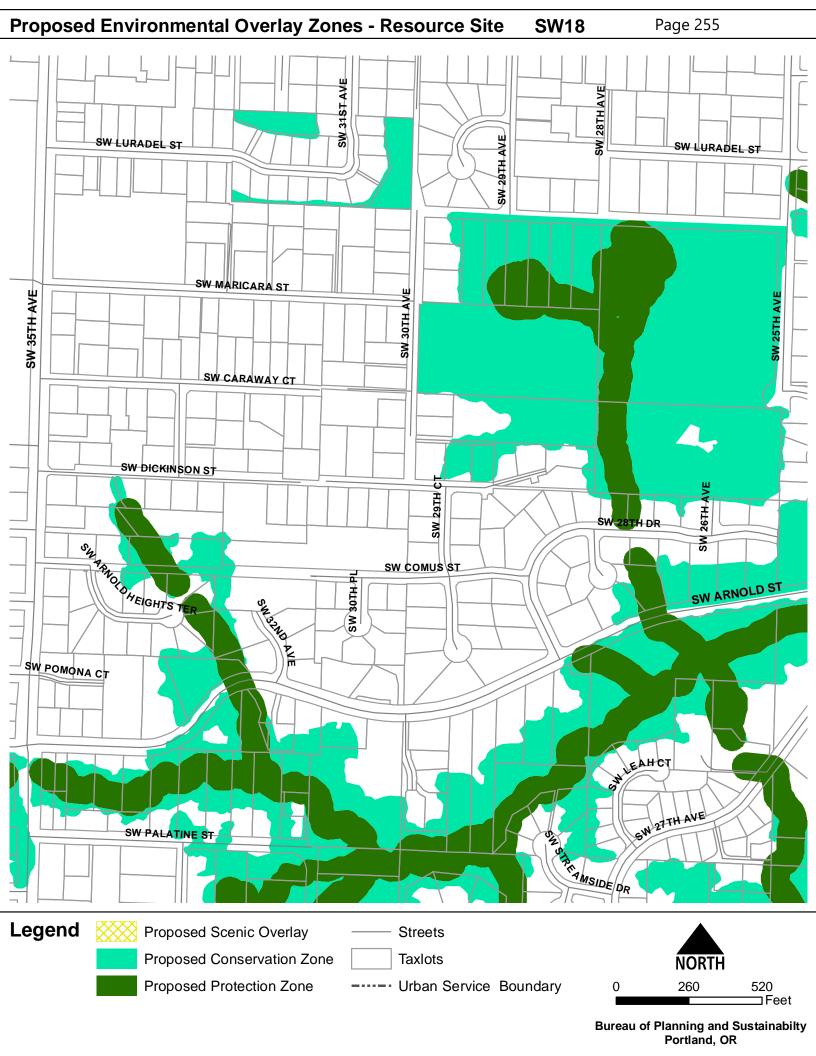


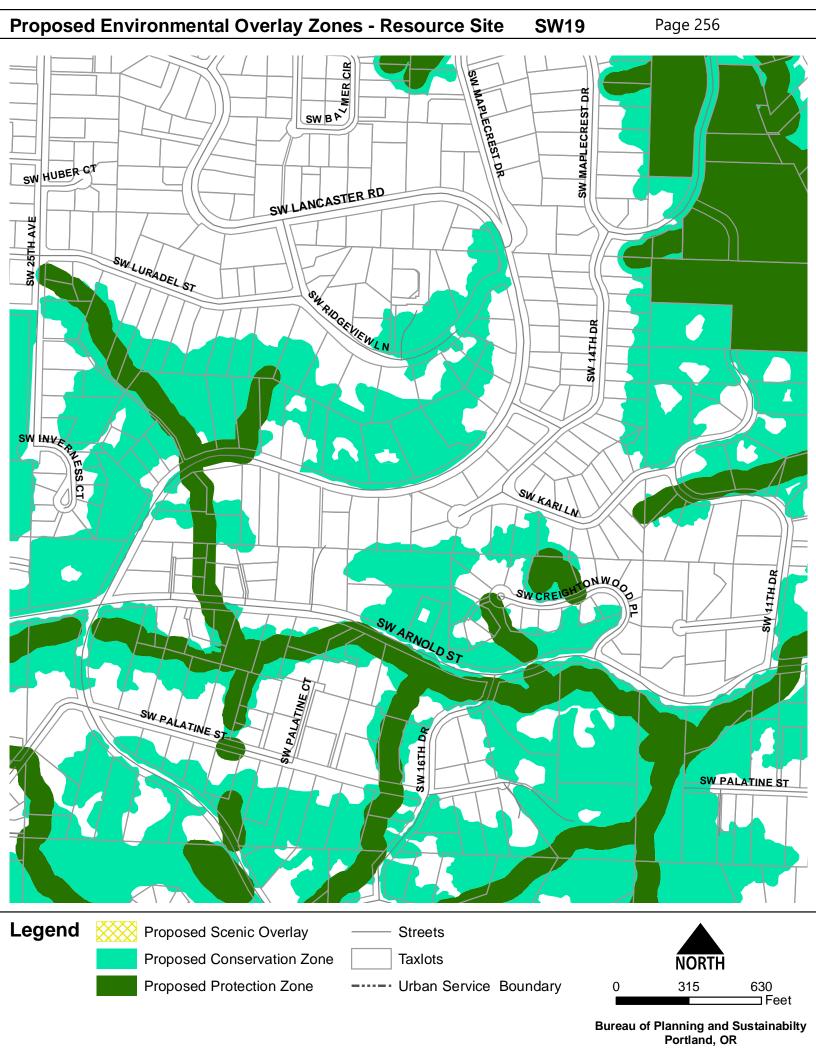


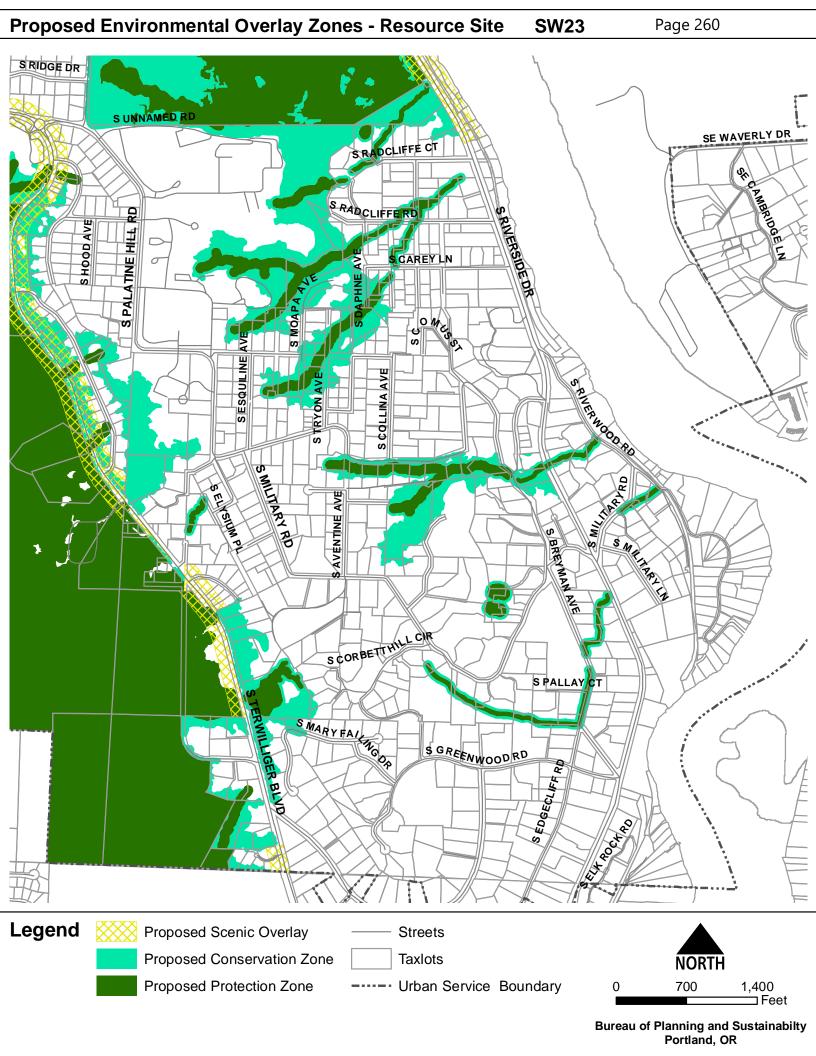


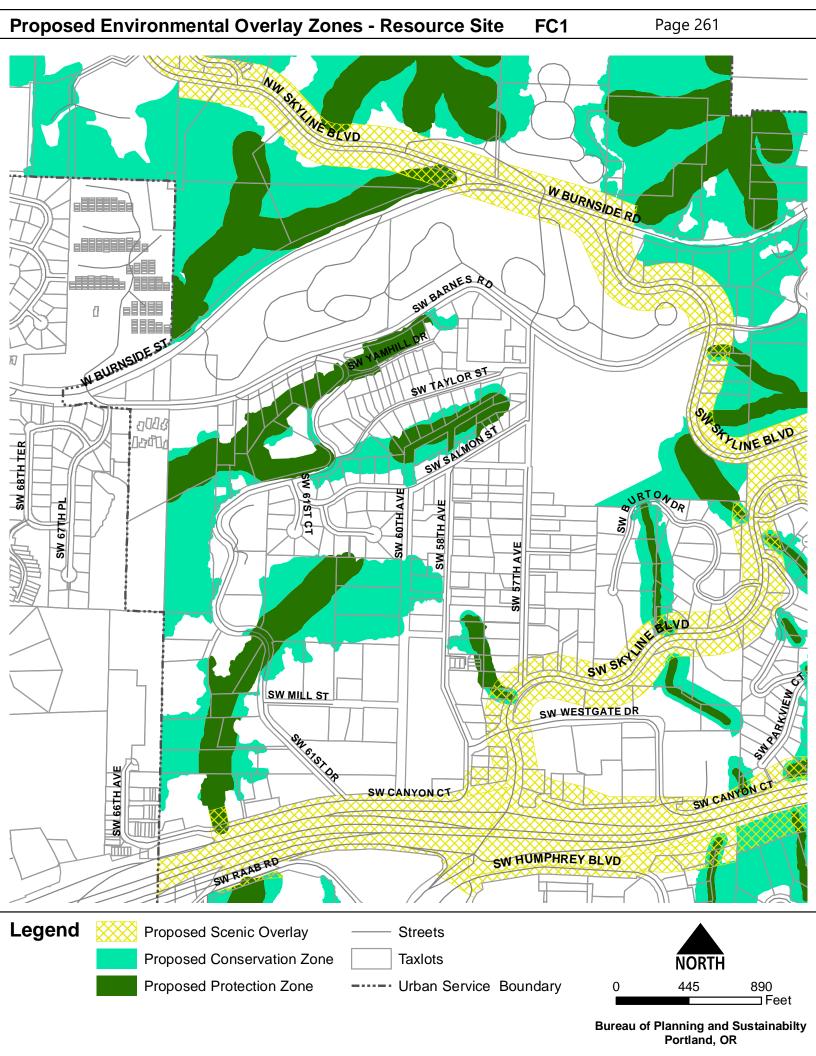


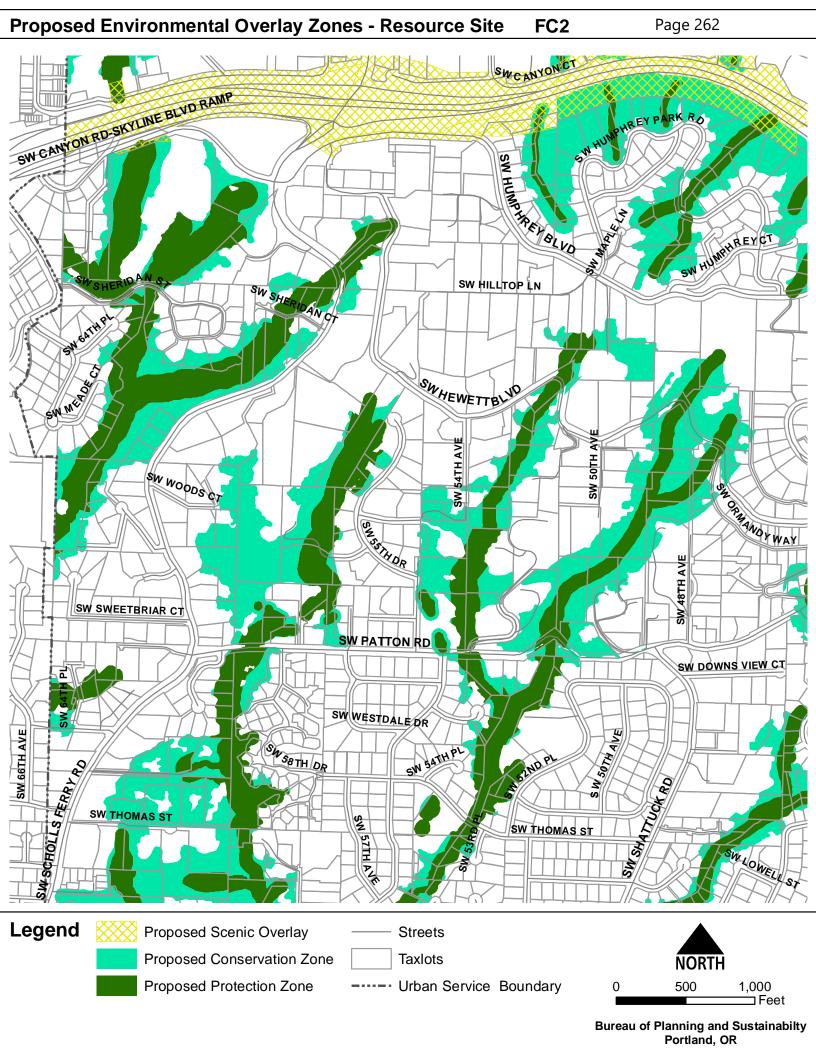


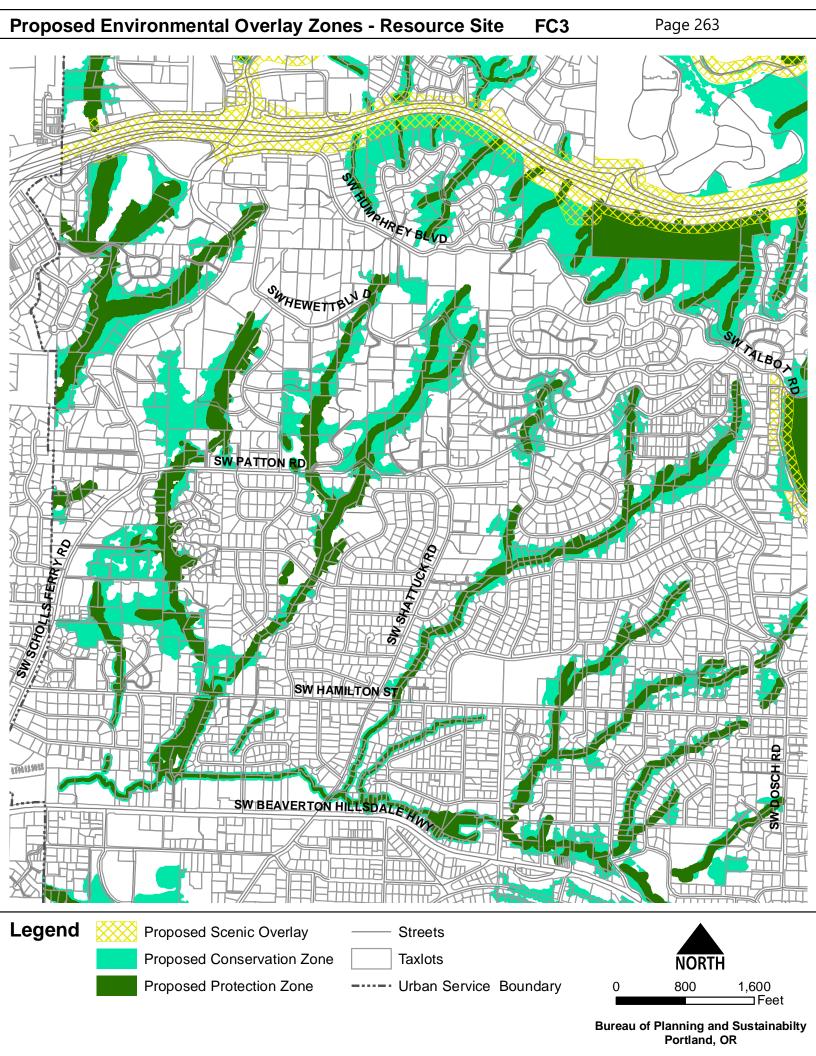


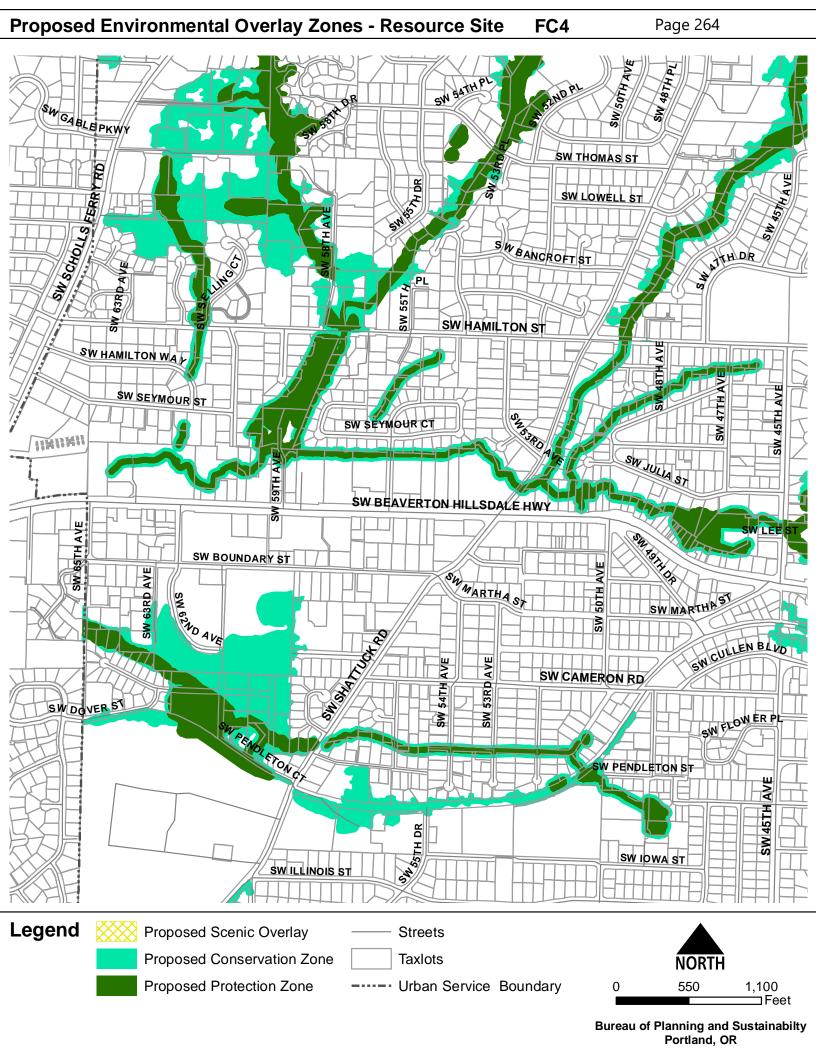


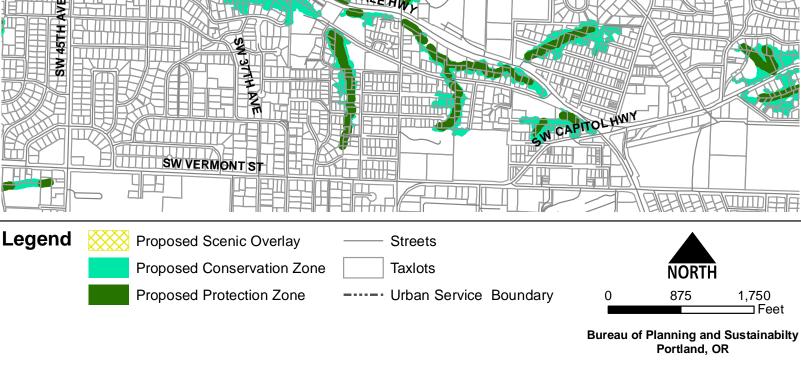


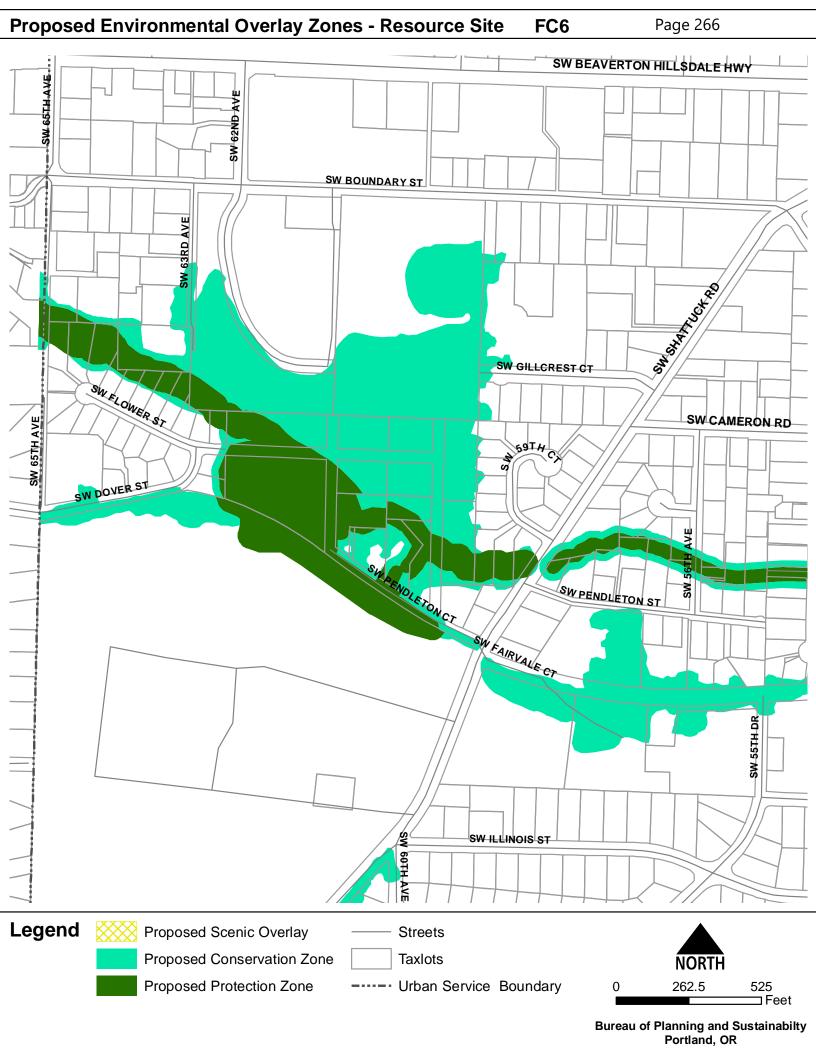


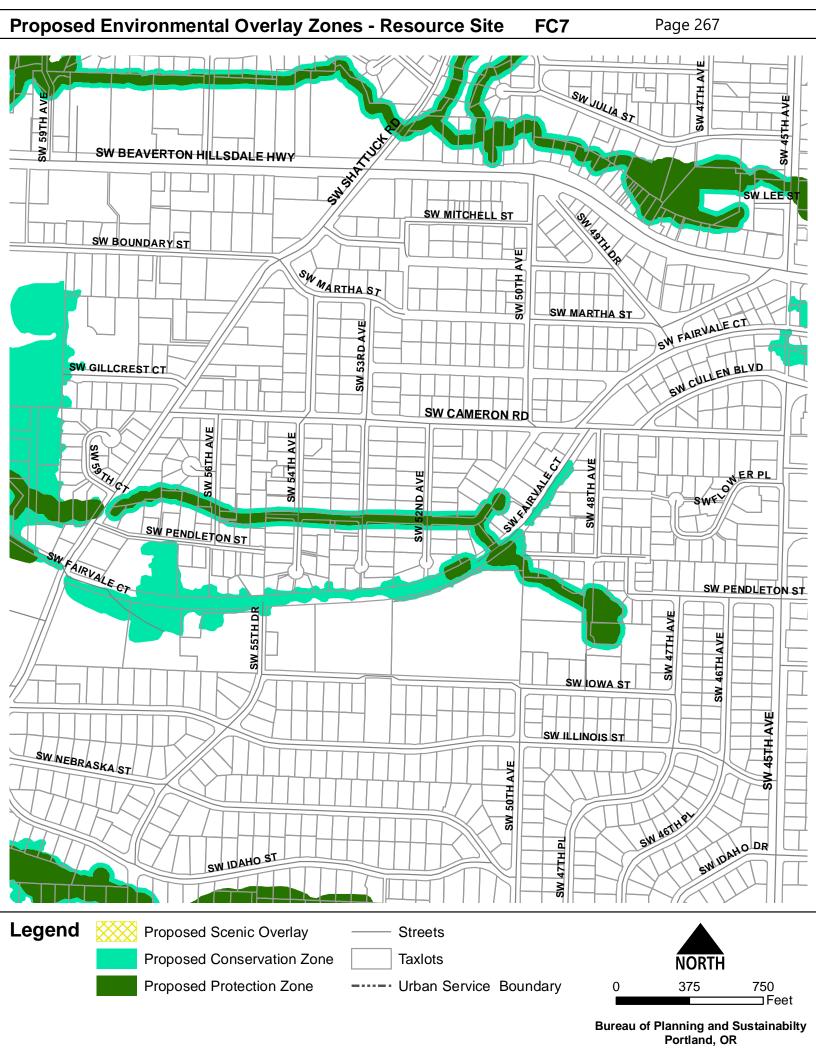


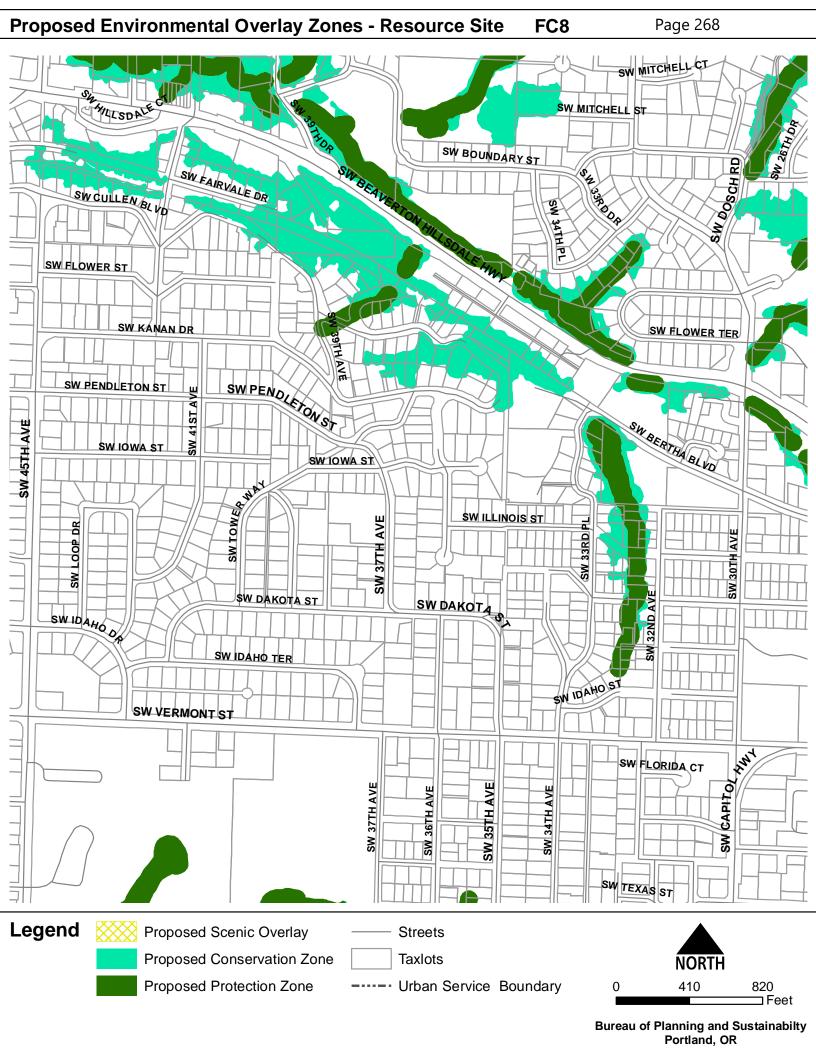


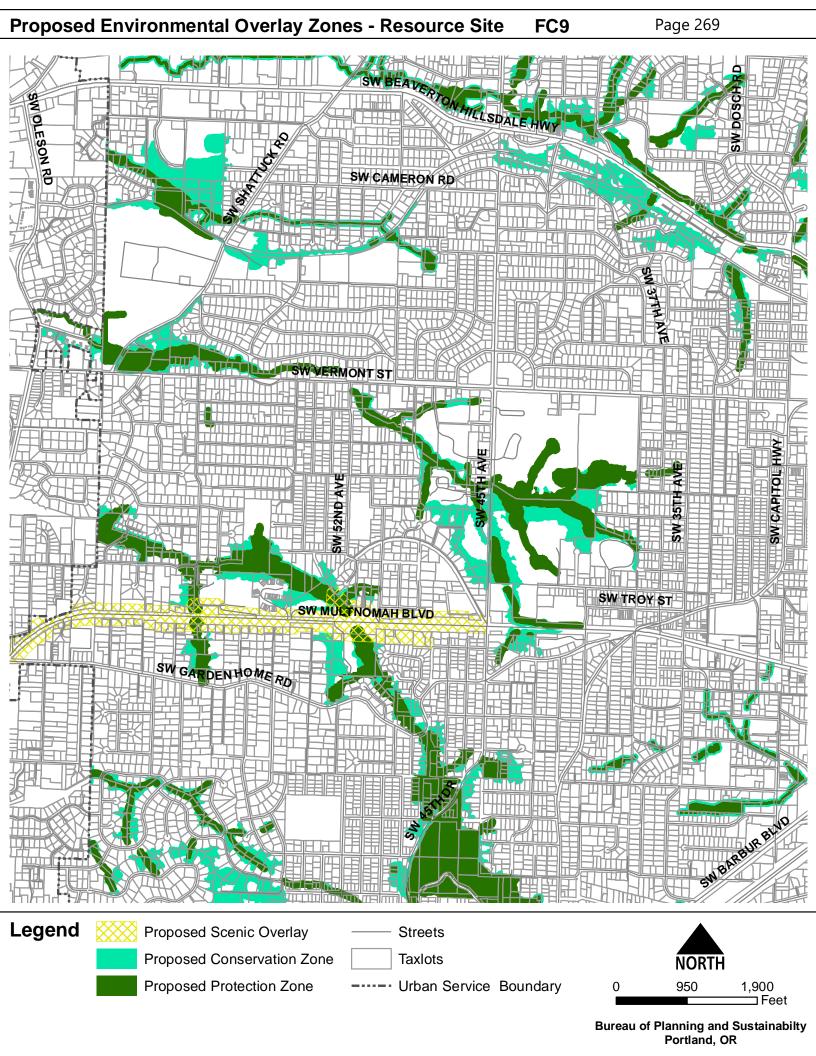


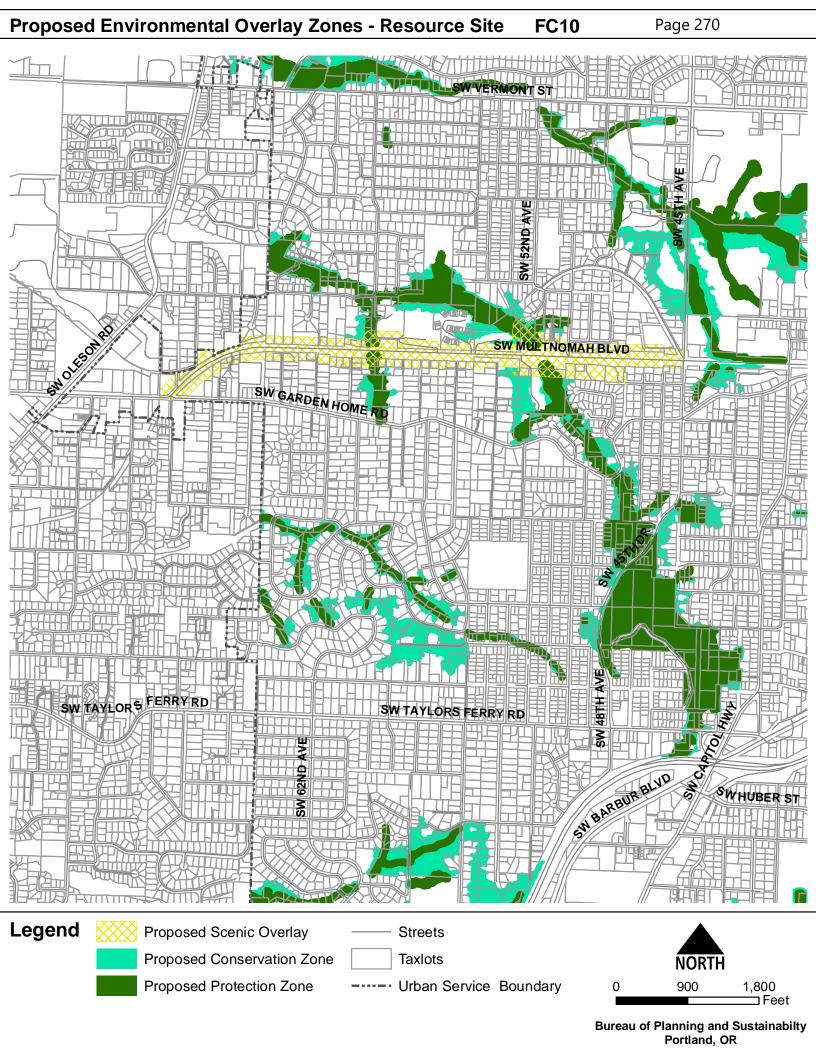


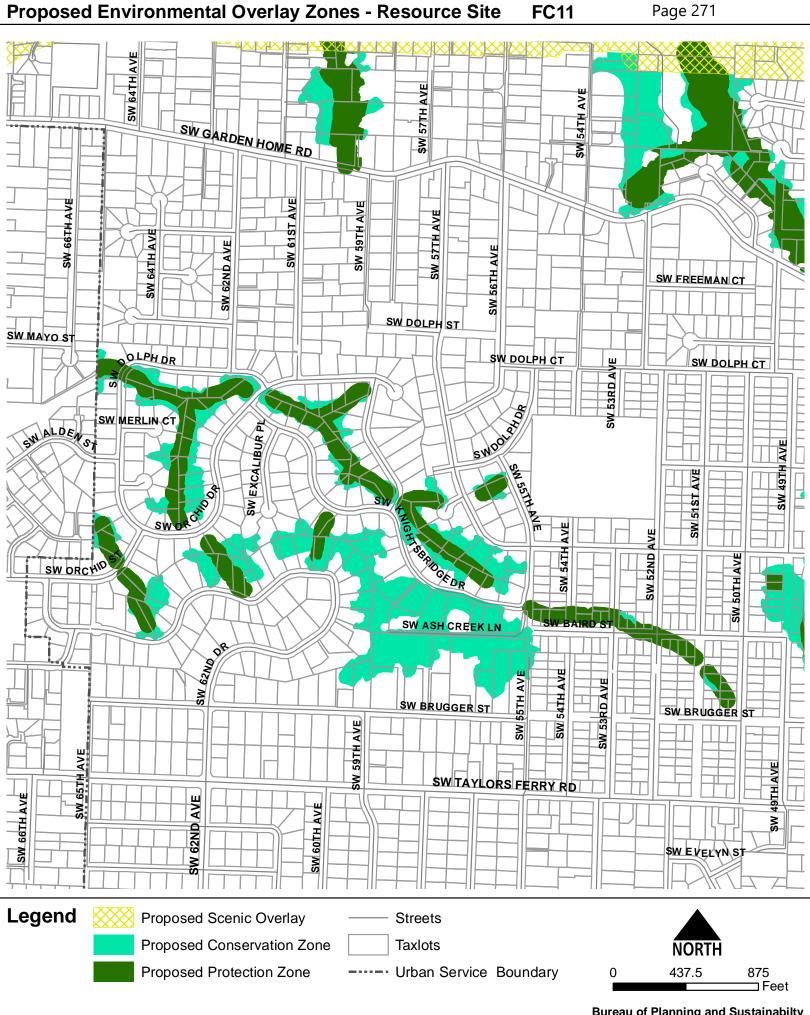


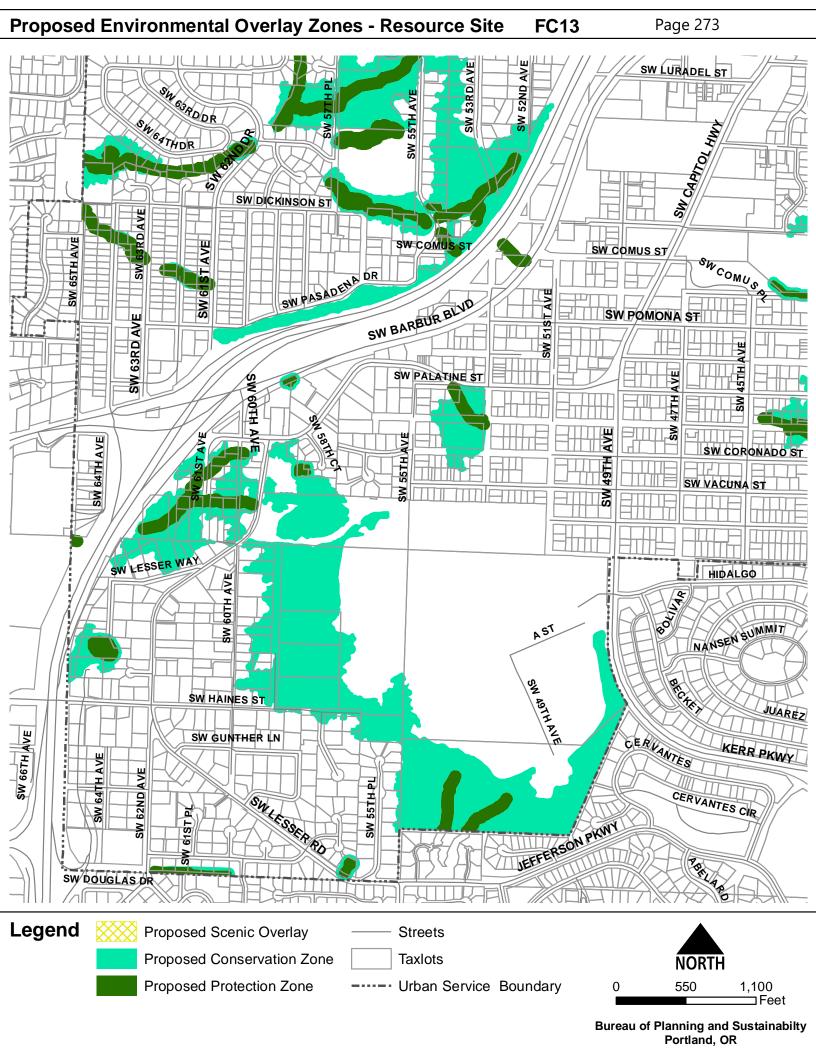




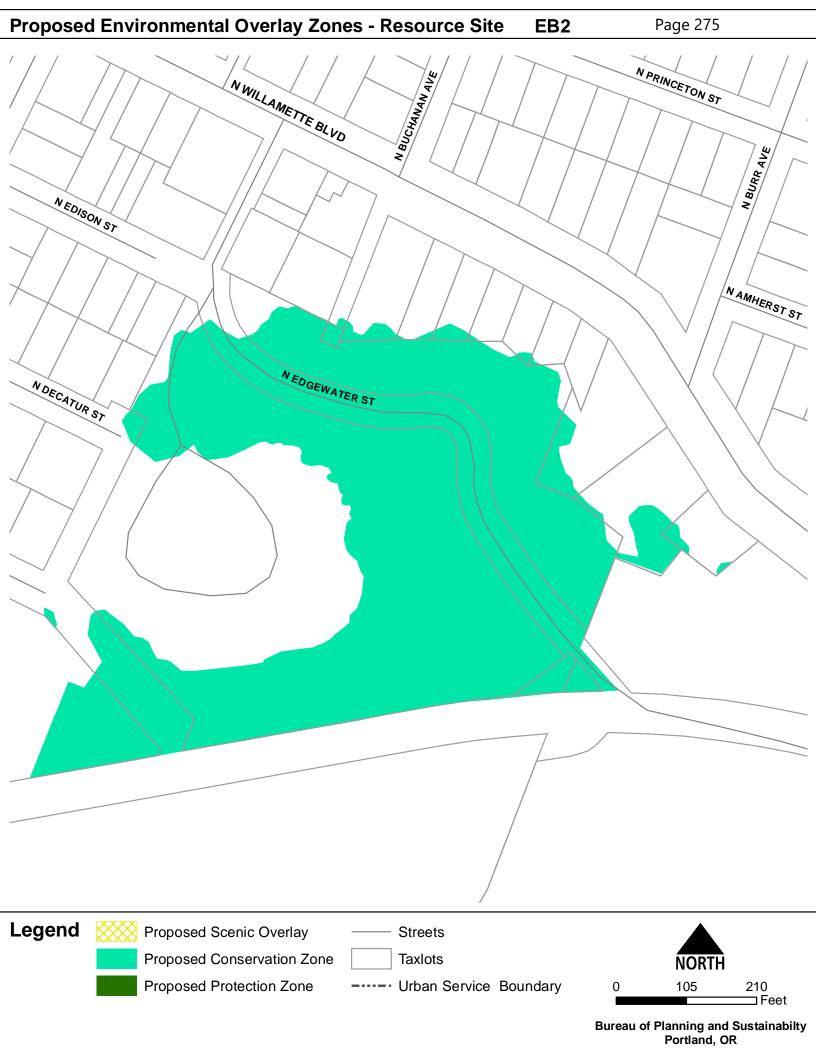


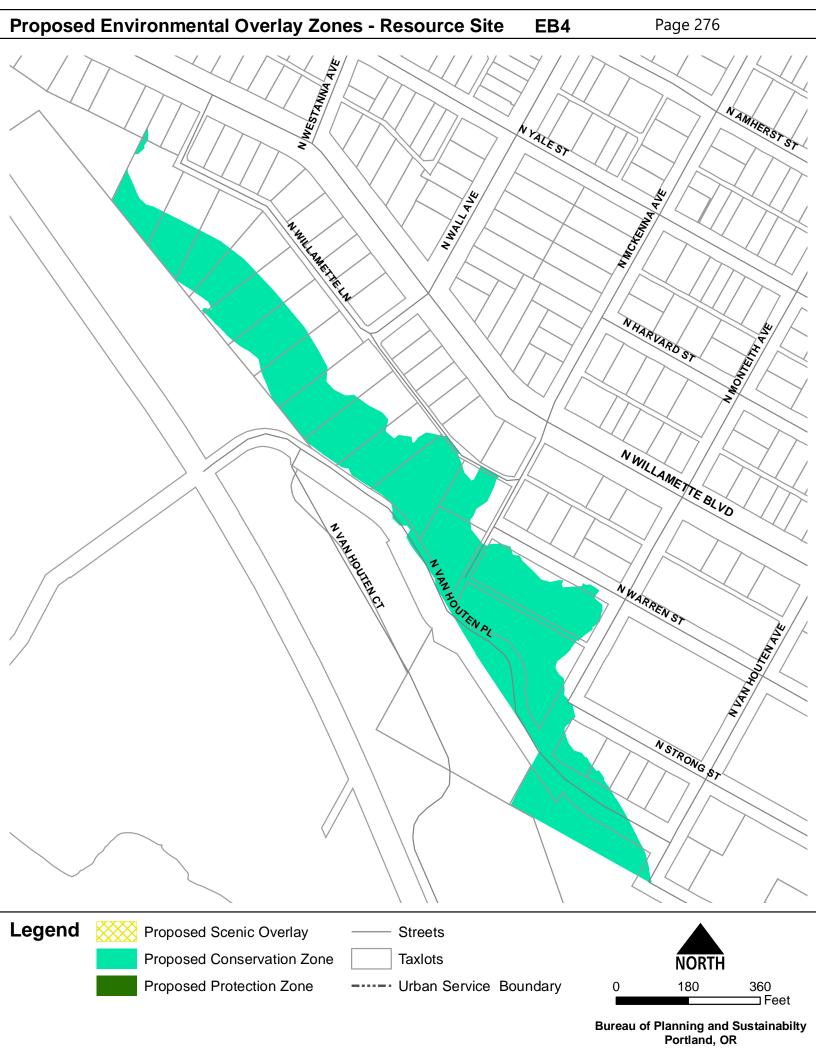


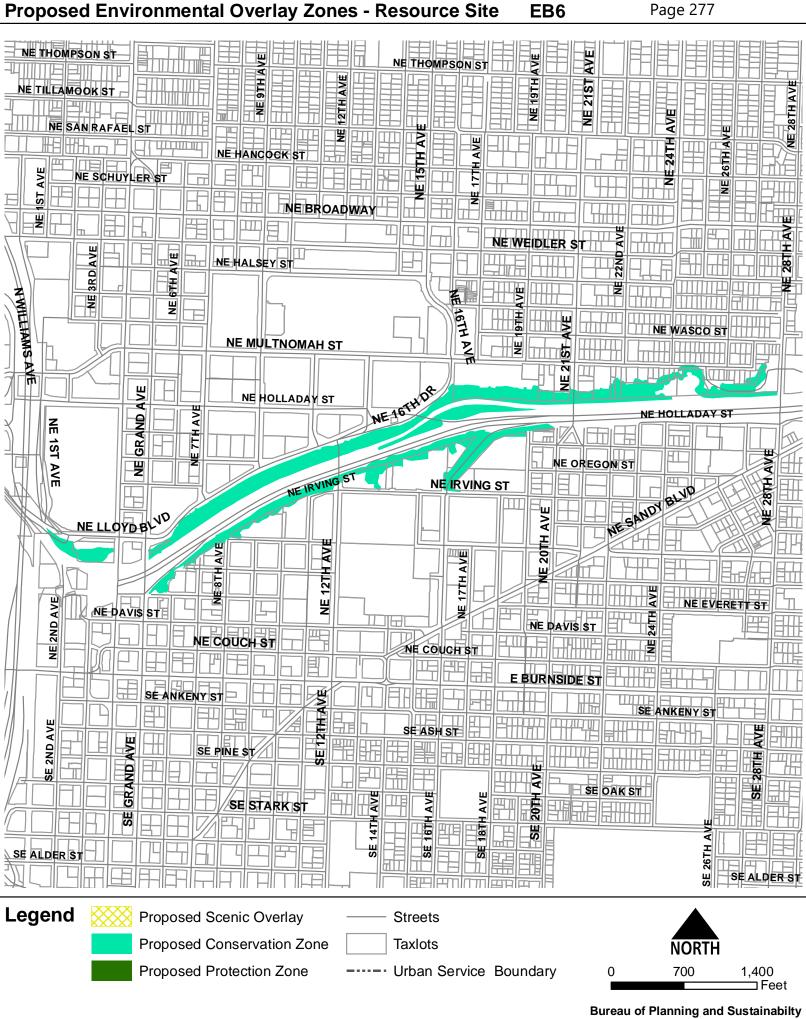




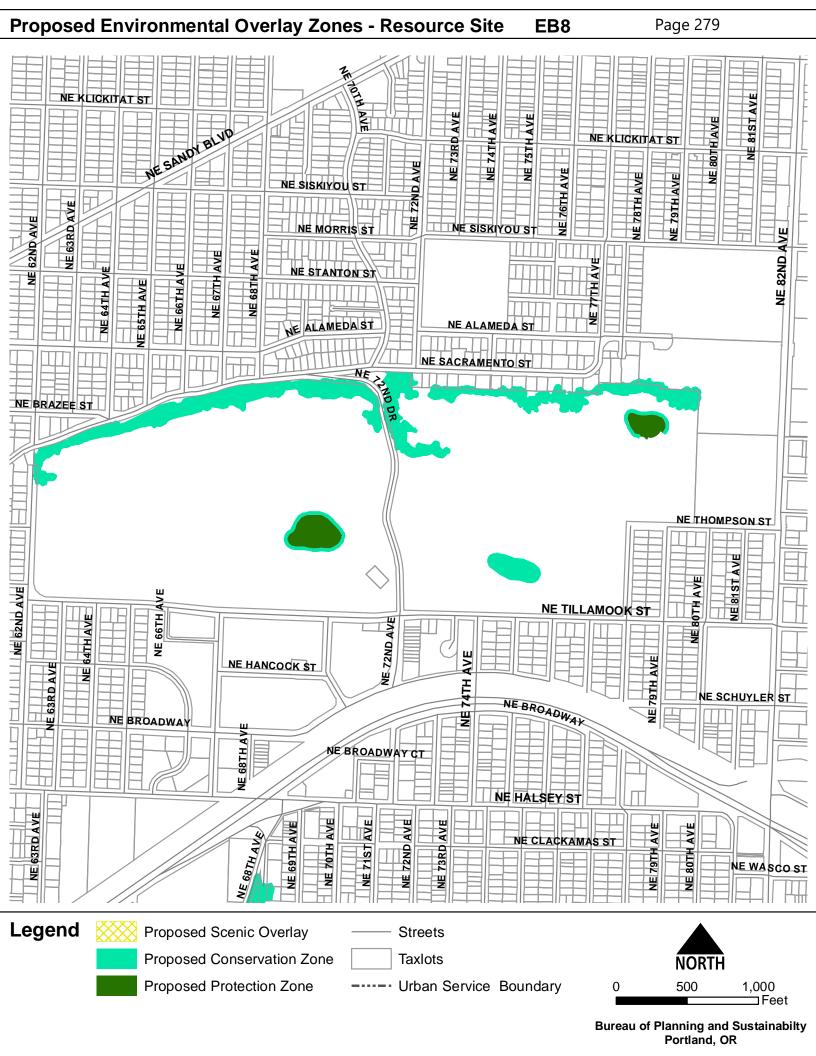


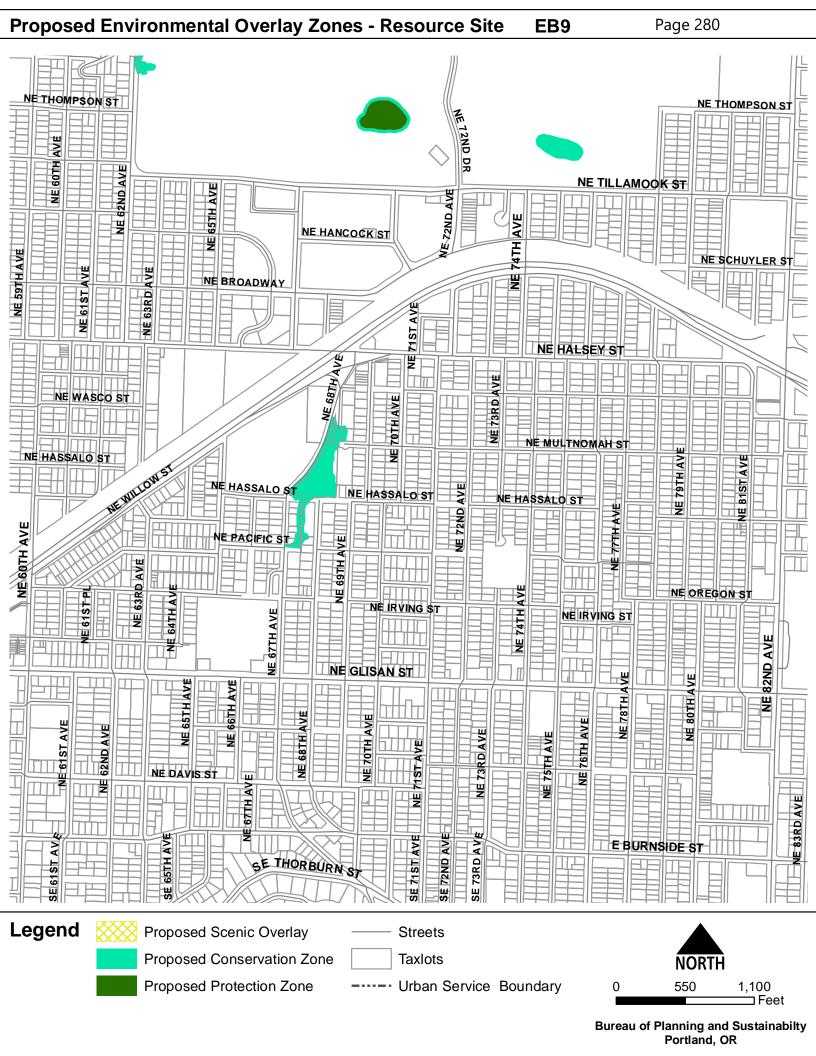


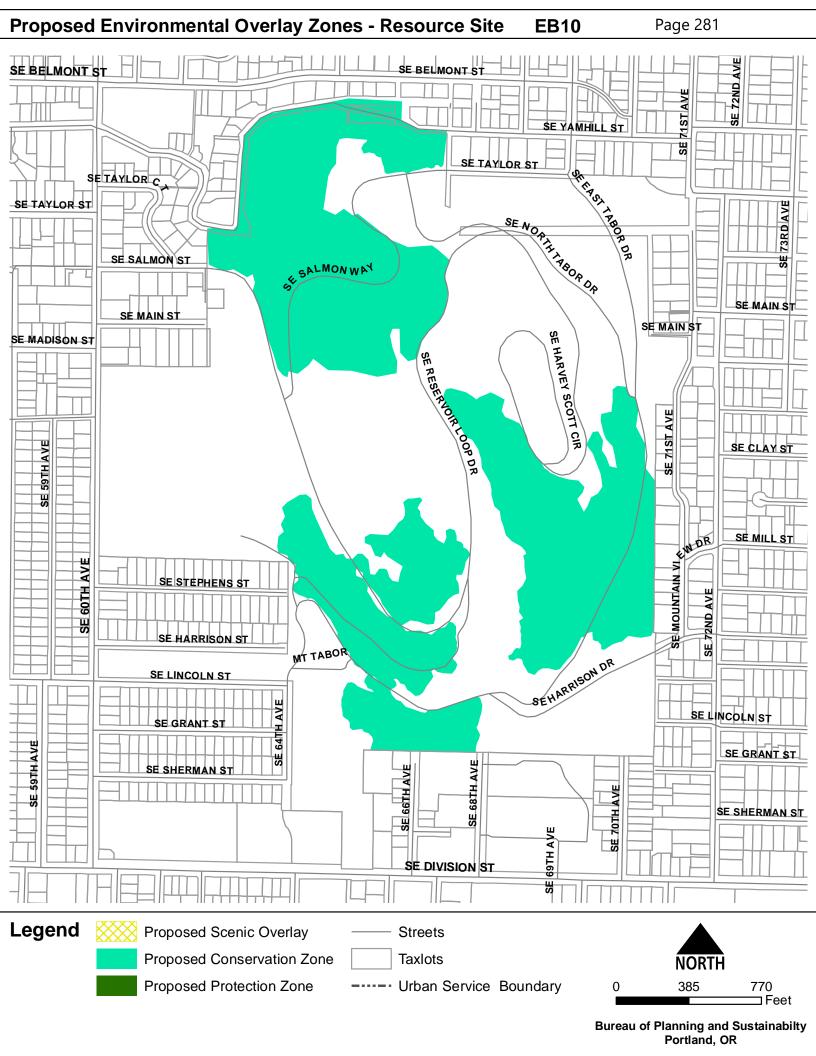


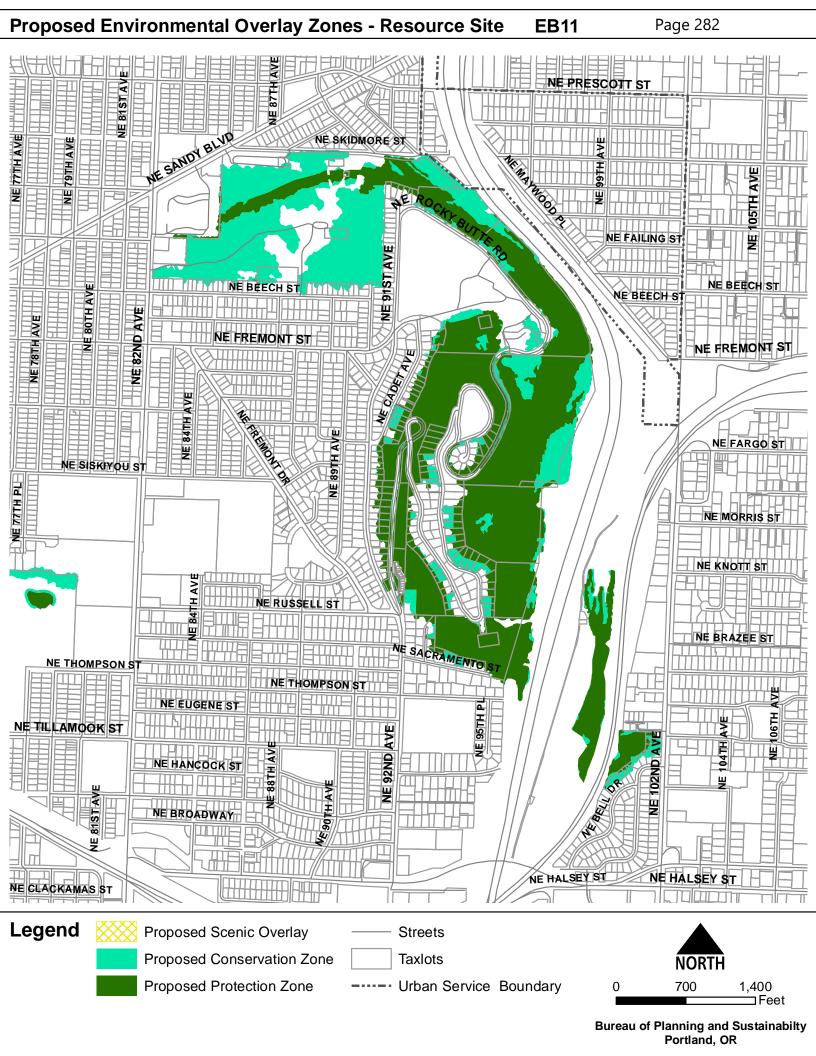


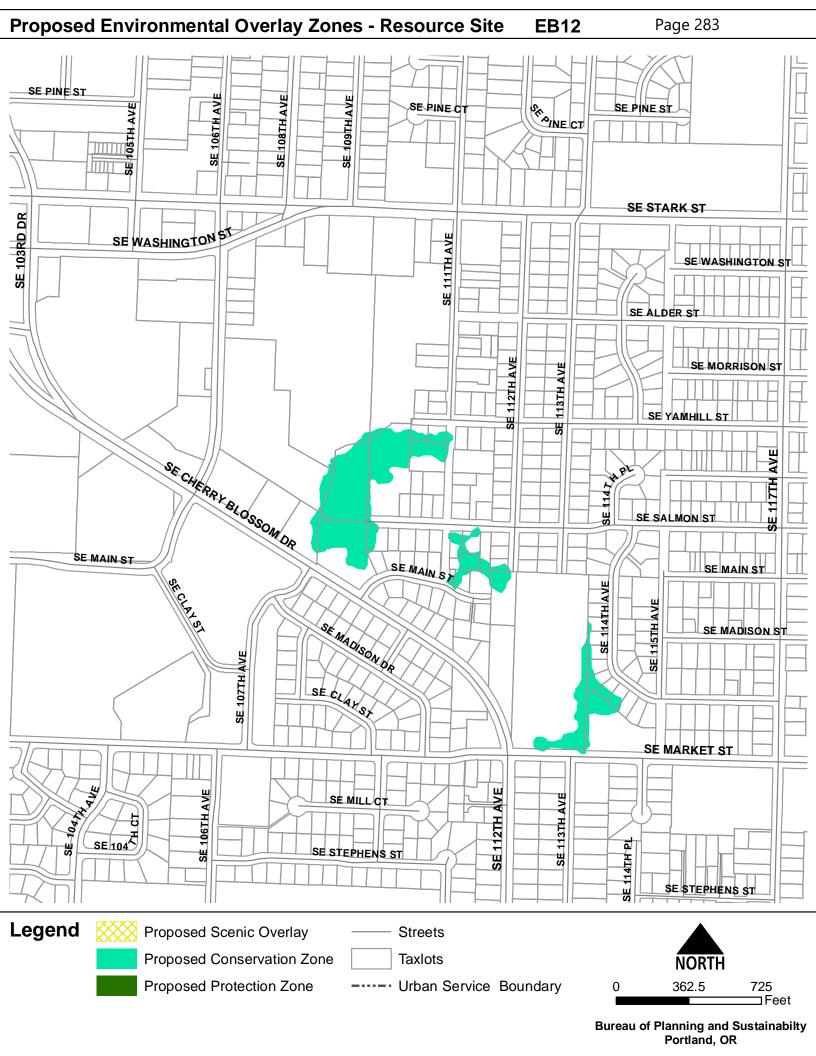


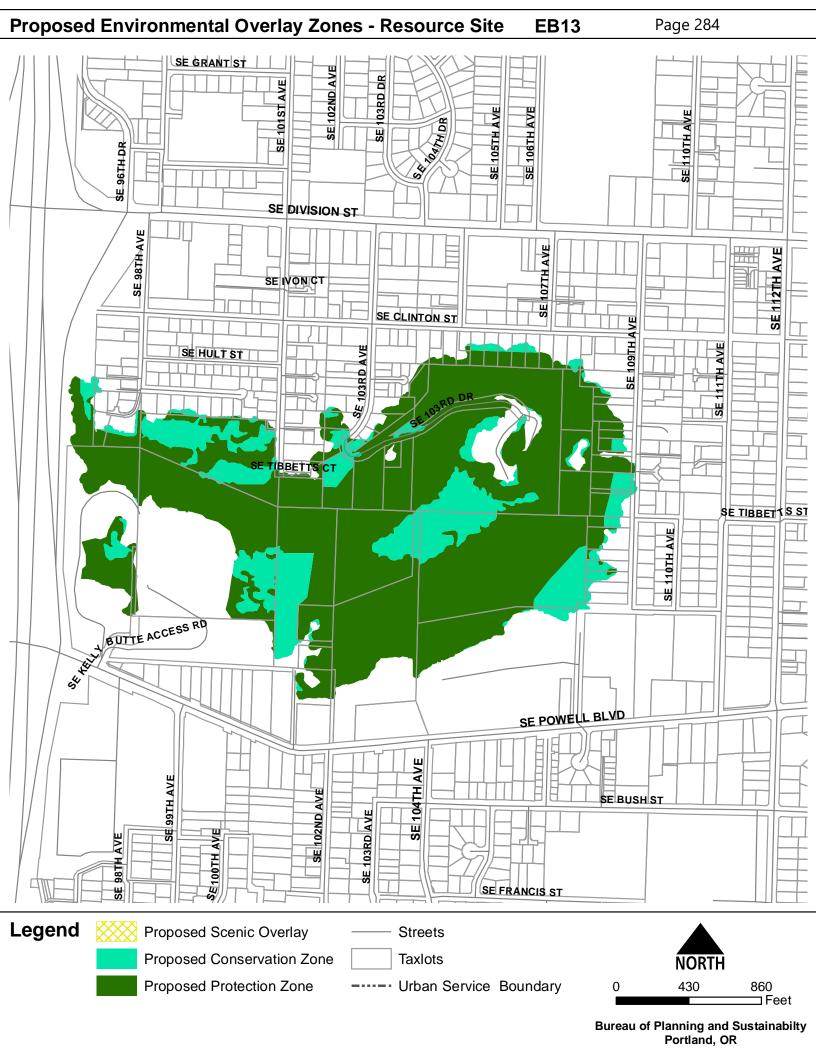




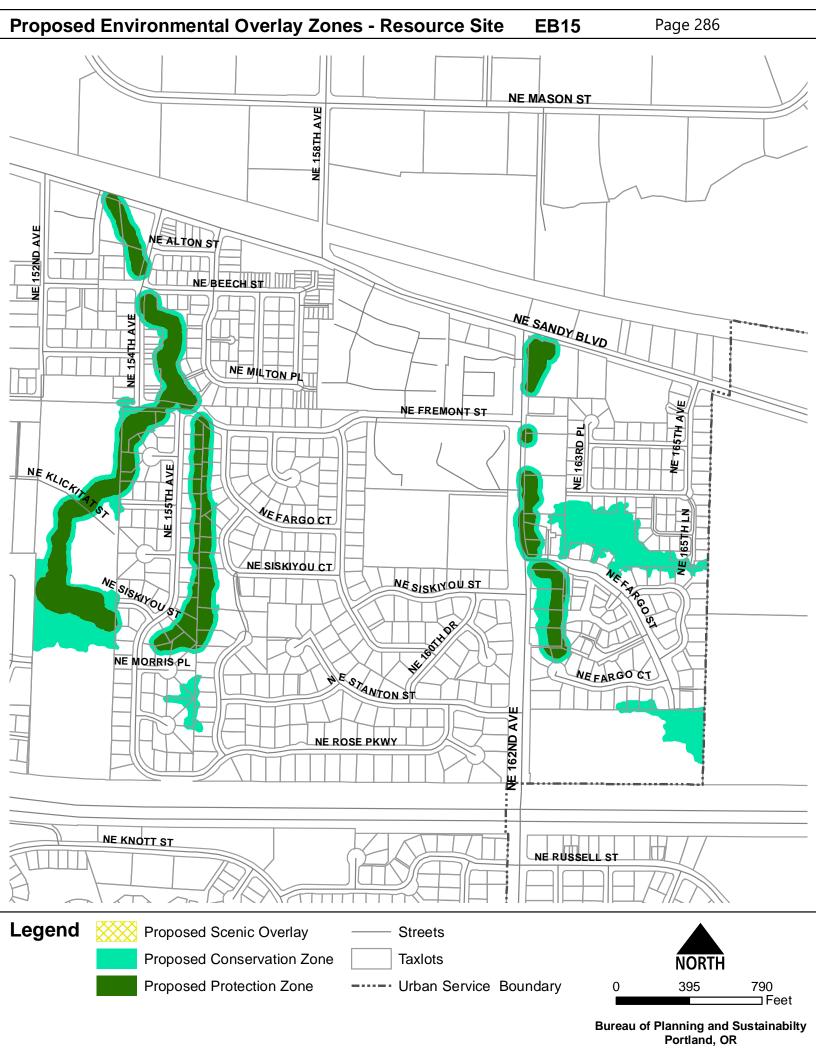


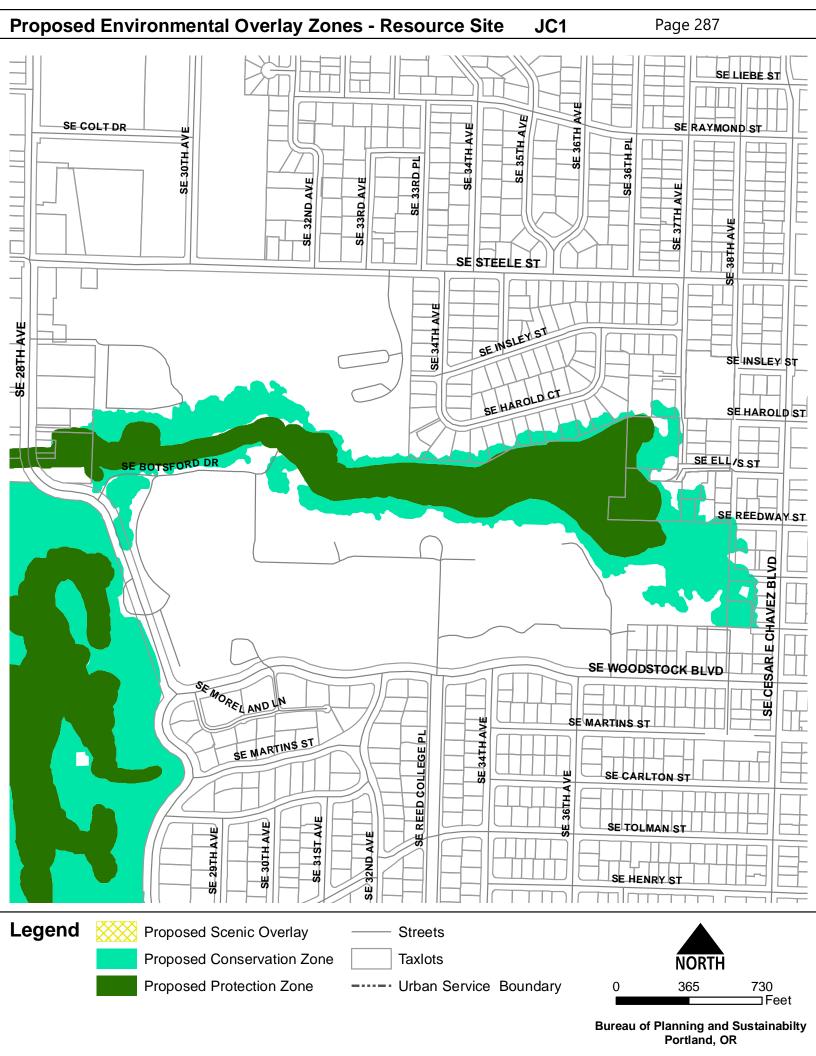


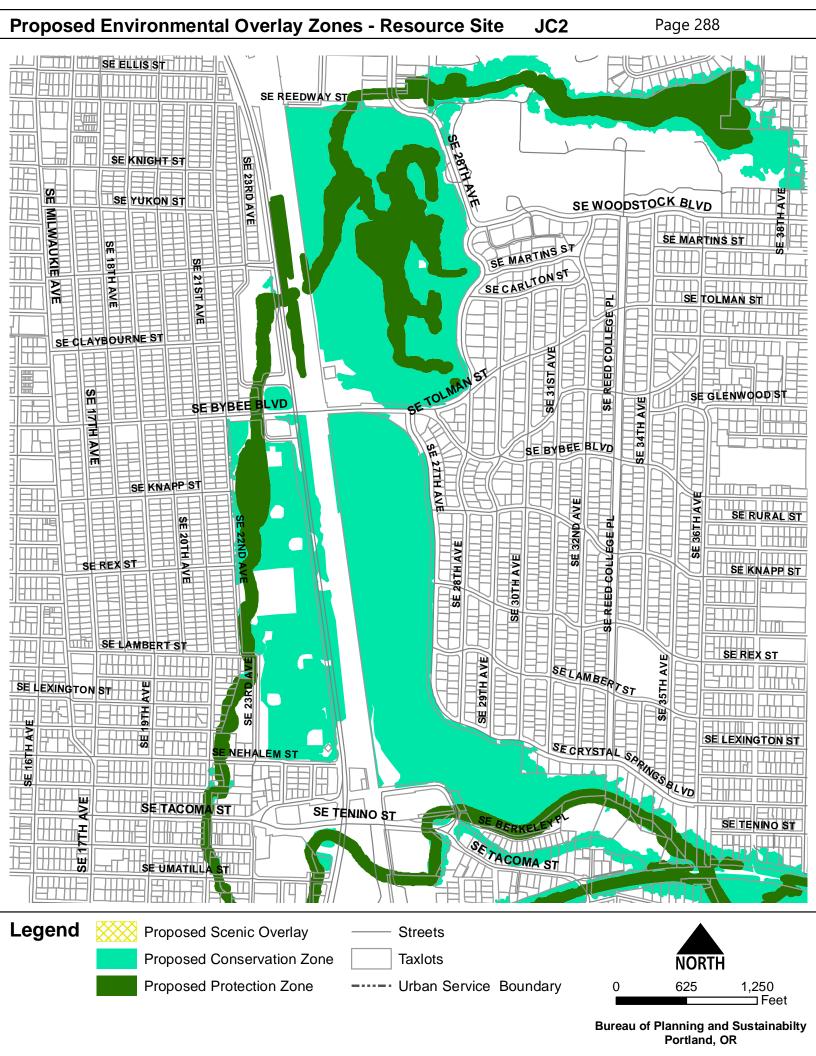




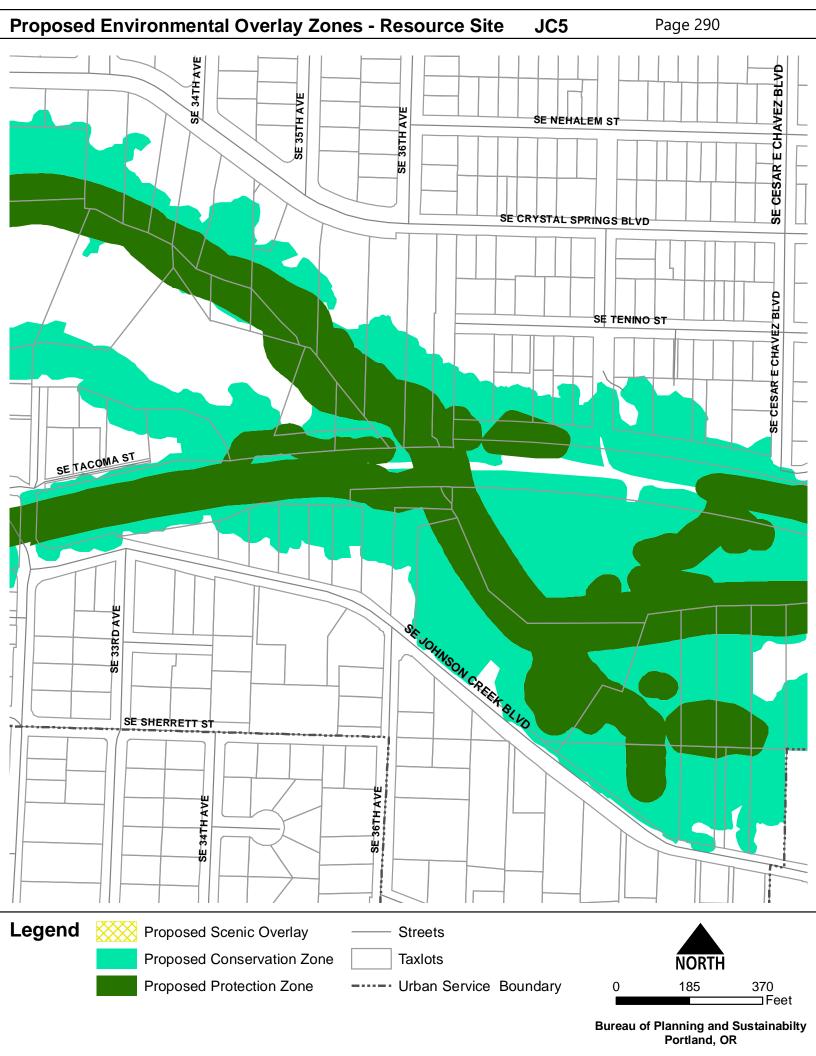


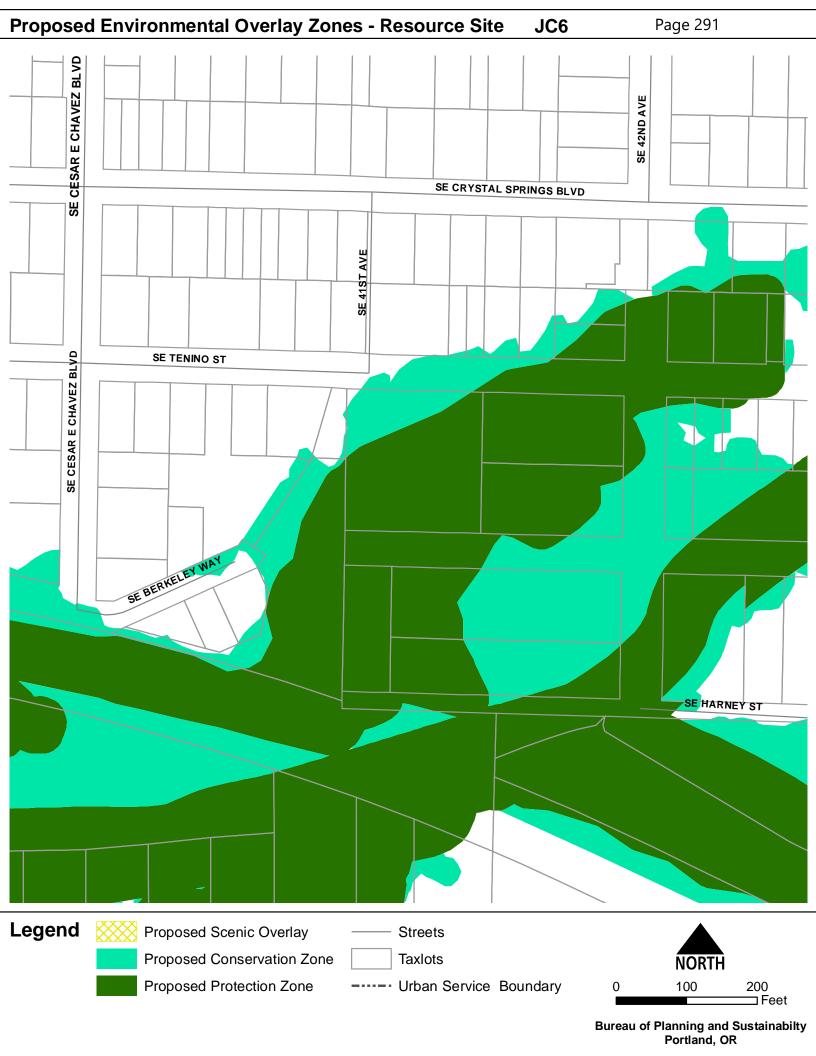


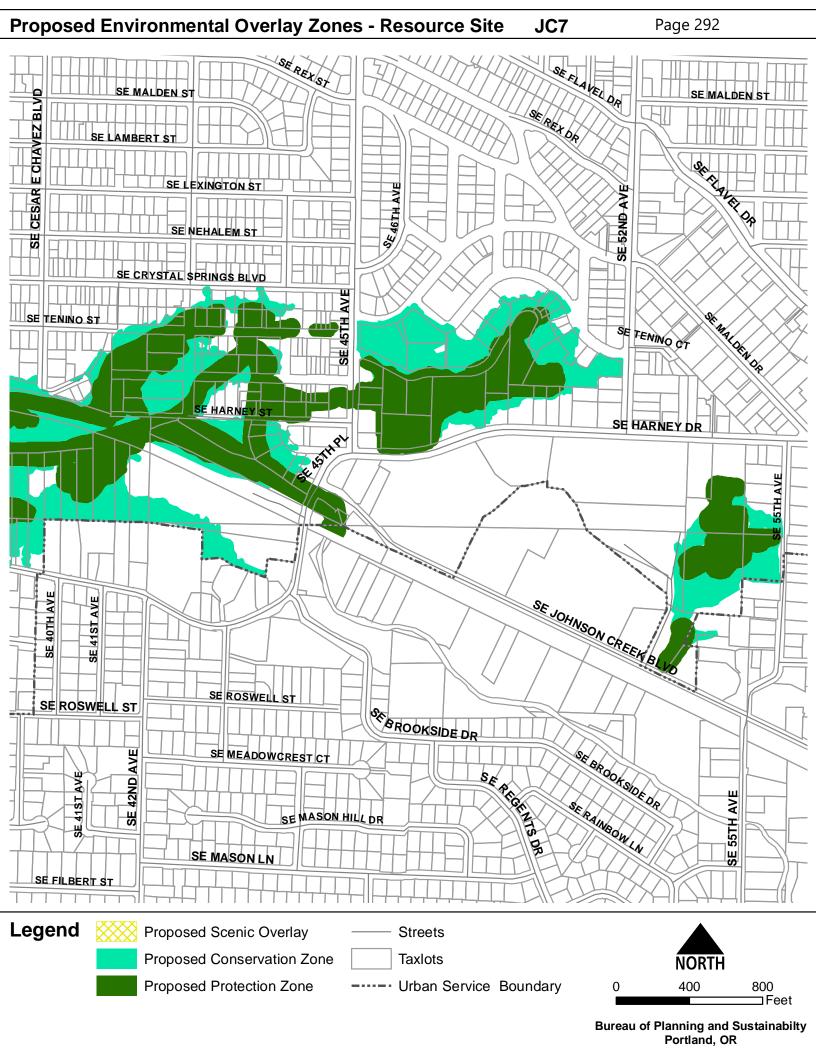




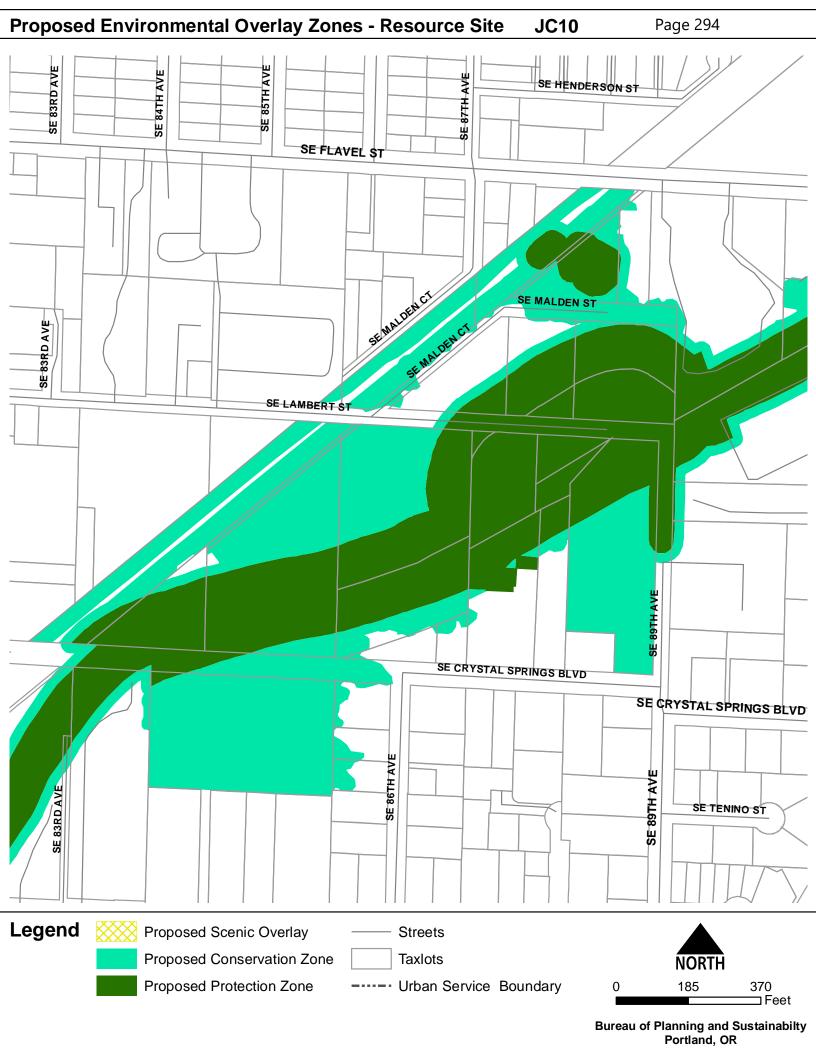


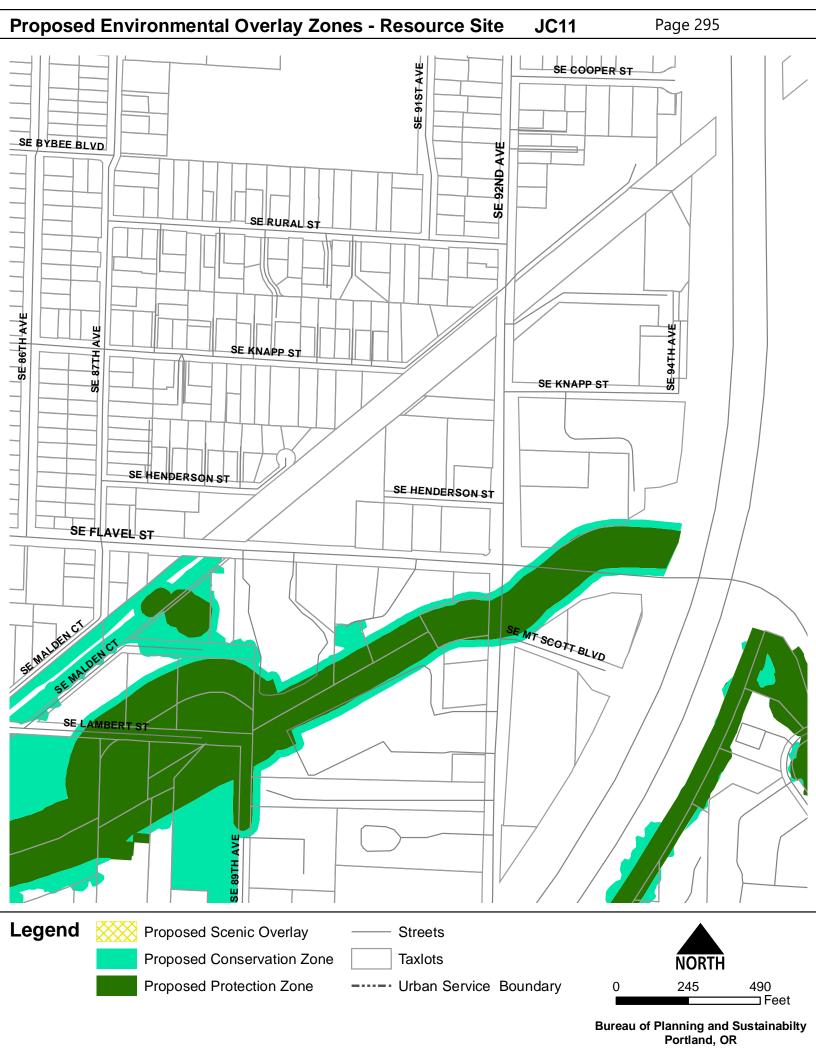




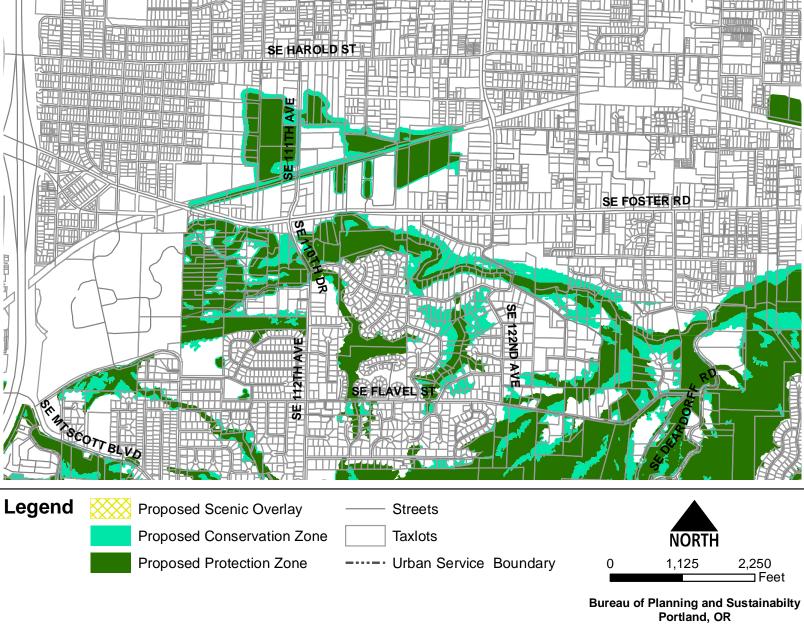


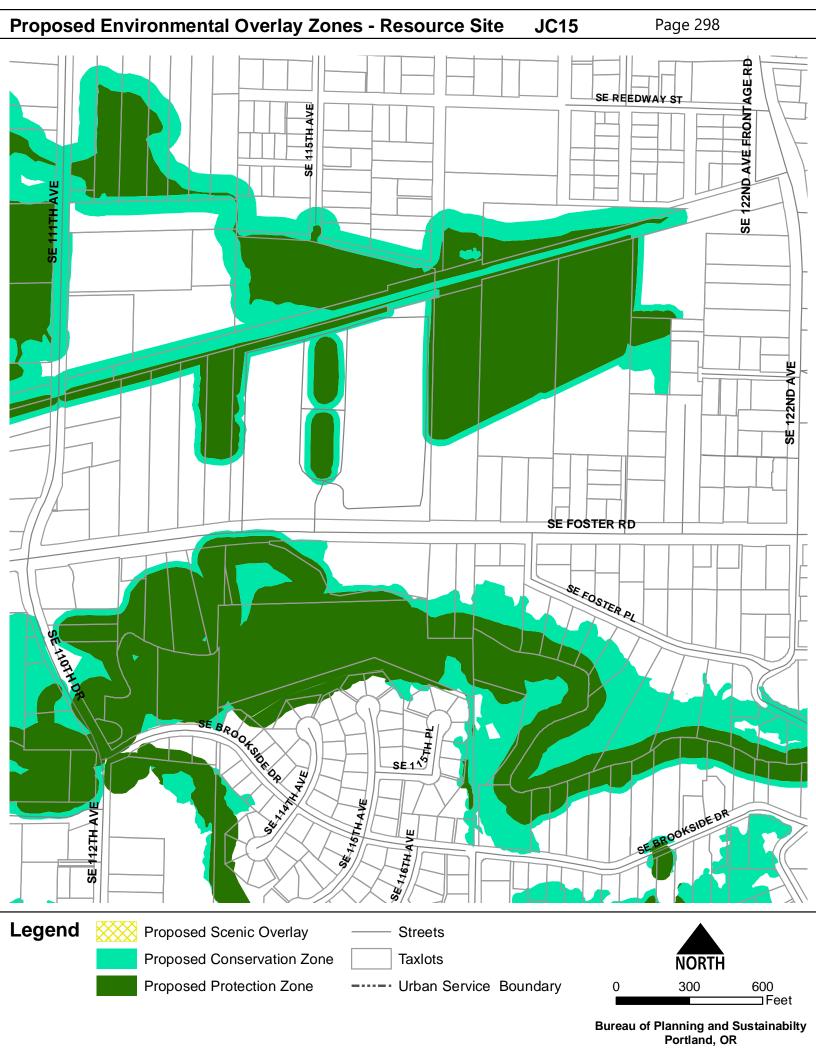


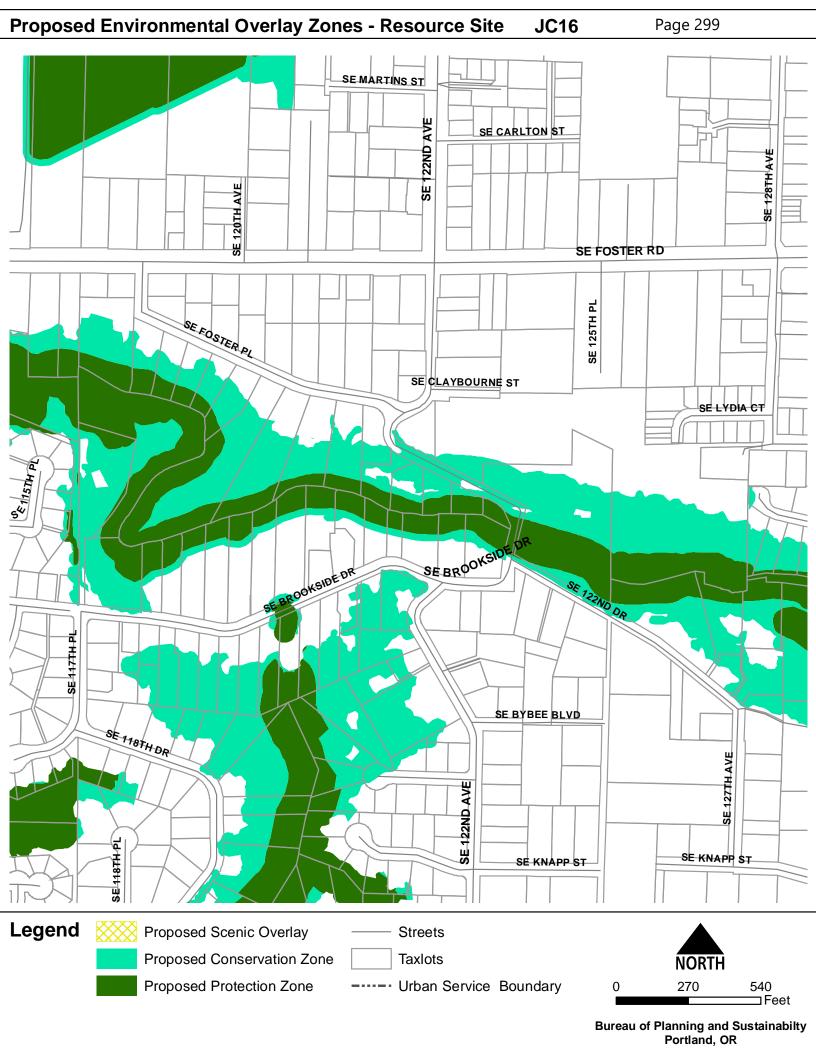


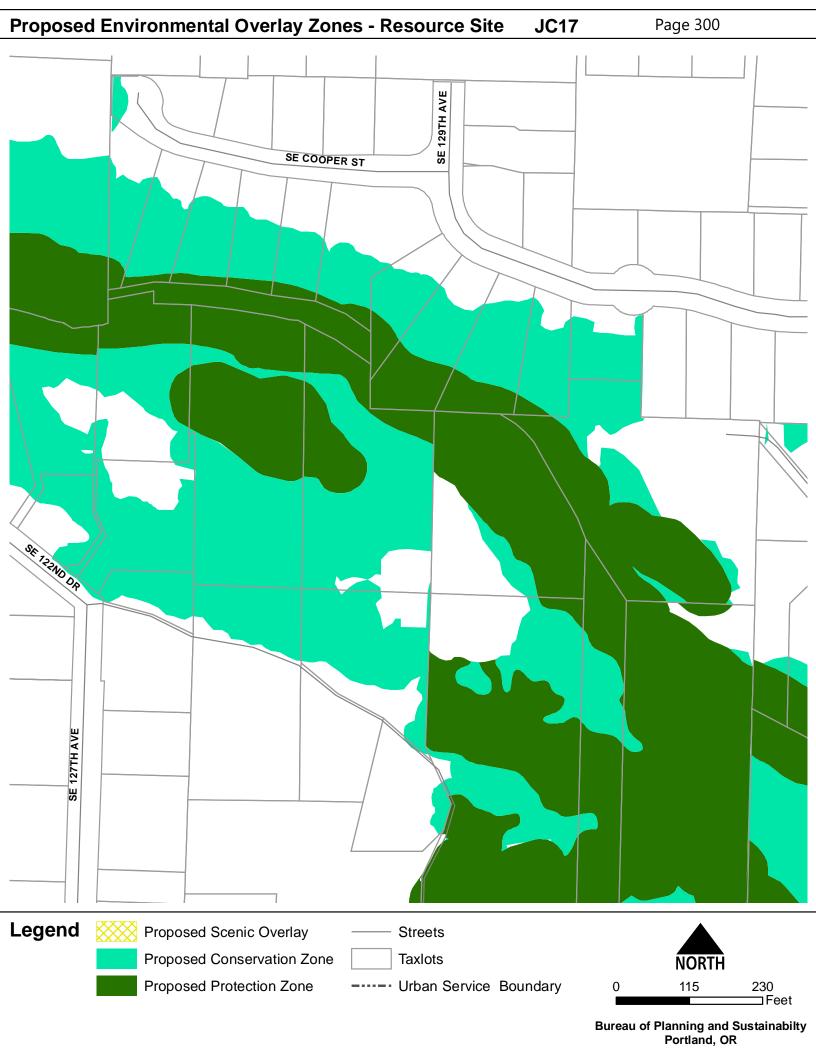


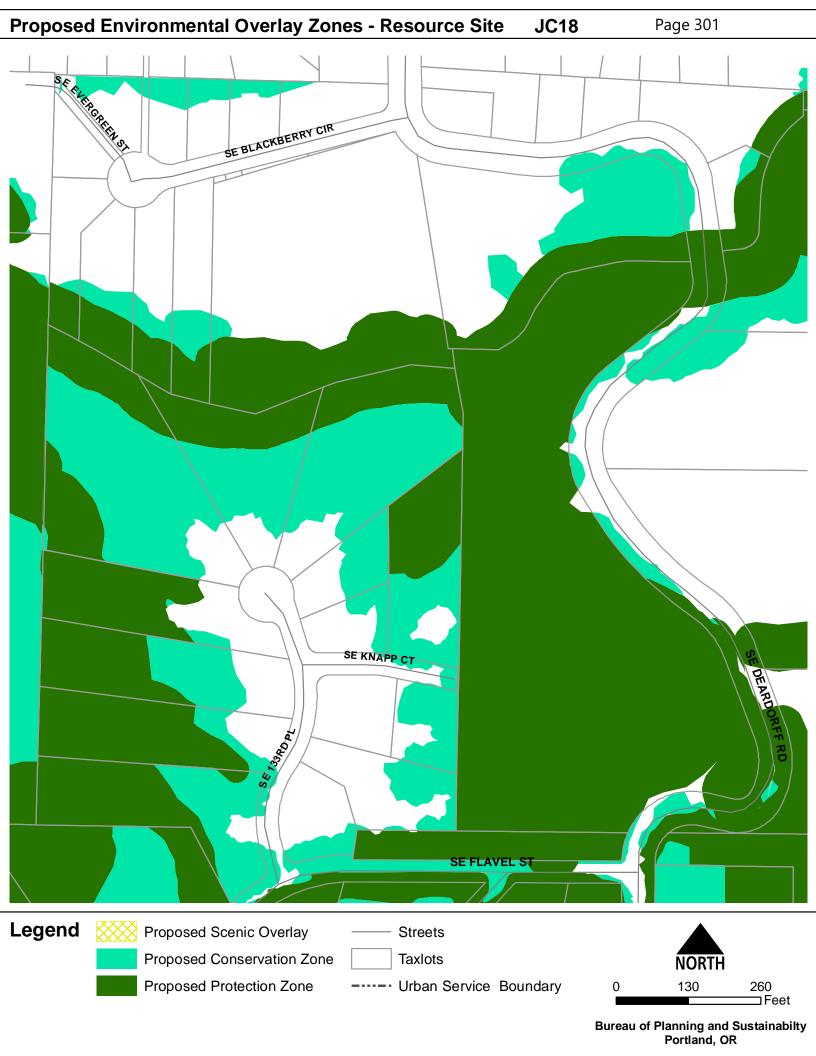


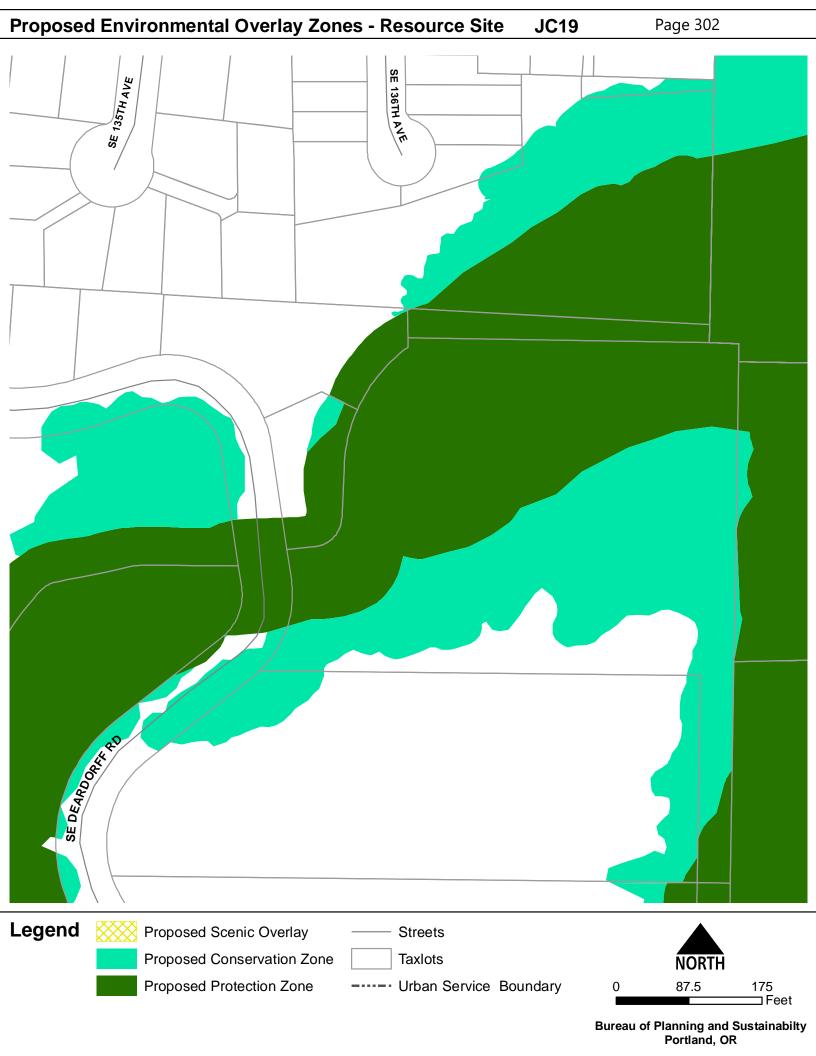


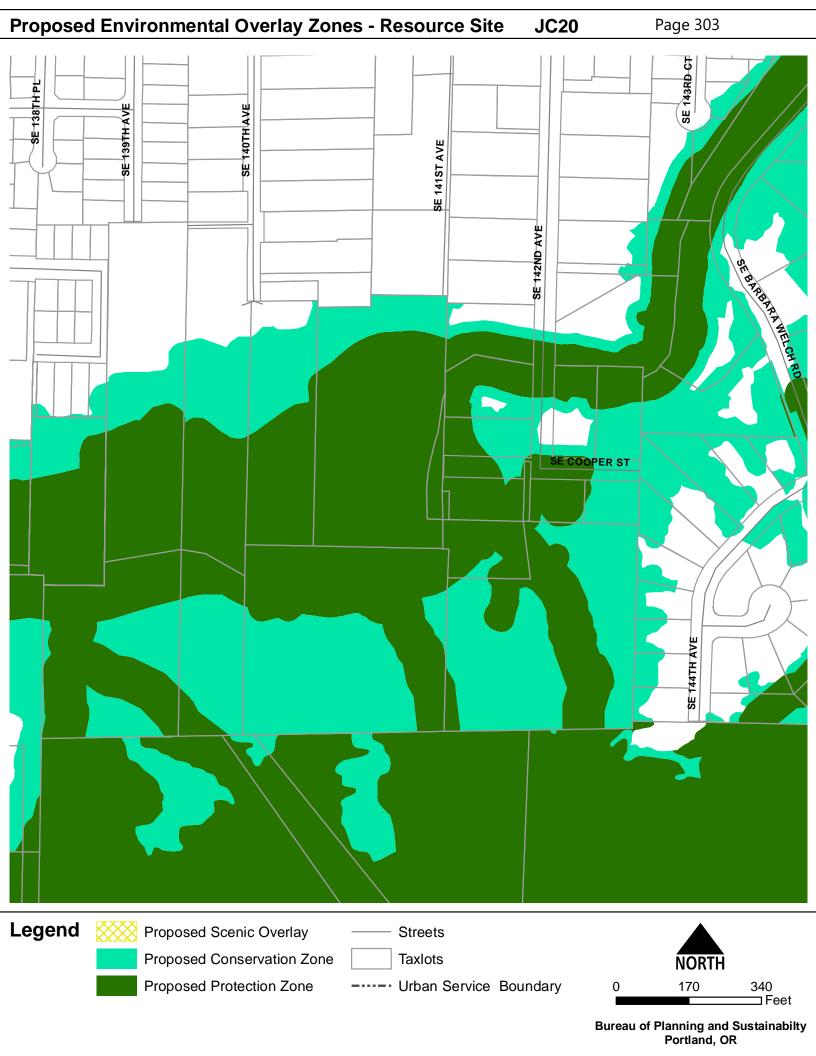


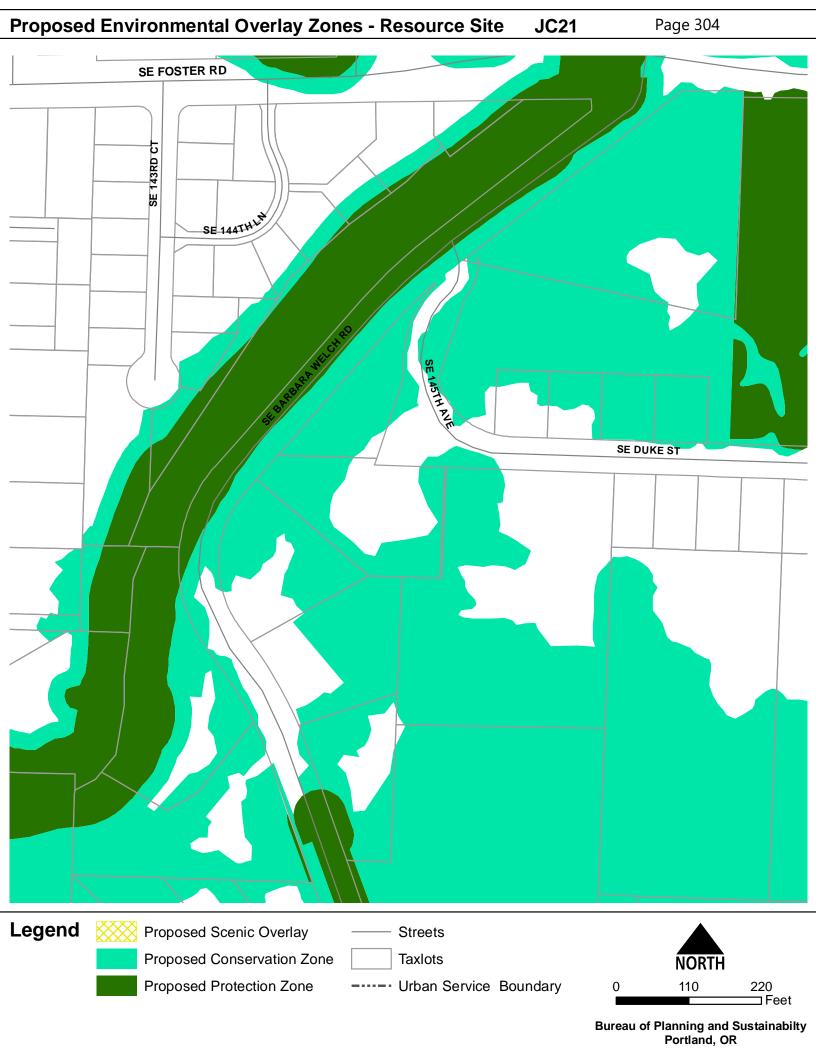


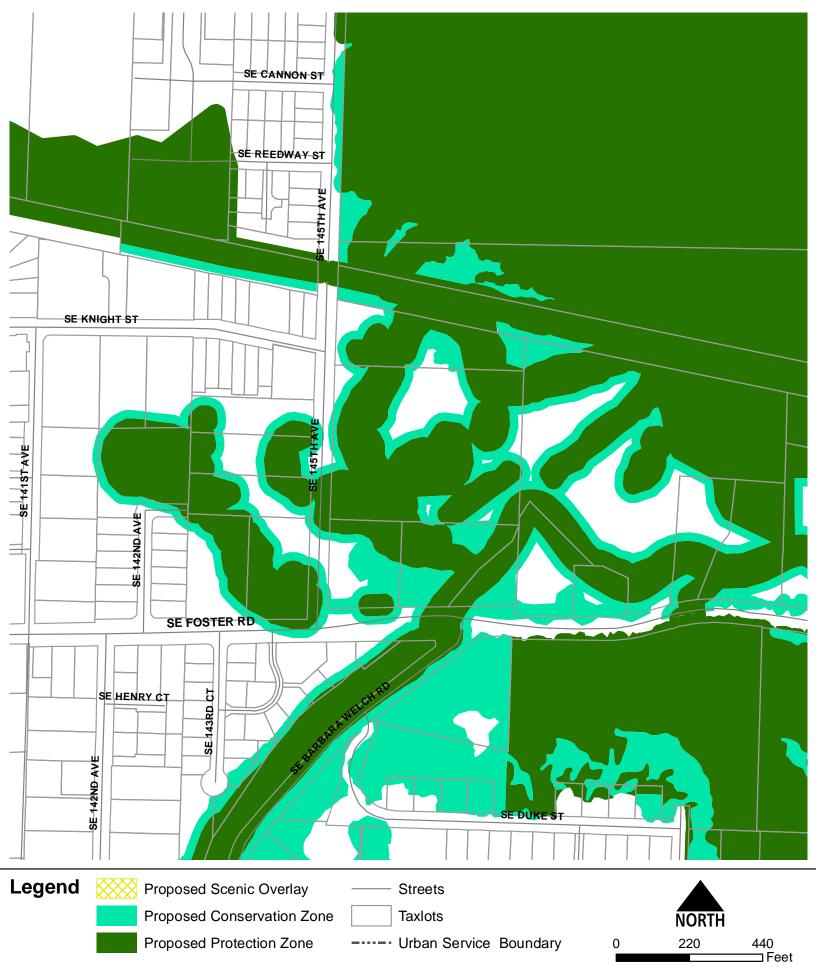






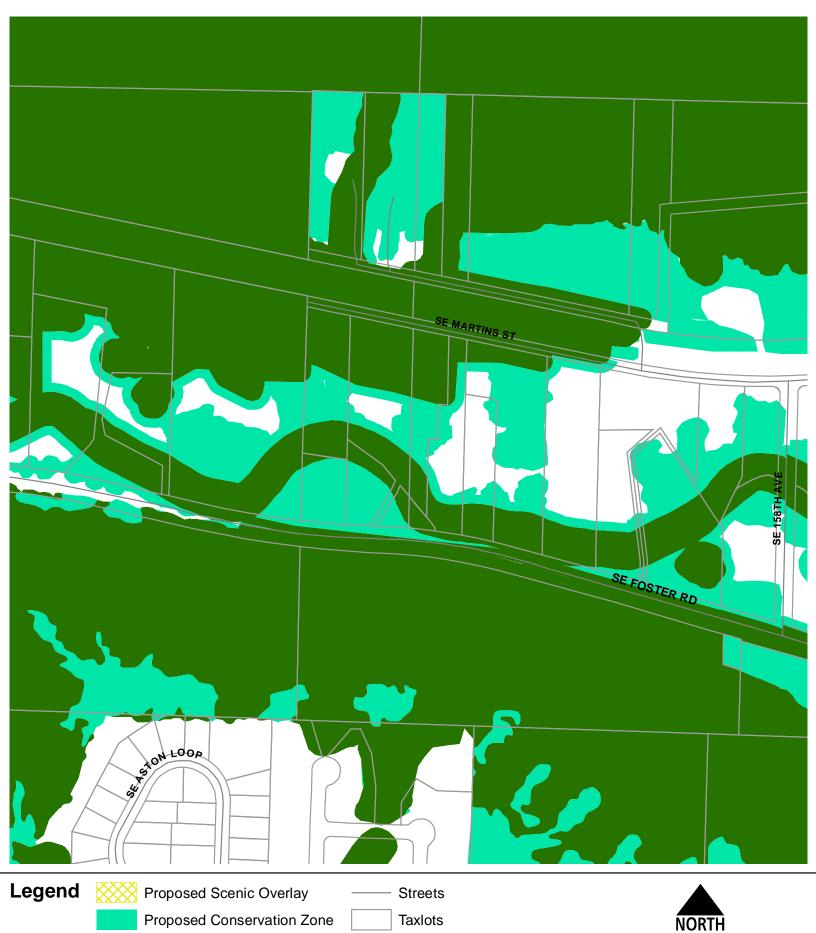








Proposed Protection Zone



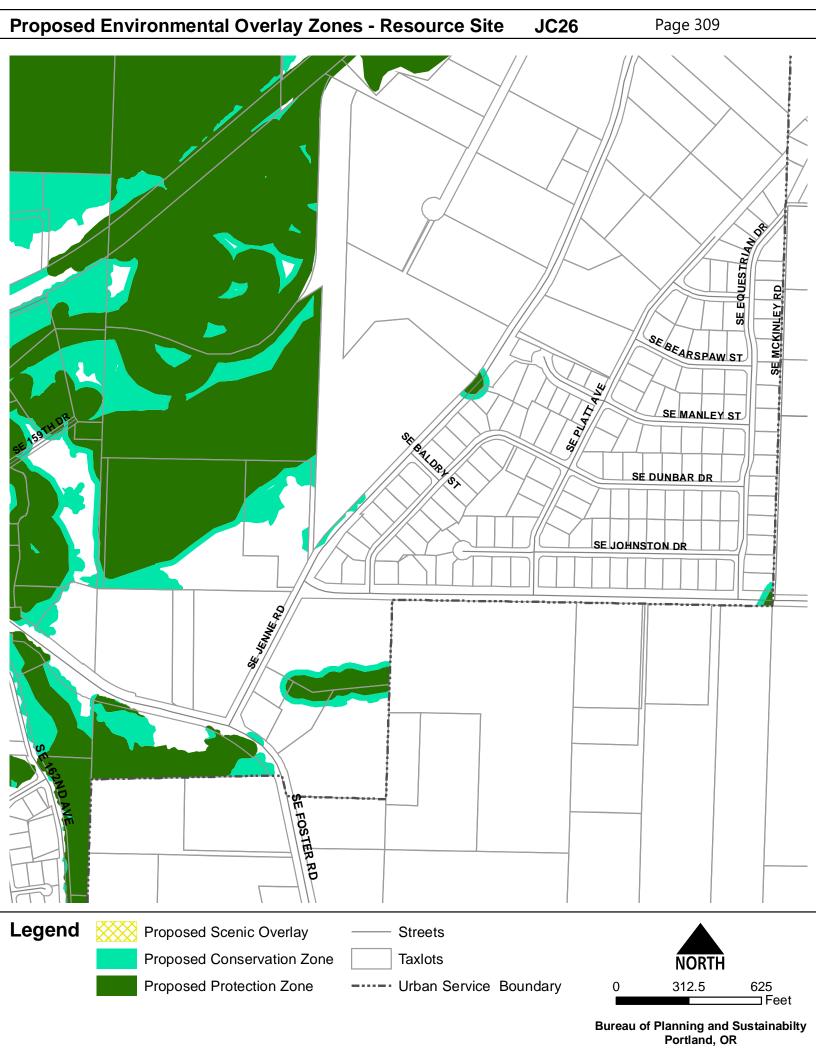
-- Urban Service Boundary

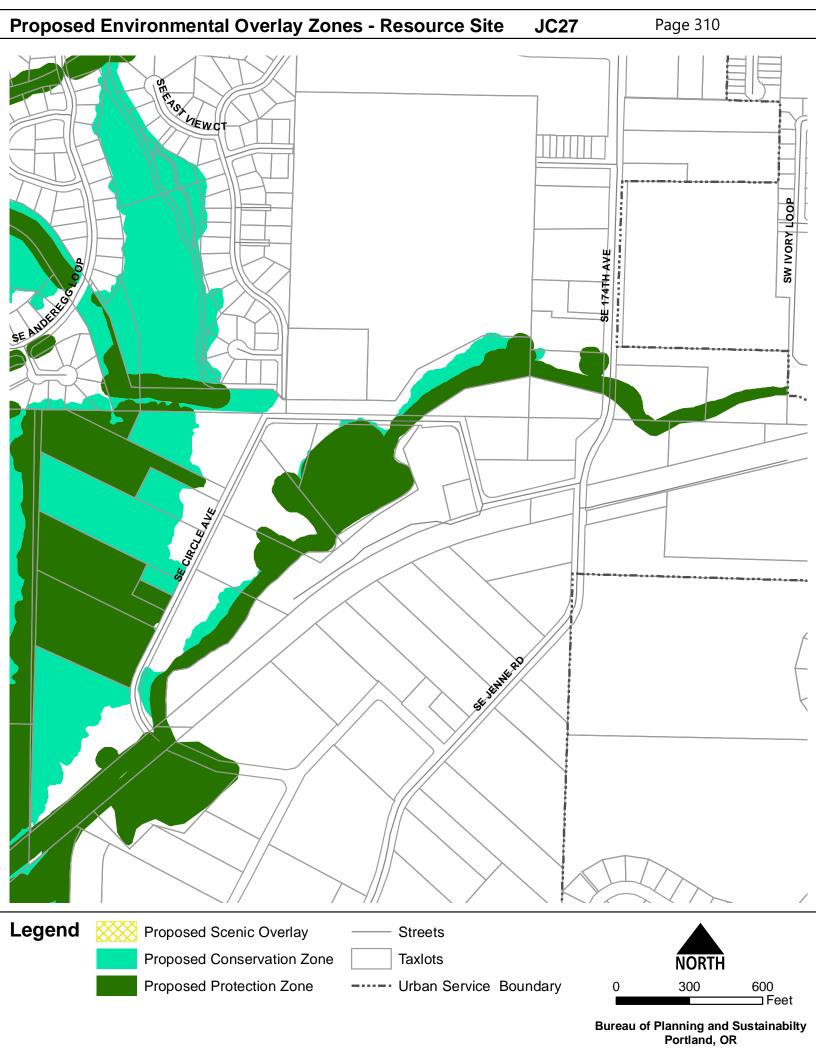
Bureau of Planning and Sustainabilty Portland, OR

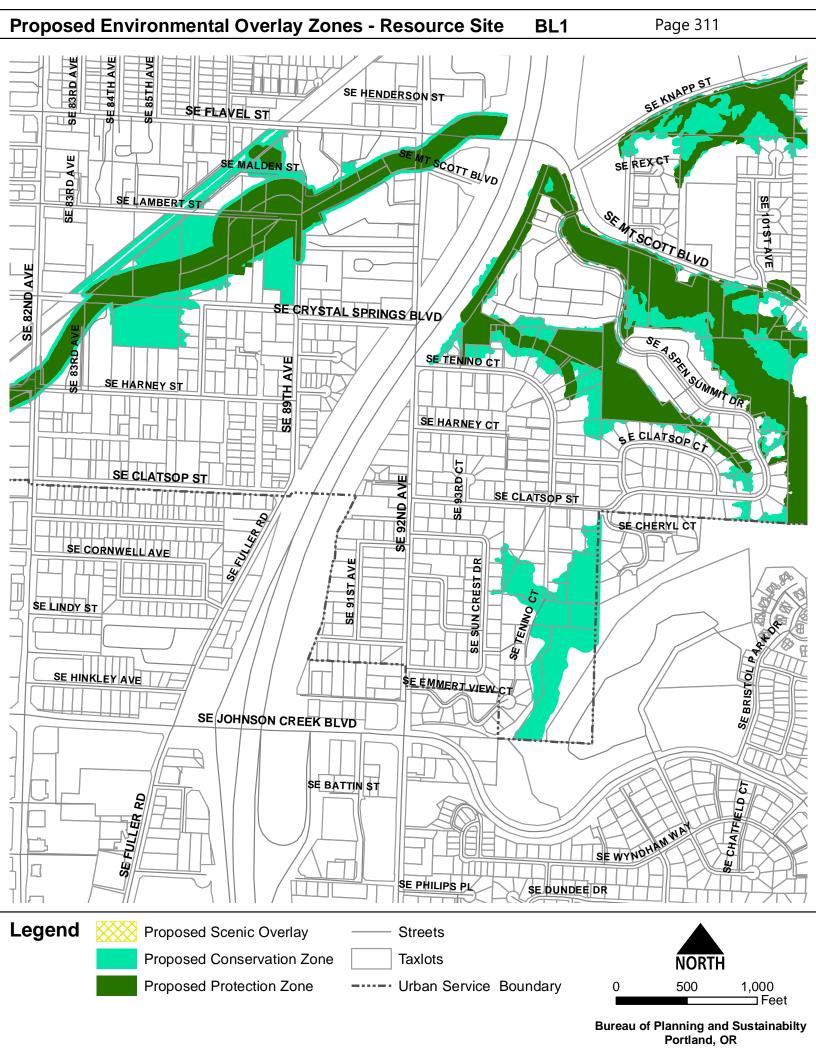
205

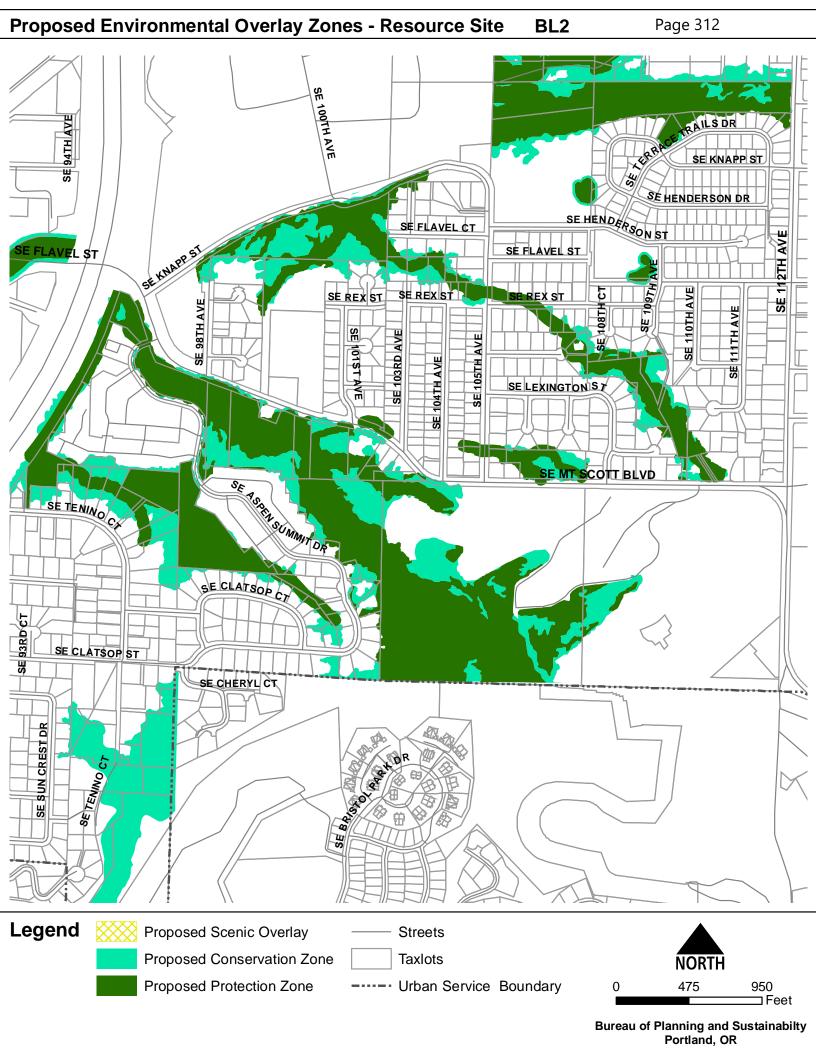
410 ☐ Feet

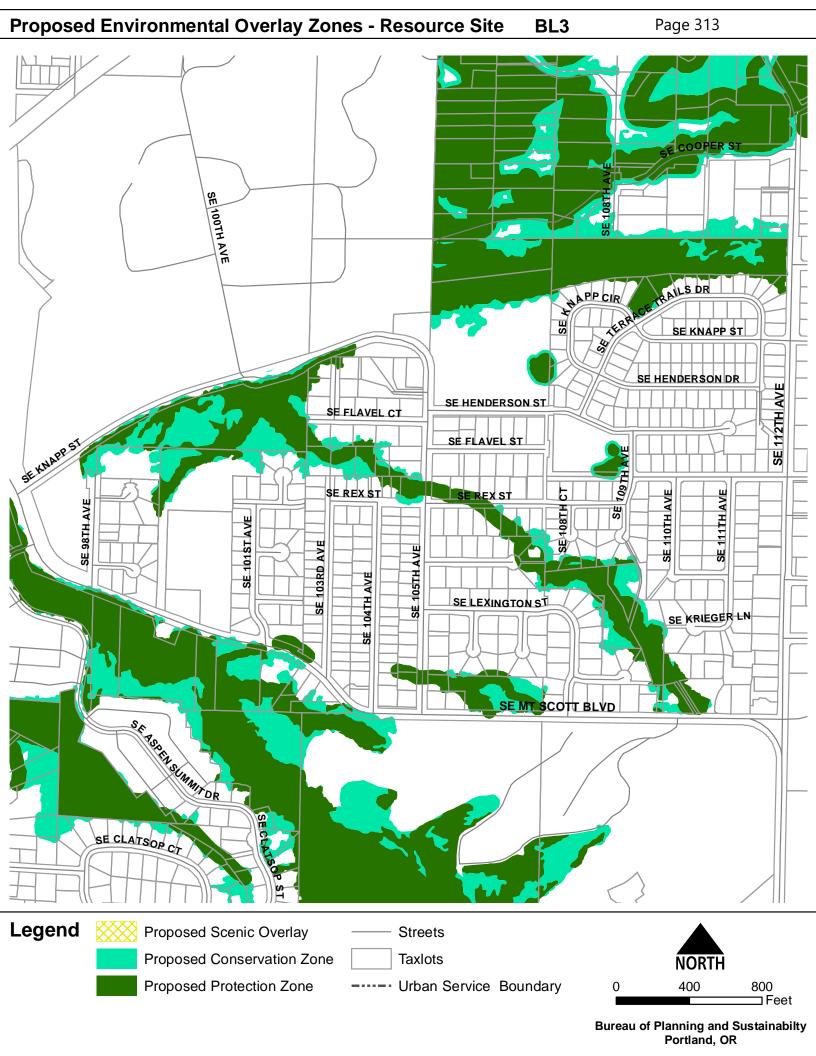
Portland, OR

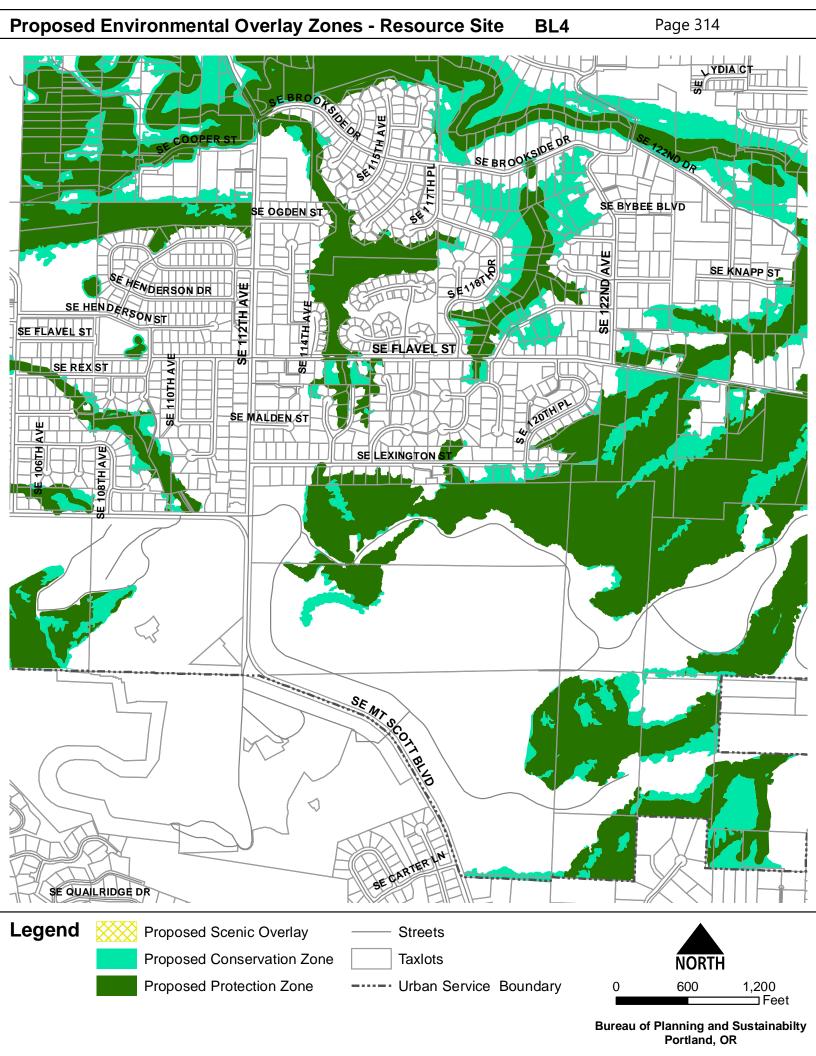


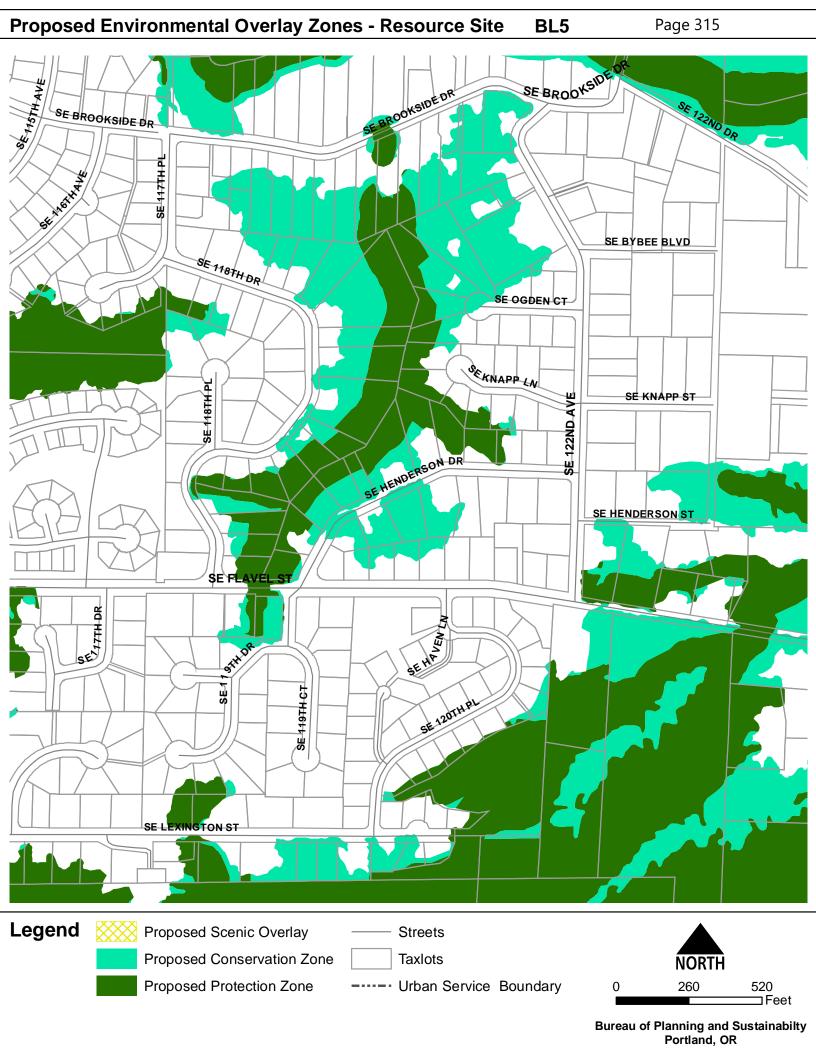


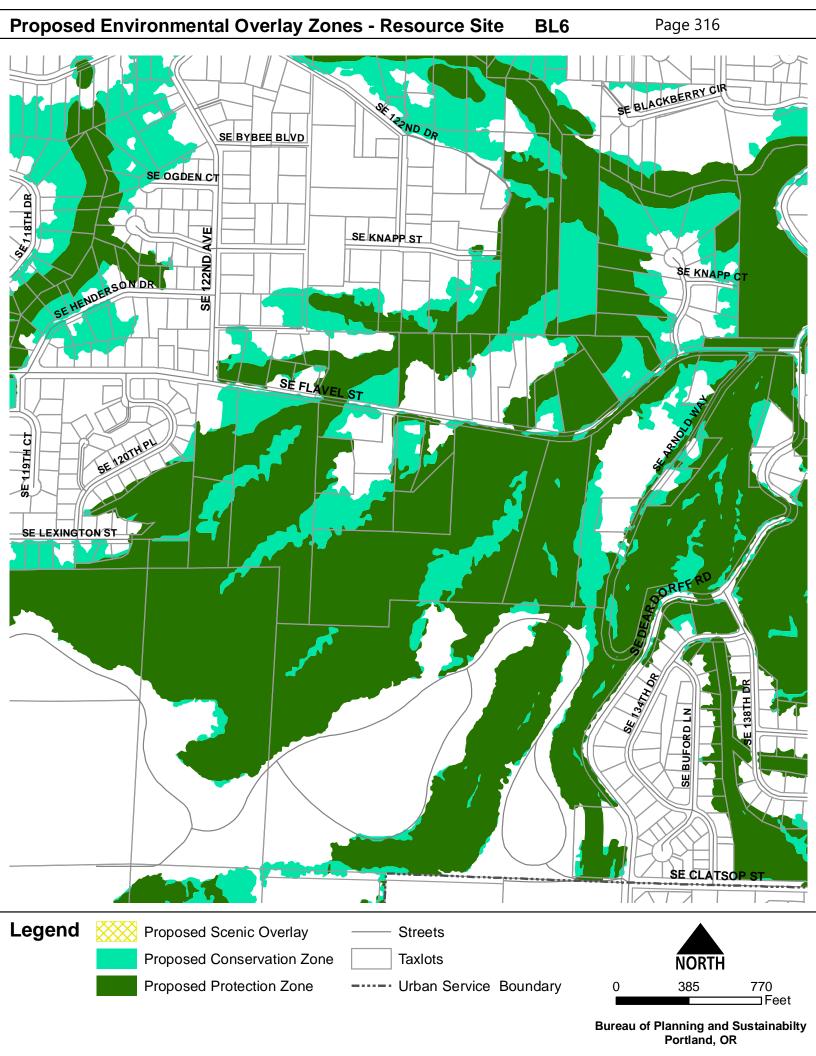


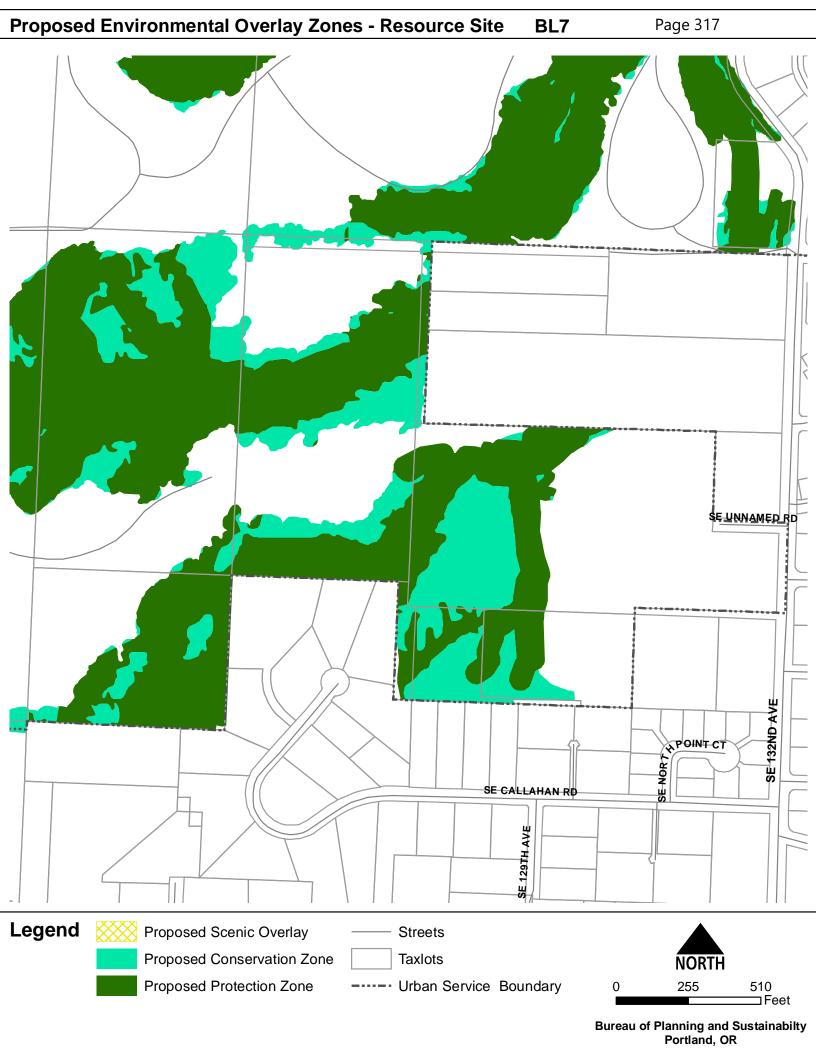


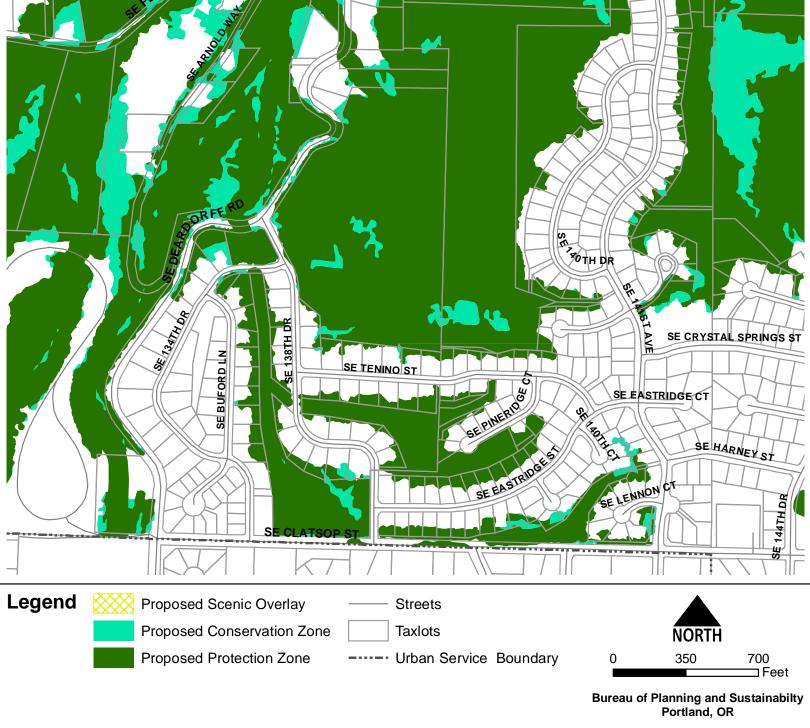


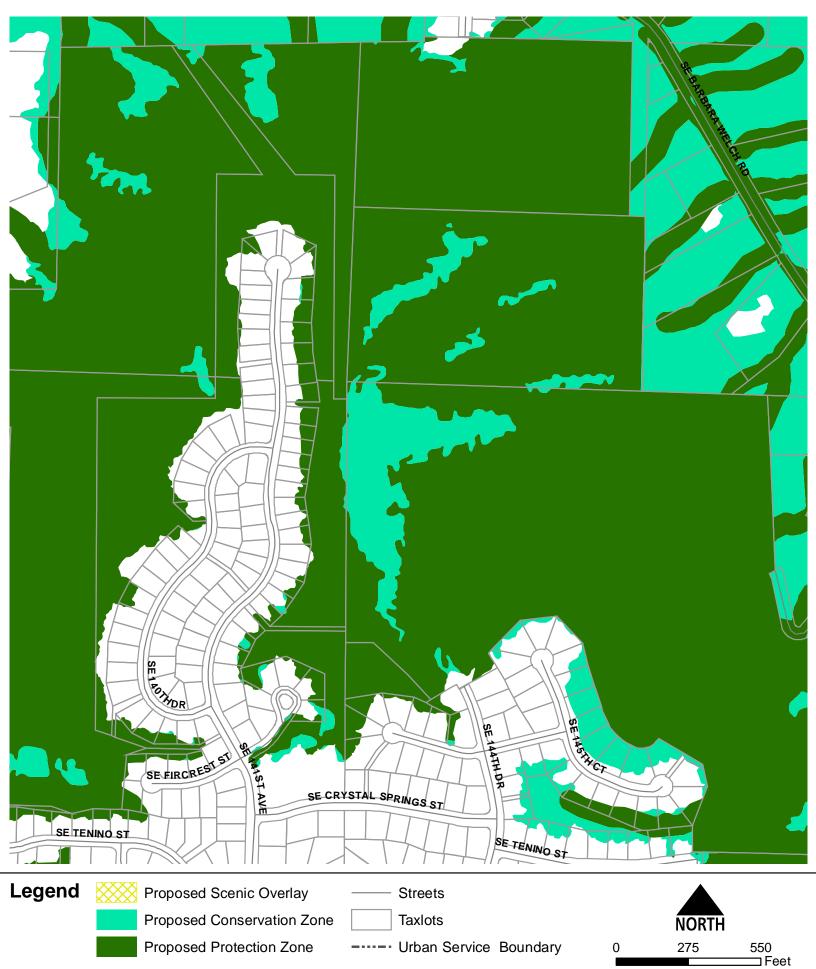


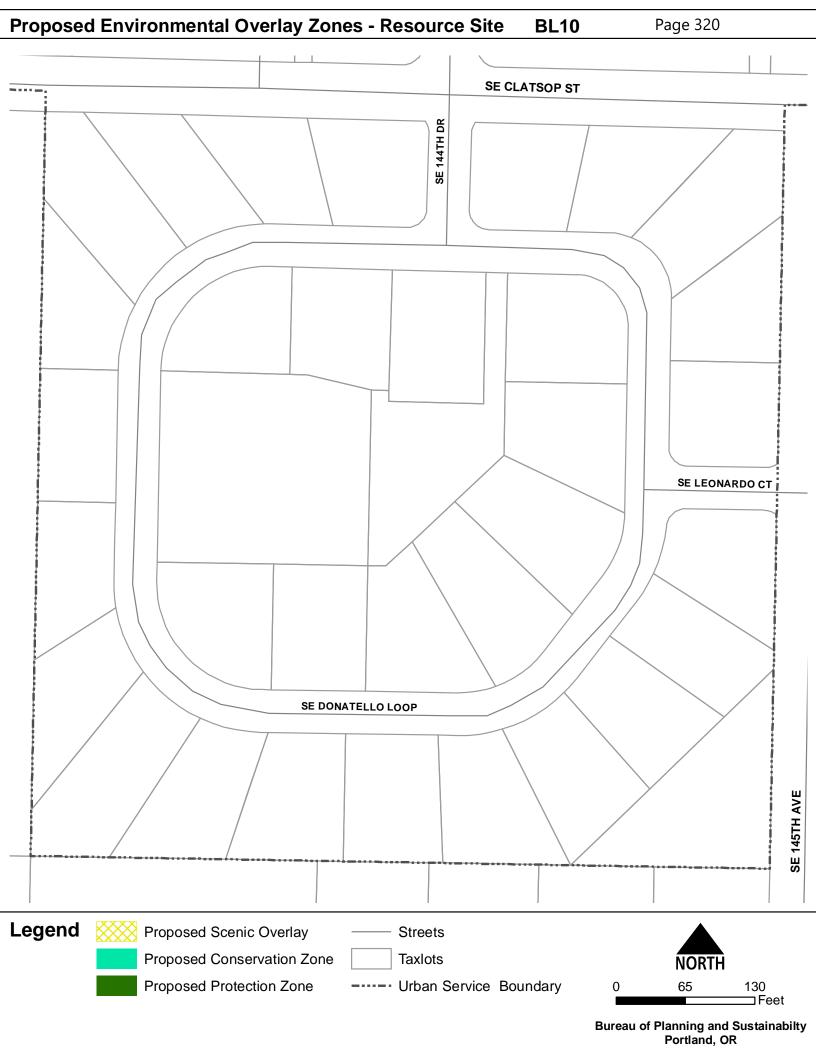












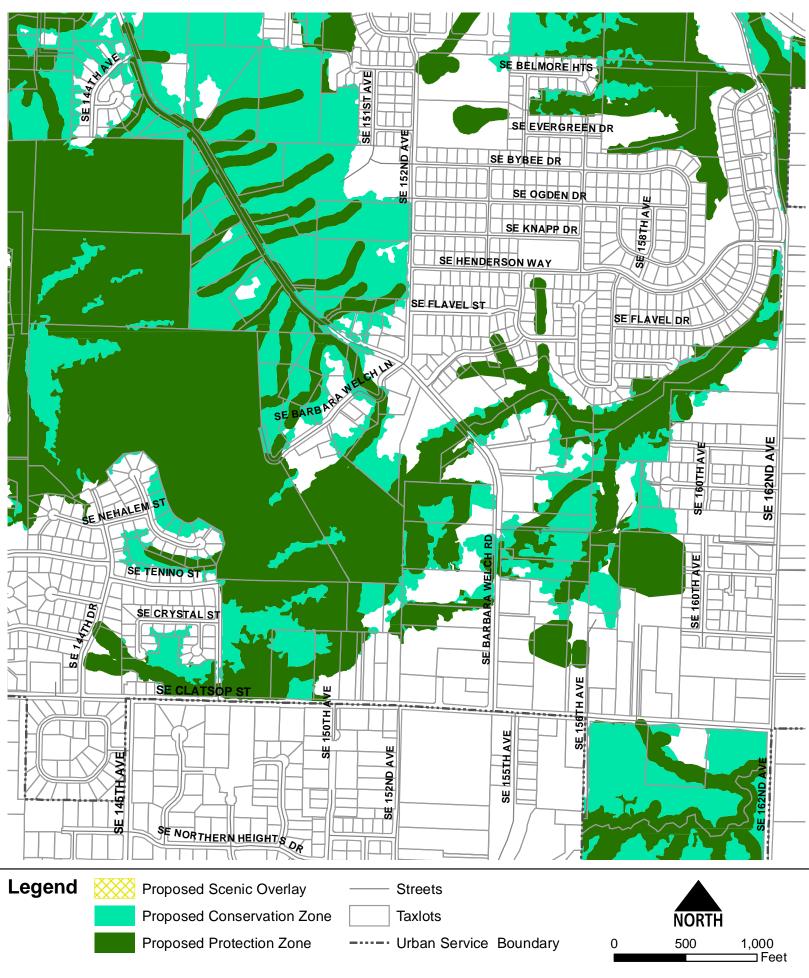
Proposed Protection Zone

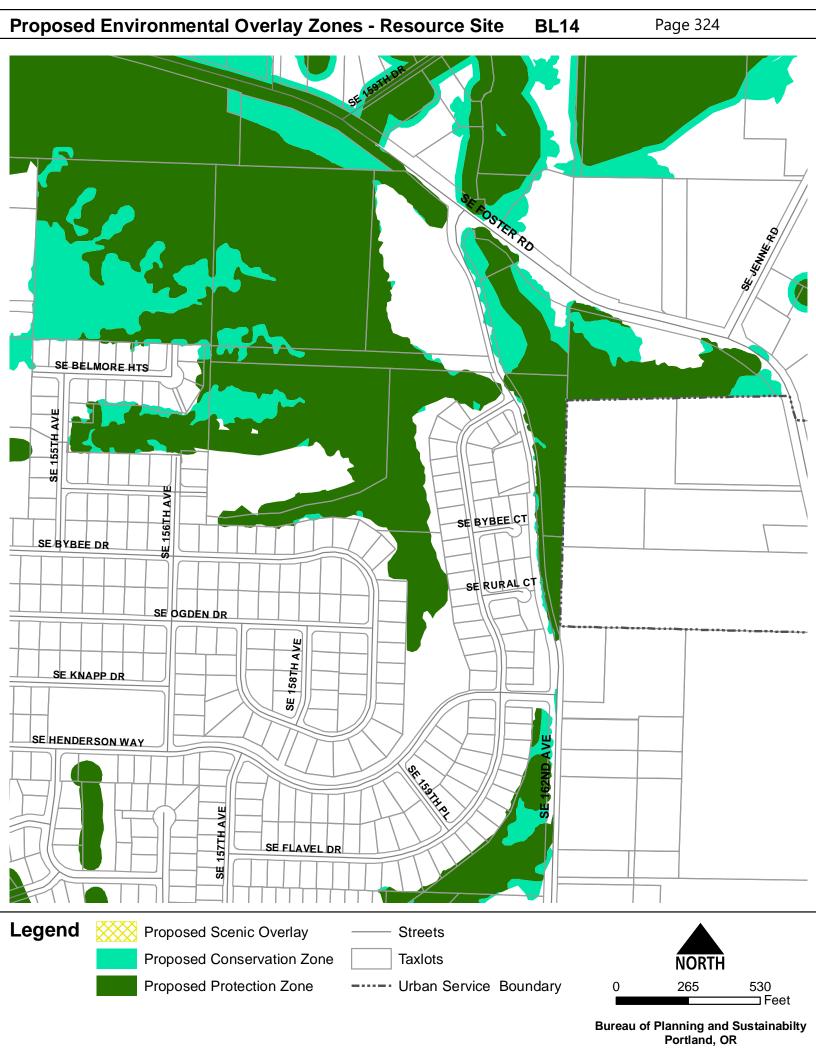


-- Urban Service Boundary

660 ⊐ Feet **Bureau of Planning and Sustainabilty** Portland, OR

330







## The *Environmental Overlay Zone Map Correction Project* plan documents:

## **Volume 1: Project Overview, Zoning Amendments, Ezone Remapping**

The purpose of the Project Report is to document the overall project approach and methodology, summarize public engagement, and it includes all of the zoning code amendments. This document provides summary information on the mapping protocols that are used to map ezones, as well as maps of the proposed ezone mapping in each resource site.

## **Volume 2: Resource Site Inventory and Resource Protection Decisions**

For the geographies listed below, each document presents an inventory of natural resource features and functions, a site-specific Economic, Social, Environmental and Energy Analysis (if applicable) and the decisions regarding which natural resource should be protected.

Part A1 – Forest Park and Northwest District, Resource Sites 1 – 20

Part A2 – Forest Park and Northwest District, Resource Sites 21 – 41

Part B – Skyline West

Part C – Tryon Creek and Southwest Hills East

Part D – Fanno Creek

Part E – East Buttes and Terraces

Part F – Johnson Creek

Part G - Boring Lava Domes

## **Volume 3: Natural Resources Inventory, Compliance, and Appendix**

This volume contains a summary of the approach and methodology used to produce the citywide Natural Resources Inventory, documentation that demonstrates compliance with Metro Urban Growth Management Plan Title 13 for Habitat Conservation Areas and Oregon State Planning Goal 5 for significant natural resources that are not a Habitat Conservation Area, and appendices that provide background information on the Environmental Overlay Zone Map Correction Project.