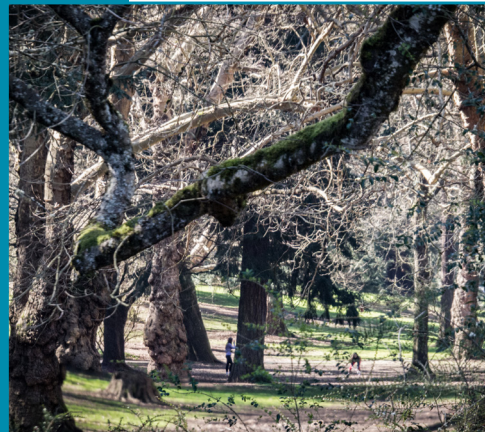


ENVIRONMENTAL OVERLAY ZONE MAP CORRECTION PROJECT

VOLUME 5:
Appendices

**PROPOSED DRAFT,
AS AMENDED**

July 2021



THE BUREAU OF
**PLANNING &
SUSTAINABILITY**

How to Testify

You may submit comments to the Portland Planning and Sustainability Commission on the Environmental Overlay Zone Map Correction Project Proposed Draft – As Amended in the following ways:

Use the Map App:

Go to www.portlandmaps.com/bps/mapapp

Click on “Ezone Project” and then click the “Testify” button.

By U.S. Mail

Planning and Sustainability Commission
Ezone Map Correction Project Testimony
1810 SW 5th Ave, Suite 710
Portland, OR 97201

In person at the public hearings

The hearing on August 24, 2021 will be held virtually. The meeting starts at 5 p.m. Please check the PSC calendar at www.portland.gov/bps/psc/events a week in advance to confirm the time of this agenda item. You can use a computer, mobile device or telephone to testify during the hearing.

To testify during the hearing, please visit the project website to register:

www.portland.gov/bps/ezones. You will receive a confirmation email containing information about joining the virtual hearing. The deadline to sign up for the August 24 hearing is Monday, August 23 at 4:00 p.m. Individuals have two minutes to testify, unless otherwise stated by the Commission Chair at the meeting.

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

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| www.portland.gov/bps/accommodation

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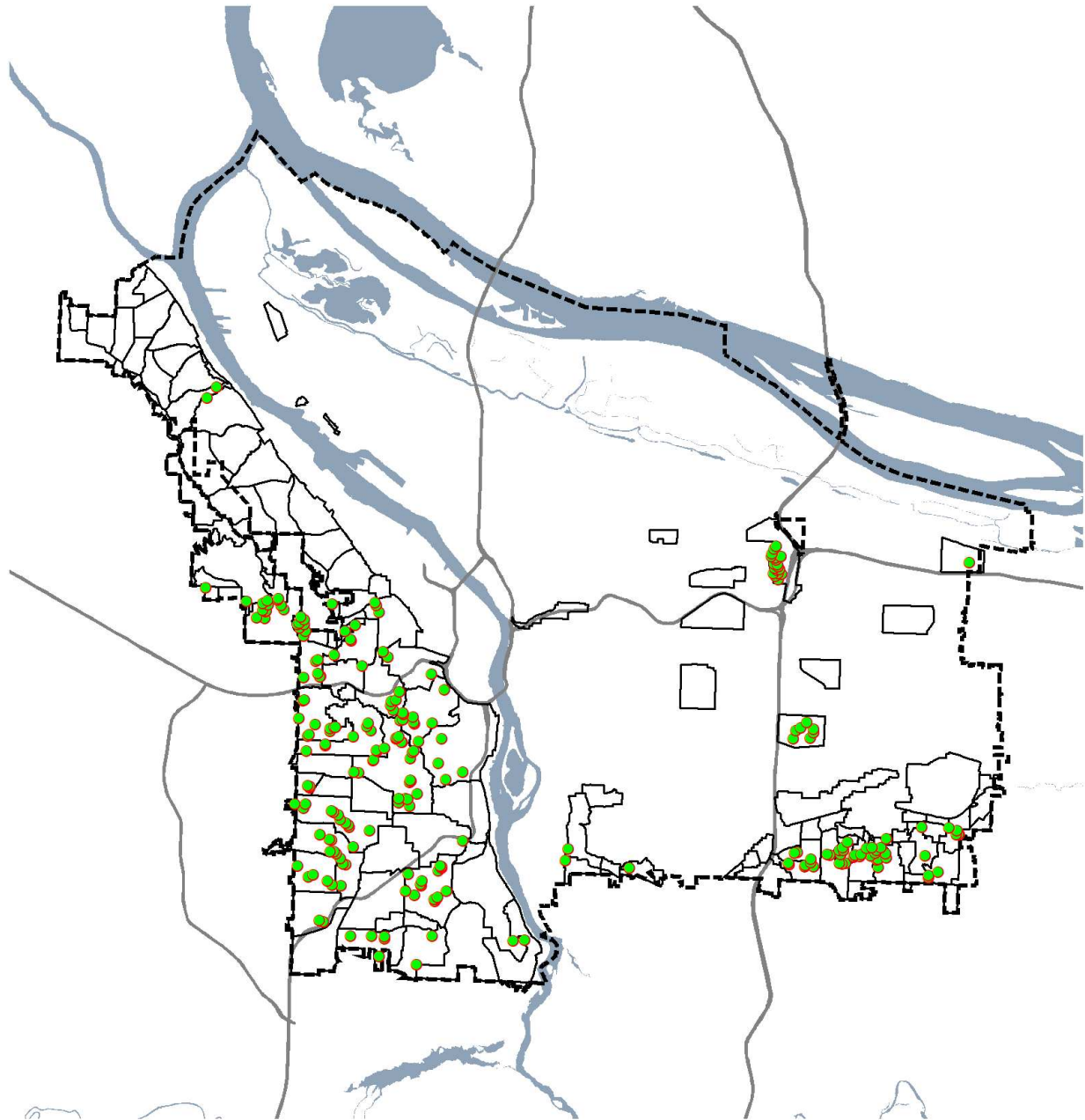
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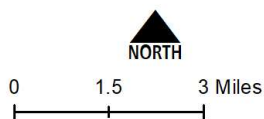
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Appendix B: Protection to Conservation Zone Conversions



**Ezone Map Correction
Manual P to C Conversions**

Updated: July 2021



-  Manual P to C Conversion
-  Resource Sites
-  Urban Service Boundary
-  Freeways
-  Rivers



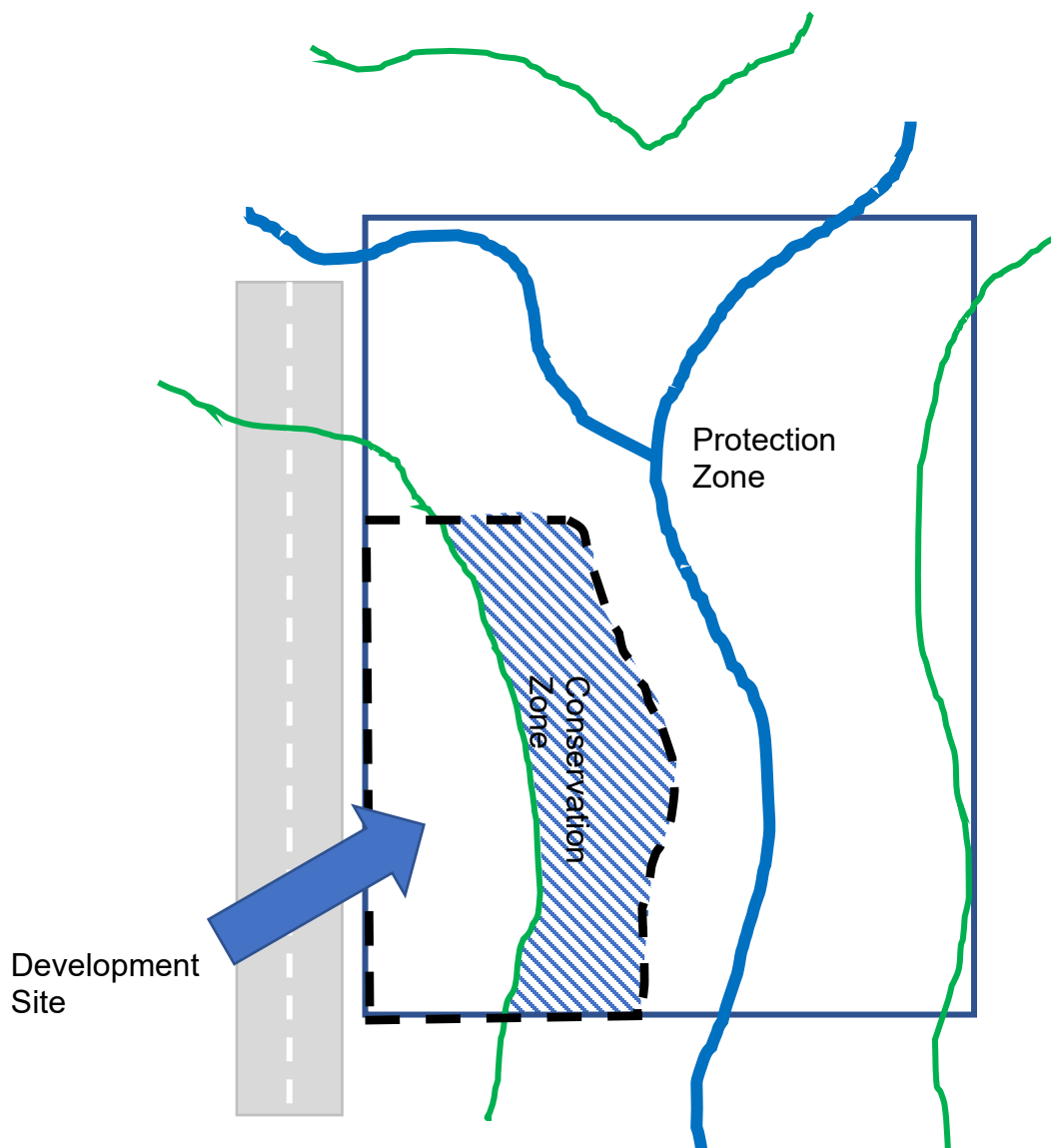
The information on the map was derived from digital databases. Care was taken in the creation of this map but it is provided "as is". The City of Portland ensures meaningful access to city programs, services, and activities to comply with Civil Rights Title VI and ADA Title II laws and reasonably provides: translation, interpretation, modifications, accommodations, alternative formats, auxiliary aids and services. To request these services, contact 503-823-7700, City TTY 503-823-6868, Relay Service: 711.

Properties that are eligible for a protection 'p' zone to conservation 'c' zone conversion 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. In this appendix each property with a 'p' to 'c' zone conversion is described and two maps are included: 1) GIS model-produced ezones; and 2) ezones after the conversion. The intent is to make it clear to property owners and future planning staff at the city where the location of the 'p' and 'c' zone boundaries are based on a conversion.

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 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.

Below is a generic example of a 'p' to 'c' zone conversion. The stream is shown in blue and the 'p' zone in green, including the land within 50 feet of the streams. In order to provide sufficient space for development, a portion of the 'p' zone is converted to 'c' zone, as shown in cross hatch. This area maintains a minimum of 25 feet of 'p' zone along the streams and places the converted area along the street frontage. By converting to a 'c' zone, develop may occur through standards or environmental review and with mitigation for impacts to the existing natural resources.



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.

The Recommended Draft report will include a before and after map of every site where a 'p' to 'c' zone conversion has been applied.

Appendix C: Updated Wetland Mapping Protocol

The Natural Resources Inventory (NRI) was adopted in 2012 as factual basis for the Comprehensive Plan 2035 and was approved by Metro as being in substantial compliance with Title 13 of the Urban Growth Management Functional Plan. The NRI included the *Wetland Data Refinement Project*, which refined wetland maps throughout Portland based on a consistent methodology that relied heavily on existing wetland determinations or delineations completed as part of local or state permitting for development. Please see the 2012 Natural Resources Inventory for additional details.

The wetland mapping protocol outlined in this appendix builds on the *Wetland Data Refinement Project* to include additional mapping methodologies for performing on-site and off-site wetland determinations. Updates to the wetland data were led by staff from the Bureau of Environmental Services and their consultant.

The information as used to begin the wetland mapping updates included:

- A. Source Wetland Polygons:
 1. City of Portland (COP) GIS wetland shapefile
 - a. Each wetland polygon (i.e., feature) was categorized as *high*, *moderate*, or *low* confidence in mapping veracity based on the feature's source identified in the layer's attribute table. Sources labeled as *DSL Permit*, *Field Survey*, or *Land Use Review* were categorized as *high* confidence. Sources labeled as *LiDAR* or *Aerial Photo* were categorized as *moderate* confidence. Sources labeled as *<Null>* were categorized as *low* confidence.
 2. National Wetland Inventory (excluding features with riverine classification)
 - a. Categorized as *low* confidence
 3. Potential Wetlands. General areas identified by Bureau of Environmental Services and Portland Parks as potential wetlands based on existing knowledge and remote sensing data.
 - a. Categorized as *low* confidence
- B. Map Features Associated with Aquatic Resources:
 1. U.S. Department of Agriculture Natural Resource Conservation Service Soil Survey Hydric and Partially Hydric Soil Unit shapefile
 2. COP streams shapefile
 3. COP waterbodies shapefile
- C. Additional Map Features
 1. LiDAR Topographic Data
 2. Taxlot shapefile
 3. Public properties shapefile

WETLAND DETERMINATION METHODS

Each source wetland polygon was assigned a unique number. All properties with source wetland polygons were sent a request for entry to perform a field determination. Priority was given to verifying source wetland polygons categorized as low or moderate confidence. Source wetlands categorized as high confidence were investigated in the field to the extent practical but were generally deferred. Hydric soil units, low topographic positions within partially hydric soil units, and COP stream and waterbody layers were investigated in the field to the extent practical. The presence or absence and approximate boundary of wetlands were then determined using the following determination methods:

1. Field-verified Determinations. Used for sites where property access was granted or where the site conditions are visible from a right-of-way or abutting property with granted access. Field determinations were performed by a qualified wetland scientist.
 - 1.1. Accessible areas.
 - 1.1.1. Corps wetland determination sample plot; *or*
 - 1.1.2. For small wetlands (less than ½ acre) in natural areas with hydrophytes contributing greater than 50% relative plant cover - referencing a sample plot at the same site, in a similar habitat and setting that exhibits the same wetland hydrology. Documented in GIS through notes and photos; *or*
 - 1.1.3. Observations of obligate (OBL) vegetation communities (e.g., cattails, skunk cabbage, water parsley, tule, spikerush, paleyellow iris, marsh seedbox). Documented in GIS through notes and photos. Does not include commonly planted OBL species such as slough sedge; *or*
 - 1.1.4. Observations of direct or indirect primary indicators of inundation or saturation and OBL to facultative wetland (FACW) vegetation communities. Documented in GIS through notes and photos.
 - 1.2. Inaccessible areas. Included areas where access was authorized but precluded thorough investigation due to State Historic Preservation Offices regulations, impenetrable vegetation, steep slopes, deep water, unauthorized camps, trash or contamination including sharps, or otherwise unsafe working conditions. This determination method also applied to areas where access was not authorized, but visual confirmation was possible from a right-of-way or abutting property with granted access.
 - 1.2.1. Any method for accessible sites; *or*
 - 1.2.2. Direct observations of inundation or saturation during normal climatic and hydrologic conditions *and* OBL to facultative (FAC) vegetation communities. Documented in GIS through notes and photos.

2. Offsite Determinations. When site access to perform a field-verified determination was not granted and visual confirmation was not possible from a the right-of-way or abutting property with granted access, an offsite determination was performed by a qualified wetland scientist.
 - 2.1. Wetland Assumption. Wetlands were assumed to exist if any of the following conditions exist:
 - 2.1.1. Wetlands are shown on a map from a qualified source. Qualified sources include City of Portland land use and permit reviews and/or wetland delineations, Department of State Lands permits and/or concurrences, U.S. Army Corps of Engineers permits and/or concurrences, and environmental consultants' maps; *or*
 - 2.1.2. Wetlands are shown on the NWI or other wetland maps, *and* hydric soil or a soil with hydric soil inclusions is shown on the soil survey (i.e., NWI + Hydric/Partially Hydric Soil Units); *or*
 - 2.1.3. Hydric soil or a soil with hydric soil inclusions is shown on the soil survey, *and* site-specific information confirms hydrophytic vegetation, hydric soils, and/or wetland hydrology (i.e., Hydric/Partially Hydric Soil Units + Site-specific info confirms 1 criterion of a wetland); *or*
 - 2.1.4. Signs of wetland are detected by reviewing aerial photos; *or*
 - 2.1.5. Any combination of the above or parts thereof (e.g., vegetated wetland on NWI maps + signs of wetland on aerial photos)

Appendix D: Targeted Language Outreach and Examples of Public Mailings

This appendix contains the following information:

1. Memo regarding a study to determine targeted language outreach for the Ezone Project
2. Ezone Project summary in English and five languages*
3. Postcards sent to all affected property owners were sent between June 2018 and June 2019
4. Letters to all affected property owners were sent on November 15, 2019
5. Postcards to renters of properties affected as well as properties within 50 feet of proposed ezones were sent on November 21, 2019

*The translated Ezone Project summary was used in social media including Facebook and Nextdoor announcements about the project. It was also sent to neighborhood coalitions for suggested use if the coalition received questions about the Ezone Project.



YOUR PROPERTY IS BEING EVALUATED FOR REMAPPING AS PART OF THIS COMPLIANCE PROJECT.

Please visit www.portlandoregon.gov/bps/e-zone for more information or attend an information session — listed on the back — near you.



City of Portland, Oregon
Bureau of Planning and Sustainability
1900 SW 4th Avenue, Suite 7100
Portland, Oregon 97201-5380

P276 RETURN SERVICE REQUESTED

Environmental Overlay Zones protect Portland's streams, wetlands, forests, steep slopes and wildlife habitat. This project will align the e-zones with the natural features adopted by the new 2035 Comprehensive Plan.

LEARN MORE AT AN INFORMATION SESSION NEAR YOU:

- Brentwood-Darlington Neighborhood Association Meeting
August 2, 2018 at 7:00pm
Brentwood-Darlington Community Center - 7211 SE 62nd Ave
- Lents Neighborhood Livability Association
August 9, 2018 at 6:30pm
KingsPins Chalet - 3550 SE 92nd Ave
- Pleasant Valley Neighborhood Association Meeting
September 19, 2018 at 7:00pm
Alice Ott Middle School - 12500 SE Ramona St

CONTACT PROJECT STAFF, WE'RE HERE TO HELP:
503-823-4225 or ezone@portlandoregon.gov

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Traducción sau interpretare	Писменный або усный перевод	翻譯或傳譯	Tuldimla ama Faslaadda
التفسير أو الترجمة	ترجمة الشرح أو التفسير	翻譯或傳譯	

503-823-7700 | www.portlandoregon.gov/bps/71701

<NAME>

<ADDRESS>

<CITY STATE ZIP>





Bureau of Planning and Sustainability

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MEMO

DATE: September 18, 2019
TO: Mindy Brooks
FROM: Nick Kobel
CC: Daniel Soebbing
SUBJECT: Targeted Language Outreach for Ezone Update

Background

The Ezone Map Correction Project is moving to the next phases of public engagement. Local, state and federal policies require serving speakers of other languages with limited English proficiency, specifically around outreach and communication. However, granular data about which languages are present in our community is extremely limited. Through a mix of data sources including ACS/Census data, Oregon Department of Education and taxlot ownership data, this memo attempts to provide strategic guidance for reaching the 49,000 LEP speakers in Portland.

Recommendations

Based on the research outlined in the next section, I recommend the following strategic locations for targeting LEP speakers. Asterisk (*) denotes higher priority based on overlapping data sources.

Chinese:

- Forest Park/Northwest Hills *
- Pleasant Valley *
- Kelly Butte *
- South Portland/Marquam Hill
- Lents, south of Foster *

Vietnamese:

- Pleasant Valley *
- Rocky Butte *
- Wilkes
- East Columbia/Bridgeton



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Printed on 100% post-consumer waste recycled paper.

- East Portland broadly

Ukrainian or Russian:

- Pleasant Valley *
- Powell Butte
- Lents, east of 205
- East Portland broadly

Spanish

- Lents *
- East Portland broadly

Data sources and methods

Quality information on populations with a language other than English is lacking. Coordination across the City on improving this data gap is also lacking. However, the data sources below helped inform this targeted language access strategy:

- ACS 2013-17 data on languages and language groupings (Table C16001)
- [Portland LEP Factor 1 Analysis](#) (ACS 2008-12 data and Oregon Department of Education data)
- Taxlot data using owner name - visual scan of names as well as a python library ([ethnicolr](#)) with a predictive AI model to infer broad geographic origin of first and last names

Limited English proficiency (LEP) population

The table below summarizes the LEP population in Portland.

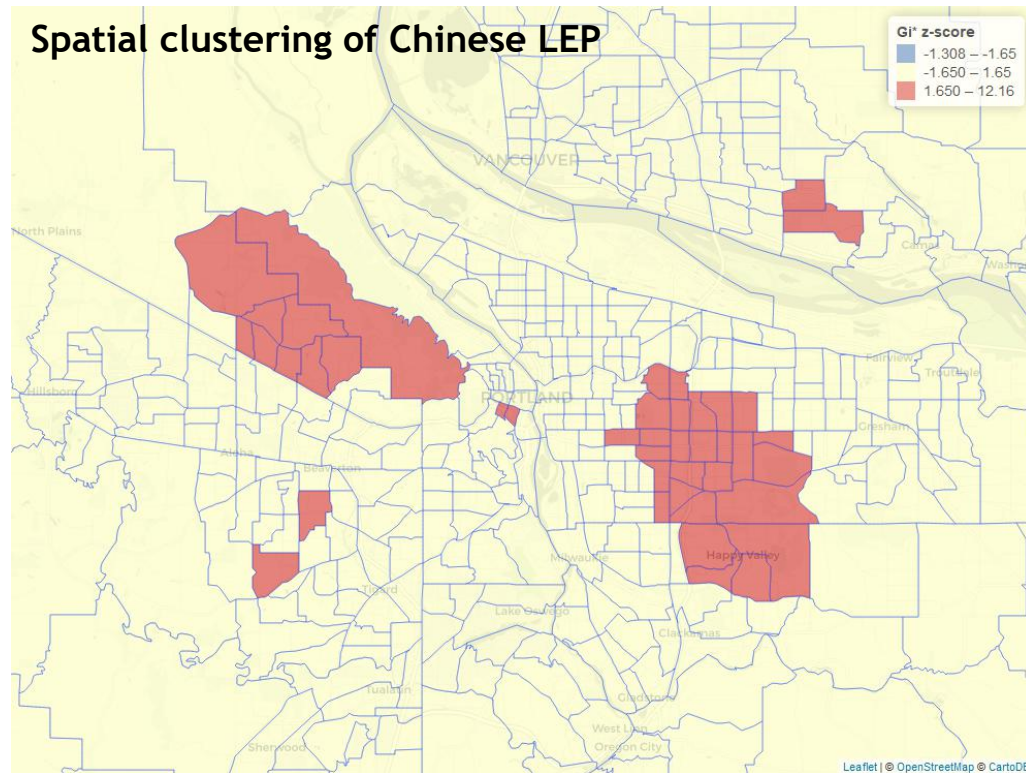
Language	LEP population	Share of LEP speakers	Share of total population
Spanish	15,431	32%	2.6%
Vietnamese	8,468	17%	1.4%
Russian Polish or other Slavic languages	6,128	13%	1.0%
Chinese (incl. Mandarin Cantonese)	5,768	12%	1.0%
Other Asian and Pacific Island languages	5,219	11%	0.9%
Other Indo-European languages	2,918	6%	0.5%
Other and unspecified languages	2,767	6%	0.5%
Arabic	639	1%	0.1%
Korean	605	1%	0.1%
Tagalog (incl. Filipino)	493	1%	0.1%
French Haitian or Cajun	319	1%	0.1%
German or other West Germanic languages	170	0%	0.0%
Total LEP speakers	48,925		8.2%
Total population 5 years or older	595,091		

Source: ACS 2013-17, Table C16001.

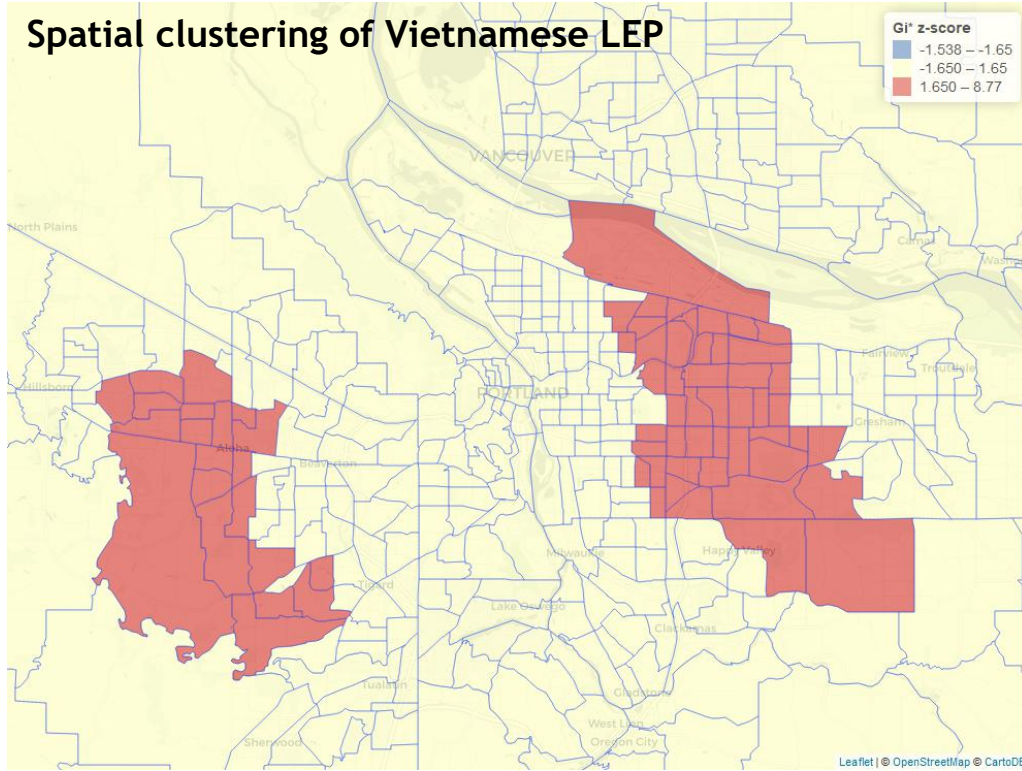


Hot spots analysis

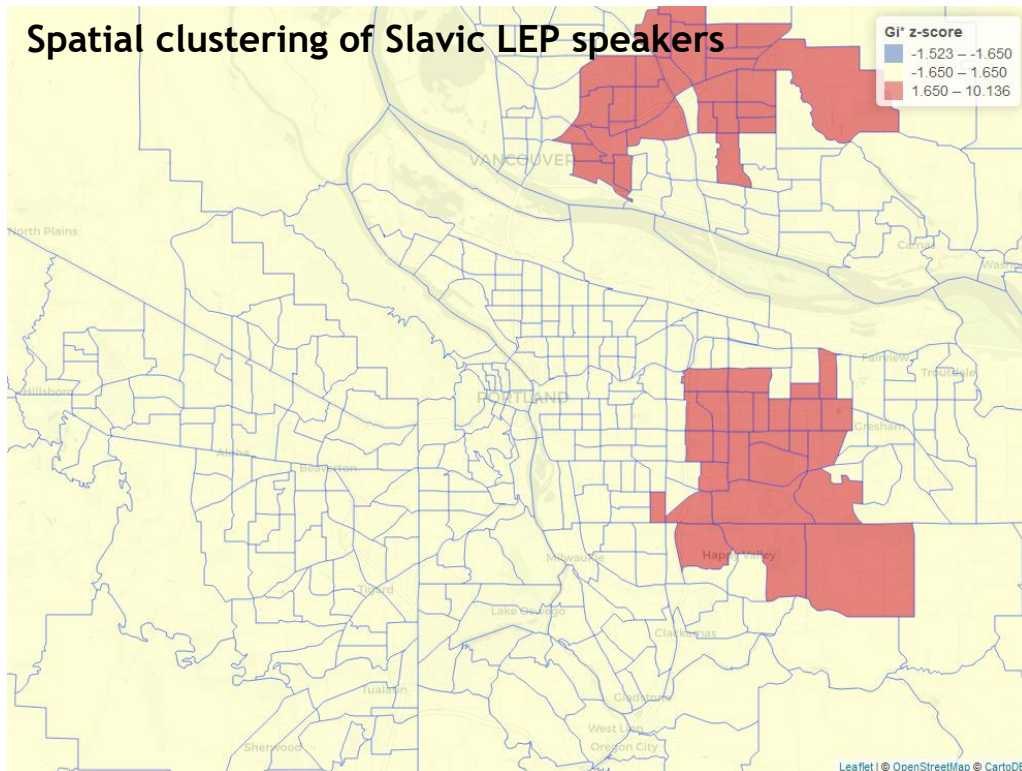
I conducted a hot spot analysis on the nominal value of LEP speakers of various languages available using the 2017 ACS. Hot spots (red) and cold spots (blue) show where there is statistically significant spatial clustering of speakers of other languages. Red and blue clusters are significant at a 90% confidence level. A hot spot analysis does not tell you where there are a high number of speakers. It tells you where there are spatially correlated clusters of speakers. While there is a high correlation between volume of speakers and spatial autocorrelation, they do not equate one another.

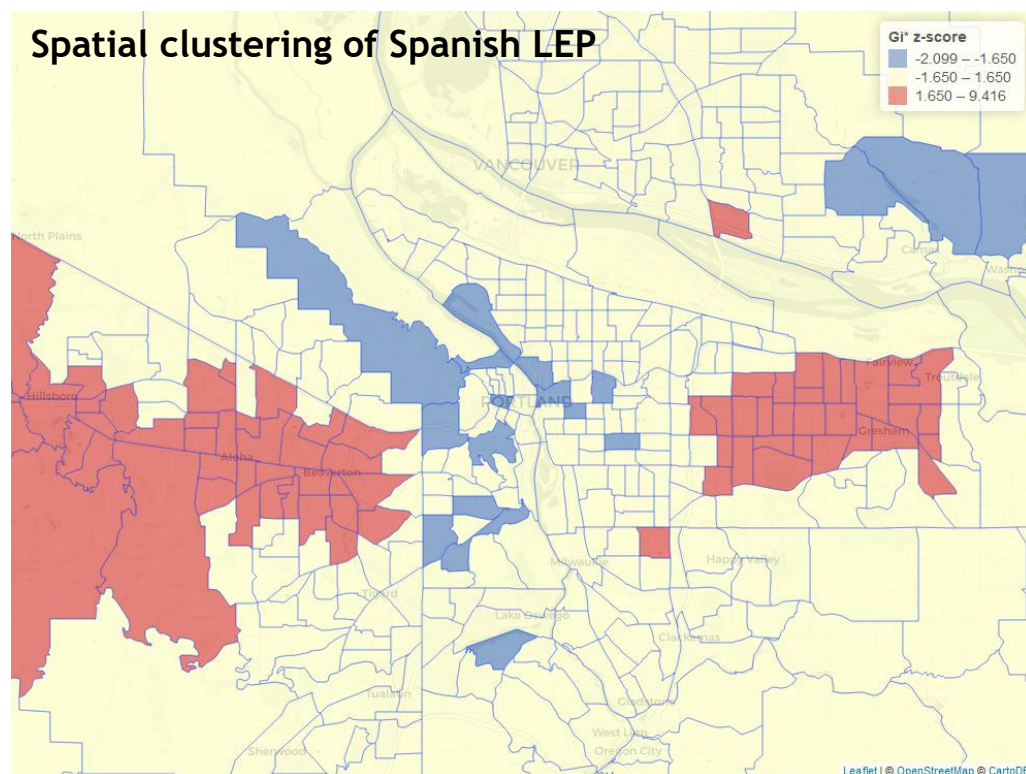


Spatial clustering of Vietnamese LEP



Spatial clustering of Slavic LEP speakers





Tenure (owner/renter split)

Last, using taxlot information, I examined the tenure split in Ezones. First, I selected all taxlots that intersect a c- or p-zone. Then I joined this information to building footprints and to census tract FIPS codes. Next, I assigned each FIPS code a Portland Plan study area using PHB’s housing analysis areas tract crosswalk. Then I determined whether the owner address matched the site address. Finally, I summarized the total number of units (RES_UNITS field in the building footprints layer) by Portland Plan area and by tenure.

Identifying owner-occupied sites is easier than identifying renter-occupied sites. This is because the owner address may not match the site address for many reasons, potentially including PO boxes used by site owner or using trusts or LLCs as the recorded owner of a site for property tax purposes. For this reason, caution should be used in drawing conclusions on renter-occupied housing units in Ezones.

Portland Plan area	Owner-occupied	Not owner-occupied	Total
122nd-Division	22	12	34
Central City	19	30	49
Forest Park-Northwest Hills	412	112	524
Gateway	10	5	15
Hayden Island-Bridgeton	183	821	1,004
Hillsdale-Multnomah-Barbur	304	750	1,054
Hollywood	1	210	211
Interstate Corridor	12	2	14

5



Lents-Foster	56	269	325
Montavilla	4	27	31
Northwest	200	128	328
Parkrose-Argay	48	7	55
Pleasant Valley	367	79	446
Raleigh Hills	552	642	1,194
Roseway-Cully	53	132	185
Sellwood-Moreland-Brooklyn	9	378	387
South Portland-Marquam Hill	340	474	814
St. Johns	1	34	35
Tryon Creek-Riverdale	455	279	734
West Portland	307	163	470
Woodstock	286	261	547
Grand Total	3,641	4,815	8,456



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الترجمة التحريرية أو الشفهية	Письмовий або усний переклад	翻訳または通訳	Turjumida ama Fasiraadda	ການແປພາສາ ຫຼື ການອະທິບາຍ
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Bureau of Planning and Sustainability
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Portland, Oregon 97201-5380 P514

Environmental Overlay Zone Map Correction Project

<OWNER NAME>

<OWNER ADDRESS>

<OWNER CITY STATE ZIP>

Environmental Overlay Zone Map Correction Project

DRAFT Zoning Changes Proposed for Your Property

Open House Events

December 4, 6:30-8:30pm at Riverdale Highschool, 9727 SW Terwilliger Blvd

December 11, 5:00-7:00pm at Skyline Memorial Garden, 4101 NW Skyline Blvd

January 8, 4:30-6:30pm at Taborspace, 5441 SE Belmont St

Project website: www.portlandoregon.gov/bps/e-zone

Environmental Overlay Zone Map Correction Project

This notice is in regard to property: <SITE ADDRESS>

What is the Environmental Overlay Zone Map Correction project?

This project is correcting the location of environmental overlay zones (ezones) to better align with rivers, streams, wetlands, flood areas, steep slopes, forests, and fish and wildlife habitat in Portland and urban unincorporated Multnomah County. A new draft of the maps and reports is available for your review on the project website: www.portlandoregon.gov/bps/e-zone

Why are these changes being proposed? Why now?

The City of Portland has an existing environmental program, which was adopted between 1989-2002, to protect natural resources using environmental overlay zones (ezones). The ezones are intended to follow features like rivers, streams, wetlands, steep slopes and forests. The technology used to map natural resources has greatly improved. With the new Natural Resources Inventory in 2012 it became obvious that some resources that are supposed to be protected (like stream segments) are not, while other lands have regulations but no resources. This project will correct that.

The ezone update project is being done now because the newly adopted 2035 Comprehensive Plan directs the City to make sure regulations that protect natural resources are up to date. Most of the ezones have not been updated in nearly 20 years and do not match the resources they were intended to protect.

How do these changes impact your property?

If your property is already developed with a house or business, there will be little impact on the existing development. The buildings, driveway, parking lot and yard can be maintained, repaired, and in most cases, be replaced. However, the ezones could impact if or where a new expansion, such as a new deck or a garage, is allowed.

If your property is vacant, the ezones allow a certain amount of development in the ezones to accommodate a new house or business. Please see the General Development Standards of zoning code 33.430.140.A-S. If a proposed development cannot meet these standards, Environmental Review is required as described in zoning code 33.430.210.

When will these changes take effect?

Before any changes can be made, there will be public hearings so community members can share their feedback on the proposals. In spring 2020, a notice will be sent to property owners with information about when, where and how to provide testimony to the Planning and Sustainability Commission. After the PSC forwards its recommendations to City Council, there will be another chance to testify at City Council. Adoption of the zone changes is anticipated in Winter 2020 or Spring 2021.

How can you find out more about the project?

- Attend an open house and speak with staff (see backside for dates and times)
- Get answers from our Ezone Helpline at 503-823-4225
- Email us at ezone@portlandoregon.gov
- Visit our website at www.portlandoregon.gov/bps/e-zone

Interpretation Services:

Esto es un aviso público sobre los posibles cambios del uso del suelo que pueden afectar a su propiedad. Para obtener más información, por favor llame al 503-823-4225.

Официально уведомляем о возможных изменениях в землепользовании, которые могут коснуться Вашей собственности. За дополнительной информацией обращайтесь по номеру 503-823-4225.

Офіційно повідомляємо про можливі зміни в землекористуванні, які можуть стосуватись Вашого нерухомого майна. За додатковою інформацією звертайтеся за номером 503-823-4225.

Đây là một thông báo cho công chúng về những thay đổi trong sử dụng đất có thể sẽ ảnh hưởng tới nhà đất của quý vị. Để biết thêm thông tin, vui lòng gọi 503-823-4225.

本文为公共通知，旨在告知您土地使用的潜在变化可能会影响到您的房产。如需更多信息，请致电：503-823-4225。

ENVIRONMENTAL OVERLAY ZONE (c & p zones) MAP CORRECTION PROJECT



Bureau of Planning and Sustainability
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City of Portland, Oregon



July 2021

THE CITY IS UPDATING PROTECTIONS FOR NATURAL RESOURCES NEAR YOU

To see the proposed ezones, please visit www.portlandmaps.com/bps/ezones/#/map
or attend an information session - listed on the back.



City of Portland, Oregon
 Bureau of Planning and Sustainability
 1900 SW 4th Avenue, Suite 7100
 Portland, Oregon 97201-5380 P276

RETURN SERVICE REQUESTED

Volume 5: Appendices
 Environmental Overlay Zones protect Portland's streams, wetlands, forests, steep slopes and wildlife habitat. This project will align the e-zones with the natural features adopted by the new 2035 Comprehensive Plan.

FIND OUT MORE AT AN INFO SESSION NEAR YOU:

December 11, 2019

5:00 to 7:00pm
 Skyline Memorial Garden
 4101 SW Skyline Boulevard

January 8, 2020

4:30 to 6:30pm
 Taborspace
 5441 SW Belmont Street

CONTACT PROJECT STAFF, WE'RE HERE TO HELP:
 503-823-4225 or ezone@portlandoregon.gov

**Environmental Overlay Zone
 Map Correction Project**

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Traduttore sau interpretare	Писъамный або усный перекладач	翻譯或通訳	Түржүмдә или устунй переведә
	القائمة العربية في اللغة	翻譯或通訳	Turjumlada ama Fistraxadda
	503-823-7700 www.portlandoregon.gov/bps/71701		

POSTAL CUSTOMER

<ADDRESS>

<CITY STATE ZIP>

Appendix E: Metro Title 13 Compliance Letter



Metro

600 NE Grand Ave.
Portland, OR 97232-2736

Memo

Date: Wednesday, May 6 2020
To: Mindy Brooks, City Planner, Bureau of Planning & Sustainability
From: Tim O'Brien, Principal Regional Planner
Subject: Ezone Map Correction Project

This memo is intended to clarify some discussion points regarding substantial compliance with Title 13 that resulted from our meeting on April 23, 2020 with staff from the Department of Land Conservation and Development and the Department of State Lands.

As you know the city was determined to be in substantial compliance with Urban Growth Management Functional Plan Title 13: Nature in Neighborhoods on January 16, 2013. This determination of substantial compliance was based upon the city's broad natural resource protection package that includes a wide range of actions and programs from overlay zones, to plan districts, development regulations, restoration, acquisition, green streets and education/stewardship programs. The number of diverse programs and projects the city implements is by far the most comprehensive of any of the jurisdictions in the region.

Because the city is in compliance with Title 13 any changes to the overall natural resource protection program as a result of the current Ezone Map Correction Project will be evaluated based on the protection measures/programs the city originally adopted to meet the requirements of Title 13. As we have discussed and agreed upon, the city will group or package major changes to the maps together in an effort to facilitate the review of the proposed map changes.

Metro staff has always understood that the original Inventory and Habitat Conservation Area (HCA) Maps were completed at the regional (50,000 foot) level and local jurisdiction refinements of the mapped HCA areas based upon updated information and improvements in mapping technology is, not only expected but encouraged, as jurisdictions update their natural resource protection programs over time. This refinement process, using an updated natural resource inventory is consistent with the intention of the implementation alternatives for cities and counties under Metro Code section 3.07.1330(b)(2). In 2012 Metro staff utilized the city's 2012 request for compliance report as a basis for determining substantial compliance. Similarly, Metro staff will utilize the city's 2020 request for compliance report to evaluate whether the proposed changes substantially meet compliance with Title 13. Metro staff's review of this report along with on-going discussions with city staff is the method for documenting the determination of substantial compliance. Once again Metro will consider the city's wide range of actions and programs as outlined in the request for compliance report in determining substantial compliance.

It is my understanding that as a result of the updated natural resource inventory new wetland and riparian areas were identified. The city's proposed methodology for addressing these areas is to utilize the methodology for identifying habitat areas consistent with code section 3.07.1340(d)(4) and determining urban development value of the land consistent with code section 3.07.1340(e). Finally the confirmation of the HCA will be determined utilizing Title 13 Table 13.07-13a. The location of the city's conservation and protection overlay zones will then be updated to apply to the confirmed HCAs – Class I Riparian Areas, Class II Riparian Areas and Habitats of Concern. This is the same process the city used in meeting substantial compliance with Title 13 in 2013 and is appropriate for use in the Ezone Map Correction Project. Lastly, for Class III Riparian Areas and Upland Habitat which are not HCAs the city will demonstrate Compliance with Goal 5 OAR 660-023.

As I noted above, Metro expects and encourages local jurisdictions to refine their local natural resource inventories and protection programs with new data and mapping technologies and we believe this is consistent with the implementation component of Title 13 as outlined in 3.07.1330. Not allowing Portland or any other jurisdiction in the region to utilize better local data and only rely on Metro mapping that occurred almost 20 years ago would be inconsistent with the intent of Title 13 to conserve, protect and restore a continuous ecologically viable streamside corridor system. Portland as well as other cities in the region utilized local inventories to comply with Title 13 in the first place and we believe this approach is still valid for determining substantial compliance with Title 13.

Appendix F. REGULATORY CONTEXT

The following are regulations, policies and goals that relate to natural resources protection and management within the City of Portland. The information is organized starting with the three programs that most directly relate to natural resource management in Portland: Oregon State Land Use Planning Program, Metro Urban Growth Management Functional Plan and City of Portland Comprehensive Plan. Following those explanations are summaries of other local, state and federal regulations, policies and goals related to natural resources. This is not an exhaustive list.

1. State, Regional and Local Land Use Planning Programs

Cities and counties in Oregon are required to comply with the State Land Use Planning Program and those jurisdictions in the Metro region are also required to comply with the Urban Growth Management Functional Plan. These two bodies of regulations set the framework for planning for natural resources in Portland. Portland complies with both programs by maintaining a Comprehensive Plan. All three programs are described below.

A. State Land Use Planning Program

Comprehensive land use planning was mandated by the 1973 Oregon Legislature, primarily in response to population growth pressures on valuable farm and forest land. Since 1975, cities and counties in Oregon have been required to comply with Statewide Planning Goals. Today there are 19 goals that Oregon cities and counties must comply with through the adoption and maintenance of local comprehensive plans. Portland adopted its first comprehensive plan in 1981 to satisfy the requirements of the state planning program. Portland's Comprehensive Plan was updated in June 2016. See below for more about the Comprehensive Plan.

Goals that relate to natural resources are Goals 5, 6 and 7.

- **Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces** – Goal 5 addresses many types of resources. It establishes a process in which resources are inventoried and evaluated for significance. If a resource or site is found to be significant, the local government must evaluate the consequences of three policy choices: protecting the resource, allowing proposed uses that conflict with the resource, or establishing a balance between protecting and allowing uses that conflict with the resource. The local government must then adopt a program based on the results of this evaluation. Goal 5 does not apply to the area within the Goal 15 Willamette Greenway Boundary. However, local jurisdictions may use tools and approaches provided by Goal 5 to inform natural resources management within the Willamette Greenway Boundary.
- **Goal 6: Air, Water and Land Resources Quality** – This goal requires local comprehensive plans and implementation measures to be consistent with state and federal regulations on matters such as stream quality and groundwater pollution. Goal 6

provides guidelines for local jurisdictions, including buffering and separating those land uses which create impacts on air, water and other resources. Further, plans should consider the carrying capacity of the air, land and water resources within the planning area.

- **Goal 7: Areas Subject to Natural Hazards** – Goal 7 deals with development in places subject to natural hazards such as flooding, landslides or wildfire. It requires that jurisdictions apply “appropriate safeguards” (e.g., flood plain zoning) when planning for development.

B. Metro’s Urban Growth Management Functional Plan and Titles 3 and 13

The 1973 Legislature granted expanded powers for the Columbia Region Association of Governments (now called Metro) to “coordinate regional planning in metropolitan areas” and to “establish a representative regional planning agency to prepare and administer a regional plan.” During the 1990s, Metro worked with local jurisdictions to develop Regional Urban Growth Goals and Objectives (RUGGOs) and the Urban Growth Management Functional Plan.

The Urban Growth Management Functional Plan provides a regional approach to growth management by tailoring several key Statewide Planning Goals, described above, to meet regional population growth expectations. This approach recognizes the interrelationship between housing, employment, clean air and water, natural resource protection, and transportation networks across jurisdictional boundaries. Metro developed the plan with input from the 24 cities and three counties within the Urban Growth Boundary at that time. The Urban Growth Boundary is one tool used to protect farms and forests from urban sprawl and promote efficient use of lands within the boundary. Uses of land within an Urban Growth Boundary support and are supported by urban services such as roads, water and sewer systems.

Nine titles in the Urban Growth Management Functional Plan are derived from or relate to Statewide Planning Goals and the rest are procedural. Title 3 and Title 13 pertain most directly to natural resources.

Title 3 is derived from portions of Oregon Statewide Land Use Goals 6 and 7, and establishes regional requirements relating to water quality, erosion control and flood hazard management. In September 2002, the City of Portland completed the Title 3 Water Quality Compliance Report. The report explains how the City complies with Title 3 requirements through the existing Environmental Overlay Zoning program and newer regulations established by the Willamette River Title 3 Water Quality Compliance Project (adopted by the City Council in August 2002). Metro found the City in substantial compliance with Title 3 in December 2002.

Title 13, adopted by the Metro Council in September 2005, establishes the Nature in Neighborhoods program. The purpose of the program is to protect, conserve, and restore important riparian corridors and wildlife habitat areas in the region. Title 13 also serves as a supplement to Title 3 requirements relating to water quality, flood hazard and erosion

control. Title 13 establishes provisions intended to prevent impacts or ensure mitigation of unavoidable impacts on identified Habitat Conservation Areas within the region.

In January 2007, the Oregon Department of Land Conservation and Development acknowledged the new Title 13 program, finding it in compliance with Goals 5 and 6. This acknowledgement established new Goal 5 and 6 requirements for cities and counties in the Metro area. Metro did include the Willamette River and areas in the Willamette Greenway Boundary within the Title 13 program.

In October 2012, the Portland City Council adopted the citywide Natural Resources Inventory methodology and maps as part of the factual basis to inform the City's Comprehensive Plan update. In November 2012, the City Council approved the City's *Request for Metro Determination of Substantial Compliance with Title 13* for submittal to Metro. In December 2012, Metro staff determined that the City is in substantial compliance with Title 13 and the Metro Council accepted this determination in February 2013. The City and Metro entered into a voluntary Intergovernmental Agreement (IGA) that states the City's intent to complete a number of planning projects that will involve the development of area-specific inventory updates and evaluation of environmental program refinements based on the inventory findings and other new information.

C. City of Portland Comprehensive Plan

All cities and counties in Oregon are required to have a Comprehensive Plan. The Comprehensive Plan addresses future development and land use in Portland. Portland adopted its first Comprehensive Plan in 1981. In May 2018, Portland completed periodic review and adopted 2035 Comprehensive Plan.

The 2035 Comprehensive Plan directs the City to "Weave nature into the city and foster a healthy environment that sustains people, neighborhoods, and fish and wildlife. Recognize the intrinsic value of nature and sustain the ecosystem services of Portland's air, water and land."

The specific environmental and watershed health are addressed by goals 7.A through 7.E and policies contained under those goals. The policies address environmental quality and quantity, ecosystem services, climate change, natural hazards, and habitat diversity and connectivity. The policies also direct the city to maintain inventories of natural resources and develop plans to protect and mitigate for unavoidable impacts to significant resources.

2. Local Environmental Regulations, Policies, Goals and Procedures

In addition to the City of Portland Comprehensive Plan, there are other local regulations, policies and goals that relate to natural resource management.

A. City of Portland Title 11: Trees

The Title 11 tree code went into effect in January 2015. The rules apply to trees that are not addressed through the environmental overlay zone regulations found in Title 33 of the zoning code. The tree rules encourage preservation of large healthy trees and replacement of trees that are removed, and ensure that trees are routinely planted as new development takes place.

<http://www.portlandonline.com/bps/index.cfm?a=350786&c=54923>

B. City of Portland Streamlining Agreement

The City of Portland has a signed agreement with federal agencies that agrees to a shared and cooperative streamlining process for federal ESA consultations. This streamlining agreement process was extended to state and local agencies in 2006 to ensure better coordination and communication between all permitting and consulting agencies.

A Streamlining Team consisting of all participating federal, state and local agencies was created along with standard operating protocols with the purpose of sharing information needed by the agencies for their review and approval of the proposed activity. In addition to assisting City project teams, the procedures are designed to improve coordination and communication among the agencies. Through this approach, the hoped for outcomes are consistent decisions between the agencies and that agency decisions will occur within the same time period whenever possible.

The streamlining agreement was originally designed to facilitate the permitting of city sponsored projects. The process can be extended to private and other public entities whenever it is determined that the City has a strong interest or connection with a proposed development.

Projects that participate in the streamlining process must present a purpose and need statement and a range of alternatives to meet the project's goals, including looking at the practicable alternative with the least impacts to natural resources. If the selected option has unavoidable impacts to natural resources, mitigation requirements can also be identified early in the process.

C. City of Portland Stormwater Management Manual

The Stormwater Management Manual (SWMM) is a technical document originally adopted in 1999 that outlines the City's stormwater management requirements to comply with the National Pollution Discharge Elimination System (NPDES) permit and Safe Drinking Water Act. The

SWMM was recently updated in 2010. The requirements defined in the manual apply to all development and redevelopment projects within the City of Portland on both private and public property. The SWMM applies to the following:

- Properties that propose new offsite discharges or new connections to the public system;
or
- Projects that develop or redevelop over 500 square feet of impervious area.

The City's approach to stormwater management emphasizes the use of vegetated surface facilities to treat and infiltrate stormwater on the property where the stormwater is created. This approach provides a number of benefits related to protecting stormwater infrastructure and improving watershed health, including pollutant reduction, volume and peak flow reduction, and groundwater recharge. If an entity cannot meet the requirement for managing stormwater onsite to the maximum extent feasible, the City may allow the entity to either construct an offsite facility or compensate the City for the future development of offsite facilities through payment of a fee. In this case, a filing of "special circumstances" must be done by the applicant, which will be reviewed and approved by the City before an alternative approach would be allowed.

<http://www.portlandonline.com/bes/index.cfm?c=47954>

D. Portland Watershed Management Plan

The Portland Watershed Management Plan, adopted by City Council in 2005, describes the approach that will be used to evaluate conditions in the City's urban watersheds and implement projects to protect and improve watershed health. The approach is used by the Bureau of Environmental Services, other City bureaus, agencies, and citizens' groups that all share a common goal to protect Portland's natural resources, restore critical ecosystems, and implement stormwater management solutions that integrate the urban area with the natural environment. Its overarching theme is to improve watershed health through new watershed friendly (more sustainable) development and redevelopment, installation of new stormwater infrastructure, maintenance and retrofitting of existing infrastructure in new ways that will improve watershed health, and extensive restoration and rehabilitation of key habitats.

The Watershed Management Plan presents an integrated City response to local, state, and federal environmental requirements, providing the flexibility to respond to regulatory requirements in a manner that addresses the root causes of problems rather than the more traditional mandate-by-mandate approach that only addresses the symptoms. The Watershed Management Plan includes a description of a management system that is used to track City progress toward well-defined watershed health goals, and to help the City adapt their strategies as needed to maximize effectiveness. An annual report is developed that tracks the progress toward achievement of the watershed health goals.

<http://www.portlandonline.com/bes/index.cfm?c=38965>

E. Urban Forestry Management Plan

The Urban Forestry Management Plan (UFMP, last updated in 2004) provides direction for the maintenance and improvement of Portland's urban forest and makes recommendations to enhance and improve the urban forest now and for the future. Its three main goals are:

- Protect, preserve, restore and expand Portland's urban forest;
- Develop and maintain support for the urban forest; and
- Manage the urban forest to maximize benefits for all residents.

Specifically, it responds to recent environmental mandates, clarifies resource management and authority, better coordinates the roles of different agencies and bureaus, and provides canopy targets. It divides Portland's urban forest into five basic categories called Urban Land Environments (ULEs). Each ULE has particular physical characteristics and issues, provides various benefits and serves different needs. Each ULE is managed by different bureaus, agencies or individuals to achieve different results. The UFMP provides a description of each ULE, management goals, information about property owners/managers, and an analysis of the strengths, weaknesses, opportunities, threats and issues for the ULE. This is followed by specific objectives, recommended actions, and performance measures for assessing progress. An implementing document for the UFMP, the Urban Forest Action Plan, was developed by an interbureau committee and accepted by City Council in 2007 to ensure attainment of the goals and recommendations of the UFMP. The Action Plan describes the full array of benefits and services that trees provide across the urban landscape. The prioritized actions are those that can be done by City of Portland bureaus; achieving all of the UFMP's goals will require participation from private organizations, individuals, and other public agencies.

<http://www.portlandonline.com/parks/index.cfm?a=226238&c=38294>

F. Terrestrial Ecology Enhancement Strategy (TEES)

The purpose of the TEES is to have a common body of information and agreed-upon priorities for conservation and restoration of terrestrial plant and animal species and habitats in Portland, within a regional and state context. The TEES is designed to help achieve the watershed health goals and objectives in the Portland Watershed Management Plan (PWMP).

The information assembled during the development of the TEES (updated June 2011) is available to BES watershed teams to supplement existing watershed characterizations, inform the selection and prioritization of actions, add value to projects and other actions, determine monitoring priorities, and support and inform the Grey to Green (G2G) project. The TEES work also supports and informs an array of other City programs, plans, activities, projects, and decision-making processes, including the Portland Plan update, environmental regulatory improvement, parks and natural area management, and local bond share land acquisition.

In addition, the TEES supports efforts of Metro (e.g., Nature in Neighborhoods, Intertwine and the Regional Conservation Strategy), the U.S. Fish and Wildlife Service, the Oregon Department of Fish and Wildlife (e.g., the Oregon Conservation Strategy), the Oregon Watershed Enhancement Board, and the Northwest Power and Conservation Council's sub-basin planning.

The main elements of the TEES include:

- Identification of plant and animal species and terrestrial habitats needing protection, conservation, and/or restoration (Special Status Species and Habitats)
- Identification of key management issues (e.g., invasive species)
- Articulation of watershed-specific objectives for terrestrial habitats and biological communities
- Identification and implementation of priorities and actions for the next 2 to 5 years, as well as identification of long-term actions
- Guidance to City bureaus and citizens for improving habitat and addressing plant and wildlife management issues
- Selection of species and habitats to be monitored over time to determine the health of biological communities in Portland's urban watersheds

<http://www.portlandonline.com/bes/fish/index.cfm?c=51052>

3. State Environmental Regulations, Policies and Goals

In addition to the State Land Use Planning Program, there are other regulations, policies and goals that relate to natural resource management.

A. Oregon Department of State Lands Removal-Fill Permit

In Oregon, a state permit issued by the Department of State Lands (DSL) is required if activities involve filling or removing more than 50 cubic yards of material in waters of the state. In areas determined to be Essential Salmonid Habitat or a State Scenic Waterway a permit is required for any amount of fill or removal. DSL regulates all wetlands, including isolated or ephemeral wetlands.

Currently, DSL and the U.S. Army Corps of Engineers (USACE) use a joint permit application form, so that in many cases applicants need to prepare only one application to obtain both permits. However, all projects require separate authorizations (or permits) from DSL and the USACE, and each agency may request information in addition to the application.

The analysis for the permit must include a purpose and need statement and each alternative must meet the purpose and need. If the alternative chosen includes unavoidable impacts to natural resources, then the analysis includes an evaluation of how impacts can be minimized and if compensatory mitigation is necessary. Compensatory mitigation means activities conducted to restore, create or enhance wetland and waterway impacts (tidal and non-tidal) to compensate for the adverse effects of the project. The ecological functions (biotic and abiotic) that are impacted by the project must be replaced. In addition to determining which ecological functions should be replaced, DSL uses ratios for spatial considerations; ratios are specific to the restoration, creation, or enhancement types of compensatory mitigation.

DSL prefers mitigation within the same watershed; payment in lieu of mitigation or acquiring mitigation credits from a DSL approved mitigation bank may also be possible.

<http://www.oregon.gov/DSL/PERMITS/r-fintro.shtml>

B. National Pollutant Discharge Elimination System (NPDES)

As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. In Oregon, the NPDES permit program is administered by Oregon Department of Environmental Quality (DEQ).

The NPDES 1200-C, 1200-CN and 1200-CA general permits apply to construction activities including clearing, grading, excavation, materials or equipment staging and stockpiling that will disturb one or more acres of land. These permits also apply to construction activities that will disturb less than one acre that are part of a common plan of development or sale, if the larger common plan of development or sale will ultimately disturb one acre or more. In addition, DEQ may require registration for any other construction activity based on the potential for contribution to an excursion of a water quality standard or potential for significant contribution of pollutants to waters of the state.

DEQ issues stormwater discharge permits to industries that discharge stormwater into rivers, lakes and streams from pipes, outfalls or other point sources at a site. Based on federal regulations, NPDES permit coverage is required for industrial facilities that discharge stormwater from their industrial areas to surface waters of the state, or to storm drains that discharge to surface waters. Examples of industrial activities that require a permit include manufacturing, transportation, mining, and steam electric power industries, as well as scrap yards, landfills, certain sewage treatment plants, and hazardous waste management facilities.

A municipal separate storm sewer system (MS4) is a conveyance or system of conveyances (e.g., roads with drainage systems, municipal streets, catch basins, curbs, gutters, manmade channels or storm drains) owned or operated by a governmental entity that discharges to waters of the state. Sources that need to obtain an MS4 permit are classified as either "Phase I" or "Phase II." Phase I MS4s are those with populations greater than 100,000, while regulated Phase II (or "small") MS4s serve populations less than 100,000 located within Census Bureau-defined Urbanized Areas.

<http://www.deq.state.or.us/wq/stormwater/stormwater.htm>

C. Oregon Waterway Authorization Program

The Oregon Department of State Lands (DSL) is responsible for establishing rules controlling public use of submerged and submersible land underlying state-owned waterways. State-owned

waterways are navigable waterways below ordinary high water. Many uses of and structures occupying state-owned waterways require DSL's written approval. Types of uses that require authorization include but are not limited to:

1. Waterway Lease for commercial and non-commercial marina/moorages, industrial, non-marine uses, floating homes, and large (more than 2,500 square feet) non-commercial docks, and boathouses.
2. Waterway Structure Registration for non-commercial docks, and boathouses under 2,500 square feet.
3. Waterway Registration of a structure that is actively and exclusively used to accommodate ships, boats, or vessels engaged exclusively in the receipt and discharge of goods or merchandise, or in the performance of active government functions on the waterway.
4. Public Facility License for public agency owned, operated, and maintained docks/floats, boat ramps, boat landings, floating restrooms, navigational aids, and viewing structures with no, or a nominal, fee.

<http://oregonstatelands.us/DSL/NAV/index.shtml>

D. Oregon Department of Fish and Wildlife – Fish Passage

In Oregon, providing fish passage over man-made dams and diversions has been required since before statehood in 1859. Fish passage statutes have evolved over the past 150 years. In 2001, House Bill 3002 (HB 3002), which addresses fish passage at artificial obstructions, was signed into law.

As a state policy, upstream and downstream passage is required at all artificial obstructions in Oregon waters where migratory native fish are currently or have historically been present, except under certain clearly defined circumstances. Overwater structures, such as a dock or pier, would be evaluated under this rule.

HB 3002 requires the Oregon Department of Fish and Wildlife (ODFW) to complete and maintain a statewide inventory of artificial obstructions, which will be used to prioritize artificial barriers. The primary method for implementing this policy should be through active collaboration and cooperation between the ODFW and owners or operators of artificial obstructions. HB 3002 provides the Fish and Wildlife Commission with emergency authority to require installation of fish passage at the owner/operator's expense if a population of native migratory fish is adversely impacted.

The ODFW will review fish passage in consultation to the DSL permit. ODFW also establishes the in-water work windows.

<http://www.dfw.state.or.us/fish/passages/>

E. The Oregon Conservation Strategy

The Oregon Conservation Strategy (the Strategy) is a non-regulatory, statewide approach to species and habitat conservation. The Strategy provides a framework for limited conservation resources, to leverage investments in a more efficient and effective manner. The Strategy was developed by the Oregon Department of Fish and Wildlife (ODFW) in conjunction with a broad base of stakeholders, including, federal, state, and local agency personnel, biologists, citizens, and elected officials. A primary goal of the Strategy is to help recover currently listed species and prevent additional species listings. The approach taken by ODFW in the Strategy is to identify "Strategy Species" which include those most in need of conservation, and "Strategy Habitats" which benefit a broad suite of species and map Conservation Opportunity Areas (COAs) for those habitat areas where conservation activities would have the greatest benefit.

Actions recommended in the Strategy include protect and maintain priority habitats where they remain, restore and expand to improve conditions and value to fish and wildlife, protect and restore river floodplain interactions, and control invasive species.

<http://www.dfw.state.or.us/conservationstrategy/>

4. Federal Environmental Regulations, Policies and Goals

There are a number of federal regulations, policies and goals that relate to natural resource management.

A. Clean Water Act (CWA) Section 404 Permit

CWA Section 404 establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Responsibility for administering and enforcing Section 404 is shared by the US Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA).

Permit review and issuance follow a sequential process that encourages avoidance of impacts first, followed by minimizing impacts and, finally, requiring mitigation for unavoidable impacts to the aquatic environment. This sequence is described in CWA Section 404(b)(1). Only after avoidance and minimization criteria are satisfied can the USACE consider compensatory mitigation. The USACE or EPA has the right to require the developer to mitigate any unavoidable impacts on waters of the United States as a condition of an individual 404 permit. The developer can be required to enhance, restore, or create wetlands or aquatic habitat on or near the development site. In establishing mitigation requirements, the USACE must strive to achieve a goal of no overall net loss of functional values and functions, meaning a minimum of one-for-one functional replacement with an adequate margin of safety to reflect scientific uncertainty. Mitigation banking, using a mitigation bank that has been approved by EPA and the USACE for this purpose, is encouraged.

Common activities that take place in waters of the US and require a federal permit include:

- Excavation or dredging in waters of the US
- Channel changes, realignments or relocations;

- Construction of a dock, pier, wharf, seawall, boat ramp, intake or outfall structure;
- Placement of fill, riprap or similar material;
- Placing fill to construct levees, roadways and bridges; and
- Bank or shore stabilization projects including jetties and revetments.

A federal permit is required regardless of the amount of area affected by the activity and amount of fill used. Under the CWA, the EPA and USACE follow the mitigation framework set out in the Section 404(b)(1) guidelines to evaluate applications for Section 404 dredge and fill permits.

The issuance of this permit is a federal action that triggers consultation with National Marine Fisheries Services (NMFS) under the Endangered Species Act, tribal governments, US Fish and Wildlife Services (USFWS) and historic preservation delegated to the State Historic Preservation Office (SHPO). (See also Oregon Department of State Lands Removal-Fill Permit).

<http://water.epa.gov/lawsregs/guidance/wetlands/sec404.cfm>

B. National Environmental Policy Act (NEPA)

In enacting NEPA, Congress recognized that nearly all federal activities affect the environment in some way and mandated that before federal agencies make decisions, they must consider the effects of their actions on the quality of the human environment. Under NEPA, the Council on Environmental Quality (CEQ) was established to work with agencies to balance environmental, economic, and social objectives in pursuit of NEPA's goal of "productive harmony" between humans and the human environment (42 U.S.C. §4331(a)). NEPA assigns CEQ the task of ensuring that federal agencies meet their obligations under the Act. CEQ NEPA regulations require an analysis of environmental impacts and, if necessary, identification of mitigation alternatives.

CEQs regulations (40 C.F.R. Parts 1500-1508) set the standard for NEPA compliance. They also require agencies to create their own NEPA implementing procedures. These procedures must meet the CEQ standard while reflecting each agency's mandate and mission. The NEPA analysis bears similarities with other federal agencies' review requirements and can be used to inform review under the Endangered Species Act and National Historic Preservation Act, Executive Orders on Environmental Justice, and other Federal, State, tribal, and local laws and regulations.

The NEPA process begins when a federal agency proposes to take an action, which may include rule making, regulations, plans, funding or specific projects (40 C.F.R. § 1508.18). For example, Department of Transportation funding for a bridge or rail improvement is an action that would trigger the NEPA process. The NEPA process is initiated when an action or project is at 10% design. A concept plan, which may not be the preferred design by which permits are acquired, is not considered a 10% design and the NEPA process would not start.

Under NEPA, the agency determines whether the action is a Categorical Exclusion (CE) or if additional analysis is necessary. To perform an analysis, the applicant must identify the purpose and need of the action and alternatives that meet the purpose and need. Through an Environmental Assessment (EA) or Environmental Impact Statement (EIS), the applicant identifies measures that will be taken to mitigate (avoid, minimize or compensate for) environmental impacts.

The EIS process includes a statement of purpose/need, identification of alternative solutions (including no action), and impacts of the preferred alternative. The Draft EIS is published for public review and comment for a minimum of 45 days. The agency must consider all substantive comments, conduct further analysis if necessary, and prepare a Final EIS, which is available for public review for 30 days. This review period must be completed before the agency makes a decision on the proposed action. The EIS process ends with the completion of a Record of Decision (ROD). The ROD explains the agency's decision, describes the alternatives the agency considered (including the environmentally preferred alternative), and discusses plans for mitigating potential environmental effects and monitoring those commitments.

<http://www.epa.gov/compliance/nepa/index.html>

C. Endangered Species Act

NOAA National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) use the Federal Endangered Species Act (ESA) to protect species including many listed species found in the Willamette River. NMFS is responsible for protecting salmon and other ocean-migrating fish, as well as marine animals. USFWS is responsible for protecting wildlife, bird species and inland (primarily freshwater) fish such as bull trout and coastal cutthroat trout. Currently, 17 salmon species and trout are federally listed and present in the Central Reach.

Under Section 7 of the ESA, federal agencies must use their authorities to protect listed species and habitats that are critical to their survival. Section 7 also requires federal agencies to ensure that their actions, including any actions they authorize, fund or carry out, do not jeopardize listed species or destroy or adversely modify their critical habitat.

NMFS and USFWS designate "critical habitat" for species that are listed under the ESA. "Critical habitat" is the "specific areas within the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological considerations or protection." NMFS has designated critical habitat for most of their species that are listed under the ESA that may be found in the Central Reach. For several species, critical habitat extends 300' from the top of bank, for others to top of bank.

Section 7 requires all federal agencies, including the US Army Corps of Engineers (USACE), to assess whether federally listed threatened or endangered species and/or critical habitat may be affected by a project under their jurisdiction. The USACE requires the applicant to prepare a Biological Assessment to evaluate if such an effect is possible and, if it is, the applicant is

required to consult with USFWS and/or NMFS before approving a permit that might affect species in these ways. This process is called "consultation." This serves as consultation for the Magnuson-Stevens Act on Essential Fish Habitat (see E below).

If no impacts on federally listed threatened or endangered species and/or critical habitat are found to be associated with the proposed project, the USACE will be able to issue a permit without consultation.

If there will be adverse effects to listed species or critical habitat, consultation with NMFS is required. NMFS evaluates the project as proposed for its impacts to ESA listed species. If NMFS determines that the project will not result in jeopardy to the species it will issue an "Incidental Take Statement" that includes reasonable and prudent measures with terms and conditions to minimize incidental take. If NMFS finds that the project will result in jeopardy to the species it will provide a "reasonable and prudent alternative" that would not result in jeopardy.

If the project design and implementation plan are deemed adequate, the USACE issues a permit to the applicant. The permit may include conditions to avoid, minimize, and compensate for expected impacts of the project. Conditions are designed to protect water quality, fish and wildlife and their habitats, and adjacent properties.

Section 9 of the ESA states that no one may "take" an animal that is listed as endangered. "Take" includes the harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capture, or collection of any threatened or endangered species. "Harm" may include habitat modification that results in the death or injury of a listed species. This is referred to as a "take prohibition." For species listed as threatened, Section 4(d) of the ESA requires NMFS to issue rules that citizens, organizations and governments must follow in order to protect the species (referred to as the "4(d) rules"). The rules may include any or all of the general take prohibitions that apply to endangered species. By regulation, NMFS applies take prohibitions to all threatened species (except plants) at the time of listing or later. The ESA provides some exceptions to general take prohibitions and 4(d) rules, and under section 10 landowners can obtain permits for work that incidentally affects listed species (Incidental Take Permit). These permits can only be issued for:

- Scientific work;
- Projects designed to enhance the survival of the species; or
- Activities that may only incrementally take or harm species during the course of the work.

Incidental Take Permits require development of a Habitat Conservation Plan (HCP) that specifies how impacts to a listed species and its habitat will be minimized. In issuing Incidental Take Permits, USFWS and NMFS must comply with NEPA as well as state and local environmental laws. For these reasons, HCPs also require an Environmental Assessment or Environmental Impact Statement for the proposed activity.

<http://www.mrsc.org/Subjects/Environment/esa/esa-bioass.aspx>
<http://www.nmfs.noaa.gov/pr/laws/esa/>

D. Federal Emergency Management Agency Flood Plain Management

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program (NFIP) which includes floodplain mapping and mandates for floodplain development regulations meeting established criteria to qualify for federally-subsidized flood insurance. The NFIP floodplain management regulations (44 CFR 60) are implemented through local jurisdictions. The City of Portland's local floodplain ordinance is found in Portland City Code 24.50. FEMA identifies the Nation's floodplains and publishes Flood Insurance Rate Maps (FIRMs), which depict the floodplain data. FEMA maps the area that has a 1% chance of being flooded in any given year. This establishes the 100-year floodplain, which is the standard used by the NFIP and most federal and state agencies for floodplain management and to determine the need for flood insurance. FEMA most recently updated the FIRMs for the Willamette River in 2009.

The principal regulatory requirements for development in the 100-year floodplain include, but are not limited to, the following:

- Development within the Floodway is prohibited unless hydraulic engineering analysis demonstrates the development will result in no increase in 100-year flood elevations.
- Occupied or inhabited structures must be built at least one foot above the 100-year flood elevation. This is often achieved by placing fill within the 100-year floodplain to raise the ground elevation and allow development in that area. Other site improvements, such as parking or exterior storage, may be below the base flood elevation.
- Fill material placed below the 100-year flood elevation must be balanced with an equal or greater volume of excavation below the 100-year flood elevation such that the flood storage capacity of the floodplain is maintained; this is often referred to as flood storage compensation or "balanced cut and fill." (See also Metro Title 3.)

NMFS recently released a biological opinion about the impacts of NFIP on listed species in the Willamette River. FEMA will provide direction to local jurisdictions regarding the implementation of the reasonable and prudent alternatives identified in the biological opinion to avoid harm to listed species. FEMA's implementation of the biological opinion will likely require updates to local floodplain regulations. As a part of this effort, FEMA will update the FIRM of all streams containing listed species.

<http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/permit.shtm>

E. Rivers and Harbors Act of 1899

The Rivers and Harbors Act addresses projects and activities in navigable waters and harbor and river improvements. The USACE administers Section 9 and Section 10 of the Rivers and Harbors Act.

Section 9 of the Rivers and Harbors Act (33 U.S.C. 401) prohibits the construction of any dam or dike across any navigable water of the United States in the absence of Congressional consent and approval of the plans by the Chief of Engineers and the Secretary of the USACE. Section 9

also pertains to bridges and causeways; however, the authority of the USACE is transferred to the Secretary of Transportation under the Department of Transportation Act.

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters, is unlawful unless the work has been recommended and authorized by USACE. This work includes excavation or fill, which could contain contaminated sediments. (See also NPDES permits.)

http://el.erdc.usace.army.mil/emrrp/emris/emrshelp5/rivers_and_harbors_acts_legal_matters.htm

F. Marine Mammal Protection Act, 1972

The Marine Mammal Protection Act (MMPA) is intended to conserve marine mammals. All marine mammals are protected under the MMPA. The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S.

The implementation of the MMPA is divided between two federal departments. The Department of Commerce, which NMFS is part of, is charged with protection of cetaceans and pinnipeds other than walrus. The Department of the Interior, USFWS, is responsible for all other marine mammals, including sea otter, walrus, polar bear, dugong and manatee.

<http://www.nmfs.noaa.gov/pr/laws/mmpa/>

G. The Migratory Bird Treaty Act and the Urban Conservation Treaty for Migratory Birds Program

The Migratory Bird Treaty Act (MBTA), passed in 1918, established the United States' commitment to implement four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The MBTA protects over 800 species of birds. Over 200 migratory bird species migrate through Portland every year, and Portland provides critical resting, feeding and nesting habitat for numerous types of migratory and resident birds.

The MBTA uses very broad language to prohibit at any time or in any manner the pursuit, hunting, taking, capturing or killing of any migratory bird. It does not have an incidental take permit or its equivalent. The unauthorized killing of any of approximately 800 identified migratory birds constitutes a violation of the MBTA. The MBTA has no specific mitigation requirements. It is enforced by USFWS, although its enforcement is viewed as somewhat selective because of MBTA's expansive scope. The MBTA's applicability to habitat modification and destruction is unclear; the definition of "take" in the MBTA does not include "harm" or "harass," unlike the ESA. Due diligence with MBTA requirements is typically done by providing

baseline studies and preconstruction surveys that document site characteristics and development of a protection plan for species known to be present.

Portland joined four other U.S. cities in 2003 in establishing a local commitment to help migratory birds and enhance their habitats within urban environments by participating in the Urban Conservation Treaty for Migratory Birds program. USFWS selected Portland as a pilot project city due to its location along the Pacific Flyway. The program was designed by USFWS in 1999 to help municipal governments conserve migratory birds that nest or fly through their cities. The Treaty sponsors public education and outreach projects to help increase public understanding of the importance of migratory bird conservation. It also helps finance the creation and restoration of city parks and greenways. Portland has developed guidelines for protecting migratory birds during construction activities.

<http://www.fws.gov/pacific/migratorybirds/mbta.htm>

<http://www.portlandonline.com/bes/index.cfm?c=51502&>

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

Volume 1A – Project Report, Summary of Results and Implementation

The purpose of the Project Report is to document the overall project approach and methodology, summarize public engagement, and provide an at-a-glance summary of the results by resource site.

Volume 1B – Zoning Code and Map Amendments

Amendments to zoning code chapter 33.430, Environmental Zones, as well as other zoning code chapters, and the official zoning maps showing the existing and proposed conservation, protection and scenic overlay zones.

Volume 2 – Resource Site Inventory and ESEE 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

A summary of the approach and methodology used to produce the citywide Natural Resources Inventory. The results of the inventory are presented in Volume 2, Part A – G.

Volume 4 – Compliance Report

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. The results, recommendations and implementation are reported in Volume 2, Part A – G, and Volume 1, Part B.

Volume 5 – Appendices