



# COMPREHENSIVE PLAN: ENVIRONMENT & WATERSHED HEALTH (CHAP 7)

May 9, 2023

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Environmental Planner

**Daniel Soebbing**

Environmental Planner



THE BUREAU OF  
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SUSTAINABILITY**

# Agenda

- Statewide Planning Goals
- Comprehensive Plan Chapter 7: Environment and Watershed Health
- Natural Resource Inventory
- Environmental Projects
  - Ezones
  - River Planning
  - Floodplains







# Statewide Planning Goals



# Statewide Planning Goals

Goal 5, Open Spaces, Scenic and Historic Areas and Natural Resources

Goal 15, Willamette River Greenway

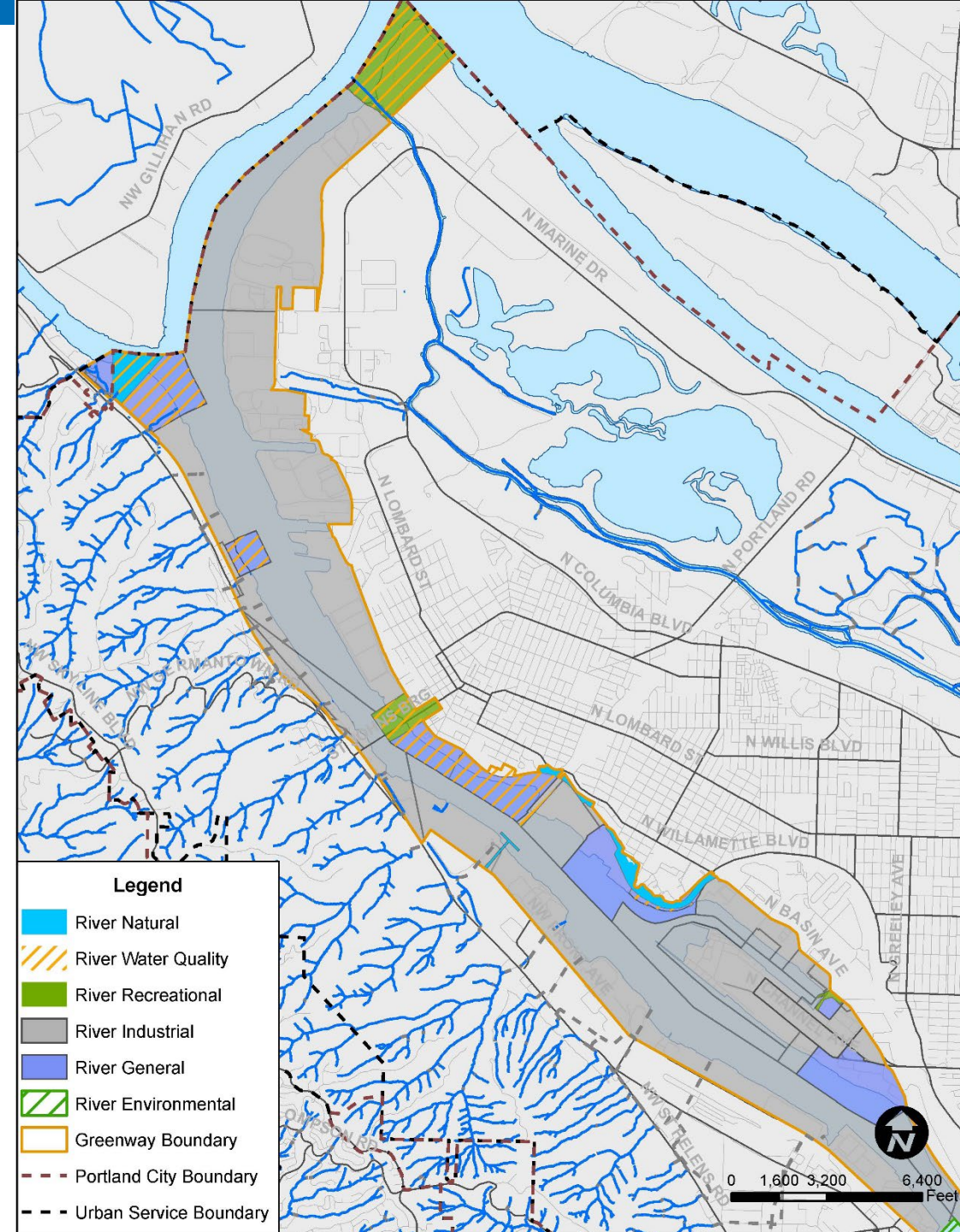
Goal 7, Areas Subject to Natural Hazards





# Goal 15, Willamette River Greenway

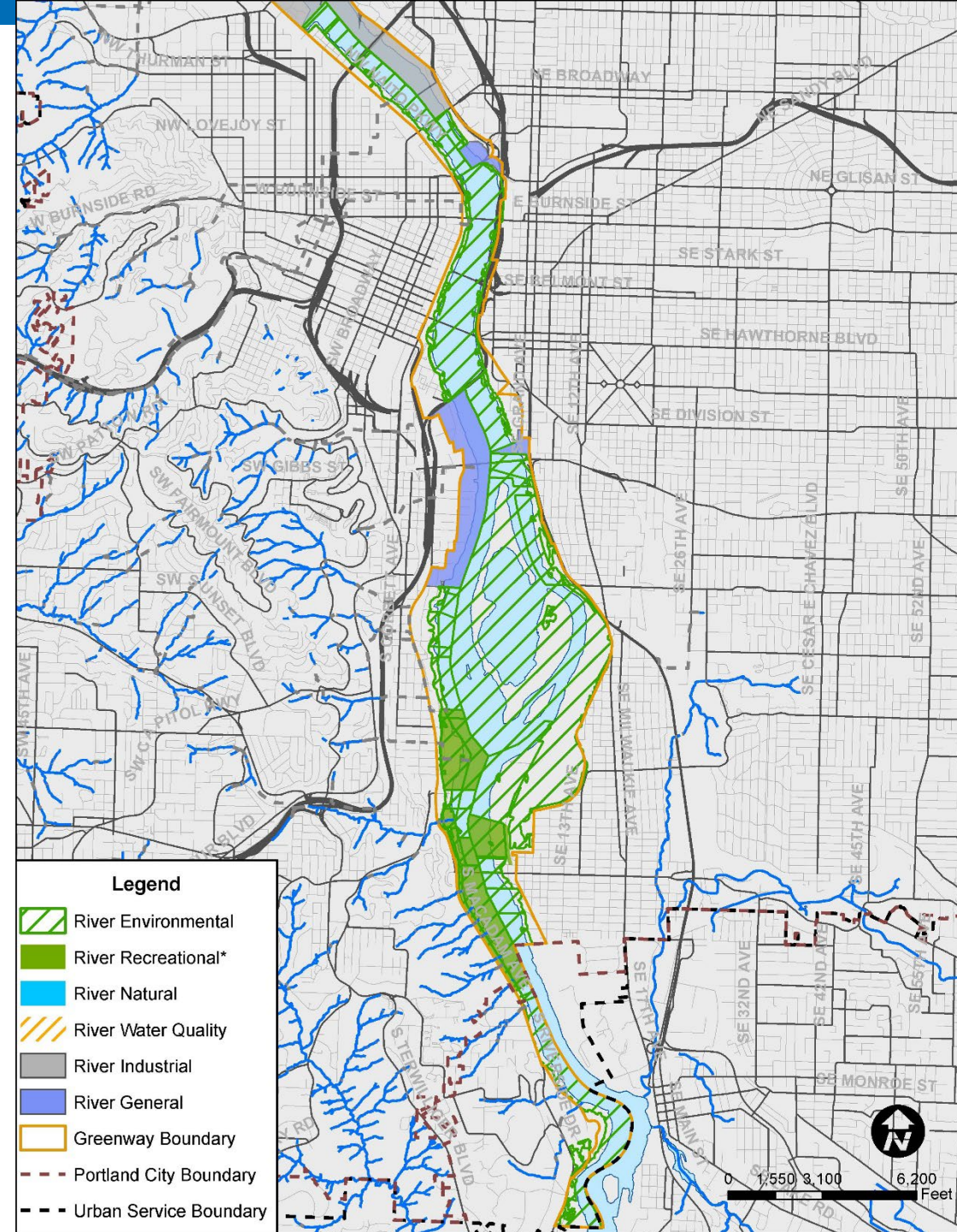
To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.





# Goal 15, Willamette River Greenway

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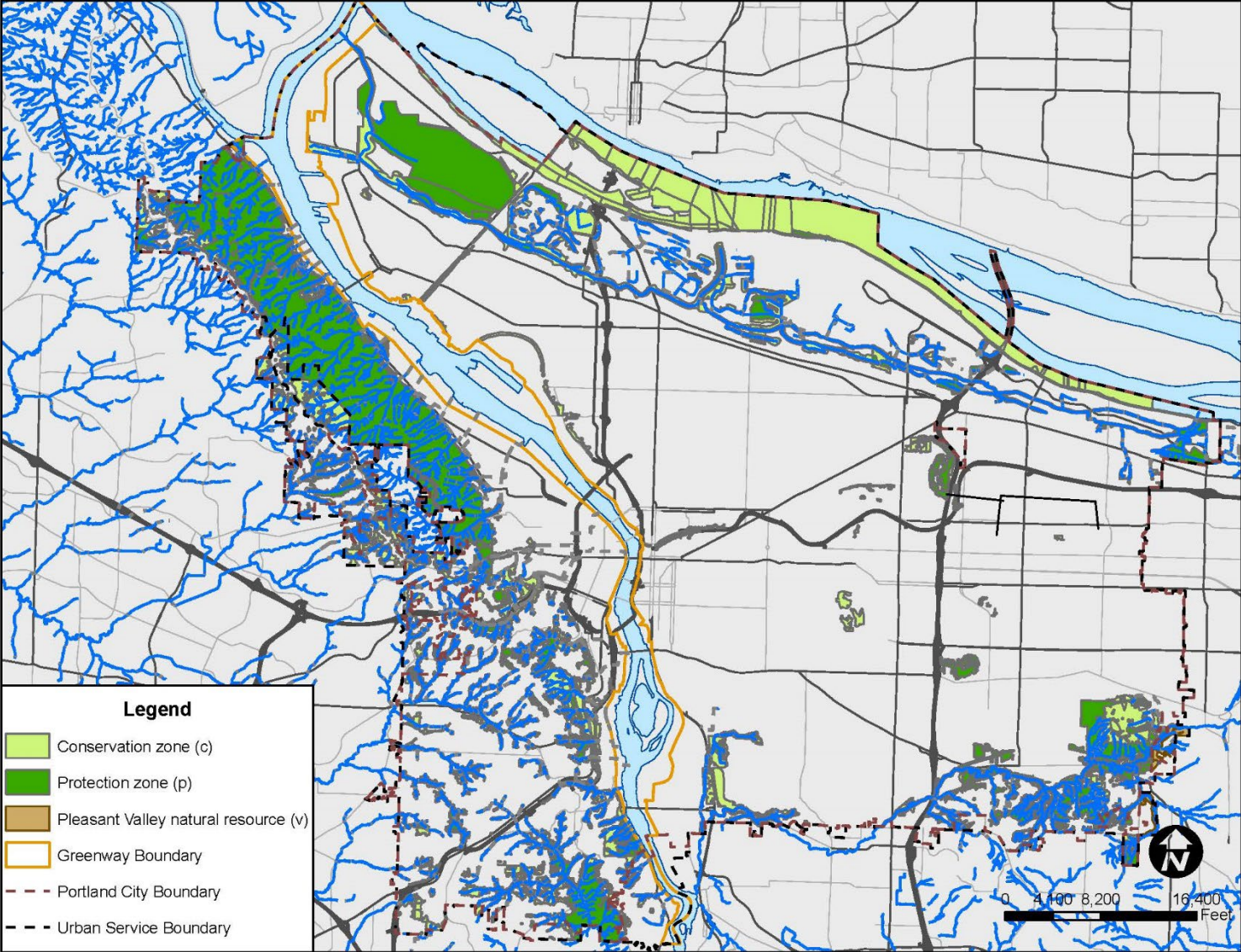


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# Goal 5, Open Spaces, Scenic & Historic Areas & Natural Resources

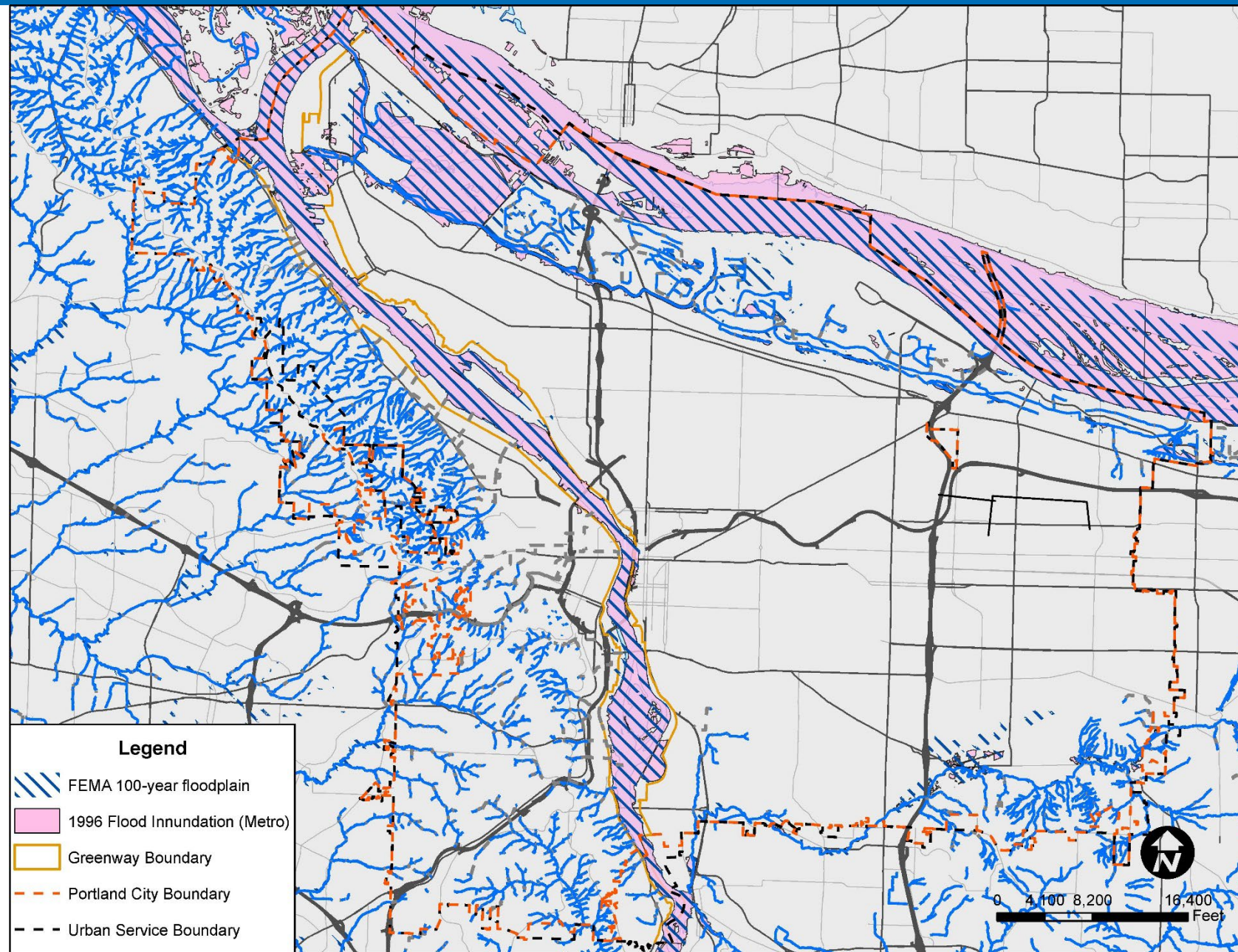
To protect natural resources and conserve scenic and historic areas and open spaces.





# Goal 7, Areas Subject to Natural Hazards

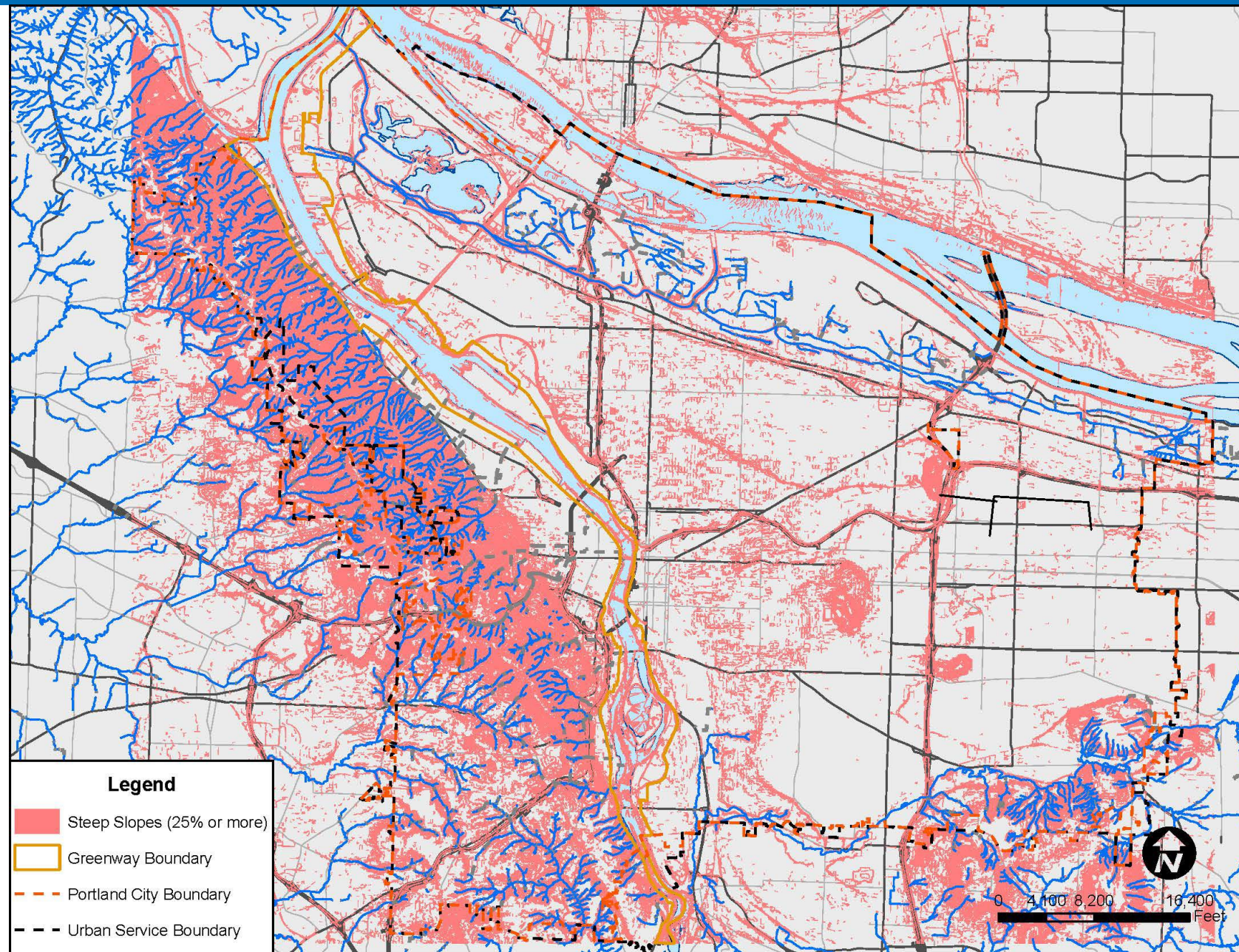
To protect people and property from natural hazards.





# Goal 7, Areas Subject to Natural Hazards

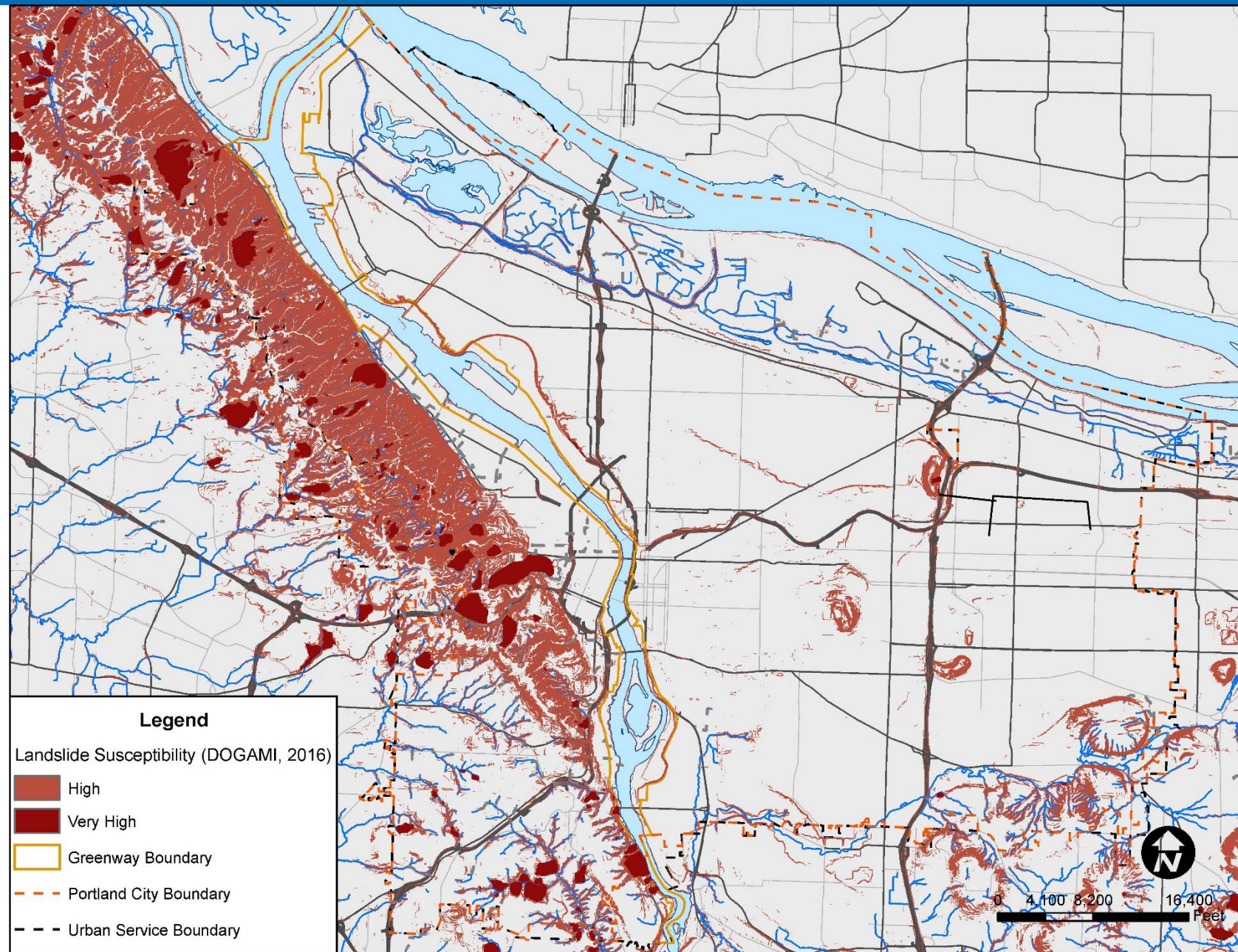
To protect people and property from natural hazards.





# Goal 7, Areas Subject to Natural Hazards

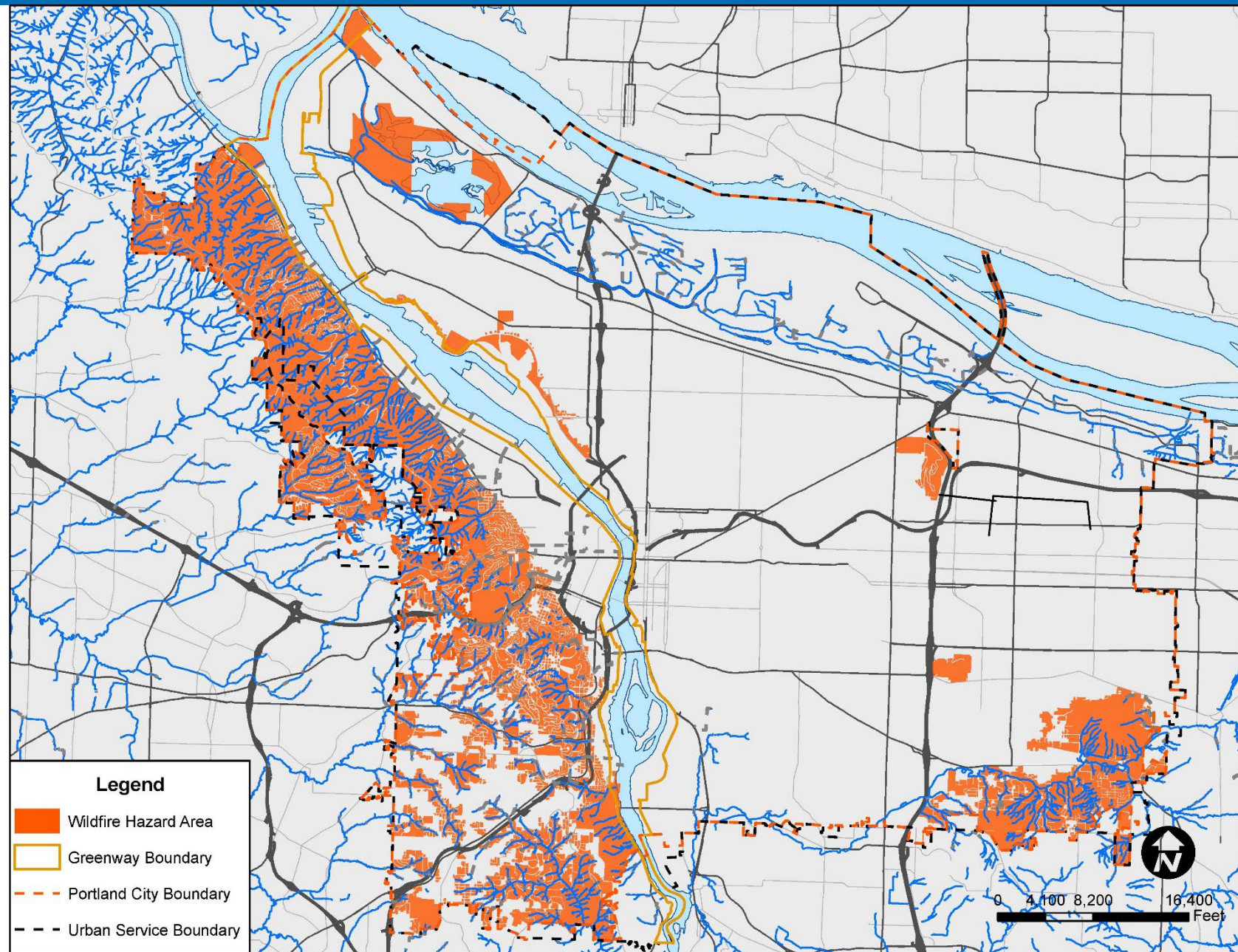
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# Goal 7, Areas Subject to Natural Hazards

To protect people and property from natural hazards.







# 2035 Comprehensive Plan Environment and Watershed Health Goals and Policies



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# The Comprehensive Plan

## Adopted with the Portland Comprehensive Plan

### Comprehensive Plan Elements

- Vision and Guiding Principles
- Goals and Policies
- Comprehensive Plan Map
- List of Significant Projects
- Transportation Policies, Street Classifications and Street Plans

### Key Implementing Tools

- Zoning Code
- Zoning Map
- Service Coordination Agreements
- Urban Renewal Plans
- Annexations
- Development Agreements

### Supporting Documents

#### Inventories and Analyses

- Buildable Lands Inventory
- Employment Opportunity Analysis
- Housing Needs Analysis
- Natural Resource Inventory

#### School Facility Plans

#### Public Facilities Plan

- Transportation System Plan (TSP)
- Sewer
- Stormwater
- Water

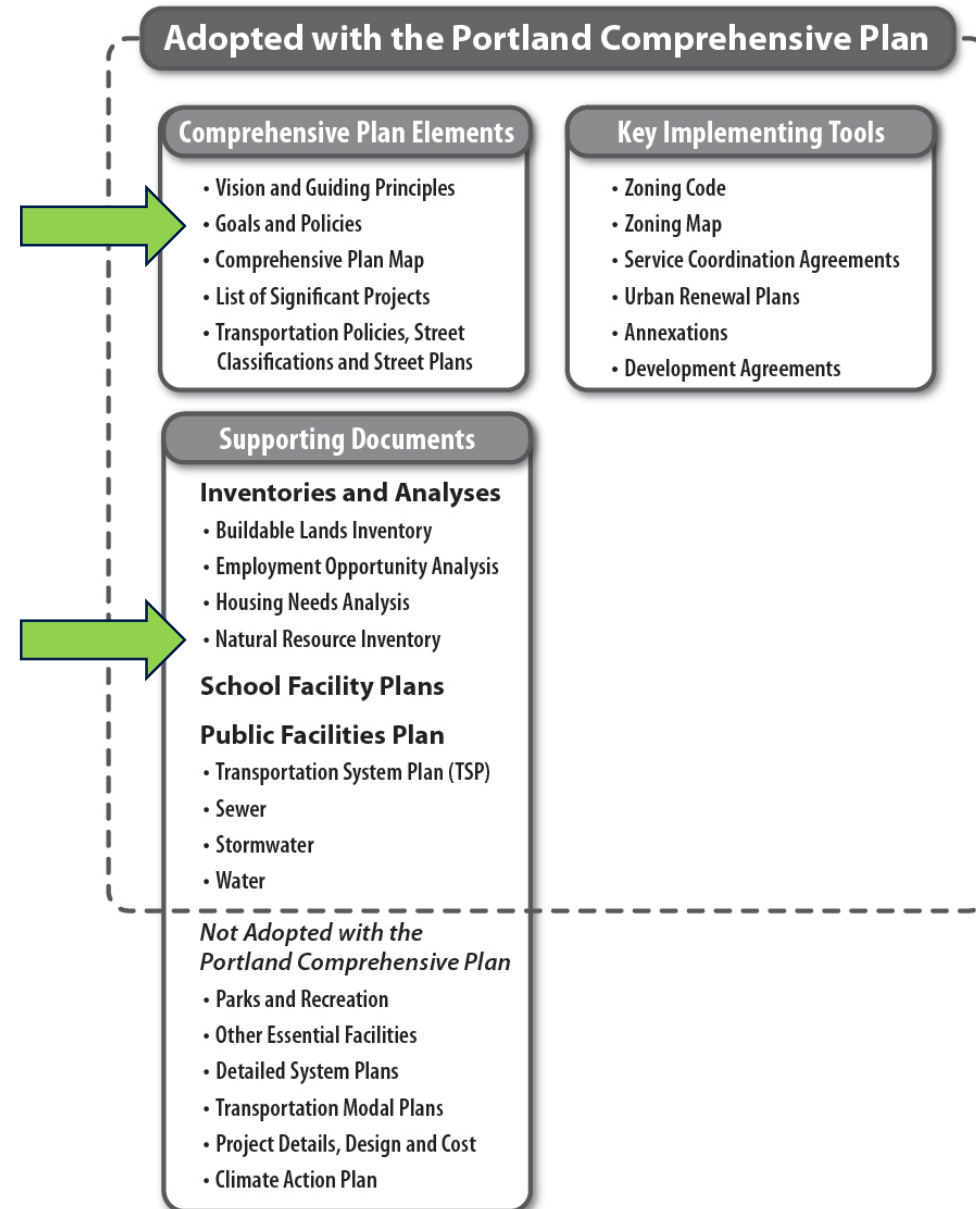
### *Not Adopted with the Portland Comprehensive Plan*

- Parks and Recreation
- Other Essential Facilities
- Detailed System Plans
- Transportation Modal Plans
- Project Details, Design and Cost
- Climate Action Plan





# The Comprehensive Plan



# The Comprehensive Plan

## Contents

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- **Introduction**

Vision and Guiding Principles

- Economic Prosperity
- Human Health
- Environmental health
- Equity
- Resilience

Infrastructure

- **How to Use the Plan**

- **Goals and Policies**

Chapter 1: The Plan

Chapter 2: Community Involvement

Chapter 3: Urban Form

Chapter 4: Design and Development

Chapter 5: Housing

Chapter 6: Economic Development

Chapter 7: Environment and Watershed Health

Chapter 8: Public Facilities and Services

Chapter 9: Transportation

Chapter 10: Land Use Designations and Zoning

- **List of Significant Projects**

- **Comprehensive Plan Map**

- **Glossary**





# Environment & Watershed Health Goals

## Goal 7.A: Climate

Carbon emissions are reduced to 50 percent below 1990 levels by 2035.

## Goal 7.B: Healthy watersheds and environment

Ecosystem services and ecosystem functions are maintained and watershed conditions have improved over time, supporting public health and safety, environmental quality, fish and wildlife, cultural values, economic prosperity, and the intrinsic value of nature.







# Environment & Watershed Health Goals

## Goal 7.C: Resilience

Portland's built and natural environments function in complementary ways and are resilient in the face of climate change and natural hazards.

## Goal 7.D: Environmental Equity

All Portlanders have access to clean air and water, can experience nature in their daily lives, and benefit from development designed to lessen the impacts of natural hazards and environmental contamination.

## Goal 7.E: Community Stewardship

Portlanders actively participate in efforts to maintain and improve the environment, including watershed health.



# Environment & Watershed Health Policies

## Overarching Policy Groupings

- Improving environmental quality and resilience
- Planning for natural resource protection
- Protecting natural resources in development situations



# Environment & Watershed Health Policies

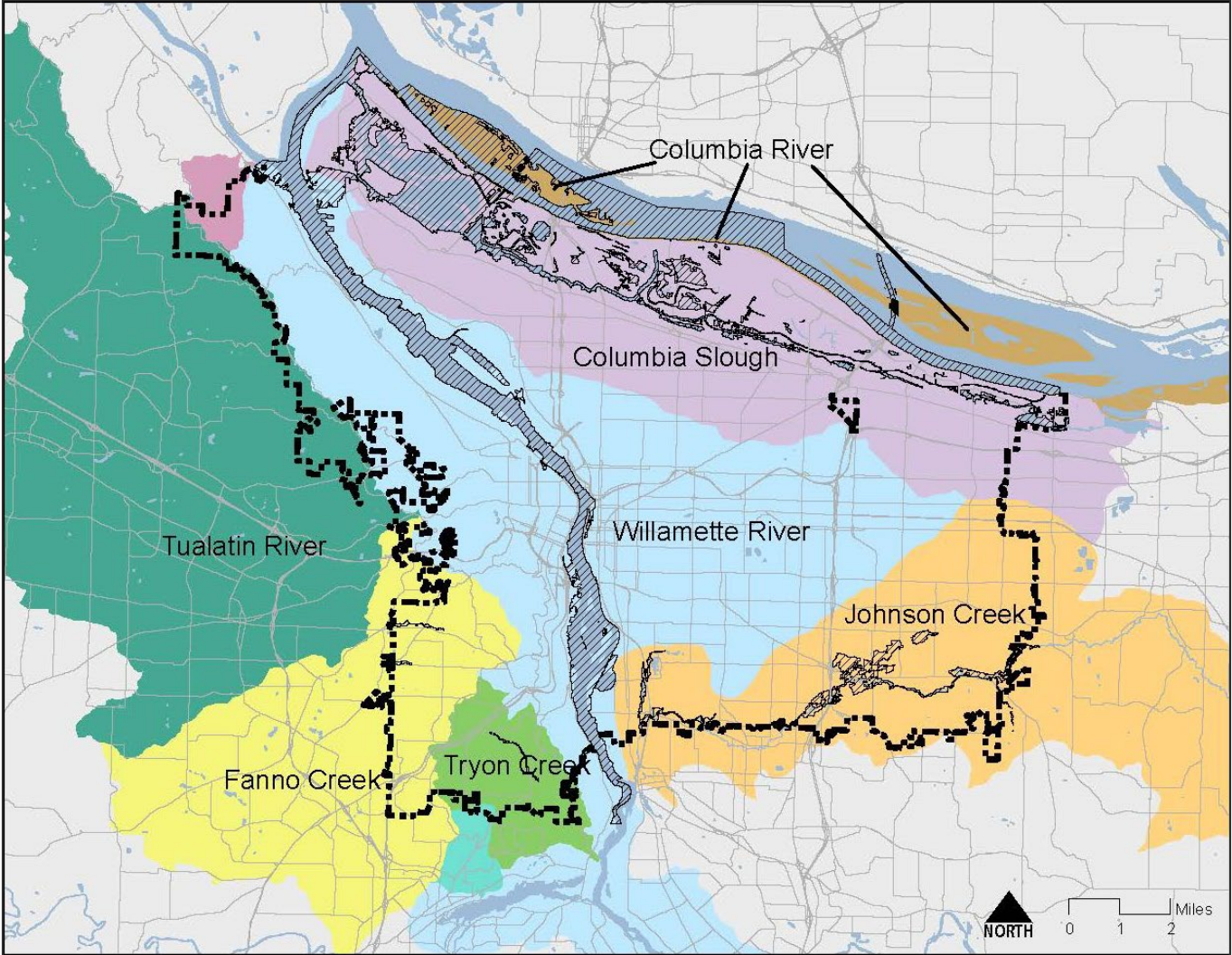
## Watershed-specific Policies

- Columbia River
- Willamette River
- Columbia Slough
- Johnson Creek
- Fanno and Tryon creeks





# Portland's Watersheds



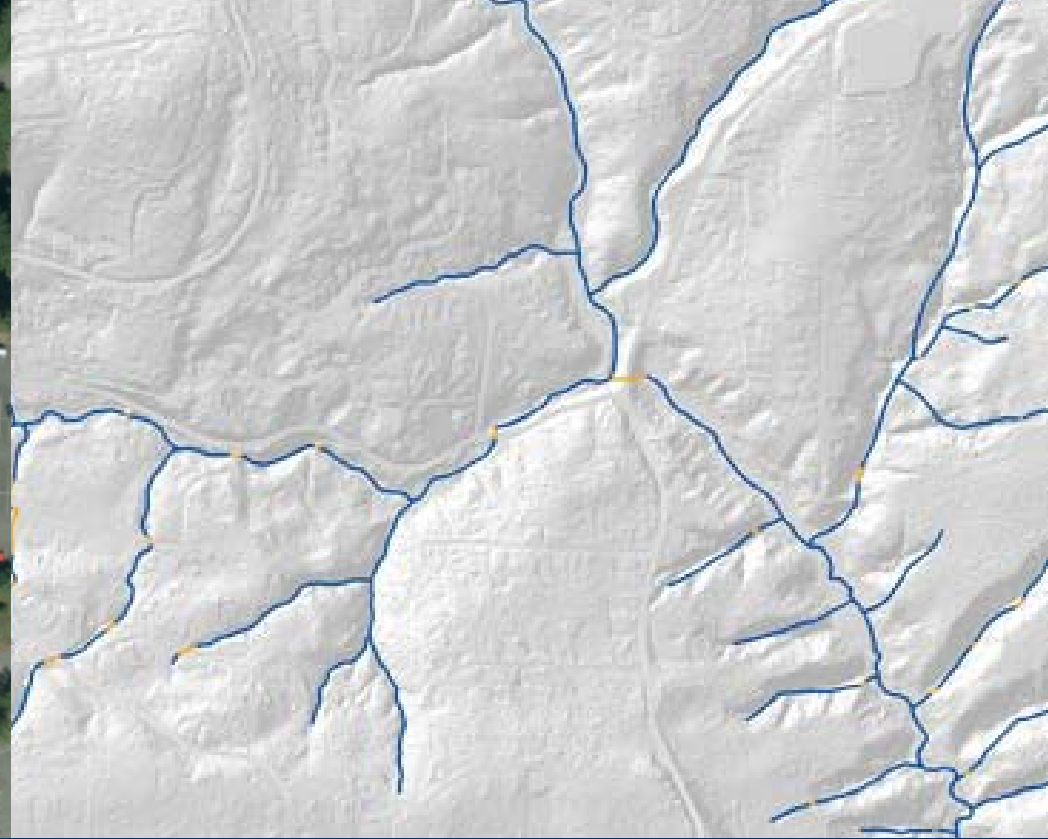
City of Portland Watersheds

- Floodplain (100-year & 1996 Flood)
- City Boundary

City of Portland  
Planning and Sustainability  
April 2019



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# Natural Resource Inventory





# Natural Resource Inventory (NRI)

- **Explains** the methods that are used to map natural resources for planning and zoning purposes.
- **Digital inventory** of streams, wetlands, vegetation, and steep slopes.
- Adopted as part of the **factual basis of the Comprehensive Plan.**
- **Adopted in 2012**

## NATURAL RESOURCE INVENTORY UPDATE



**RIPARIAN CORRIDORS AND WILDLIFE  
HABITAT | CITY OF PORTLAND, OREGON**



PROJECT REPORT  
ADOPTED BY CITY COUNCIL, OCTOBER 3, 2012  
ORDINANCE NO. 185657

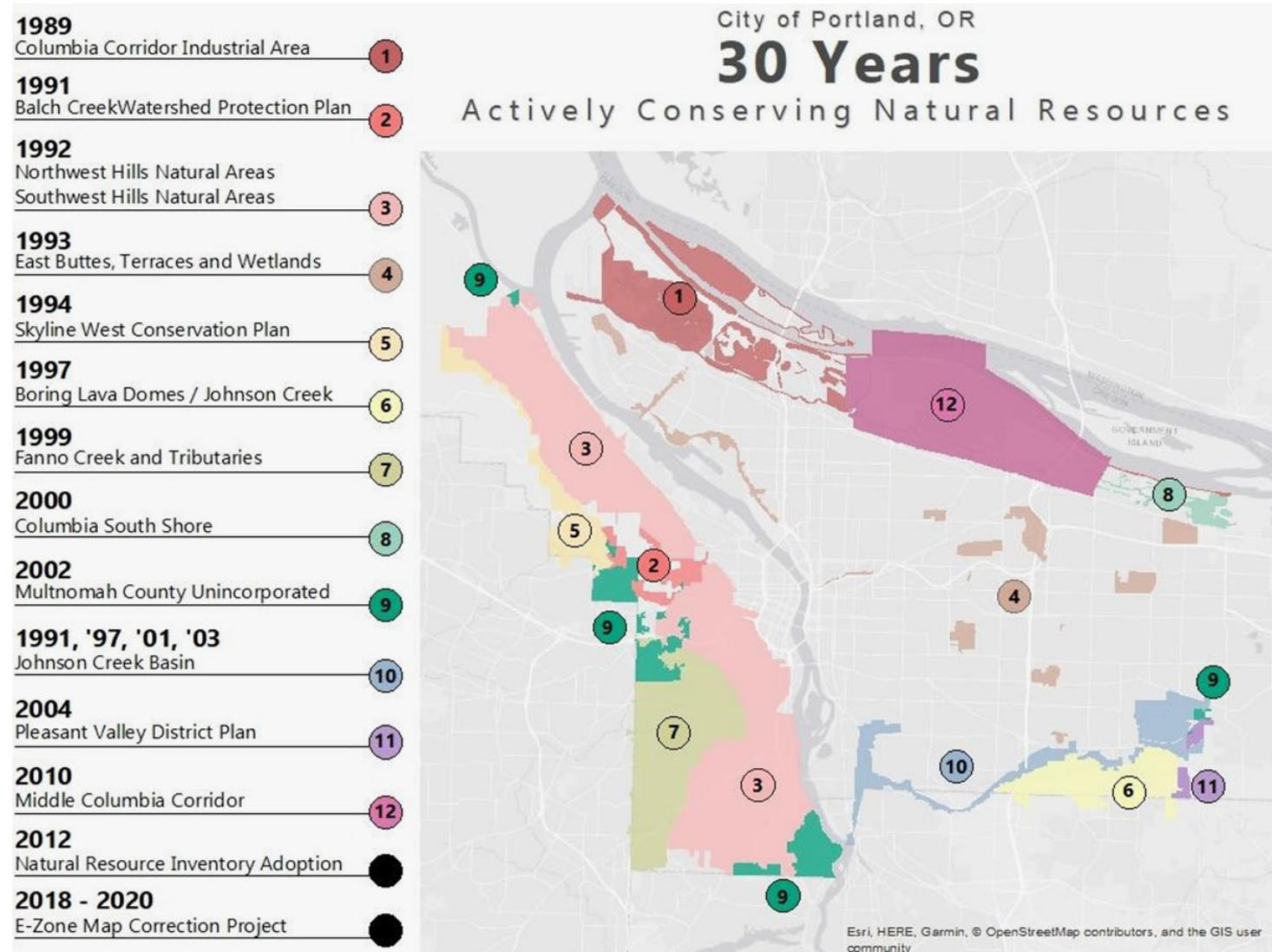
AMENDED BY CITY COUNCIL MAY 25, 2022  
EFFECTIVE OCTOBER 1, 2022  
ORDINANCE NO. 190834

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City of Portland, Oregon  
Sam Adams, Mayor - Susan Anderson, Director



# Past Resource Management Efforts







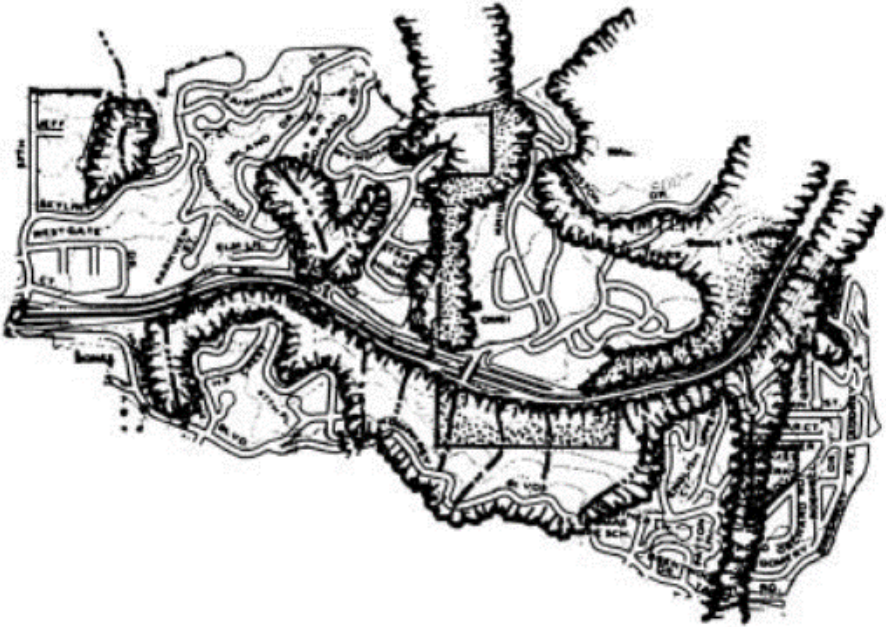
# Types of Environmental Overlay Zones

- Conservation Overlay Zone (c)
- Protection Overlay Zone (p)
- Pleasant Valley Overlay Zone (v)
- Scenic Resources Overlay Zone (s)
- River Environmental Overlay Zone (e)

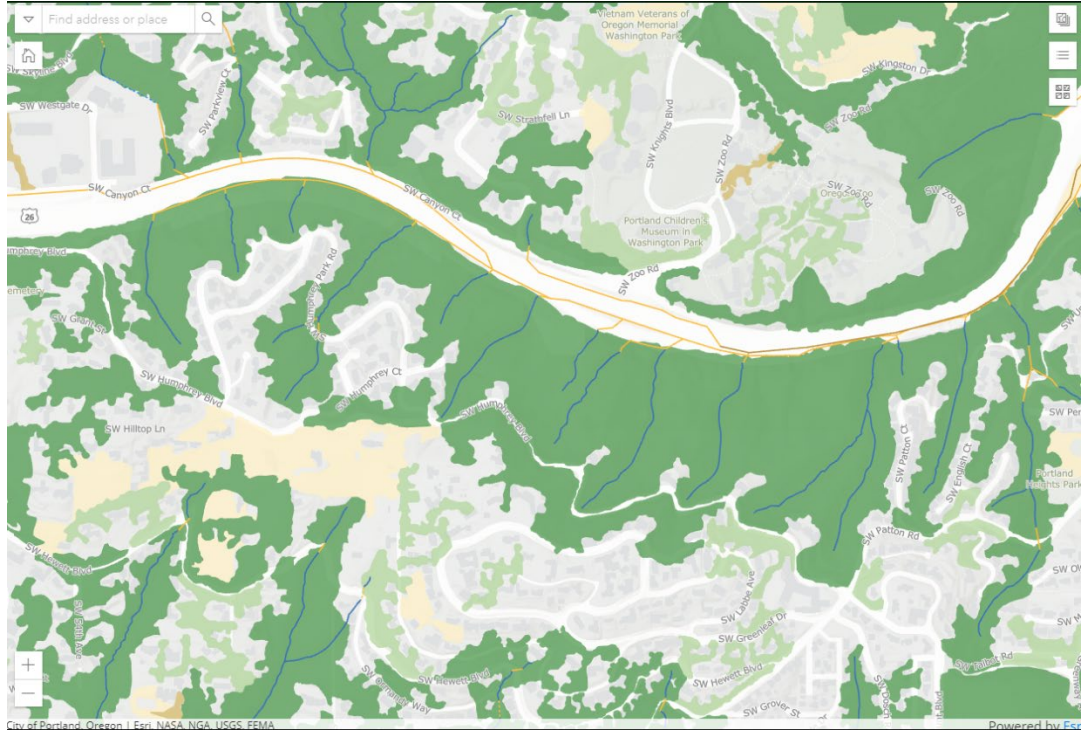


# NRI

## Comparison of Old and New Natural Resource Mapping



Southwest Hills Resource Protection Plan 1994



NRI 2022

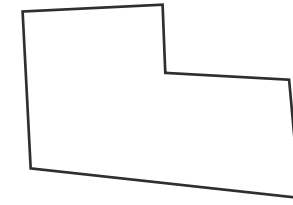


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# Natural Resource Protection Process

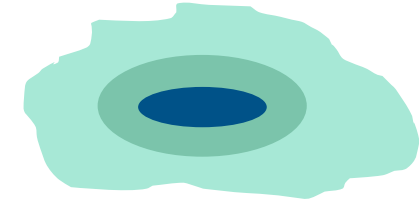
1. Define Resource Sites



2. Inventory Natural Resources



3. Determine Significance



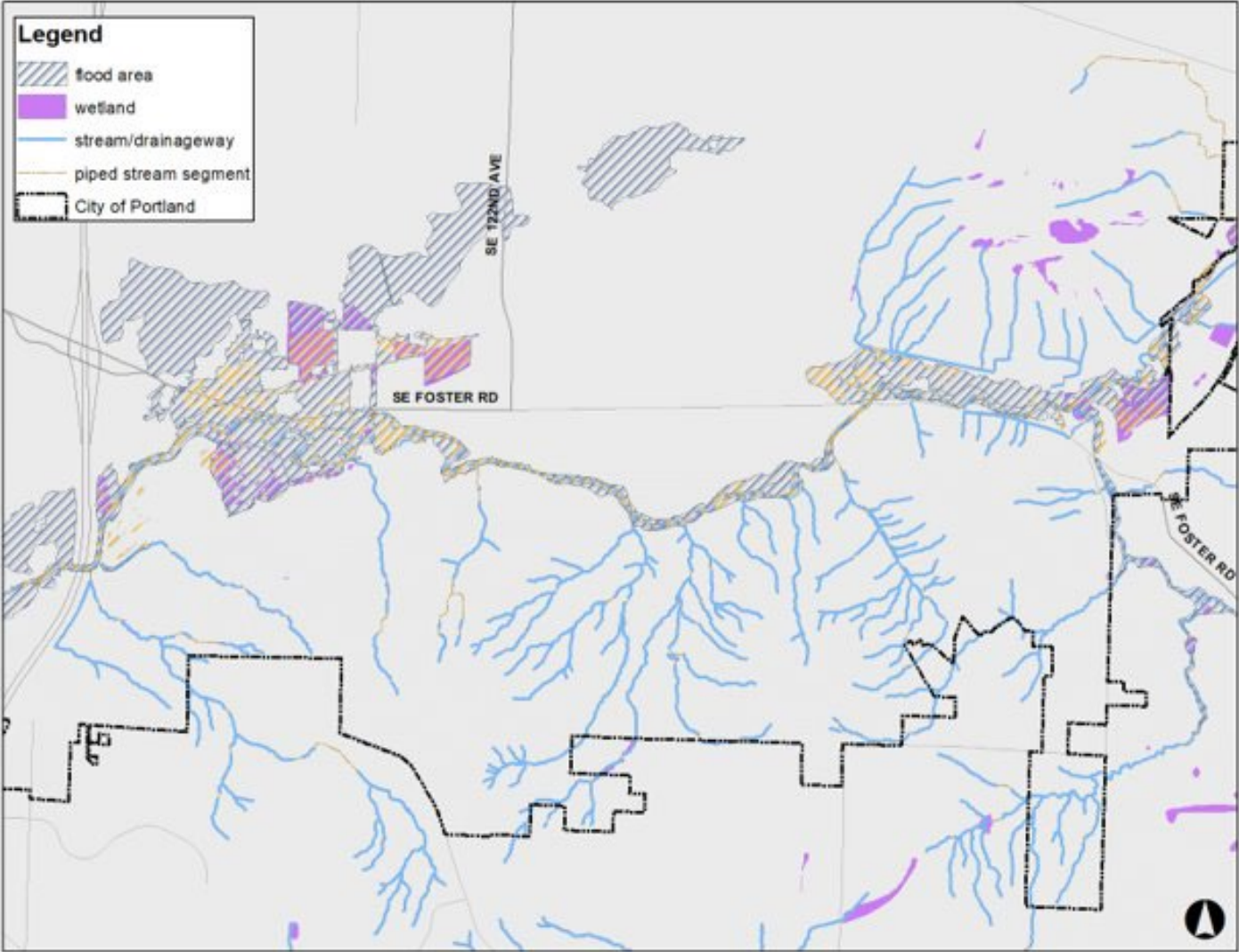
4. Economic, Social, Environmental, and Energy (ESEE) Analysis



5. Protection Decision

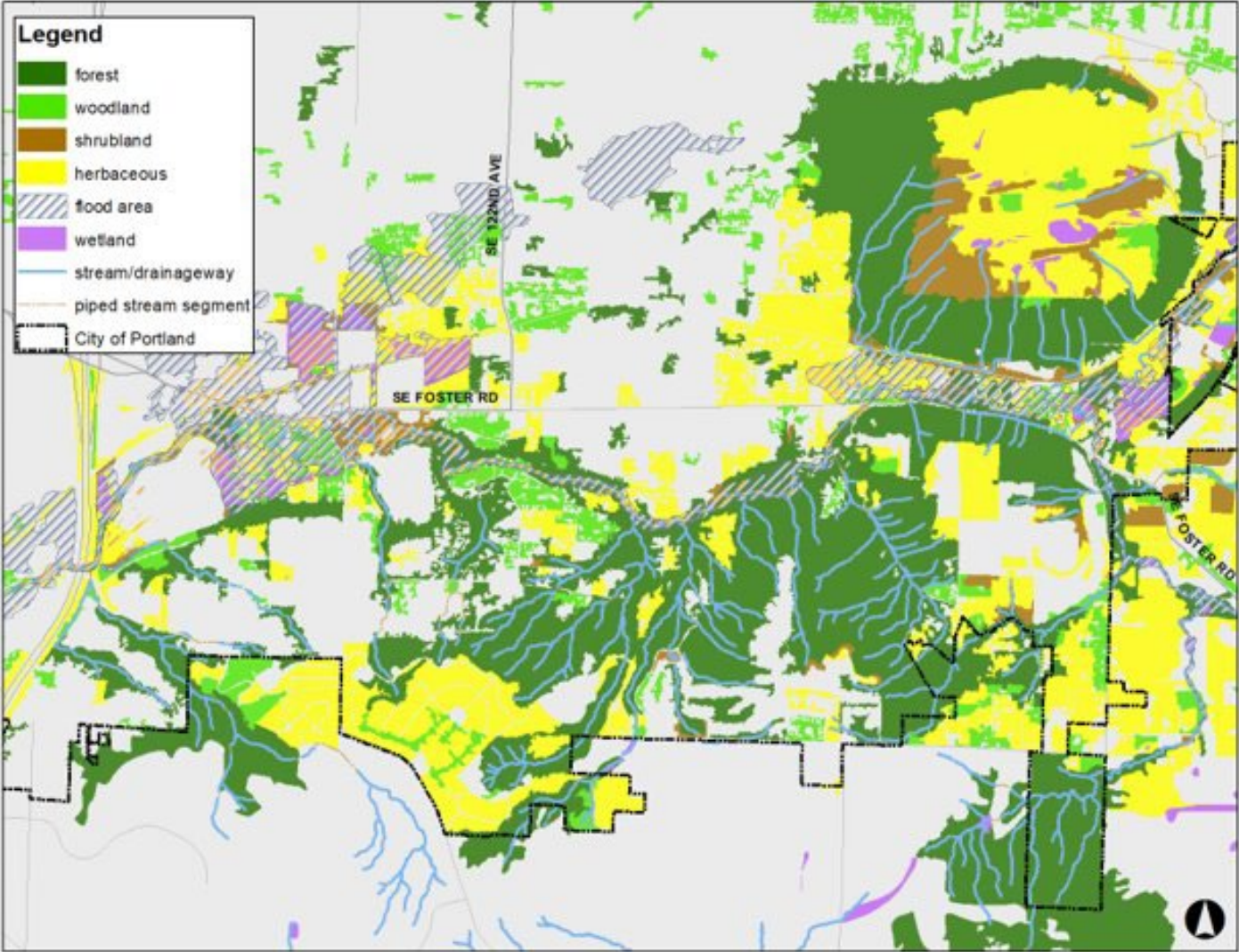


# How the NRI Model Works

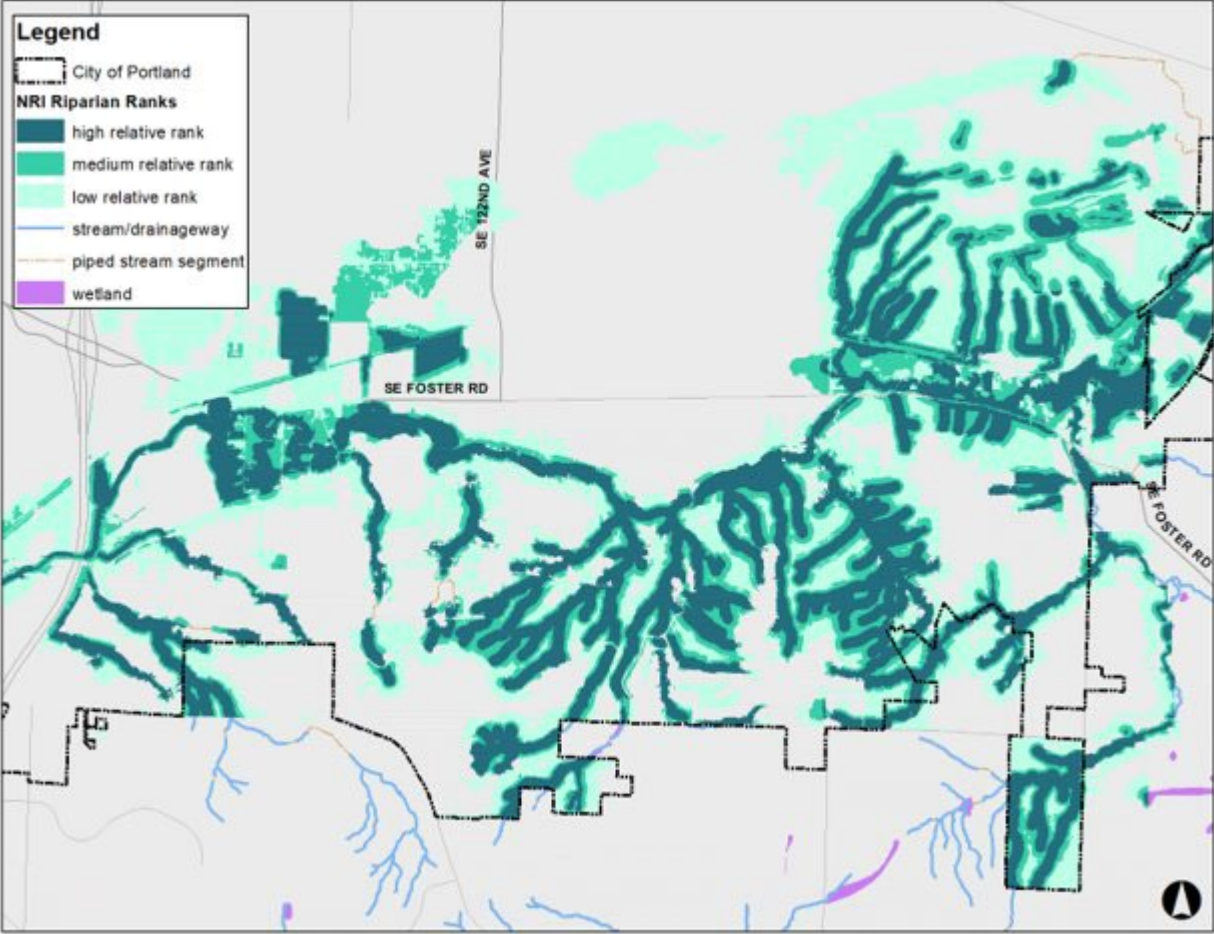




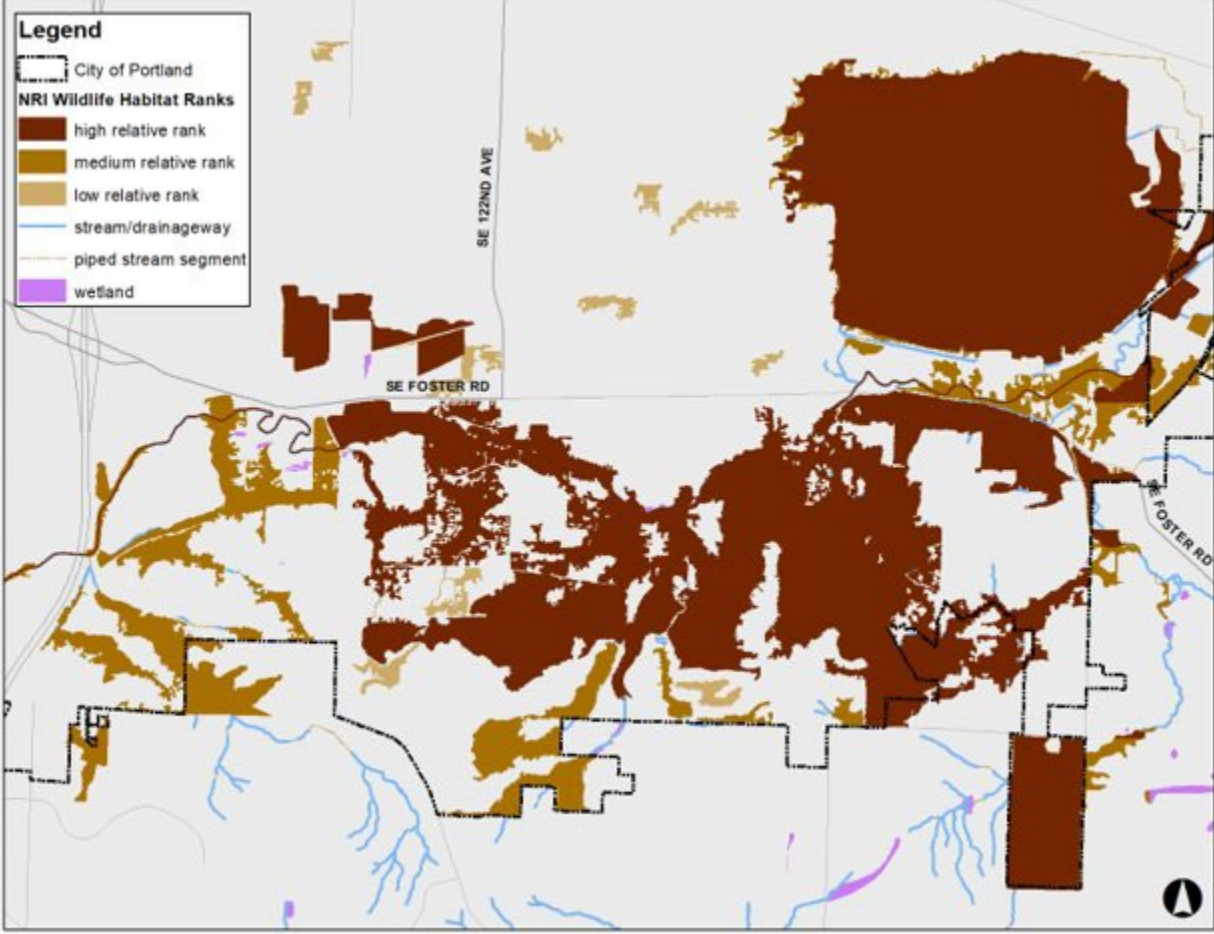
# How the NRI Model Works



# How the NRI Model Works



Relative Riparian Resource Values



Wildlife Habitat Resource Values

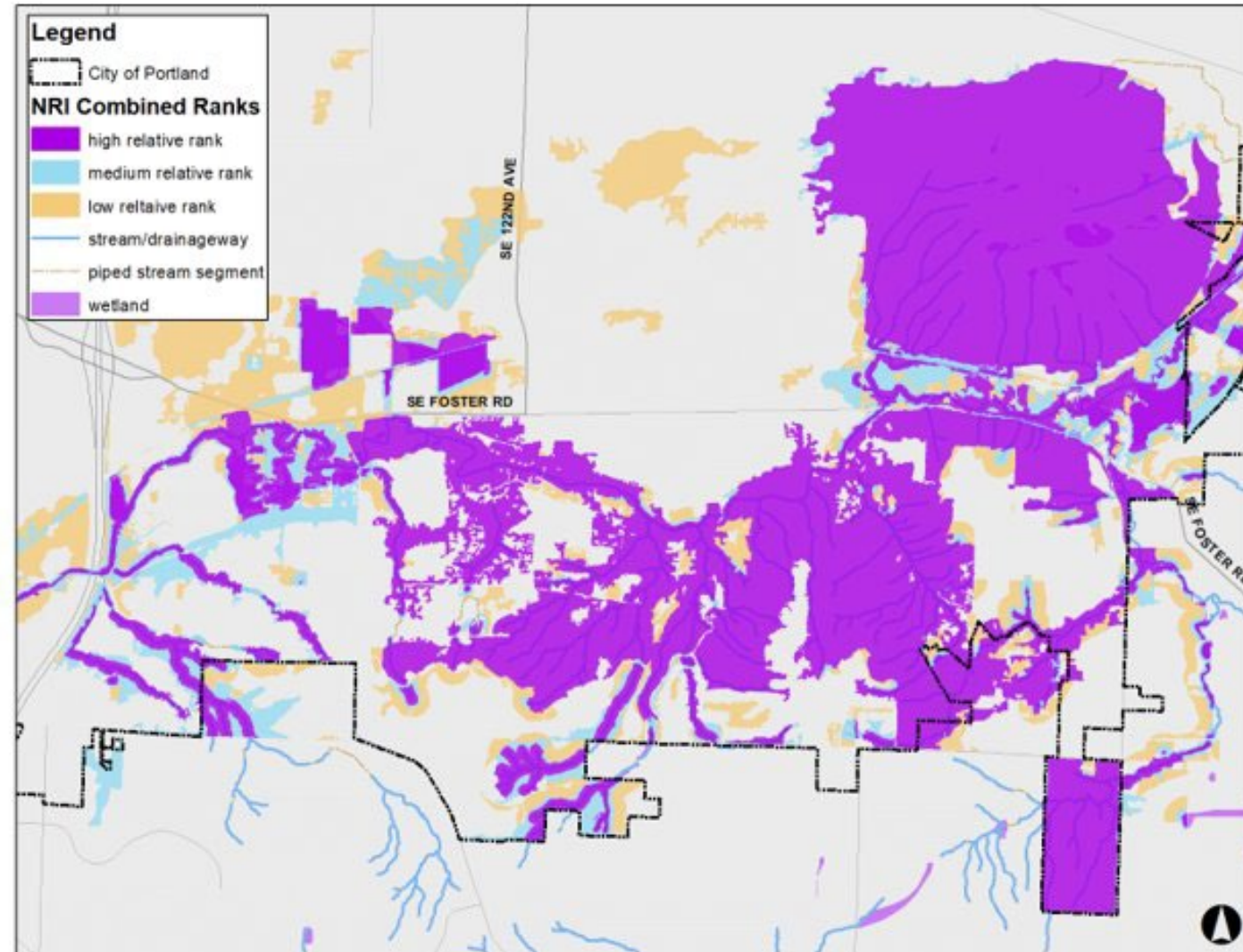


# How the NRI Model Works

## Combined Resource Rankings

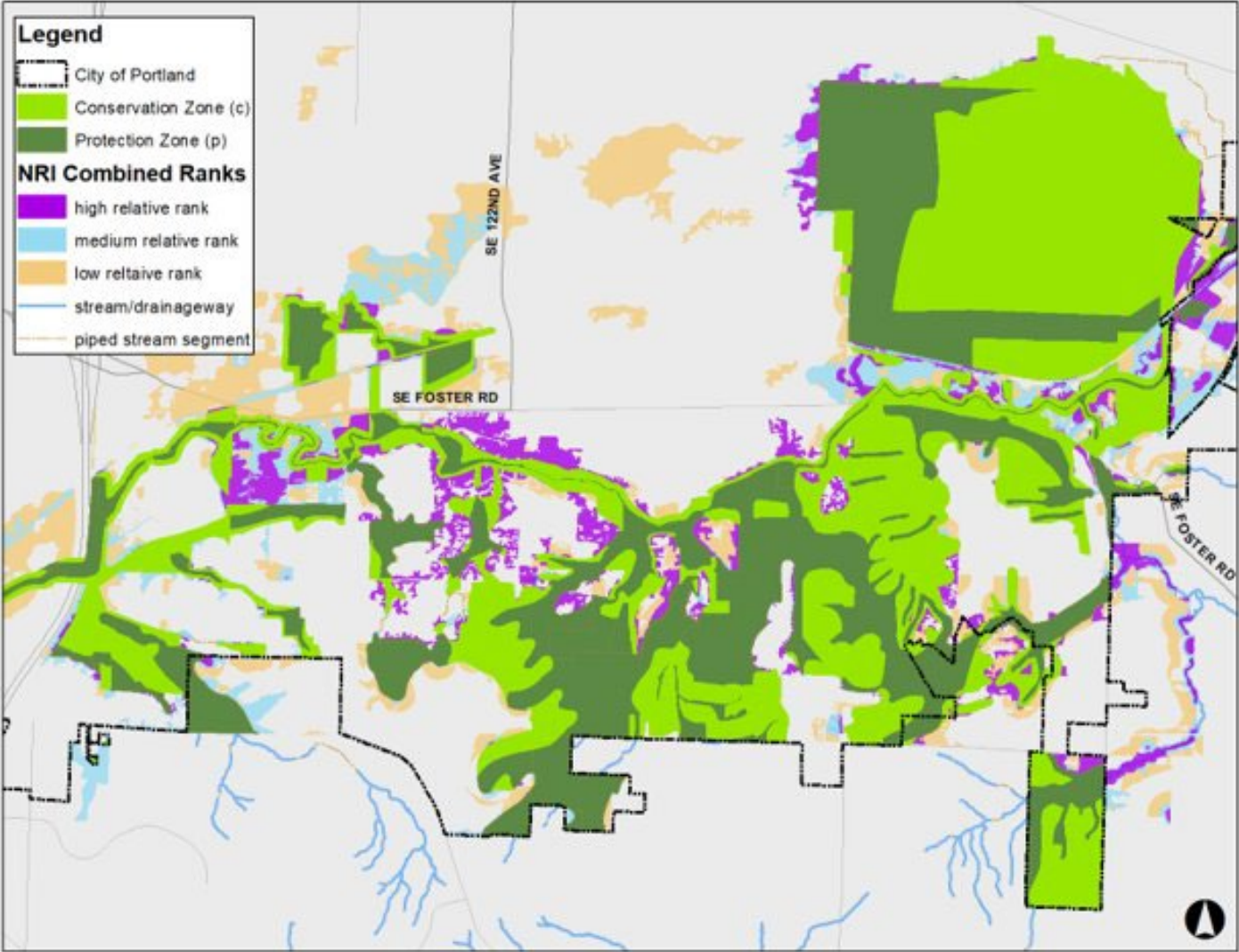
Overlays are usually applied to high ranking resources.

Overlays applied to some medium and low ranking resources.



# How the NRI Model Works

Old environmental zone mapping (pre 2022).







# Projects



# Environmental Overlay Zone Map Correction Project





# Ezone Project Summary

## 1. Purpose of environmental overlay zones

To protect streams, wetlands, flood areas, steep slopes, forests and wildlife habitat.

To protect the resources to protect people and homes from risk of landslides and floods and support healthy neighborhoods.

## 2. Purpose of this project

To correct the boundaries of the environmental overlay zones to better align with existing natural resources.

## 3. Why was the project needed

Environmental overlay zones were produced over a 30 year period using variable techniques. The project updated the environmental zone mapping using the NRI.



# Environmental Overlay Zone Map Correction Project

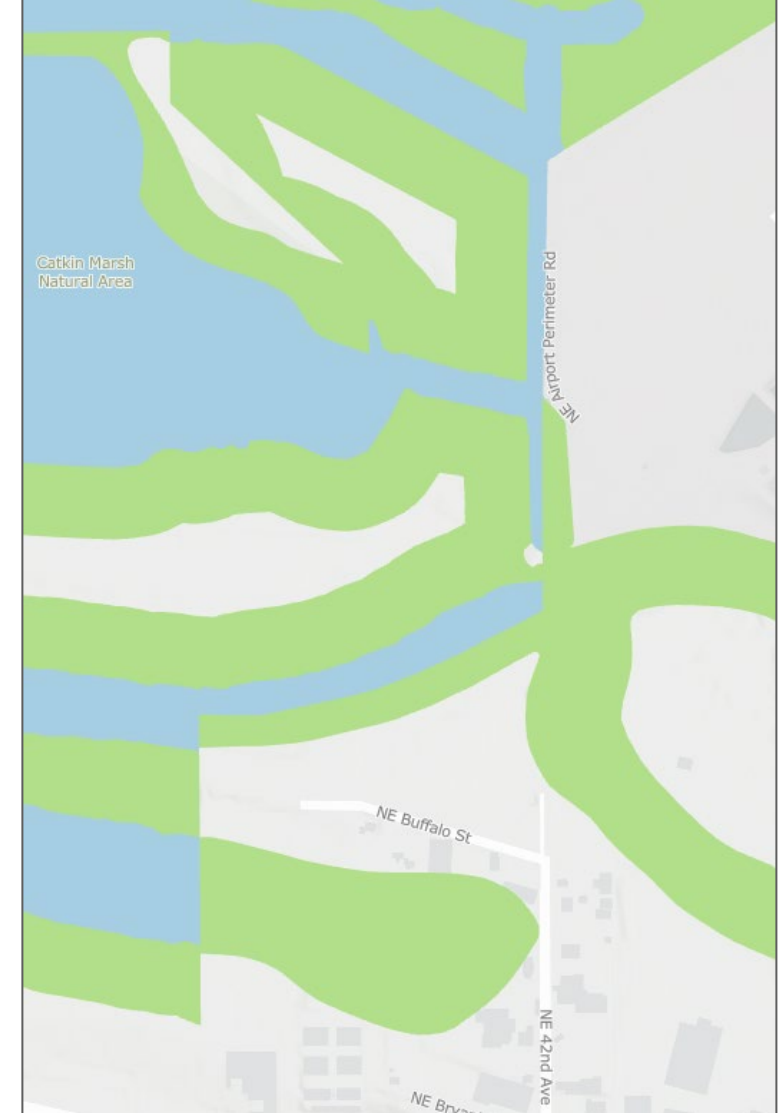
Ezones protect important natural resources

## Conservation zone (c)

Allows some **new** private development that is sensitive to the natural resources

## Protection zone (p)

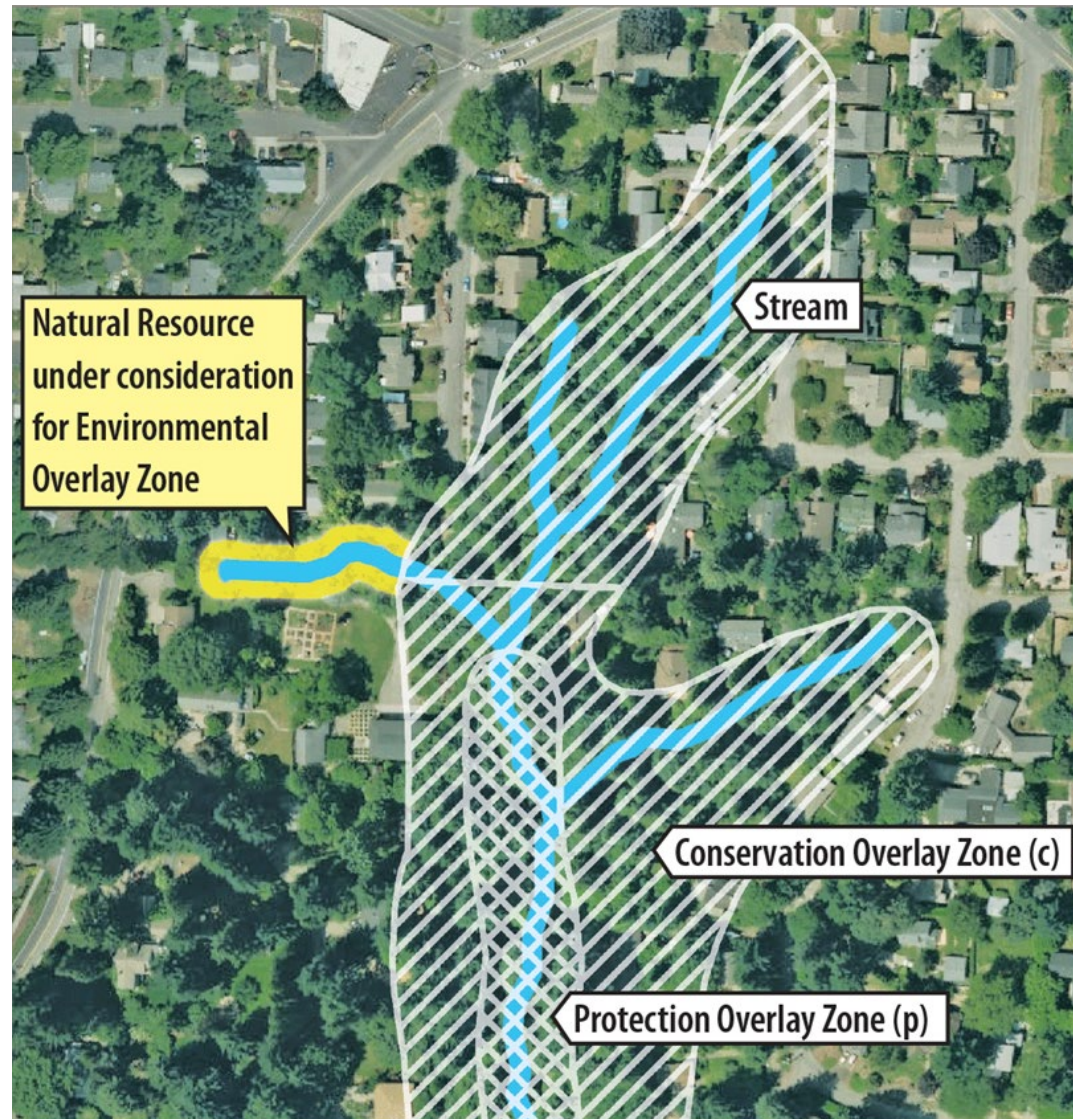
- Prohibits most **new** private development
- Allows new stormwater outfalls, levees, pump stations, public streets and similar infrastructure – with mitigation



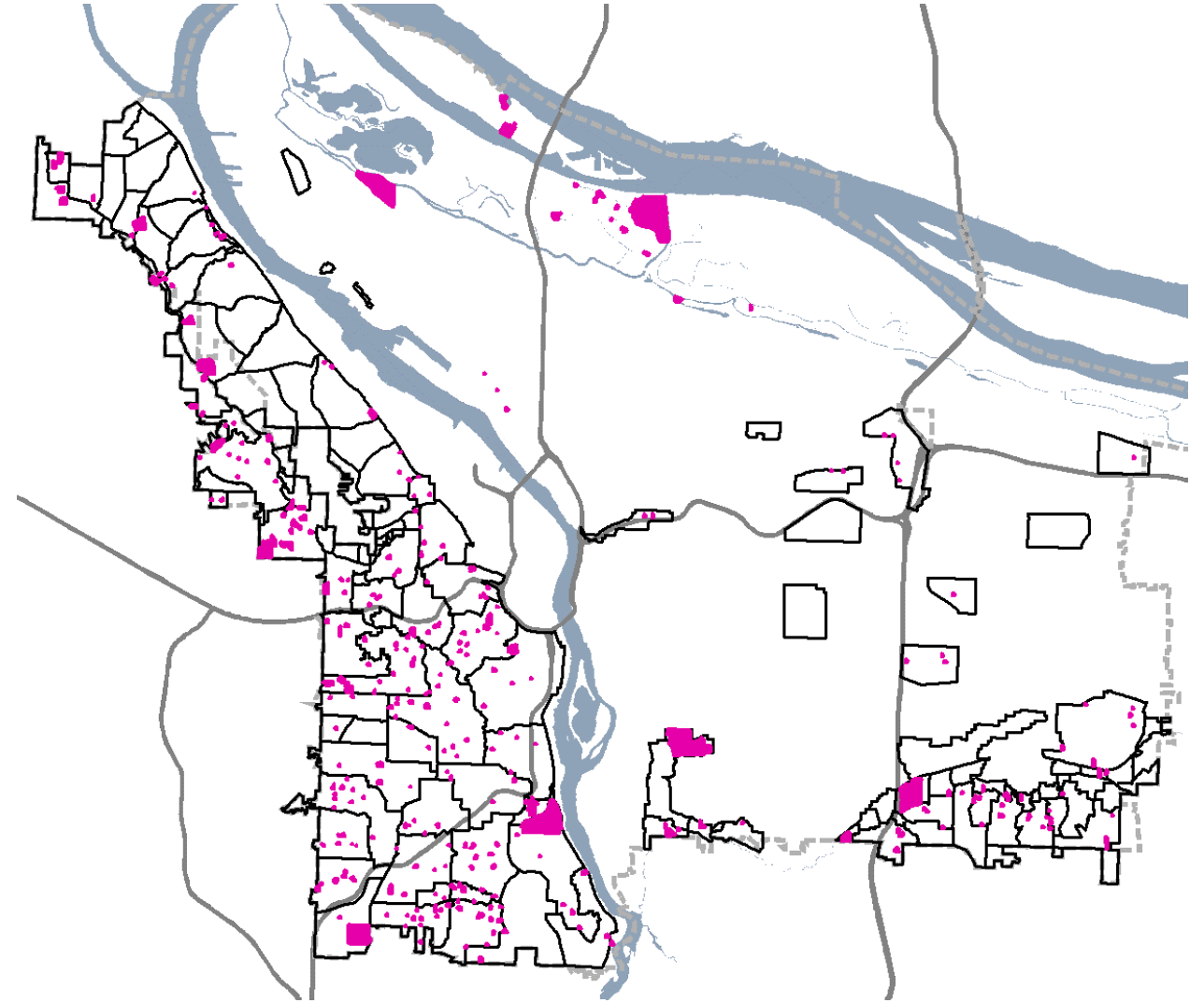
- Environmental Conservation (c)
- Environmental Protection (p)



# Ezones not Aligned with the Resources



# Site Visits



 Site Visit Location





# Environmental Overlay Zone Map Correction Project

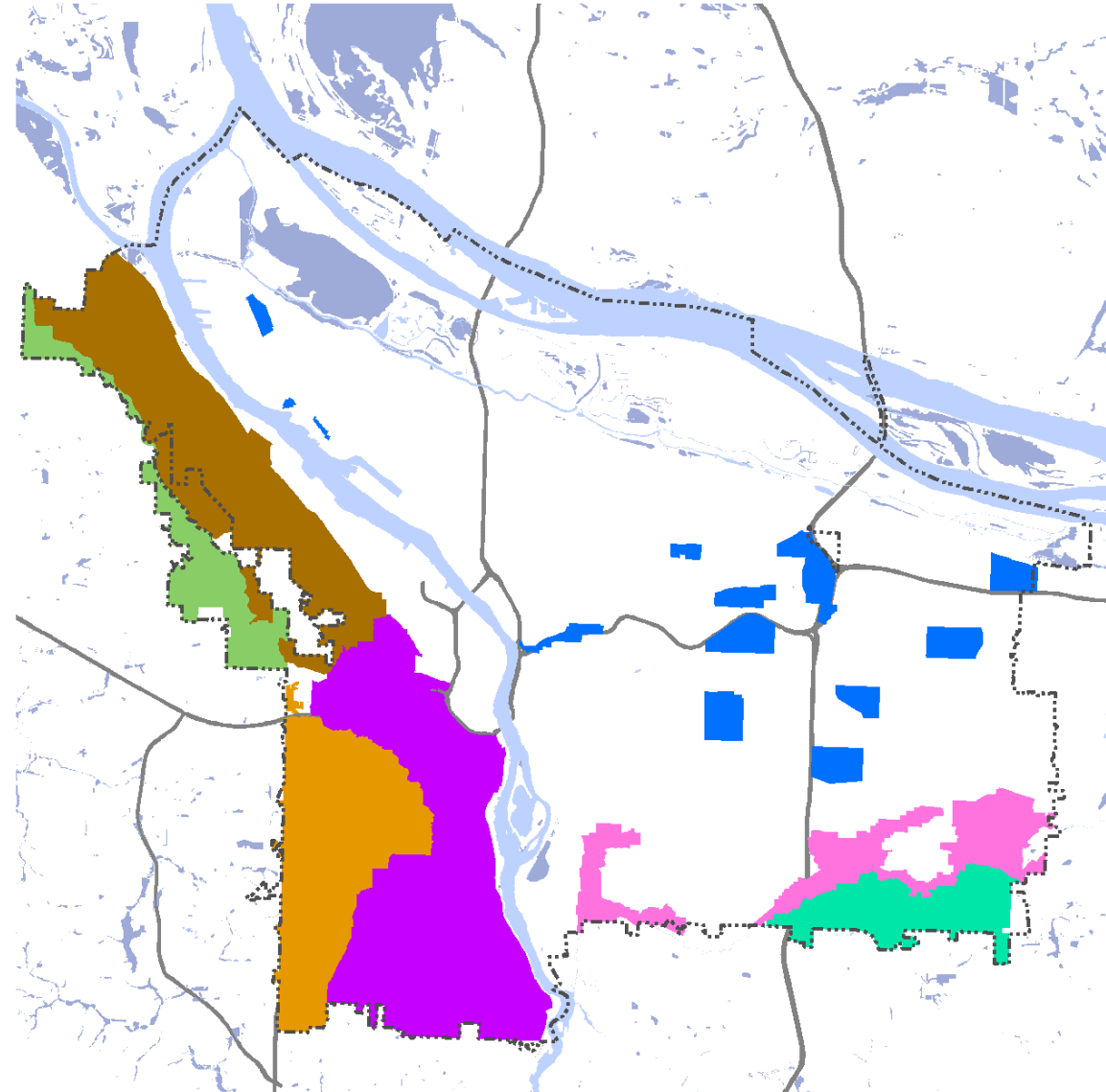


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City of Portland, Oregon

## Environmental Overlay Zones Map Correction Project

### Project Area

- Forest Park & NW District
- Skyline West
- Fanno Creek
- Tryon Creek/SW Hills East
- East Buttes & Terraces
- Johnson Creek
- Boring Lava Domes
- wetlands
- rivers & streams
- freeways
- Urban Service Boundary



Updated November 2019

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.

0 0.5 1 2 Miles  
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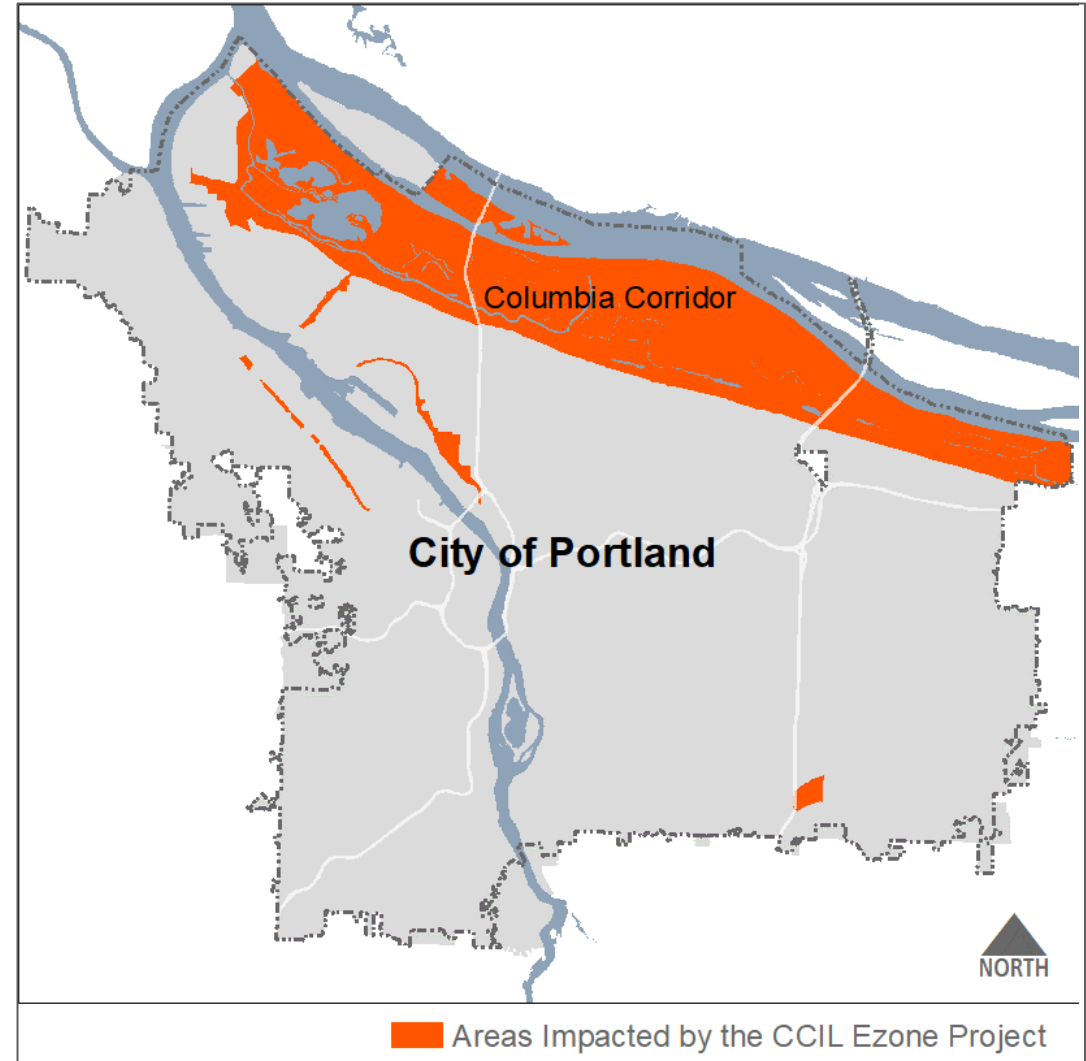
# Columbia Corridor and Industrial Lands Ezone Project

## The Next Phase

Update environmental overlays in conjunction with the citywide Economic Opportunity Analysis.

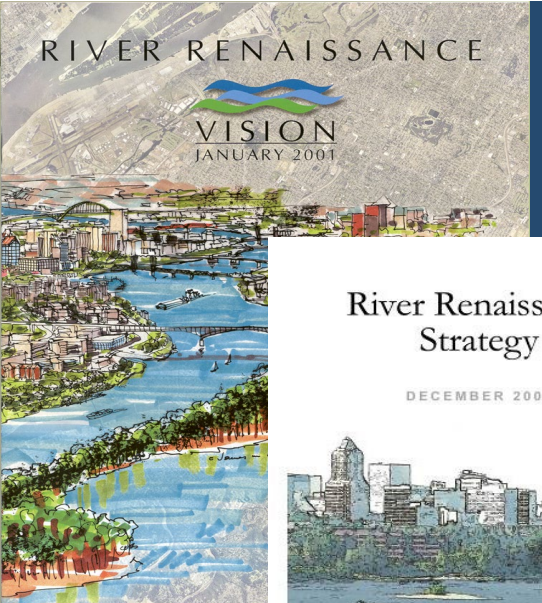
Ensure adequate industrial and employment land for future growth.

Protect natural resources while ensuring **State Land Use Planning Goal 9** compliance.

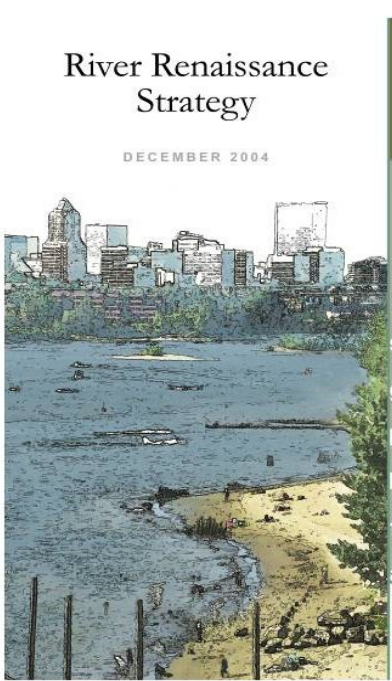




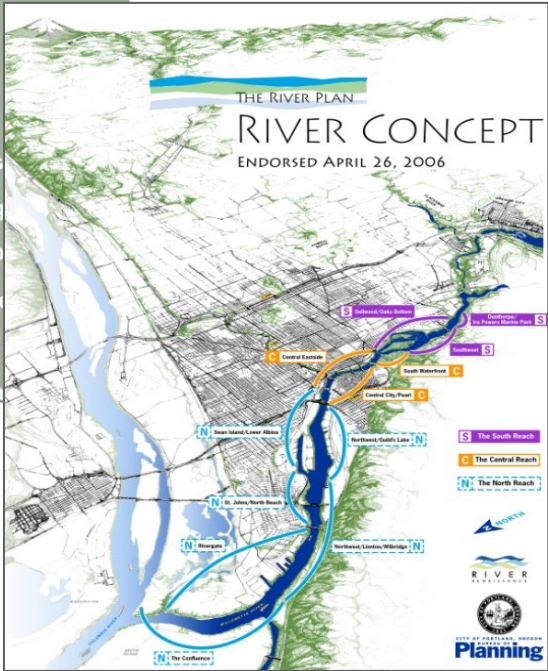
# Willamette River Planning



River Renaissance Vision (2001)



River Renaissance Strategy (2005)



The River Concept (2006)

# Willamette River Planning

## Reaches

- North Reach – Adopted 2010 (appealed)
- Central Reach – Adopted 2018 (& again in 2020)
- South Reach – Adopted 2020





# Floodplain Resilience Plan

## Plan Purpose/Goals

- Maintain access to floodplain insurance and disaster relief funds
- Reduce future flood risk
- Expand habitat for Portland's threatened and endangered species
- Continue implementation of City's *Floodplain Management Update Work Plan*

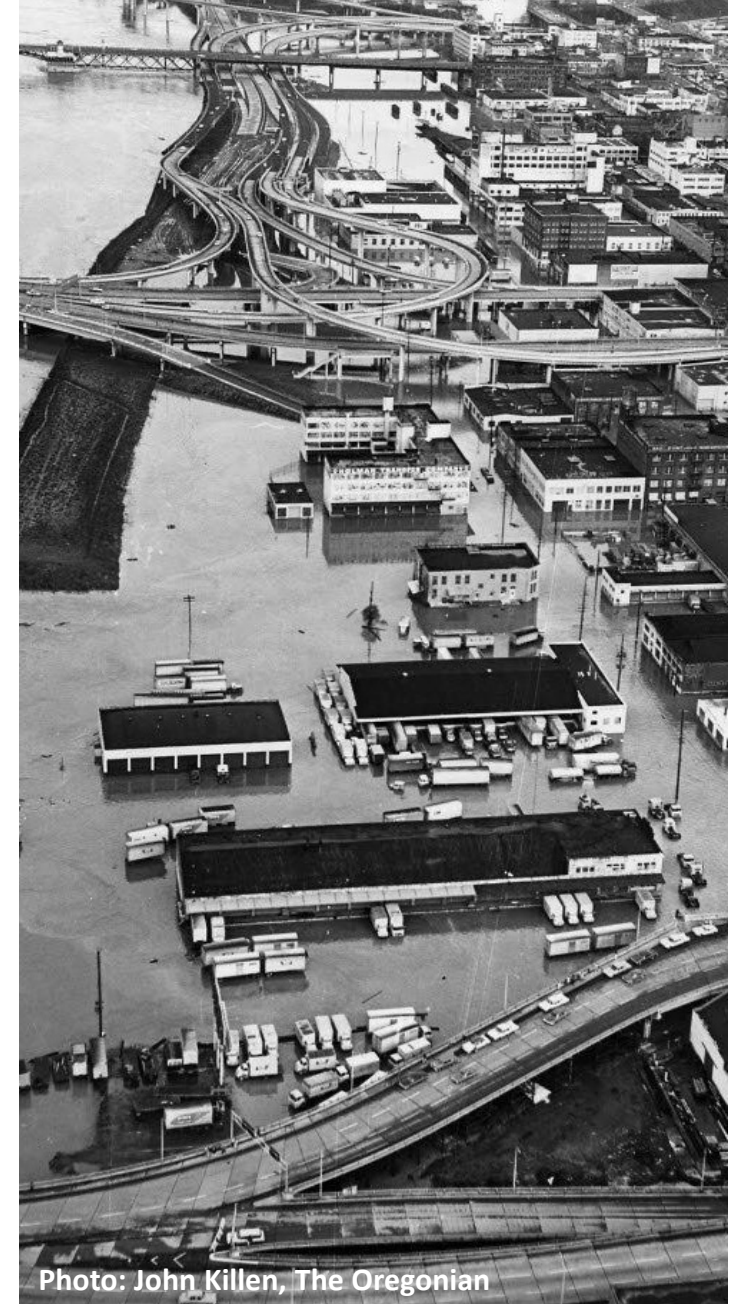
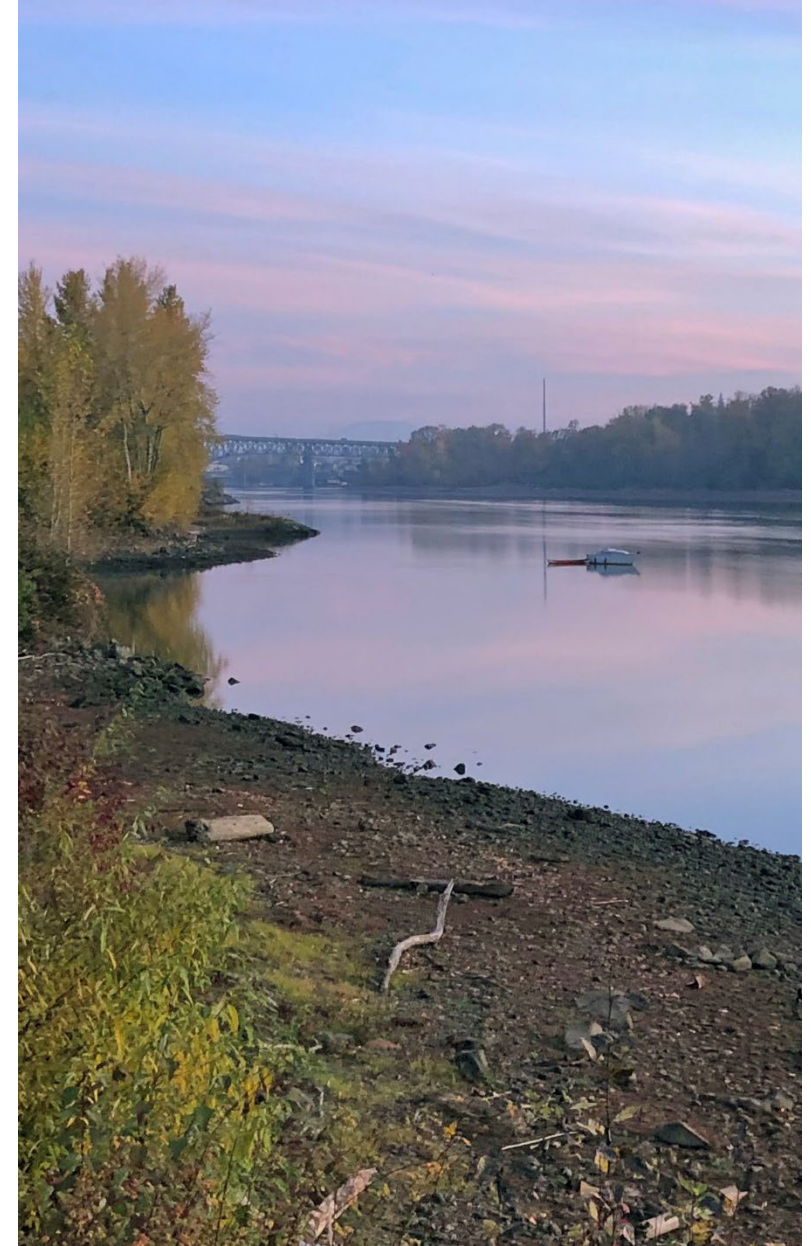


Photo: John Killen, The Oregonian

# Floodplain Resilience Plan

## Zoning Code (Title 33) Updates

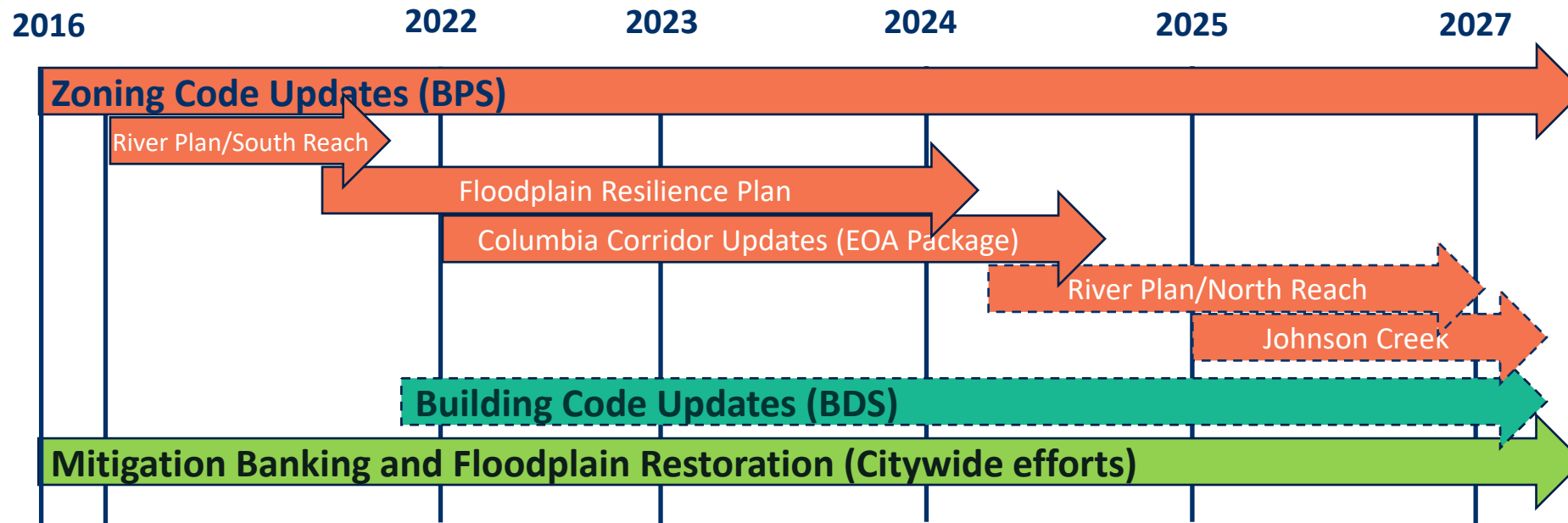
- Establish riparian buffer area in Willamette Central Reach
- Apply environmental zones to all undeveloped floodplains
- Update tree and vegetation requirements throughout the city in the floodplain





# Floodplain Management Updates

## CITY WORK PLAN COMPONENTS & SCHEDULE





# Wrap Up





# Wrap Up

- Comp Plan Environment and Watershed Health goals and policies emphasize:
  - Decarbonization
  - Climate resilience
  - Preservation and maintenance of natural resources
  - Environmental equity
- NRI is key to our understanding of the City's natural resources
- Next big thing: Ezone and floodplain updates as a part of EOA



## THE BUREAU OF **PLANNING & SUSTAINABILITY**

**Jeff Caudill and Daniel Soebbing**

BPS River and Environmental Team

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ອະທິບາຍ | الترجمة التحريرية أو الشفهية | [Portland.gov/bps/accommodation](https://portland.gov/bps/accommodation)







# Climate Resilience/ Urban Heat Islands

Develop and recommend strategies to *mitigate* the effects of urban heat islands, *adapt* to changing climate conditions, and *respond* to extreme weather events.

## Areas of interest:

- Policy reform
- Green infrastructure
- Urban form
- Community resilience hubs
- Potential partnerships and funding sources