

THE RIVER PLAN
NORTH REACH

RECOMMENDED DRAFT

APRIL 2010



VOLUME 1B: CODE AMENDMENTS AND ZONING MAPS



City of Portland Bureau of
Planning and Sustainability
Sam Adams, Mayor | Susan Anderson, Director

ACKNOWLEDGEMENTS

Portland City Council

Sam Adams, Mayor, Commissioner-in-charge; Nick Fish, Commissioner; Amanda Fritz, Commissioner; Randy Leonard, Commissioner; Dan Saltzman, Commissioner

Portland Planning Commission

Don Hanson, President; Amy Cortese, Vice President; Michelle Rudd; André Baugh; Lai-Lani Ovalles; Howard Shapiro; Chris Smith; Jill Sherman; Irma Valdez

River Plan Committee

Don Hanson, Chair; Brian Campbell, Vice Chair (through 8/07); Pauline Anderson; Jason Graf; Bob Naito; Melissa Powers; Greg Wolley; Krystyna Wolniakowski

Portland Bureau of Planning and Sustainability

Executive Team

Susan Anderson, Director; Joe Zehnder, Chief Planner

River Plan / North Reach Project Team

Sallie Edmunds, Project Manager; Shannon Buono; Brian Campbell; Marisol Caron; Diane Hale, Steve Kountz

Working Harbor Reinvestment Strategy

Steve Dotterer, Principal Planner; Steve Kountz, Project Manager; Arianne Sperry

Willamette River Natural Resource Inventory and Economic, Social, Environment, and Energy Analysis

Roberta Jortner, Project Manager; Mindy Brooks

Other Contributors

Deborah Stein; Jamie Jeffrey; Rodney Jennings; Phil Nameny; Jessica Richman; Joan Hamilton; Rick Bastasch; Michael Montgomery; Al Burns
Technical Services: Gary Odenthal; Kevin Martin; Ralph Sanders; Carmen Piekarski, Leslie Wilson; An Lee

Previous River Team Members

Planning Director: Gil Kelley

Principal Planners: Cary Pinard; Eric Engstrom

Planners: Arianne Sperry, Matt Lustig; Diane Sullivan; Marguerite Feuersanger; Barbara Hart; Julia Gisler; Grant Morehead; Amy Koski, Mieke Keenen

Interns: Peter Ovington; Sarah Selden; Joanne Daunt

Consultants

Steve Durrant, Alta Planning + Design

James Pettinari, University of Oregon Architecture Department

Dennis Canty, Evergreen Funding Consultants

David Munro, Darlene Siegel, Tetra Tech

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RIVER PLAN / NORTH REACH VOLUMES

VOLUME 1A: POLICIES, OBJECTIVES AND RECOMMENDATIONS

This volume describes the project background, policy context and recommendations to address Economic Prosperity, Watershed Health, Access, Riverfront Communities, and Working with our Partners. (Available in print)

VOLUME 1B: CODE AMENDMENTS AND ZONING MAPS

This volume contains amendments to the comprehensive plan, zoning code, and other City titles, and zoning maps. (Available in print)

VOLUME 2: ECONOMIC PROSPERITY BACKGROUND INFORMATION

This volume includes background information for some of the economic prosperity recommendations. For additional information please see the River Plan website. (Available on CD)

VOLUME 3A: NATURAL RESOURCES INVENTORY: RIPARIAN CORRIDORS AND WILDLIFE HABITAT

This volume contains natural resource information for 13 resource sites in the North Reach. (Available on CD)

VOLUME 3B: NATURAL RESOURCES INVENTORY: RIPARIAN CORRIDORS AND WILDLIFE HABITAT—APPENDICES

This volume contains five technical appendices to the Willamette River Natural Resource Inventory including a description of the methodology used to develop the inventory. (Available on CD)

VOLUME 3C: ECONOMIC, SOCIAL, ENVIRONMENTAL AND ENERGY ANALYSIS AND RECOMMENDATIONS FOR RIPARIAN CORRIDORS AND WILDLIFE HABITAT

This volume contains a State Land Use Planning Goal 5 required analysis of the tradeoffs associated with different levels of natural resource protection for the upland portions of the River Plan / North Reach planning area. (Available on CD)

VOLUME 4: ACCESS BACKGROUND INFORMATION

This volume includes background information for the access related recommendations. For additional information please see the River Plan website. (Available on CD)

VOLUME 5: ORDINANCE AND RESOLUTION

This volume includes the draft River Plan/ North Reach Ordinance and Resolution. (Available in print)

Documents listed as available on CD can be ordered in print form. Please allow seven days for printing.

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COMPREHENSIVE PLAN AMENDMENTS



COMMENTARY

2.7 The Willamette River

There are several Comprehensive Plan goals and policies that could be amended to support recommendations contained in the River Plan/North Reach including:

- Goal 2: Urban Development
- Goal 3: Neighborhoods
- Goal 5: Economic Development
- Goal 6: Transportation
- Goal 8: Environment
- Goal 10: Plan Review and Administration
- Goal 11: Public Facilities
- Goal 12: Urban Design

The recommended zoning code amendments in River Plan / North Reach are generally consistent with existing Comprehensive Plan goals and policies. Only one change to the Comprehensive Plan policies is recommended. Policy 2.7 Willamette River Greenway is out of date and needs to be amended to be consistent with the River Renaissance Vision themes endorsed by Council in 2001.

The objectives were developed as part of the development of the River Concept and endorsed by Council in 2006. The objectives for the South and Central Reaches may be amended and edited for clarity as part of the River Plan / South Reach and River Plan / Central Reach.

8.11 Special Areas

This section is updated to include name of the new River Plan and to recognize the name of the 1987 plan is Willamette Greenway Plan, not Willamette River Greenway Plan.

COMPREHENSIVE PLAN POLICY AMENDMENTS

Policies & Objectives

2.7 The Willamette River-Greenway Plan

Implement the Willamette River Greenway Plan which preserves a strong working river while promoting recreation, commercial and residential waterfront development along the Willamette south of the Broadway Bridge.

Adopt and implement a new River Plan for the Willamette River and adjacent lands that:

- Ensures a clean and healthy river for fish, wildlife, and people;
- Maintains and enhances the city's prosperous working harbor;
- Embraces the river and its banks as Portland's front yard;
- Creates vibrant waterfront districts and neighborhoods;
- Promotes partnerships, leadership and education; and
- Emphasizes different objectives for the three reaches of the river.

Continue to implement the 1987 Willamette Greenway Plan until the revised River Plan is adopted.

Objectives:

A. The North Reach is Portland's Working Waterfront.

The North Reach will continue to provide Oregon with access to global markets and support the region's economy as a West Coast distribution hub and a heavy industrial area. Environmental cleanup, recreational access, and watershed health actions will contribute to the harbor's long-term vitality.

B. The Central Reach is the Region's Gathering Place.

The Central Reach will continue to be a highly urban, regional center with a waterfront that serves as the city's main civic space and as a regional attraction. Access to the river and public use of the waterfront will improve through new development and transportation improvements, eventually including changes to Interstate 5.

C. The South Reach is Neighborhoods and Natural Areas.

The South Reach will provide unique fish and wildlife habitat, parks and trails in the center of the city, easily reached from established neighborhoods.

8.11 Special Areas

Recognize unique land qualities and adopt specific planning objectives for special areas.

Objectives:

H. The Willamette River Greenway

Protect and preserve the natural and economic qualities of lands along the Willamette River through implementation of the city's River Plan and Willamette River-Greenway Plan.

CODE AMENDMENTS



Recommended Code Amendments

This section contains recommended amendments to two City Codes. Some of these amendments apply to the North Reach only, while other amendments apply to other areas of the City as shown on the following table.

Code	Title	Area of Application
New Zoning Code Chapters		
33.475	River Overlay Zones	North Reach
33.840	Greenway Goal Exception	North Reach and Greenway
33.860	Comprehensive Natural Resource Plan	Citywide
33.865	River Review	North Reach
Amendments to Existing Zoning Code Chapters		
33.10	Legal Framework and Relationships	Citywide
33.258	Nonconforming Situations	Citywide
33.272	Public Recreational Trails	Citywide
33.430	Environmental Overlay Zones	Environmental Zones
33.440	Greenway Overlay Zones	Greenway
33.510	Central City Plan District	South Waterfront
33.583	St. Johns Plan District	North Reach
33.585	Swan Island Plan District	North Reach
33.700	Administration and Procedures	Citywide
33.810	Comprehensive Plan Map Amendments	North Reach
33.815	Conditional Uses	Citywide
33.910	Definitions	Citywide
33.930	Measurements	Citywide
Amendments to Other City Codes		
24.50.060	Provisions for Flood Hazard Reduction	North Reach

Commentary

Chapter 33.475, River Overlay Zones replaces Chapter 33.440, Greenway Overlay zones within the area along the Willamette River that is called the North Reach. Eventually, the River Overlay zones will replace the Greenway Overlay zones within the Central and South Reaches as well. The change for the Central and South Reaches will be made over time as the River Plan project continues planning for the future of the river. In the interim, the River Overlay zones will govern development and redevelopment in the North Reach, while the Greenway Overlay zones will continue to govern development and redevelopment in the Central and South Reaches.

33.475 is a new chapter of the zoning code. For ease of readability, the text is not underlined.

Because of the complexity of the regulations being recommended for the North Reach, they will likely need to be in use for a period of time before their effectiveness can be fully assessed. The Bureau of Planning and Sustainability anticipates that some issues could emerge during the first few years of implementation that would warrant refinements to the code to better achieve the legislative intent. To that end, Planning Commission recommends that the Bureau of Planning and Sustainability and the Bureau of Development Services work together on a two-year work program to monitor implementation of these regulations. BPS will develop a work plan for the monitoring program. The monitoring process will include regular reporting to the Planning Commission and could result in future code changes or changes to programs that help implement the legislative intent of the River Plan. Monitoring reports provided to the Planning Commission will be available to the neighborhood coalition offices and other interested parties.

This is a new chapter. For ease of readability the text is not underlined.

CHAPTER 33.475 RIVER OVERLAY ZONES

Sections:

- 33.475.010 Purpose
- 33.475.020 River Overlay Zones
- 33.475.030 Where These Regulations Apply
- 33.475.040 Relationship to Other City, State and Federal Reviews
- 33.475.060 Supplemental Permit Application Requirement
- River Industrial Overlay Zone
 - 33.475.100 Use Regulation
 - 33.475.110 Nonconforming Uses
 - 33.475.120 Vegetation Enhancement Standard
 - 33.475.130 IG2 Minimum Landscape Area
 - 33.475.140 Land Divisions and Property Line Adjustments
- River General Overlay Zone
 - 33.475.200 Use Regulations
 - 33.475.210 River Setback
 - 33.475.220 Vegetation Enhancement Standard
 - 33.475.230 IG2 Minimum Landscape Area
 - 33.475.240 Property Line Adjustments
- River Recreational Overlay Zone
 - 33.475.300 Use Regulation
 - 33.475.310 River Setback
 - 33.475.320 Vegetation Enhancement Standard
 - 33.475.330 IG2 Minimum Landscape Area
 - 33.475.340 Property Line Adjustments
- River Environmental Overlay Zone
 - 33.475.400 Use Regulations
 - 33.475.405 Environmental Report
 - 33.475.420 Review Procedure
 - 33.475.430 Exemptions and Development Standards
 - 33.475.450 Corrections to Violations of River Environmental Overlay Zone Development Standards
- Clean Up of Contaminated Sites
 - 33.475.460 Removal or Remediation of Hazardous Substances

33.475.010 Purpose

The River Overlay zones generally promote the protection, conservation, restoration, enhancement and maintenance of the economic, natural, scenic, and recreational qualities of lands along the north reach of the Willamette River. This purpose is achieved by applying regulations that control development of land, change of use and intensification of use, and reflect the desired character of the north reach of the Willamette River—a character that includes a prosperous working harbor, a healthy river and watershed, vibrant riverfront neighborhoods, and access to and along the river. The River Overlay zones also implement the City’s responsibilities under ORS 390.310 to 390.368 and Metro’s Urban Growth Management Functional Plan for the north reach of the Willamette River. This chapter includes the substantive requirements that apply to the removal and remediation of hazardous substances.

Commentary

33.475.020 River Overlay Zones

With the exception of one new overlay zone, the names and general purpose of the River Overlay zones are the same as their corresponding Greenway Overlay zones. The River Industrial overlay zone does not exist outside of the North Reach, so that zone will live only in this chapter (33.475, River Overlay Zones). The River Water Quality zone and the River Natural zone are being replaced in the North Reach by the new River Environmental overlay zone, therefore those former overlay zones will not exist in the North Reach or this chapter. The River General and the River Recreational overlay zones will exist in the North Reach and along the rest of the river reaches.

In order to limit confusion about which Zoning Code chapter to reference, maps and code language are used to delineate the separate boundaries of the North Reach River Overlay zones and the Greenway Overlay zones (see maps 475-1 and 440-1). An asterisk (*) has been added to the zoning map symbols for the River General overlay zone and the River Recreational overlay zone that exist in the North Reach to further identify which chapter applies to those zones.

The River Environmental overlay zone is a new overlay zone and has been applied to high and medium ranked resources identified in the *Willamette River Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2009)*. The River Environmental overlay zone applies in combination with one of the other River Overlay zones and has regulations similar to Portland's existing environmental conservation zone.

33.475.030 Where These Regulations Apply

This section clarifies that the regulations in this chapter apply to activities that occur on the land and in the water. This section also references a map that shows the area within which the River Overlay zones and regulations apply. A corollary map has been added to 33.440, *Greenway Overlay Zones*, delineating the area within which the Greenway Overlay zoning code applies. This section describes which regulations apply in each overlay zone, and which regulations apply to the removal and remediation of hazardous substances.

This is a new chapter. For ease of readability the text is not underlined.

33.475.020 River Overlay Zones

A. Purpose. The River Overlay zones implement the land use pattern identified in the River Plan/North Reach. There are four River Overlay zones each with their own purpose:

1. River Industrial. The River Industrial overlay zone encourages and promotes the development of river-dependent and river-related industries, and strengthens the economic viability of Portland as a marine shipping and industrial harbor.
2. River General. The River General overlay zone allows for uses and development that are consistent with the base zoning and allows for public use and enjoyment of the waterfront.
3. River Recreational. The River Recreational overlay zone encourages and promotes river-dependent and river-related recreational uses with a variety of types of public access to and along the river.
4. River Environmental. The River Environmental overlay zone protects, conserves and enhances important natural resource functions and values while allowing environmentally sensitive development. The River Environmental overlay zone applies to specific natural resource areas identified in a detailed study titled *Willamette River Natural Resources Inventory; Riparian Corridors and Wildlife Habitat (2008)*. This overlay zone applies in combination with one of the other River Overlay zones.

B. Map symbols. The River Overlay zones are shown on the official zoning maps with the following symbols:

<u>Overlay Zone</u>	<u>Map Symbol</u>
River Industrial	i
River General	g*
River Recreational	r*
River Environmental	e

33.475.030 Where These Regulations Apply

The regulations of this chapter apply to the land and the water within the Willamette River North Reach overlay zone boundary shown on Map 475-1 and designated on the Official Zoning Maps with the River Industrial, River General, River Recreational and River Environmental overlay zones. The regulations of this chapter do not apply to the River General and River Recreational zones within the Willamette Greenway Overlay zone boundary shown on Map 440-1. See Chapter 33.440, Greenway Overlay Zones for regulations that apply to the River General and River Recreational zones within the Willamette Greenway Overlay zone boundary. The regulations of this chapter apply as follows:

- A.** The regulations of sections 33.475.010 through .060 apply to all sites in the River Overlay Zones
- B.** The regulations of sections 33.475.100 through .140 apply to sites in the River Industrial overlay zone.

Commentary

33.475.040 Relationship to other City, State and Federal Reviews

The City is in the process of developing an enhanced coordination process to improve the city/state/federal permitting process.

This is a new chapter. For ease of readability the text is not underlined.

- C. The regulations of sections 33.475.200 through .240 apply to sites in the River General overlay zone.
- D. The regulations of sections 33.475.300 through .340 apply to sites in the River Recreational overlay zone.
- E. The regulations of sections 33.475.400 through .450 apply to sites in the River Environmental overlay zone.
- F. The regulations of section 33.475.460 apply to actions taken to remove or remediate hazardous substances. In this case, the actions are exempt from all of the other regulations in this chapter.

33.475.040 Relationship to other City, State and Federal Reviews

In addition to meeting the requirements of this Title, other City regulations, such as Title 10 Erosion Control, may apply to development within the River Overlay zones. Development may also require the approval of the Division of State Lands and the U.S. Army Corps of Engineers. City approval of uses or activities pursuant to this chapter does not imply compliance with other chapters of Title 33, other City regulations, or the regulations of state and federal agencies. Approval by other agencies does not imply approval by the City of Portland.

33.475.060 Supplemental Permit Application Requirement

- A. **When this requirement applies.** The information specified in subsection B is required when a permit for development or exterior alteration in any of the river overlay zones is reviewed for compliance with this chapter. The supplemental information specified in subsection C is required when a permit for development or exterior alteration in the River Environmental overlay is reviewed for compliance with this chapter.
- B. **Top of Bank.** If the site has river frontage, the applicant must provide a site plan depicting the top of bank of the Willamette River, and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See Section 33.910.030 for more information on top of bank. Top of bank information is not required for sites in the river industrial overlay zone that do not have any river environmental overlay zoning.
- C. **Additional information needed within the River Environmental overlay.** The following additional information is required for building or development permit applications that are reviewed for compliance with the standards of the River Environmental overlay. The information in paragraphs 1 and 2 must be submitted with permit application plans. Submission of the information in paragraph 3 is optional.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

1. An existing conditions site plan including:
 - a. Location of River Environmental overlay zone lines on the site;
 - b. Outline of any existing development, including existing utility locations, paved areas, river bank stabilization treatments, and buildings;
 - c. Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, centerline of stream, ordinary high water, or wetland boundary as appropriate;
 - d. Trees must be identified as follows:
 - (1) The size and species of trees that are 4 inches or greater in diameter that are within the area where ground disturbance or vegetation removal will occur, or have crown cover that overlaps that area, must be indicated on the site plan; and
 - (2) Trees outside of the area where ground disturbance and vegetation removal will occur may be shown as general crown cover with an indication of species composition.
 - e. Topography shown by contour lines at 2 foot vertical contours in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater.
2. A proposed development plan including:
 - a. Outline of the proposed project area, including all areas of ground disturbance, vegetation removal, grading, new structures, new paving, new river bank stabilization treatments, any proposed utility work, and proposed mitigation areas;
 - b. Location and description of all proposed erosion control devices;
 - c. Stormwater management facilities; and
 - d. A landscaping plan indicating the size, species, and location of all vegetation to be planted.
3. Photographs of the site are not required but are encouraged to supplement the existing conditions site plan.

Commentary

33.475.110 Nonconforming Uses

The regulations in this section apply to situations where the primary use is not river-dependent or river-related and is located on a riverfront site in the River Industrial overlay zone. When this situation occurs, the nonconforming use can continue and the use can change to a conforming use (i.e. one that is river-dependent or river-related). Both of these provisions are consistent with the regulations of 33.258, Nonconforming Situations.

To change the nonconforming use to another non-river-dependent or non-river-related use, the applicant will be required to go through a River Review rather than the Nonconforming Situation Review that is typically required through 33.258, Nonconforming Situations. In order to meet the approval criterion for River Review, the site will have to be deemed unsuitable for a river-dependent or river-related use.

The nonconforming use will be allowed to expand within the boundary of the property lines as they exist on the day the River Overlay zone chapter goes into effect. The expansion will not be subject to Nonconforming Situation Review. The elimination of the review supports the employers and existing uses in the working harbor. In addition, the approval criteria for Nonconforming Situation Review are not relevant because they do not address uses that are nonconforming because they are not river-dependent or river-related.

This is a new chapter. For ease of readability the text is not underlined.

River Industrial Overlay Zone

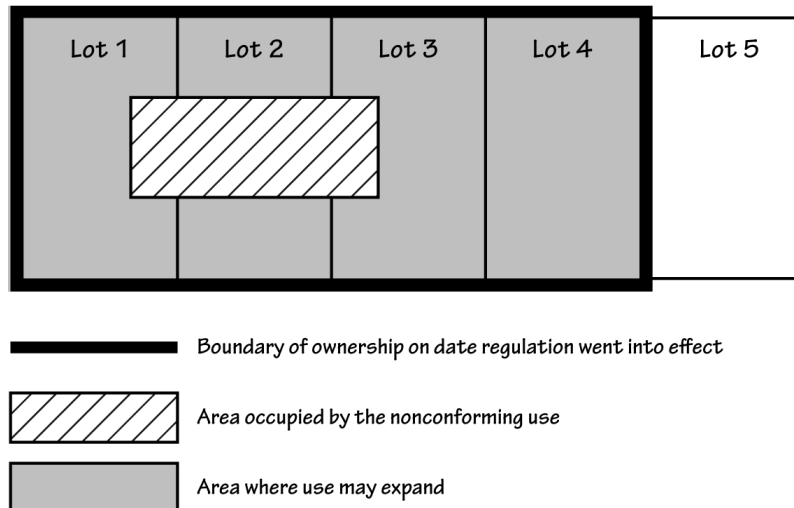
33.475.100 Use Regulation

On sites that have river frontage, primary uses must be river-dependent or river-related uses. Primary uses that are not river-dependent or river-related are allowed on a riverfront site only if approved through a River Review. On sites that do not have frontage on the river, the use regulations are those of the base zone.

33.475.110 Nonconforming Uses

- A. When these regulations apply.** Nonconforming uses are subject to the regulations of Chapter 33.258, Nonconforming Situations. The regulations of this section apply to uses that are nonconforming because they are not river-dependent or river-related and are located on sites that have frontage on the river. The regulations of this section are in addition to the regulations of 33.258 unless otherwise specified below.
- B. Continued operation.** The nonconforming use may continue.
- C. Change of use.** The nonconforming use may change to an allowed use. The nonconforming use may change to another use that is nonconforming because it is not river-dependent or river-related when approved through River Review. If the proposed use is also a nonconforming use in the base zone, the change is also subject to 33.258.050, Nonconforming Uses.
- D. Expansion.** Expansion of the nonconforming use is limited to the area bounded by the property lines of the use as they existed on *[effective date of this regulation]*. The expansion is exempt from the regulations of 33.258.050.C, Expansions. See Figure 475-1, Area of Possible Expansion

**Figure 475-1
Area of Possible Expansion**



Commentary

33.475.120 Vegetation Enhancement Standard

In order to enhance the natural features of lands within the Willamette River Greenway and increase the amount of natural resource functionality, an applicant for a building or development permit will be responsible for increasing the amount of vegetative cover on their site or in the North Reach by choosing to meet one of three options:

1. Spend an amount equal to one percent of project value, or \$200,000, whichever is less, on planting vegetation. The vegetation planting area must meet the planting area standards described in subsection E;
2. Spend an amount equal to one percent of project value or \$200,000, whichever is less, on an ecoroof. The ecoroof must meet Stormwater Management Manual guidelines; or
3. Make a payment to the City equal to one percent of project value, or \$200,000, whichever is less. The payment will be spent on planting vegetation on one of the City's river restoration sites.

The amounts to be spent (one percent or \$200,000, whichever is less) has been recommended as a starting point in light of the current economic situation. Planning Commission recommends that the amount increases to two percent, or \$200,000, once the economy recovers from the current recession.

In order for the standard to have an end point (i.e. a point at which the spending or paying of one percent of project value is no longer required), the requirements include two types of caps—an on-site vegetation cap, and an off-site payment cap:

1. On-site vegetation cap. Once an applicant can show that 15 percent of their site is vegetated, the vegetation enhancement standard will be met. Vegetation planted on the riverbank will count at a ratio of 3:1; vegetation planted in or adjacent to the river environmental overlay zone will count at a ratio of 1.5:1; and vegetation on an ecoroof will count at a ratio of .5:1;
2. Off-site payment cap. Once an applicant can show that they have paid an amount equal to the cost for the City to plant vegetation in an area equal in size to 15% of their site, the vegetation standard will be met.

The City estimates that it will cost \$6.70 per square foot to plant and maintain vegetation in the North Reach. This is a preliminary estimation, and River Plan staff will work with the Bureau of Development Services to finalize the cost estimate prior to the implementation of this plan. The estimation quoted here was derived as follows: The average of the unit costs for revegetation and floodplain restoration, plus a 90% management fee and a portion of the cost for land acquisition. The unit cost for revegetation is estimated to be \$1.15. With a 90% management fee the estimate is increased to \$2.19. The unit cost for floodplain restoration is \$3.00. With a 90% management fee the estimate is \$5.70. The average of \$2.19 and \$5.70 is \$3.95. The cost for acquisition is estimated to be between \$3.00 and \$8.00 per square foot, with an average of \$5.50. Only a portion of the cost of acquisition will be recovered and therefore acquisition has been set at \$2.75. The total cost is the sum of \$3.95 and 2.75, or \$6.70/square foot.

This is a new chapter. For ease of readability the text is not underlined.

33.475.120 Vegetation Enhancement Standard

- A. Purpose.** The vegetation enhancement standard is intended to increase the quality and quantity of vegetative cover in the North Reach. Enhancing vegetation in the North Reach will improve the natural qualities of lands along the Willamette River Greenway, increase the quality and quantity of riparian and wildlife natural resources and functional values, increase wildlife habitat connectivity, and improve water quality and other watershed health conditions. This standard is not intended to provide mitigation for impacts to the natural qualities of the Willamette River Greenway from development, but rather improve natural conditions overall.
- B. When the standard applies.** The vegetation enhancement standard applies to new development and exterior alteration within the River Overlay zones.
- C. Vegetation enhancement standard.** The applicant must meet one of the following options.
1. Option 1. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on planting vegetation on an area of the site that is within the River Overlay zones. The vegetated area must meet the planting area standards of Subsection E, below. Project value is determined based on Subsection F, below;
 2. Option 2. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on an ecoroof. The ecoroof must meet the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria*. Project value is determined based on Subsection F, below; or
 3. Option 3. Make a payment to the City equal to one percent of project value, or \$200,000, which ever is less. The payment will be directed to the River Restoration Fund and will be spent on planting vegetation on a City-owned site in the North Reach. Project value is determined based on Subsection F, below.
- D. Cap.** The following caps apply. The vegetation enhancement standard will be met when one of the caps is met:
1. On-site vegetation cap.
 - a. The amount of on-site vegetation required to be planted is capped at 15 percent of the total site area that is within the River Overlay zones. Once 15 percent of the total site area within the River Overlay zones is vegetated, the applicant is no longer required to spend one percent of project value coming into compliance with the vegetation enhancement standard;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- b. Each square foot of vegetation planted within or adjacent to the river environmental overlay zone counts as 1.5 square feet toward the cap when the vegetated area meets the planting area standards of Subsection E, below;
 - c. Each square foot of vegetation planted riverward of the top of bank counts as three square feet toward the cap when:
 - (1) The average slope of the river bank is not greater than 20 percent (1:5). Slopes greater than 20 percent may be retained within the root zones of existing trees over 10 inches in diameter, or as necessary to make a stable 1:2 transition at boundary of the vegetated area. The river bank is the area between the ordinary high water mark and the top of bank; and
 - (2) The planting area meets the standards of Subsection E, below;
 - d. Each square foot of vegetation planted on an ecoroof that meets the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria* counts as .5 square feet toward the cap.
2. Payment cap. The total amount to be paid to the City is capped at an amount equal to the cost for the City to plant vegetation in an area equal in size to 15 percent of the total site area that is within the River Overlay zones. Once the payment cap is met, the applicant is no longer required to pay one percent of project value to the City: The Bureau of Development Services will adopt and maintain an off-site vegetation cost schedule.

E. On-site vegetation planting standards. An on-site vegetation planting area must meet the following standards. Adjustments or modifications to the standards are prohibited:

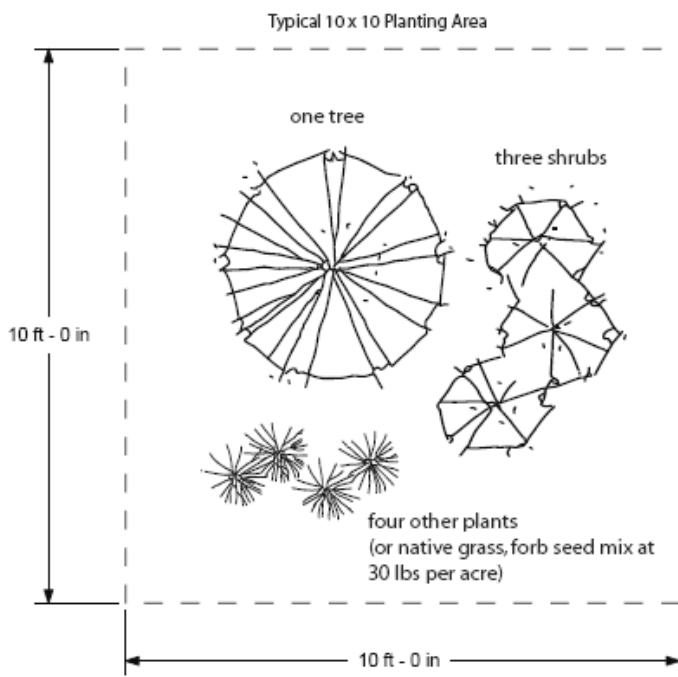
- 1. All prohibited and nuisance plants listed on the Portland Plant List must be removed from the planting area and within in 10 feet of the planting area.
- 2. All structures and debris must be removed from the planting area except for large wood, bioengineered structures, and other structures that are used to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials, or soil cells wrapped in biodegradable fabrics.
- 3. Required plants. The following plant standards apply. See Figure 475-6, Example Planting Plan:
 - a. Plants and plant densities:
 - (1) One tree, three shrubs, and four other ground cover plants are required to be planted for every 100 square feet of planting area. Trees may be clustered. Plants must be selected from the *Portland Plant List*; or

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (2) One tree and three shrubs are required for every 100 square feet of vegetated area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the *Portland Plant List*.
- b. For nonvegetated areas that will be revegetated to meet the minimum vegetated area standard, the soil must be amended as follows:
- (1) The revegetation area must have 12 inches of growing medium;
 - (2) Composition of growing medium:
 - For all revegetation areas located outside of the flood hazard area, the growing medium must be a blend of loamy soil, sand, and compost that is 30 to 40 percent plant material compost (by volume); or
 - For all revegetation areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
 - (3) Placement of the growing medium is not allowed when the ground is frozen or saturated; and
 - (4) Temporary erosion control measures are required until permanent stabilization measures are functional.

**Figure 475-6
Example Planting Plan**



Commentary

This is a new chapter. For ease of readability the text is not underlined.

4. Installation and maintenance. The following installation and maintenance requirements apply:
 - a. Installation. Plant materials must be supported when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires or other measures must be removed as soon as the plant can support itself.
 - b. Maintenance. Maintenance of vegetated areas is the ongoing responsibility of the property owner. Required vegetation must be continuously maintained in a healthy manner. Plants that die must be replaced in kind.
 - c. Irrigation. The intent of this standard is to ensure that plants will survive during a 3 year establishment period when they are most vulnerable due to lack of watering. All vegetated areas must provide a temporary irrigation system, as stated in option 1 or 2.
 - (1) Option 1. A temporary irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established.
 - (2) Option 2. Irrigation by hand.
 - d. Protection. All required vegetated areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas.
 - e. Monitoring and Reporting. Monitoring of vegetated areas is the ongoing responsibility of the property owner. Written proof that all specifications of this section have been met must be provided one year after the planting is completed. The property owner must provide this documentation to BDS.
5. Exception. Where an area has been deemed in compliance with subparagraph 33.475.460.F.2.a(1), the same area can be counted toward meeting the minimum vegetated area standard and will be deemed in conformance with the standards of this subsection.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

F. Determining project value. Project value is determined based on the entire project, not individual building permits. For purposes of this standard, project value includes:

1. The total value of all construction work for which a permit is required, including site preparation as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and other permanent work or equipment, and the contractor's profit;
2. Project value does not include costs associated with:
 - a. Normal maintenance and repair;
 - b. Nonconforming development upgrades required by this title;
 - c. Stormwater management system installation or upgrades;
 - d. Pollution control equipment;
 - c. Approved on-site mitigation for development within the River Environmental overlay zone, or resource enhancement that occurs within the River Environmental overlay zone;
 - e. Voluntary restoration that has been approved by the Bureau of Environmental Services;
 - f. Removal or remediation of hazardous substances conducted under ORS 465.200 through 465.545 and 465.900. If capping includes buildings or paving for parking lots or roads, then the costs associated with construction of the building, road or parking lot is included in project value;
 - g. Alterations required by approved fire/life safety agreements;
 - h. Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
 - i. Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings; and
 - j. Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.

Commentary

33.475.130 IG2 and EG2 Minimum Landscape Area

In lieu of meeting the minimum landscape area standard in the IG2 and EG2 zones, Planning Commission proposes to allow applicants to make a payment that will be directed to the River Restoration Program. The minimum landscape standard requires that 15% of a site be landscaped. Adjustments to this standard have been approved recently facilitating expansions of businesses that are located on constrained sites in the North Reach. Planning Commission proposes to allow the flexibility to pay a fee rather than meet the minimum standard or apply for an adjustment. In the IG2 and EG2 zones, meeting the Vegetated Area Standard would also satisfy this landscaping standard (the two standards may be met with the same area, provided the more robust planning standard is met).

The amount of the payment is intended to roughly correspond to the cost of installing and maintaining the landscaping required by the IG2 and EG2 standards, times a 90% design, permitting, long-term maintenance and management fee, plus one-half of the value of the land that would have been devoted to landscaping but which will now be available for development. This fee would be established through a Bureau of Development Services (BDS) administrative rule, and updated annually.

The cost to purchase and plant one tree, two shrubs and seven ground cover plants for every 50 square feet can be provided by the Bureau of Environmental Services (BES) based on current market price for materials, labor, and maintenance. Land in the harbor districts is currently estimated to have a value of between \$3.00 and \$8.00 per square foot. The average of these is \$5.50, and half of that value is \$2.75. The cost of design, permitting, long-term maintenance and management is estimated to be 90%.

This is a new chapter. For ease of readability the text is not underlined.

33.475.130 IG2 and EG2 Minimum Landscape Area

In lieu of meeting the required minimum landscaped area standard in the IG2 and EG2 zones, applicants may choose to make a payment. See 33.140.225 for the minimum landscaped area standard. The Bureau of Development Services shall adopt and maintain an in-lieu payment schedule.

Commentary

33.475.140 Land Divisions and Property Line Adjustments

Uses on river front sites in the River Industrial overlay zone are limited to river-dependent and river-related uses. In the past, land divisions and property line adjustments have been approved that resulted in eliminating river frontage from large sites in the River Industrial overlay zone. The recommended regulations are intended to ensure that land divisions and property line adjustments are not used as a way to avoid the use limitation in the River Industrial overlay zone.

The additional lot dimension standards will ensure that new lots have adequate access to the river front thereby ensuring that lots remain viable for river-related and river-dependant uses and development. The minimum river frontage length of 350 feet corresponds to the average length of dock structures currently used by river-related and river-dependent uses along the Willamette River in the North Reach. The minimum lot depth of 175 feet is intended to provide the area needed for loading and unloading of cargo, allow room for rail lines, conveyors and other infrastructure needed to accommodate river-related or river-dependant development.

The first exception allows flexibility in cases where a smaller lot will still be able to accommodate the required river-dependent or river-related use. In this case, the applicant will be required to provide a site plan or other similar drawing showing how the use will incorporate river-dependent or river-related development within the proposed dimensions. The second exception is for cases when a lot has been determined to be unsuitable for river-related and river-dependant uses.

The limitation on river frontage in a tract is intended to ensure that the river front in the River Industrial overlay zone remains buildable because special purpose tracts are not typically available for industrial development. This limitation has one exception. A tract can be created to accommodate a public stormwater facility as long as BES dictates the route of service and the stormwater tract does not significantly impact the ability of the remaining site or lots to accommodate river-dependent or river-related uses.

33.475.140 Land Divisions and Property Line Adjustments

- A. Purpose.** These regulations ensure that land divisions and Property Line Adjustments on sites with river frontage result in lots that can be used by river-dependent or river-related uses, while providing flexibility for unusual situations.
- B. Where these regulations apply.** These regulations apply to land divisions and Property Line Adjustments where any portion of the site is in the River Industrial overlay zone, and where any portion of the site has river frontage. Land divisions must meet the regulations in Subsections C and D. Property Line Adjustments must meet the regulations in Subsections C, D, and E. These regulations are in addition to other regulations of this Title.
- C. Lot dimension regulations.** Lots proposed through a land division must meet the standards of C.1. Modification of these standards may be approved through either River Review or Land Division Review, subject to the approval criteria in C.2. Property Line Adjustments must meet the standards of C.1:
1. Lot dimension standards:
 - a. Minimum river frontage. Each lot in the River Industrial overlay zone must have at least 350 feet of river frontage. If a site does not have 350 feet of river frontage before the land division or Property Line Adjustment, the land division or Property Line Adjustment may not cause the property to move further out of conformance with this standard.
 - b. Minimum lot depth. Each lot with river frontage must be at least 175 feet deep, measured from the midpoint of the river frontage to the midpoint of the opposite lot line. If the site is not 175 feet deep before the land division or Property Line Adjustment, the land division or Property Line Adjustment may not cause the property to move further out of conformance with this standard.
 2. Approval criteria for modification of lot dimension standards:
 - a. Land Division Review criteria. The lot is of a size and shape that can reasonably accommodate a river-dependent or river-related use and its associated development; or
 - b. River Review criteria. The site is unsuitable for a river-dependent or river-related use.
- D. Tracts.**
1. Generally. No portion of the river frontage may be placed in a tract; the river frontage must be entirely within lots.
 2. Exception. A portion of the river frontage can be within a tract for a public stormwater management facility as long as BES approves the route of service for the stormwater facility and the majority of the river frontage on the land division site remains within lots.
- E. Property Line Adjustments.** Property Line Adjustments may not result in a lot or lot of record that is in more than one River Overlay zone, unless the second overlay is the River Environmental overlay zone.

Commentary

33.475.210 River Setback

OAR 660-015-0005 and Goal 15 require that a setback line be established to keep structures separated from the river. However, the requirement does not apply to "water-related or water-dependent uses". The existing greenway regulations require that development be setback 25 feet from the top of bank. The setback does not apply to development such as buildings, structures, storage areas, and equipment that is river-dependent and river-related development. The setback does apply to buildings, equipment and structures that are not river-dependent or river-related.

One of the main goals of the River Plan/North Reach is to revise existing regulations where reasonable so that property owners in the working harbor have the flexibility to expand and redevelop on site. To meet this goal, Planning Commission recommends eliminating the setback from the River Industrial overlay zone. The River Industrial overlay zone requires that uses on riverfront sites be river-dependent or river-related. The purpose of the zone is to reserve space for harbor related uses and this purpose is implemented by ensuring that the businesses on riverfront sites use the river to transport goods. Many riverfront sites in the North Reach are constrained and applying the current setback can limit a property owner's ability to use the site in an efficient manner. The recommended change is appropriate only in the River Industrial overlay zone. The River Industrial overlay zone is located only in the working harbor and long standing City policy supports maintaining a thriving harbor.

The river setback will continue to apply in the River General and the River Recreational overlay zones in the North Reach. Planning Commission recommends increasing the setback to 50 feet from the top of the bank of the Willamette River (the existing greenway setback is 25 feet from the top of bank). A 50 foot setback is more in keeping with current thinking about urban form in relation to the river. The setback in South Waterfront is 100 feet. The setback also provides a buffer between development and the river system. The Bureau of Environmental Services recommends that development be setback at least 50 feet from the top of bank so that the natural functions of the riparian area and the river can thrive. The setback also provides space for the greenway trail.

The setback is based on the location of the top of bank. The definition and measurement of top of bank has been problematic. Planning Commission recommends amending the definition and adding a new section regarding how to measure the top of bank.

River General Overlay Zone

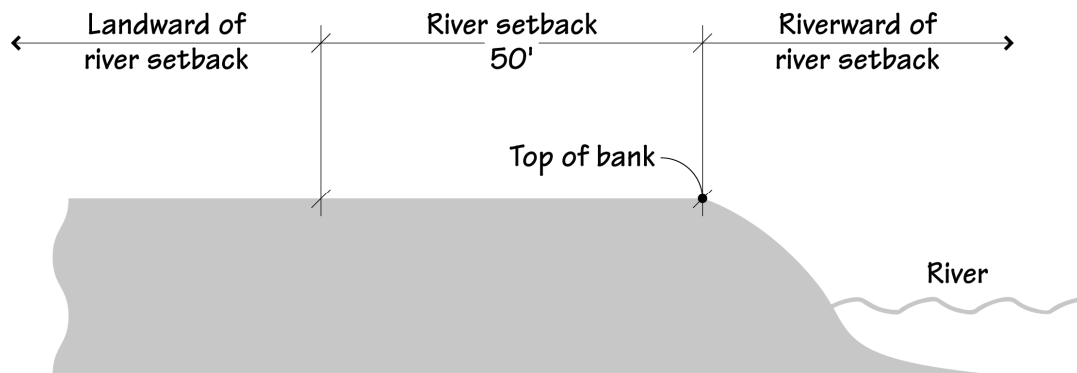
33.475.200 Use Regulations

There are no special use restrictions in the River General overlay zone.

33.475.210 River Setback

- A. Purpose.** The purpose of the river setback is to keep structures separated from the river in areas where the land is not being reserved for river-dependent and river-related industrial uses. Separating structures from the river facilitates protection, maintenance, restoration, preservation and enhancement of the natural, scenic, historic and recreational qualities of the Willamette River in the North Reach by reserving space for the conservation and enhancement of natural vegetation and the opportunity for public access. In addition, OAR 660-015-0005 requires the establishment of a setback line.
- B. General.** The requirements of this section focus on whether the development is **river-dependent** or **river-related**. The focus is not on the primary use of the land. For example, a marine freight terminal is a river-dependent primary use, but not all development associated with the terminal is river-dependent. The dock and loading cranes are river-dependent, but the parking lot, storage areas, and corporate offices are not.
- C. The river setback.** The location of the setback is measured from the top of bank. (See Chapter 33.910, Definitions and 33.930, Measurements). The river setback extends from the top of the bank to a point 50 feet landward of the top of the bank. See Figure 475-1. Where alteration to the river bank carried out to meet subparagraph 33.475.220.D.1.c(1) results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and new top of bank line must be submitted for verification that the top of bank has been measured according to the standard in 33.930.150, Measuring Top of Bank and then recorded with the County recorder. In all cases the setback line must be at least 5 feet landward of the new top of bank line.

**Figure 475-1
River Setback**



Commentary

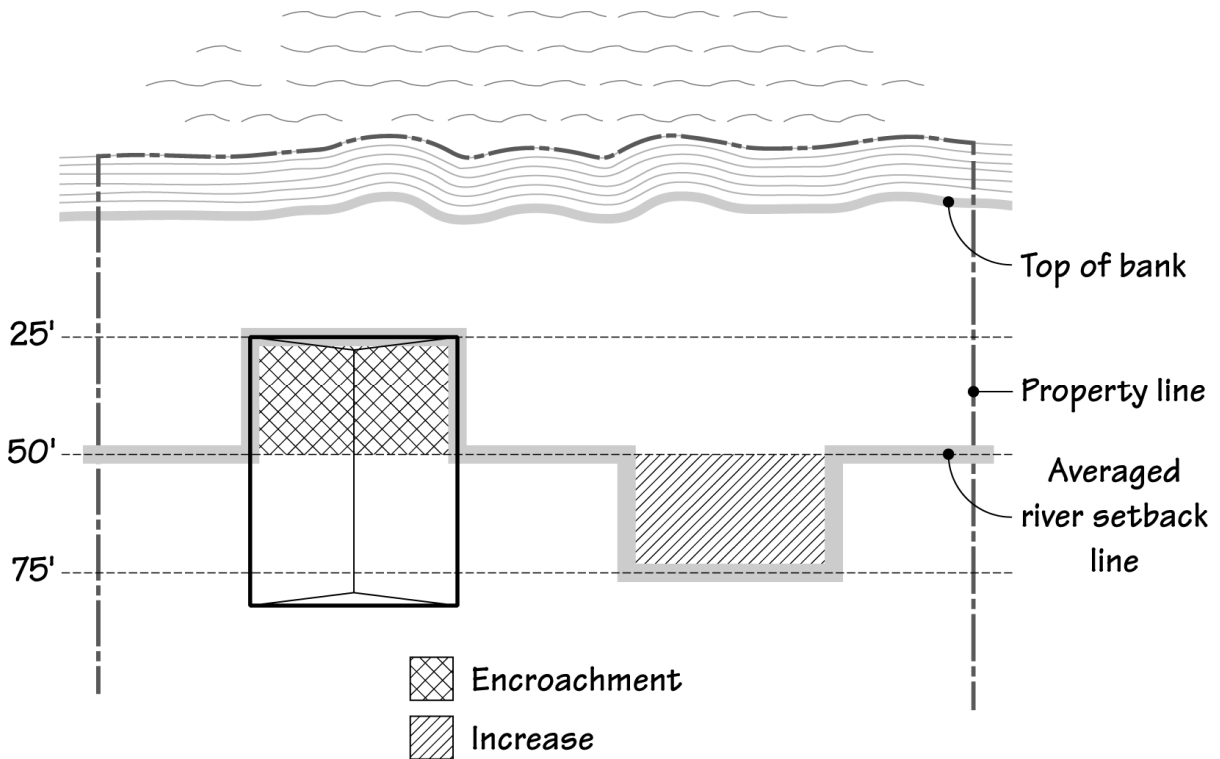
33.475.210.E Encroachment into the setback. One of the main goals of the River Plan / North Reach is to revise regulations where reasonable so that property owners in the working harbor have the flexibility to expand and redevelop on site. As a corollary to the recommendation to increase the setback from top of bank from 25 feet to 50 feet, Planning Commission also recommends allowing non-river-dependent and non-river-related development to encroach into the setback as long as the setback is enlarged an amount equal to the square footage of the encroachment. This change will allow flexibility in the regulation while ensuring that the average setback remains 50 feet from top of bank. The regulations will also stipulate that at no point can development encroach closer than 25 feet from top of bank.

D. Development standards.

1. Development landward of the river setback. Development, exterior alterations, excavations, and fills landward of the river setback are not required to be river-dependent or river-related.
2. Development within or riverward of the river setback. Development, exterior alterations, excavations, and fills within or riverward of the river setback must be river-dependent or river-related. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related are allowed within or riverward of the river setback only if approved through a Greenway Goal Exception. Adjustments and modifications are prohibited.

E. Encroachment into the setback. Development that is not river-dependent or river-related may encroach into the river setback as long as the setback is increased by an amount of square footage equal to the encroachment. At no point can development that is not river-dependent or river-related encroach closer than 25 feet from top of bank unless approved through a Greenway Goal Exception. See figure 475-2.

**Figure 475-2
River Setback Encroachment**



Commentary

33.475.220 Vegetation Enhancement Standard

In order to enhance the natural features of lands within the Willamette River Greenway and increase the amount of natural resource functionality, an applicant for a building or development permit will be responsible for increasing the amount of vegetative cover on their site or in the North Reach by choosing to meet one of three options:

1. Spend an amount equal to one percent of project value, or \$200,000, whichever is less, on planting vegetation. The vegetation planting area must meet the planting area standards described in subsection E;
2. Spend an amount equal to one percent of project value or \$200,000, whichever is less, on an ecoroof. The ecoroof must meet Stormwater Management Manual guidelines; or
3. Make a payment to the City equal to one percent of project value, or \$200,000, whichever is less. The payment will be spent on planting vegetation on one of the City's river restoration sites.

The amounts to be spent (one percent or \$200,000, whichever is less) has been recommended as a starting point in light of the current economic situation. Planning Commission recommends that the amount increases to two percent, or \$200,000, once the economy recovers from the current recession.

In order for the standard to have an end point (i.e. a point at which the spending or paying of one percent of project value is no longer required), the requirements include two types of caps—an on-site vegetation cap, and an off-site payment cap:

1. On-site vegetation cap. Once an applicant can show that 15 percent of their site is vegetated, the vegetation enhancement standard will be met. Vegetation planted on the riverbank will count at a ratio of 3:1; vegetation planted in or adjacent to the river environmental overlay zone will count at a ratio of 1.5:1; and vegetation on an ecoroof will count at a ratio of .5:1;
2. Off-site payment cap. Once an applicant can show that they have paid an amount equal to the cost for the City to plant vegetation in an area equal in size to 15% of their site, the vegetation standard will be met.

The City estimates that it will cost \$6.70 per square foot to plant and maintain vegetation in the North Reach. This is a preliminary estimation, and River Plan staff will work with the Bureau of Development Services to finalize the cost estimate prior to the implementation of this plan. The estimation quoted here was derived as follows: The average of the unit costs for revegetation and floodplain restoration, plus a 90% management fee and a portion of the cost for land acquisition. The unit cost for revegetation is estimated to be \$1.15. With a 90% management fee the estimate is increased to \$2.19. The unit cost for floodplain restoration is \$3.00. With a 90% management fee the estimate is \$5.70. The average of \$2.19 and \$5.70 is \$3.95. The cost for acquisition is estimated to be between \$3.00 and \$8.00 per square foot, with an average of \$5.50. Only a portion of the cost of acquisition will be recovered and therefore acquisition has been set at \$2.75. The total cost is the sum of \$3.95 and 2.75, or \$6.70/square foot.

This is a new chapter. For ease of readability the text is not underlined.

33.475.220 Vegetation Enhancement Standard

- A. Purpose.** The vegetation enhancement standard is intended to increase the quality and quantity of vegetative cover in the North Reach. Enhancing vegetation in the North Reach will improve the natural qualities of lands along the Willamette River Greenway, increase the quality and quantity of riparian and wildlife natural resources and functional values, increase wildlife habitat connectivity, and improve water quality and other watershed health conditions. This standard is not intended to provide mitigation for impacts to the natural qualities of the Willamette River Greenway from development, but rather improve natural conditions overall.
- B. When the standard applies.** The vegetation enhancement standard applies to new development and exterior alteration within the River Overlay zones.
- C. Vegetation enhancement standard.** The applicant must meet one of the following options.
1. Option 1. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on planting vegetation on an area of the site that is within the River Overlay zones. The vegetated area must meet the planting area standards of Subsection E, below. Project value is determined based on Subsection F, below;
 2. Option 2. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on an ecoroof. The ecoroof must meet the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria*. Project value is determined based on Subsection F, below; or
 3. Option 3. Make a payment to the City equal to one percent of project value, or \$200,000, which ever is less. The payment will be directed to the River Restoration Fund and will be spent on planting vegetation on a City-owned site in the North Reach. Project value is determined based on Subsection F, below.
- D. Cap.** The following caps apply. The vegetation enhancement standard will be met when one of the caps is met:
1. On-site vegetation cap.
 - a. The amount of on-site vegetation required to be planted is capped at 15 percent of the total site area that is within the River Overlay zones. Once 15 percent of the total site area within the River Overlay zones is vegetated, the applicant is no longer required to spend one percent of project value coming into compliance with the vegetation enhancement standard;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- b. Each square foot of vegetation planted within or adjacent to the river environmental overlay zone counts as 1.5 square feet toward the cap when the vegetated area meets the planting area standards of Subsection E, below;
 - c. Each square foot of vegetation planted riverward of the top of bank counts as three square feet toward the cap when:
 - (1) The average slope of the river bank is not greater than 20 percent (1:5). Slopes greater than 20 percent may be retained within the root zones of existing trees over 10 inches in diameter, or as necessary to make a stable 1:2 transition at boundary of the vegetated area. The river bank is the area between the ordinary high water mark and the top of bank; and
 - (2) The planting area meets the standards of Subsection E, below;
 - d. Each square foot of vegetation planted on an ecoroof that meets the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria* counts as .5 square feet toward the cap.
2. Payment cap. The total amount to be paid to the City is capped at an amount equal to the cost for the City to plant vegetation in an area equal in size to 15 percent of the total site area that is within the River Overlay zones. Once the payment cap is met, the applicant is no longer required to pay one percent of project value to the City: The Bureau of Development Services will adopt and maintain an off-site vegetation cost schedule.

E. On-site vegetation planting standards. An on-site vegetation planting area must meet the following standards. Adjustments or modifications to the standards are prohibited:

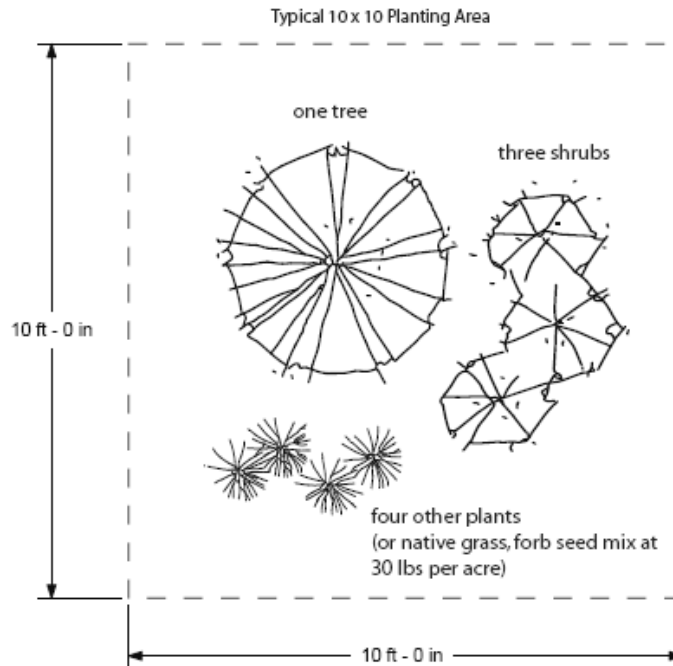
- 1. All prohibited and nuisance plants listed on the Portland Plant List must be removed from the planting area and within 10 feet of the planting area.
- 2. All structures and debris must be removed from the planting area except for large wood, bioengineered structures, and other structures that are used to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials, or soil cells wrapped in biodegradable fabrics.
- 3. Required plants. The following plant standards apply. See Figure 475-6, Example Planting Plan:
 - a. Plants and plant densities:
 - (1) One tree, three shrubs, and four other ground cover plants are required to be planted for every 100 square feet of planting area. Trees may be clustered. Plants must be selected from the *Portland Plant List*; or

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (2) One tree and three shrubs are required for every 100 square feet of vegetated area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the *Portland Plant List*.
- b. For nonvegetated areas that will be revegetated to meet the minimum vegetated area standard, the soil must be amended as follows:
- (1) The revegetation area must have 12 inches of growing medium;
 - 2) Composition of growing medium:
 - For all revegetation areas located outside of the flood hazard area, the growing medium must be a blend of loamy soil, sand, and compost that is 30 to 40 percent plant material compost (by volume); or
 - For all revegetation areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
 - (3) Placement of the growing medium is not allowed when the ground is frozen or saturated; and
 - (4) Temporary erosion control measures are required until permanent stabilization measures are functional.

**Figure 475-6
Example Planting Plan**



Commentary

This is a new chapter. For ease of readability the text is not underlined.

4. Installation and maintenance. The following installation and maintenance requirements apply:
 - a. Installation. Plant materials must be supported when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires or other measures must be removed as soon as the plant can support itself.
 - b. Maintenance. Maintenance of vegetated areas is the ongoing responsibility of the property owner. Required vegetation must be continuously maintained in a healthy manner. Plants that die must be replaced in kind.
 - c. Irrigation. The intent of this standard is to ensure that plants will survive during a 3 year establishment period when they are most vulnerable due to lack of watering. All vegetated areas must provide a temporary irrigation system, as stated in option 1 or 2.
 - (1) Option 1. A temporary irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established.
 - (2) Option 2. Irrigation by hand.
 - d. Protection. All required vegetated areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas.
 - e. Monitoring and Reporting. Monitoring of vegetated areas is the ongoing responsibility of the property owner. Written proof that all specifications of this section have been met must be provided one year after the planting is completed. The property owner must provide this documentation to BDS.
5. Exception. Where an area has been deemed in compliance with subparagraph 33.475.460.F.2.a(1), the same area can be counted toward meeting the minimum vegetated area standard and will be deemed in conformance with the standards of this subsection.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

F. Determining project value. Project value is determined based on the entire project, not individual building permits. For purposes of this standard, project value includes:

1. The total value of all construction work for which a permit is required, including site preparation as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and other permanent work or equipment, and the contractor's profit;
2. Project value does not include costs associated with:
 - a. Normal maintenance and repair;
 - b. Nonconforming development upgrades required by this title;
 - c. Stormwater management system installation or upgrades;
 - d. Pollution control equipment;
 - c. Approved on-site mitigation for development within the River Environmental overlay zone, or resource enhancement that occurs within the River Environmental overlay zone;
 - e. Voluntary restoration that has been approved by the Bureau of Environmental Services;
 - f. Removal or remediation of hazardous substances conducted under ORS 465.200 through 465.545 and 465.900. If capping includes buildings or paving for parking lots or roads, then the costs associated with construction of the building, road or parking lot is included in project value;
 - g. Alterations required by approved fire/life safety agreements;
 - h. Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
 - i. Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings; and
 - j. Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.

Commentary

33.475.230 IG2 and EG2 Minimum Landscape Area

In lieu of meeting the minimum landscape area standard in the IG2 and EG2 zones, Planning Commission recommends to allow applicants to make a payment that will be directed to the River Restoration Program. The minimum landscape standard requires that 15% of a site be landscaped. Adjustments to this standard have been approved recently facilitating expansions of businesses that are located on constrained sites in the North Reach. Planning Commission proposes to allow the flexibility to pay a fee rather than meet the minimum standard or apply for an adjustment. In the IG2 and EG2 zones, meeting the Vegetated Area Standard would also satisfy this landscaping standard (the two standards may be met with the same area, provided the more robust planning standard is met).

The amount of the payment is intended to roughly correspond to the cost of installing and maintaining the landscaping required by the IG2 and EG2 standards, times a 90% design, permitting, long-term maintenance and management fee, plus one-half of the value of the land that would have been devoted to landscaping but which will now be available for development. This fee would be established through a Bureau of Development Services (BDS) administrative rule, and updated annually.

The cost to purchase and plant one tree, two shrubs and seven ground cover plants for every 50 square feet can be provided by the Bureau of Environmental Services (BES) based on current market price for materials, labor, and maintenance. Land in the harbor districts is currently estimated to have a value of between \$3.00 and \$8.00 per square foot. The average of these is \$5.50, and half of that value is \$2.75. The cost of design, permitting, long-term maintenance and management is estimated to be 90%.

This is a new chapter. For ease of readability the text is not underlined.

33.475.230 IG2 and EG2 Minimum Landscape Area

In lieu of meeting the required minimum landscaped area standard in the IG2 and EG2 zones, applicants may choose to make a payment. See 33.140.225 for the minimum landscaped area standard. The Bureau of Development Services shall adopt and maintain an in-lieu payment schedule.

33.475.240 Property Line Adjustments

Property Line Adjustments may not result in a property that is in more than one river overlay zone, unless the second overlay is the River Environmental overlay zone.

Commentary

33.475.310 River Setback

OAR 660-015-0005 and Goal 15 require that a setback line be established to keep structures separated from the river. However, the requirement does not apply to "water-related or water-dependent uses". The existing greenway regulations require that development be setback 25 feet from the top of bank. The setback does not apply to development such as buildings, structures, storage areas, and equipment that is river-dependent and river-related development. The setback does apply to buildings, equipment and structures that are not river-dependent or river-related.

The river setback will continue to apply in the River General and the River Recreational overlay zones in the North Reach. Planning Commission recommends to increase the setback to 50 feet from the top of the bank of the Willamette River (the existing greenway setback is 25 feet from the top of bank). A 50 foot setback is more in keeping with current thinking about urban form in relation to the river. The setback in South Waterfront is 100 feet. The setback also provides a buffer between development and the river system. The Bureau of Environmental Services recommends that development be setback at least 50 feet from the top of bank so that the natural functions of the riparian area and the river can thrive. The setback also provides space for the greenway trail.

The setback is based on the location of the top of bank. The definition and measurement of top of bank has been problematic. Planning Commission recommends amending the definition and adding a new section regarding how to measure the top of bank.

River Recreational Overlay Zone

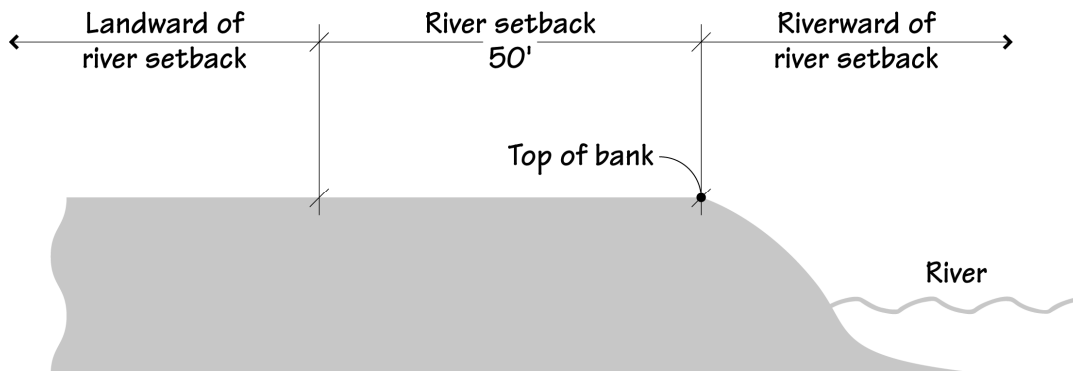
33.475.300 Use Regulation

Primary uses are limited to recreational uses that are river-dependent or river-related.

33.475.310 River Setback

- A. Purpose.** The purpose of the river setback is to keep structures separated from the river in areas where the land is not being reserved for river-dependent and river-related industrial uses. Separating structures from the river facilitates protection, maintenance, restoration, preservation and enhancement of the natural, scenic, historic and recreational qualities of the Willamette River in the North Reach by reserving space for the conservation and enhancement of natural vegetation and the opportunity for public access. In addition, OAR 660-015-0005 requires the establishment of a setback line.
- B. General.** The requirements of this section focus on whether the development is **river-dependent** or **river-related**. The focus is not on the primary use of the land. For example, a riverfront park is a river-dependent recreational primary use, but not all development associated with the park is river-dependent. The boat launch, dock, trail, bench, picnic tables, bicycle racks, drinking fountains, trash receptacles, grills, and bioswales associated with trails are river-dependent, but the parking lot, bathrooms, playgrounds, gazebos, storage areas, water fountains, shelters and sport fields are not.
- C. The river setback area.** The location of the setback is measured from the top of bank. (See Chapter 33.910, Definitions and 33.930, Measurements). The river setback extends from the top of the bank to a point 50 feet landward of the top of the bank. See Figure 475-3. Where alteration to the river bank carried out to meet subparagraph 33.475.320.D.1.c(1) results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and new top of bank line must be submitted for verification that the top of bank has been measured according to the standard in 33.930.150, Measuring Top of Bank and then recorded with the County recorder. In all cases the setback line must be at least 5 feet landward of the new top of bank line.

**Figure 475-3
River Setback**



Commentary

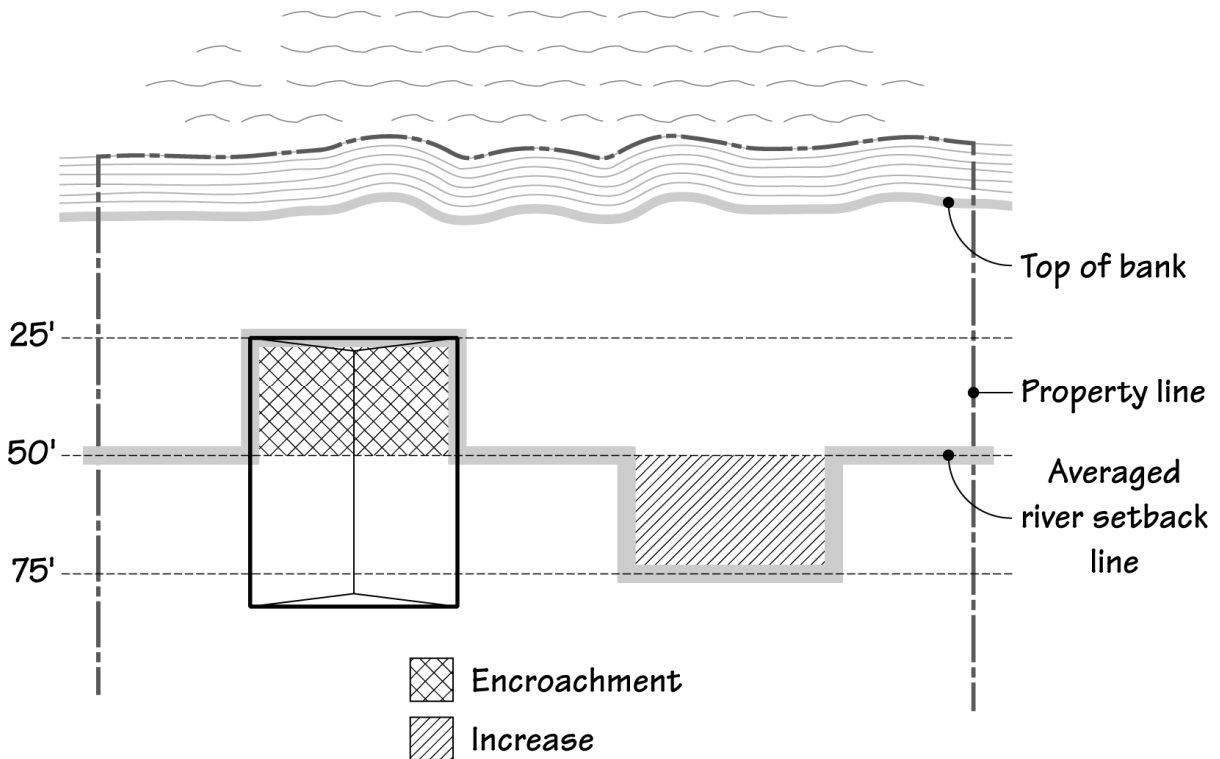
33.475.310.E Encroachment into the setback. One of the main goals of the River Plan/North Reach is to revise regulations where reasonable so that property owners in the working harbor have the flexibility to expand and redevelop on site. As a corollary to the recommendation to increase the setback from top of bank from 25 feet to 50 feet, Planning Commission also recommends allowing non-river-dependent and non-river-related development to encroach into the setback as long as the setback is enlarged an amount equal to the square footage of the encroachment. This change will allow flexibility for addressing on-site design issues while ensuring that the average setback remains 50 feet from top of bank. The regulations will also stipulate that at no point can development encroach closer than 25 feet from top of bank. This will ensure that there is a uniform space within the setback area for accommodating a trail or viewpoint if necessary.

D. Development standards.

1. Development landward of the river setback. Development, exterior alterations, excavations, and fills landward of the river setback are not required to be river-dependent or river-related.
2. Development within or riverward of the river setback. Development, exterior alterations, excavations, and fills within or riverward of the river setback must be river-dependent or river-related. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related are allowed within or riverward of the river setback only if approved through a Greenway Goal Exception. Adjustments and modifications are prohibited.

E. Encroachment into the setback. Development that is not river-dependent or river-related may encroach into the river setback as long as the setback is increased by an amount of square footage equal to the encroachment. At no point can development that is not river-dependent or river-related encroach closer than 25 feet from top of bank unless approved through a Greenway Goal Exception. See Figure 475-4.

**Figure 475-4
River Setback Encroachment**



Commentary

33.475.320 Vegetation Enhancement Standard

In order to enhance the natural features of lands within the Willamette River Greenway and increase the amount of natural resource functionality, an applicant for a building or development permit will be responsible for increasing the amount of vegetative cover on their site or in the North Reach by choosing to meet one of three options:

1. Spend an amount equal to one percent of project value, or \$200,000, whichever is less, on planting vegetation. The vegetation planting area must meet the planting area standards described in subsection E;
2. Spend an amount equal to one percent of project value or \$200,000, whichever is less, on an ecoroof. The ecoroof must meet Stormwater Management Manual guidelines; or
3. Make a payment to the City equal to one percent of project value, or \$200,000, whichever is less. The payment will be spent on planting vegetation on one of the City's river restoration sites.

The amounts to be spent (one percent or \$200,000, whichever is less) has been recommended as a starting point in light of the current economic situation. Planning Commission recommends that the amount increases to two percent, or \$200,000, once the economy recovers from the current recession.

In order for the standard to have an end point (i.e. a point at which the spending or paying of one percent of project value is no longer required), the requirements include two types of caps—an on-site vegetation cap, and an off-site payment cap:

1. On-site vegetation cap. Once an applicant can show that 15 percent of their site is vegetated, the vegetation enhancement standard will be met. Vegetation planted on the riverbank will count at a ratio of 3:1; vegetation planted in or adjacent to the river environmental overlay zone will count at a ratio of 1.5:1; and vegetation on an ecoroof will count at a ratio of .5:1;
2. Off-site payment cap. Once an applicant can show that they have paid an amount equal to the cost for the City to plant vegetation in an area equal in size to 15% of their site, the vegetation standard will be met.

The City estimates that it will cost \$6.70 per square foot to plant and maintain vegetation in the North Reach. This is a preliminary estimation, and River Plan staff will work with the Bureau of Development Services to finalize the cost estimate prior to the implementation of this plan. The estimation quoted here was derived as follows: The average of the unit costs for revegetation and floodplain restoration, plus a 90% management fee and a portion of the cost for land acquisition. The unit cost for revegetation is estimated to be \$1.15. With a 90% management fee the estimate is increased to \$2.19. The unit cost for floodplain restoration is \$3.00. With a 90% management fee the estimate is \$5.70. The average of \$2.19 and \$5.70 is \$3.95. The cost for acquisition is estimated to be between \$3.00 and \$8.00 per square foot, with an average of \$5.50. Only a portion of the cost of acquisition will be recovered and therefore acquisition has been set at \$2.75. The total cost is the sum of \$3.95 and 2.75, or \$6.70/square foot.

33.475.320 Vegetation Enhancement Standard

- A. Purpose.** The vegetation enhancement standard is intended to increase the quality and quantity of vegetative cover in the North Reach. Enhancing vegetation in the North Reach will improve the natural qualities of lands along the Willamette River Greenway, increase the quality and quantity of riparian and wildlife natural resources and functional values, increase wildlife habitat connectivity, and improve water quality and other watershed health conditions. This standard is not intended to provide mitigation for impacts to the natural qualities of the Willamette River Greenway from development, but rather improve natural conditions overall.
- B. When the standard applies.** The vegetation enhancement standard applies to new development and exterior alteration within the River Overlay zones.
- C. Vegetation enhancement standard.** The applicant must meet one of the following options.
1. Option 1. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on planting vegetation on an area of the site that is within the River Overlay zones. The vegetated area must meet the planting area standards of Subsection E, below. Project value is determined based on Subsection F, below;
 2. Option 2. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on an ecoroof. The ecoroof must meet the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria*. Project value is determined based on Subsection F, below; or
 3. Option 3. Make a payment to the City equal to one percent of project value, or \$200,000, which ever is less. The payment will be directed to the River Restoration Fund and will be spent on planting vegetation on a City-owned site in the North Reach. Project value is determined based on Subsection F, below.
- D. Cap.** The following caps apply. The vegetation enhancement standard will be met when one of the caps is met:
1. On-site vegetation cap.
 - a. The amount of on-site vegetation required to be planted is capped at 15 percent of the total site area that is within the River Overlay zones. Once 15 percent of the total site area within the River Overlay zones is vegetated, the applicant is no longer required to spend one percent of project value coming into compliance with the vegetation enhancement standard;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- b. Each square foot of vegetation planted within or adjacent to the river environmental overlay zone counts as 1.5 square feet toward the cap when the vegetated area meets the planting area standards of Subsection E, below;
 - c. Each square foot of vegetation planted riverward of the top of bank counts as three square feet toward the cap when:
 - (1) The average slope of the river bank is not greater than 20 percent (1:5). Slopes greater than 20 percent may be retained within the root zones of existing trees over 10 inches in diameter, or as necessary to make a stable 1:2 transition at boundary of the vegetated area. The river bank is the area between the ordinary high water mark and the top of bank; and
 - (2) The planting area meets the standards of Subsection E, below;
 - d. Each square foot of vegetation planted on an ecoroof that meets the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria* counts as .5 square feet toward the cap.
2. Payment cap. The total amount to be paid to the City is capped at an amount equal to the cost for the City to plant vegetation in an area equal in size to 15 percent of the total site area that is within the River Overlay zones. Once the payment cap is met, the applicant is no longer required to pay one percent of project value to the City: The Bureau of Development Services will adopt and maintain an off-site vegetation cost schedule.

E. On-site vegetation planting standards. An on-site vegetation planting area must meet the following standards. Adjustments or modifications to the standards are prohibited:

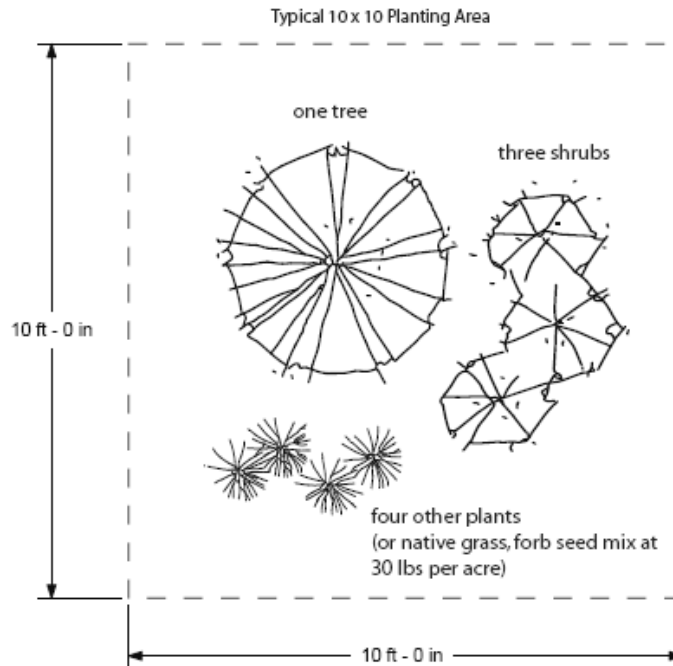
- 1. All prohibited and nuisance plants listed on the Portland Plant List must be removed from the planting area and within 10 feet of the planting area.
- 2. All structures and debris must be removed from the planting area except for large wood, bioengineered structures, and other structures that are used to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials, or soil cells wrapped in biodegradable fabrics.
- 3. Required plants. The following plant standards apply. See Figure 475-6, Example Planting Plan:
 - a. Plants and plant densities:
 - (1) One tree, three shrubs, and four other ground cover plants are required to be planted for every 100 square feet of planting area. Trees may be clustered. Plants must be selected from the *Portland Plant List*; or

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (2) One tree and three shrubs are required for every 100 square feet of vegetated area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the *Portland Plant List*.
- b. For nonvegetated areas that will be revegetated to meet the minimum vegetated area standard, the soil must be amended as follows:
- (1) The revegetation area must have 12 inches of growing medium;
 - 2) Composition of growing medium:
 - For all revegetation areas located outside of the flood hazard area, the growing medium must be a blend of loamy soil, sand, and compost that is 30 to 40 percent plant material compost (by volume); or
 - For all revegetation areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
 - (3) Placement of the growing medium is not allowed when the ground is frozen or saturated; and
 - (4) Temporary erosion control measures are required until permanent stabilization measures are functional.

Figure 475-6
Example Planting Plan



Commentary

This is a new chapter. For ease of readability the text is not underlined.

4. Installation and maintenance. The following installation and maintenance requirements apply:
 - a. Installation. Plant materials must be supported when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires or other measures must be removed as soon as the plant can support itself.
 - b. Maintenance. Maintenance of vegetated areas is the ongoing responsibility of the property owner. Required vegetation must be continuously maintained in a healthy manner. Plants that die must be replaced in kind.
 - c. Irrigation. The intent of this standard is to ensure that plants will survive during a 3 year establishment period when they are most vulnerable due to lack of watering. All vegetated areas must provide a temporary irrigation system, as stated in option 1 or 2.
 - (1) Option 1. A temporary irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established.
 - (2) Option 2. Irrigation by hand.
 - d. Protection. All required vegetated areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas.
 - e. Monitoring and Reporting. Monitoring of vegetated areas is the ongoing responsibility of the property owner. Written proof that all specifications of this section have been met must be provided one year after the planting is completed. The property owner must provide this documentation to BDS.
5. Exception. Where an area has been deemed in compliance with subsubparagraph 33.475.460.F.2.a(1), the same area can be counted toward meeting the minimum vegetated area standard and will be deemed in conformance with the standards of this subsection.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

F. Determining project value. Project value is determined based on the entire project, not individual building permits. For purposes of this standard, project value includes:

1. The total value of all construction work for which a permit is required, including site preparation as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and other permanent work or equipment, and the contractor's profit;
2. Project value does not include costs associated with:
 - a. Normal maintenance and repair;
 - b. Nonconforming development upgrades required by this title;
 - c. Stormwater management system installation or upgrades;
 - d. Pollution control equipment;
 - c. Approved on-site mitigation for development within the River Environmental overlay zone, or resource enhancement that occurs within the River Environmental overlay zone;
 - e. Voluntary restoration that has been approved by the Bureau of Environmental Services;
 - f. Removal or remediation of hazardous substances conducted under ORS 465.200 through 465.545 and 465.900. If capping includes buildings or paving for parking lots or roads, then the costs associated with construction of the building, road or parking lot is included in project value;
 - g. Alterations required by approved fire/life safety agreements;
 - h. Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
 - i. Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings; and
 - j. Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.

Commentary

33.475.330 IG2 and EG2 Minimum Landscape Area

In lieu of meeting the minimum landscape area standard in the IG2 and EG2 zones, Planning Commission recommends allowing applicants to make a payment that will be directed to the River Restoration Program. The minimum landscape standard requires that 15% of a site be landscaped. Adjustments to this standard have been approved recently facilitating expansions of businesses that are located on constrained sites in the North Reach. Planning Commission recommends allowing the flexibility to pay a fee rather than meet the minimum standard or apply for an adjustment. In the IG2 and EG2 zones, meeting the Vegetated Area Standard would also satisfy this landscaping standard (the two standards may be met with the same area, provided the more robust planning standard is met).

The amount of the payment is intended to roughly correspond to the cost of installing and maintaining the landscaping required by the IG2 and EG2 standards, times a 90% design, permitting, long-term maintenance and management fee, plus one-half of the value of the land that would have been devoted to landscaping but which will now be available for development. This fee would be established through a Bureau of Development Services (BDS) administrative rule, and updated annually.

The cost to purchase and plant one tree, two shrubs and seven ground cover plants for every 50 square feet can be provided by the Bureau of Environmental Services (BES) based on current market price for materials, labor, and maintenance. Land in the harbor districts is currently estimated to have a value of between \$3.00 and \$8.00 per square foot. The average of these is \$5.50, and half of that value is \$2.75. The cost of design, permitting, long-term maintenance and management is estimated to be 90%.

This is a new chapter. For ease of readability the text is not underlined.

33.475.330 IG2 and EG2 Minimum Landscape Area

In lieu of meeting the required minimum landscaped area standard in the IG2 and EG2 zones, applicants may choose to make a payment. See 33.140.225 for the minimum landscaped area standard. The Bureau of Development Services shall adopt and maintain an in-lieu payment schedule.

33.475.340 Property Line Adjustments

Property Line Adjustments may not result in a property that is in more than one river overlay zone, unless the second overlay is the River Environmental overlay zone.

Commentary

33.475.405 Environmental Reports

The River Environmental overlay zone is a new overlay that has been created specifically to address the protection and conservation of remaining high and medium ranked natural resource areas in the North Reach. The natural resource inventory for the Willamette River has been updated and documents the location, extent and relative condition of resources that provide important riparian corridors and wildlife habitat functions in the North Reach. The River Environmental overlay zone does not apply to low-ranked natural resources, for example unvegetated river banks.

The primary focus of the River Environmental overlay zone is to limit the impacts from development on the natural resources and functional values contained within the zone. When impacts can not be avoided, mitigation will be required. Development in the zone will not be precluded if proposed development meets the standards or if there are no practicable alternatives that will avoid adversely affecting the resource—in that sense the zone will function more like the environmental conservation zone than the environmental protection zone. The North Reach is the working harbor and as such, development on the river banks and in the water will occur, however additional development in the River Environmental zone will have to be designed to reduce impacts on the resources and functional values in the area.

33.475.420 When River Review is Required

As with the other environmental overlay zones in the City, some types of development and activity will be exempt from regulation, some development and exterior alteration will be allowed if it meets standards, and some development will require a land use review. This recommended code diverges from the other environmental overlay codes in that there are no standards that apply to development in general. Rather, the standards in the River Environmental overlay zone have been written to apply only to a narrow set of development types and activities. This means that more development in the River Environmental overlay zone will trigger discretionary review than triggers environmental review in the rest of the city.

River Environmental Overlay Zone

33.475.400 Use Regulation

There are no special use restrictions associated specifically with the River Environmental overlay zone. However, any use restrictions that apply as a result of an accompanying River Overlay zone also apply within the River Environmental overlay zone.

33.475.405 Environmental Report

The River Environmental overlay zone is intended to protect and conserve specific natural resource features and functional values identified in a detailed study titled *Willamette River Natural Resource Inventory: Riparian Corridors and Wildlife Habitat (2008)*. The report identifies the type, location, extent and relative condition of natural resource features and describes functional values they provide within the study area. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of the report.

33.475.420 Review Procedures

Development and exterior alterations within the River Environmental overlay zone will be reviewed through one of the following tracks:

- A. Exemptions.** Some development, alterations and other items are exempt from the standards of the River Environmental overlay zone and exempt from River Review. In this case, development is exempt only from the River Environmental overlay zone regulations but may be subject to the other regulations in this Chapter. Development that is exempt from meeting the River Environmental overlay zone regulations is listed in 33.475.430.A, below. If the development is not included on the list of exemptions, then the proposal is subject to either the River Environmental overlay zone standards or River Review.
- B. Standards.** Several specific types of development and alterations are allowed within the River Environmental overlay zone if the proposal meets certain standards. Standards are provided for bulkheads, cargo conveyors, rail rights-of-way, utility lines, stormwater outfalls, trails, resource enhancement, and site investigative work. The standards are intended to encourage sensitive development while providing clear limitations on disturbance, including tree removal, and minimizing impacts on resources and functional values. Adjustments to the standards are prohibited. Modification of the standards may be approved through River Review. When a proposal can meet the standards, the applicant may choose to go through the discretionary River Review process, or meet the objective standards of this section. When there are no applicable standards, the proposal must be approved through River Review. Compliance with the standards is determined as part of the building permit or development permit application process. The standards are listed in 33.475.430.B, below.
- C. Review.** River Review is required when the proposed development or exterior alteration is subject to the River Environmental overlay zone regulations, and the development or exterior alteration either does not meet the River Environmental development standard or there are no River Environmental development standard that apply to the proposal. The process and approval criteria for River Review can be found in Chapter 33.865, River Review.

Commentary

33.475.430 Exemptions and Development Standards

In keeping with current City regulatory approaches to managing activities within identified natural resources areas, Planning Commission recommends a two-track system for reviewing proposals that affect the area within the River Environmental overlay zone. The first track is clear and objective, while the second track involves discretionary review. On the first track, proposals are either exempt from the River Environmental overlay zone regulations or the proposal is subject to standards. If the proposal is not exempt and it either does not meet a prescribed standard or there are no standards that apply to the proposal, then the proposal is subject to River Review.

The standards allow certain specific low-impact development activities and exterior alterations. The standards limit the amount of disturbance that can occur and limit how close the development or alteration can be to the river, a stream or a wetland. Tree removal is limited and mitigation is always required.

33.475.430.A. Exemptions

Some development and activities that occur within the River Environmental overlay zone will be exempt from regulation. The activities that are exempt from the regulations are important for the continued operation of existing facilities and they have little or no impact on resources or the activity is adequately regulated by a state or federal agency. Examples include operation, maintenance, repair and replacement of existing structures and improvements, alterations that do not change the footprint of a building, and placement of a certain number of piles and dolphins. The majority of the recommended exemptions mirror the levels of development and alteration that are currently exempt from the regulations of the Environmental Overlay zones or are exempt from Greenway Review.

33.475.430.A.3.i

Under the current greenway regulations all dredging, channel maintenance and removal of gravel/materials from the river is exempt from greenway review. Planning Commission recommends narrowing the exemption because dredging in or near shallow water and beaches could have significant detrimental impacts on the habitat that the shallow water provides. Beaches and shallow water play important roles in the life cycle of aquatic species, including salmon, and impacts to these areas should be avoided when practicable and mitigated if the impacts can't be avoided. The exemption language allows dredging in the main federal navigation channel and dredging in waters more than 35 feet deep without having to meet development standards or go through River Review. Shallow water is identified as water between zero and 20 feet deep, however Planning Commission recommends using 35 feet as the trigger for review because the area between 20 and 35 feet deep represents an area of concern where the impacts of dredging could affect the habitat in the more shallow areas.

Maintenance dredging that occurs outside the main river channel that has been approved by the U.S. Army Corps of Engineers will continue to be exempt from the River Environmental overlay zone regulations.

This is a new chapter. For ease of readability the text is not underlined.

33.475.430 Exemptions and Development Standards

Unless exempted by subsection A, below, the standards in subsection B apply to development and exterior alterations in the River Environmental overlay zone.

A. Exemptions. The following items are exempt from the River Environmental development standards and do not require River Review:

1. Change of ownership;
2. Temporary emergency procedures necessary for the protection of life, health, safety, or property;
3. Existing development, operations, and improvements including the following:
 - a. Operation, maintenance, repair, and replacement of existing structures, exterior improvements, roads, public trails and paths, public viewpoints, and public interpretive facilities. Replacement is not exempt whenever coverage is increased, or permeability is decreased;
 - b. Maintenance, repair, and replacement of existing utilities. Replacement of underground utilities is not exempt whenever the size of the utility is increased;
 - c. Removal of existing structures. Removal is not exempt whenever there is ground disturbance;
 - d. Pruning of trees and shrubs within 10 feet of a structure;
 - e. Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;
 - f. Structures that are located on existing paved surfaces;
 - g. Structures on an existing dock, wharf, or pier;
 - h. Operation, maintenance, repair and replacement of irrigation systems, stormwater facilities, non-potable water systems, and erosion control measures. Replacement is not exempt whenever coverage or utility size is increased;
 - i. Dredging, channel maintenance, and the removal of materials as follows:
 - (1) Dredging, channel maintenance, and the removal of materials within the federal navigation channel.
 - (2) Dredging, channel maintenance, and the removal of materials outside of the federal navigation channel as follows:
 - Dredging and the removal of material in areas in waters that are 35 feet deep or deeper; or
 - Channel, slip and berth maintenance that has been approved by the U.S. Army Corps of Engineers.
 - (3) The placement of dredged materials within the River Environmental Overlay zone is not exempt.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- j. Removing plants listed on the Nuisance or Prohibited Plant Lists except for trees; and
 - k. Removing trees or portions of trees when the City Forester or a certified arborist determines that they pose an immediate danger. Removing these portions is exempt only if all sections of wood greater than 12 inches in diameter remain, or are placed, in the River Environmental overlay zone on the same ownership on which they are cut.
4. The following new development and improvements:
- a. The placement of up to 4 single piles, or 2 multiple-pile dolphins for each 100 feet of shoreline for an existing river-dependent or river-related use;
 - b. Planting of native vegetation listed on the Portland Plant List when planted with hand-held equipment;
 - c. Groundwater monitoring wells constructed to the standards of the Oregon Water Resources Department and water quality monitoring stations, where access is by foot only;
 - d. Installation of security cameras provided that no more than 100 square feet of ground surface is disturbed landward of top of bank, no ground is disturbed riverward of the top of bank, native trees 4 inches and greater in diameter are not removed, and any disturbed area is restored to pre-construction conditions;
 - e. Utility service using a single utility pole or where no more than 100 square feet of ground surface is disturbed landward of the top of bank of water bodies, no ground is disturbed riverward of top of bank, and where the disturbed area is restored to the pre-construction conditions;
 - f. Utilities installed above or below developed portions of the public right-of-way, and stormwater management facilities within the public right-of-way;
 - g. Temporary site investigative work including soil tests, land surveys, groundwater and water quality monitoring stations when all of the following are met:
 - (1) The work is conducted using hand-held equipment only;
 - (2) The disturbance is temporary;
 - (3) Disturbance areas are restored to pre-existing conditions; and
 - (4) No native trees are removed.

Commentary

33.475.430.A.4.h

Planning Commission recommends allowing the addition of fencing on an already paved surface because of the need for harbor-related facilities to add fencing based on security concerns. The exemption only applies to paved surfaces because in most cases a paved surface within an industrial waterfront facility is not functioning as a wildlife corridor. If the fence will be placed in an unpaved area, then consideration of wildlife connectivity should be afforded.

33.475.430.B Standards

As previously mentioned, some development and alteration will be allowed within the River Environmental overlay zone without requiring a discretionary review. The types and levels of development and alteration allowed are generally low-impact activities that can be readily mitigated. The standards limit the amount of disturbance that can occur and limit how close the development or alteration can be to the river, a stream or a wetland. Tree removal is limited and mitigation is always required.

Development standards have been drafted for the replacement of bulkheads when the replacement will occur within a few feet of the existing bulkhead, cargo conveyor structures that are supported by footings, the installation of rail road tracks, the installation of utility lines and stormwater outfalls, resource enhancement projects, the construction of trails, site investigative work not done with hand-held equipment, and the removal of trees. These categories represent the extent of the activities that will be allowed within the River Environmental overlay zone without further discretionary review. Mitigation and tree replacement will be required for these activities.

33.475.430.B.1 Standards for Bulkheads

The replacement of existing structures and exterior improvements is exempt from the River Environmental overlay zone regulations unless the size or coverage of the structure is increased. In some cases, replacing a bulkhead requires installing a new bulkhead a few feet in front of the existing structure. When this occurs, replacement does not meet the threshold for an exemption because the total amount of coverage increases. Mitigating for the impacts of moving a bulkhead farther into the river is important, however requiring River Review and an alternatives analysis is not efficient as there is likely no alternative to replacement. Therefore, Planning Commission recommends allowing replacement through standards when the new bulkhead is not longer than the existing, is not located farther than five feet riverward of the existing, and the applicant compensates for the impacts by making a mitigation payment to the River Restoration Program.

This is a new chapter. For ease of readability the text is not underlined.

- h. Installation of fencing in the following situations:
 - (1) Fencing on an already paved surface; and
 - (2) Temporary fencing to protect resource enhancement project planting areas, prevent access to hazardous material spill areas or contaminated sites, or to close off or control the use of illegal trails. The fence must be removed within five years;
- i. Installation of signage as part of public trail development, for interpretive purposes, as part of navigational aids, as part of resource enhancement projects, as part of operational aids, or to provide public safety or health warnings;
- j. Removal of trash, provided that native vegetation is not removed or damaged. This includes removal of trash from the river bed, or from the water. Removal of trash does not include the removal or remediation of hazardous substances.

B. Standards. The following standards apply to several specific types of low-impact development.

- 1. Standards for bulkheads. The following standards apply to bulkheads within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. The installation of a bulkhead is allowed when all of the following are met:
 - (1) There is an existing bulkhead on site;
 - (2) The new bulkhead is replacing some or all of the existing bulkhead;
 - (3) The new bulkhead is located in the same footprint as the existing bulkhead except that the footprint of the new bulkhead can move up to five feet riverward of the existing bulkhead; and
 - b. To compensate for the impacts to natural resources of placing the new bulkhead riverward of the existing bulkhead, the applicant must make a mitigation payment to the River Restoration Program. The Bureau of Development Services shall adopt and maintain a mitigation payment schedule based on the square footage of the area that is filled between the old and new bulkhead, and track where in-lieu payments have been collected. See Figure 475-5, Replacement Bulkhead Mitigation Area.

Commentary

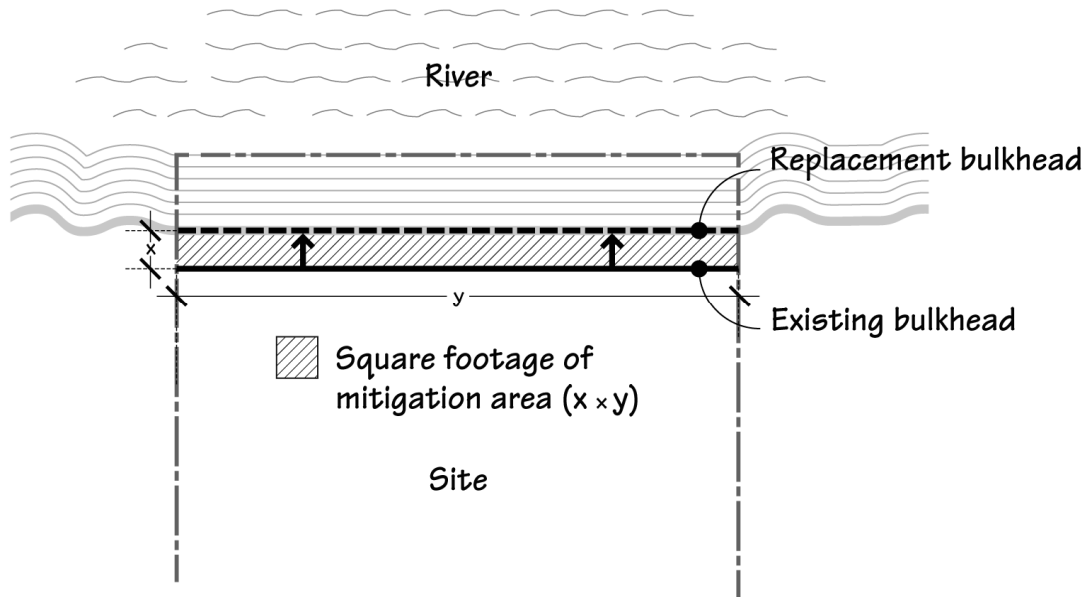
33.475.430.B.2 Standards for Cargo Conveyors

These standards were developed in consultation with Port of Portland staff and reflect the general characteristics and impacts of conveyors that carry cargo to and from a ship. The standards state that disturbance must not occur riverward of the top of bank of the Willamette River, however up to 4 single piles or 2 multiple-pile dolphins for each 100 feet of shoreline may be installed through the exemptions.

The tree removal standards are described in paragraph B.10, below and generally allow the removal of non-native trees and native trees up to 10 inches in diameter. Every tree over 4 inches in diameter that is removed must be replaced at a ratio of 1:1 (i.e. one diameter inch of tree replaced for every one diameter inch of tree removed).

This is a new chapter. For ease of readability the text is not underlined.

**Figure 475-5
Replacement Bulkhead Mitigation Area**



2. Standards for cargo conveyors. The following standards apply to cargo conveyors within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. No more than 250 square feet of disturbance is allowed per support footing;
 - b. No more than 50 cubic yards total of excavation is allowed;
 - c. Disturbance associated with the support footing or the installation of the footing may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of an identified stream, wetland or other water body, ;
 - d. Temporary roads necessary for the installation of the footings may not be wider than 15 feet, must be removed by the completion of the footing installation, and the disturbed area must be replanted to meet the standard of paragraph B.10.f, below;
 - e. Tree removal as allowed by paragraph B.10, below; and
 - f. Mitigation is required as specified in paragraph B.11, below.

Commentary

33.475.430.B.3 Standards for rail rights-of-way

The width of corridor allowed for the development of a rail right-of-way is based on discussions with BDS staff who have reviewed the installation and extension of rail road track in the North Reach. The width is intended to accommodate standard gauge rail (4 feet 8 inches) with added space for ballast and any equipment that may be necessary for track operations.

33.475.430.B.4-5 Standards for utility lines and stormwater outfalls

The standards in these paragraphs mirror standards for the installation of a utility line or stormwater outfall in the Environmental Overlay zones.

This is a new chapter. For ease of readability the text is not underlined.

3. Standards for rail right-of-way. The following standards apply to rail rights-of-way within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review:
 - a. Disturbance associated with the construction of a rail right-of-way may occur within a corridor that is up to 20 feet wide. No disturbance is allowed outside of the 20 foot wide corridor;
 - b. Disturbance associated with the rail corridor or installation of the rail corridor may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland or other water body;
 - c. Tree removal as allowed by paragraph B.10, below; and
 - d. Mitigation is required as specified in paragraph B.11, below.

4. Standards for utility lines. The following standards apply to new utility lines, private connections to existing or new utility lines, and upgrades of existing utility lines within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with the installation of a utility line, including utility trenching, may occur within a corridor that is no greater than 10 feet wide. Disturbance may not occur outside of the 10 foot corridor;
 - b. Disturbance associated with the installation of a utility line may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland, or other water body;
 - c. Tree removal as allowed by paragraph B.10, below; and
 - d. Mitigation is required as specified in paragraph B.11, below.

5. Standards for stormwater outfalls. The following standards apply to the installation of stormwater outfalls. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with the installation of a stormwater outfall may occur within an area that is up to 10 feet wide;
 - b. When constructed open channels or vegetated swales are proposed, the slope between the stormwater source and the water body does not exceed 15 percent at any point.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- c. If an outfall riprap pad is used it must be planted with live stakes of native plant stock, one-half inch in diameter. Stakes must be installed at a density of three stakes per square yard. Detailed specifications for installing live stakes are found in the *Erosion Control Manual*;
 - d. Tree removal as allowed by paragraph B.10, below; and
 - e. Mitigation is required as specified in paragraph B.11, below.
6. Standards for trails. The following standards apply to trails. All of the standards must be met. Modification of these standards requires approval through a River Review.
- a. Disturbance associated with the construction of a trail must be set back at least 25 feet from the top of bank of the Willamette River, and 30 feet from the top of bank of a stream, wetland or other water body.
 - b. Tree removal as allowed by paragraph B.10, below; and
 - c. Mitigation is required as specified in paragraph B.11, below.

Commentary

33.475.430.B.7 Standards for resource enhancement

These standards are intended to ensure that the river bank is shallower than before the enhancement project because a shallow bank provides better resource function than a steep bank. The standards also require that the bank be stabilized with vegetation rather than rock armoring.

For projects that occur landward of the top of bank, the standards allow disturbance of the ground as long as there is no net increase in soil within the River Environmental overlay zone and the area disturbed is replanted with native vegetation. Resource enhancement projects, by definition, must result in a net increase in functional value and an improvement in the quantity or quality of resources. Mature native vegetation in many cases provides high quality natural resource function. The removal of native vegetation is limited so that staff can evaluate whether or not the removal of vegetation will result in a net increase in functional value and an improvement in quality or quantity of resource.

This is a new chapter. For ease of readability the text is not underlined.

7. Standards for resource enhancement. The following standards apply to resource enhancement projects within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. The following standards apply to river bank restoration and enhancement projects located riverward of the top of bank of the Willamette River including projects that relocate the top of bank of the Willamette River:
 - (1) The bank may be re-graded if the slope after grading is shallower than the slope prior to grading. In no case can the final slope be greater than 20 percent (20 percent slope represents a rise to run ratio equal to 1:5);
 - (2) Rock armoring must not be used on the surface between the top of bank and the ordinary high water mark except as required surrounding outfalls;
 - (3) The placement of large wood and bioengineered structures on the bank is allowed to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials or soil cells wrapped in biodegradable fabrics;
 - (4) The area between the top of bank and the ordinary high water mark must be planted with one tree, three shrubs, and four other plants for every 100 square feet of area. Trees may be clustered. Plants must be selected from the *Portland Plant List*; and
 - (5) Tree removal as allowed by subsection B.10, below.
 - b. The following standards apply to resource enhancement projects located landward of the top of bank of the Willamette River:
 - (1) There must be no excavation or fill of, or construction activity within, any stream, wetland or water body;
 - (2) There is no net fill in the River Environmental overlay zone;
 - (3) Native vegetation listed on the *Portland Plant List* may not be removed except as allowed by subsubparagraph B.7.b(4) and paragraph B.9, below; and
 - (4) No structures are proposed except for public viewing areas developed as part of the project. The public viewing areas must meet the following:
 - Up to 500 square feet of ground can be disturbed;
 - The viewing area must be set back at least 30 feet from the top of bank of a stream, wetland or water body;
 - The viewing area must not be in the floodway;

Commentary

33.475.430.B.8 Site investigative work

This set of standards will allow site investigative work, including the installation of monitoring wells, when the work is done with mechanical equipment. An exemption allows this type of work when the work is done exclusively with hand-held equipment.

33.475.430.B.9 Standards for development in the River Recreational overlay zone

These standards allow the City of Portland Parks and Recreation department to install park amenities in City parks located in the North Reach. The types of amenities that Parks envisions being installed without river review include park benches, picnic tables, drinking fountains, bicycle racks, trash cans, playgrounds, memorials, kiosk, etc. The standards limit the amount of disturbance that will occur within the river environmental overlay zone for the construction of each amenity to 1,800 square feet. The standards also limit tree removal and require mitigation.

This is a new chapter. For ease of readability the text is not underlined.

- (5) Areas where ground disturbance has occurred must be replanted to at least the following standard:
 - One tree, three shrubs, and four other plants are required to be planted for every 100 square feet of replanting area. Trees may be clustered. Plants must be selected from the *Portland Plant List*; or
 - One tree and three shrubs are required for every 100 square feet of replanting area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the *Portland Plant List*.
8. Standards for site investigative work. The following standards apply to site investigative work within the River Environmental overlay zone. Site investigative work includes soil tests, land surveys, groundwater and water quality monitoring stations. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. No more than 100 square feet of disturbance is allowed per site investigative work activity;
 - b. Disturbance associated with site investigative work is temporary;
 - c. No native trees are removed; and
 - d. Disturbance areas are restored to pre-existing conditions.
9. Standards for other development in a City of Portland park. The following standards apply to development in a City of Portland park that is not subject to other standards in this subsection. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with development in a City of Portland park must be set back at least 25 feet from the top of bank of the Willamette River, and 30 feet from a stream, wetland or other water body;
 - b. Disturbance associated with development in a City of Portland park may not exceed the following:
 - (1) 500 square feet within the river setback; or
 - (2) 1,800 square feet landward of the river setback.
 - c. Tree removal as allowed by paragraph B.10, below; and
 - d. Mitigation is required as specified in paragraph B.11, below.

Commentary

33.475.430.B.10 Removal of trees

These standards allow the removal of non-native trees, including those that are listed as nuisance or prohibited on the *Portland Plant List*. These trees must be replaced with native trees. This is a change from existing allowances in the Environmental Overlay zones. Currently, nuisance and prohibited trees may be removed and replacement is not required. Planning Commission recommends amending that allowance to require that applicants replace trees to compensate for lost functions, including soil stabilization, interception of precipitation, shade and air cooling, and habitat. This proposal is also under consideration through the Citywide Tree Policy Review and Regulatory Improvement Project. While the City should continue to support the removal of nuisance and prohibited trees, current understanding about the continued loss of tree canopy throughout the City calls for tree replacement even if the tree is a nuisance or prohibited tree. The recommended standard allows all nuisance and prohibited trees to be removed and requires replacement when trees over 4 inches in diameter are removed. The recommended replacement ratio is: one diameter inch of tree replaced for every one diameter inch of tree removed. Replacement trees must have same or greater canopy factor as the tree to be removed. The threshold for replacement, the replacement ratio, and required canopy factors are different than the regulations currently applicable in the Environmental Overlay zones. While these approaches may ultimately be deemed appropriate in other parts of the city as well, they are recommended for the North Reach at this time given the lack of mature trees within resource areas in the North Reach. Therefore the loss of smaller trees has a greater impact on resource function. Replacement will offset the loss of function.

Under certain circumstances, the standards also allow the removal of native trees up to 10 inches in diameter when the removal is in conjunction with installation of cargo conveyor, rail right-of-way, utility line, stormwater outfall, trail, or the implementation of a resource enhancement project. The removal of trees is limited to the areas within which the development or activity will occur and replacement is required for trees over 4 inches in diameter.

This is a new chapter. For ease of readability the text is not underlined.

10. Standards for tree removal. The following standards apply to the removal of trees 4 inches or greater in diameter from within the River Environmental overlay zone. All of the standards must be met. Modification of these standards requires River Review:
 - a. Trees that are not native trees on the *Portland Plant List* may be removed;
 - b. Generally, native trees on the *Portland Plant List* may not be removed except as follows:
 - (1) General. Native trees up to 10 inches in diameter may be removed or pruned in conjunction with development and exterior improvements approved under the standards of this section as follows:
 - within the area where disturbance is allowed for the support footing for a cargo conveyor will be located.
 - within the area where disturbance is allowed for a temporary road associated with the installation of a cargo conveyor will be located.
 - within 10 feet of the cargo conveyor when removal or pruning is necessary to ensure safe operations;
 - within the rail right-of-way and within 10 feet of the rail right-of-way
 - within the utility line corridor;
 - within the area where the stormwater outfall will be constructed;
 - within the area where the trail will be constructed; and
 - within the area where development in the River Recreational overlay zone will be constructed.

Commentary

33.475.430.B.10.c The threshold for replacing trees in the river environmental overlay zone in the North Reach is 4 inches. The threshold for replacing trees in other environmental overlay zones is 6 inches. The difference represents the fact that there are fewer and smaller trees in the North Reach than in other areas of the City.

33.475.430.B.11 Mitigation

In order to develop in or alter the River Environmental overlay zone, mitigation is required. Mitigation must occur in an area that is one and one-half times the size of the area that will be disturbed for the development. This ratio is intended to mitigate for the fact that when mature, established vegetation is removed and replaced with new plantings there is a loss of resource functional value until the new vegetation becomes established.

The required number of plants and the planting densities recommended in this standard match requirements that are in effect in the Environmental Overlay zones and the Pleasant Valley Natural Resource overlay zone.

This is a new chapter. For ease of readability the text is not underlined.

- (2) Resource enhancement project. Native trees up to 10 inches in diameter may be removed in conjunction with the following:
 - a project that is located riverward of the top or bank;
 - a project being undertaken by the Bureau of Environmental Services or Portland Parks and Recreation to restore native oak woodland;
 - a project that relocates the top of bank; or
 - a public viewing area that meets all of the standards in B.7.b(4), above; and
 - c. Trees that are over 4 inches in diameter that are removed must be replaced as follows:
 - (1) one diameter inch of tree must replace every one diameter inch of tree removed. Every inch of evergreen tree removed must be replaced with an equal number of inches of evergreen tree;
 - (2) the replacement trees must be a minimum ½-inch in diameter;
 - (3) the replacement trees must be native trees selected from the *Portland Plant List* unless the trees are street trees planted between the sidewalk and the curb. In this case, trees may be non-native non-nuisance tree species as determined by the City Forester;
 - (4) all replacement trees must be planted within the River Environmental overlay zone, within 50 feet of the River Environmental overlay zone, or within 50 feet of the top of bank of the Willamette River in the North Reach. If the trees are not planted on the applicant's site, then the applicant must own the property or have an easement or deed that ensures the area where the trees are planted will not be developed;
 - (5) all replacement trees must be planted 10 feet on center; and
 - (6) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.
11. Mitigation. The following standards apply to mitigation required by paragraphs B.2 through B.6, and B.9. All of the standards must be met. Modification of these standards requires approval through a River Review.
- a. Mitigation must occur at a 1.5:1 ratio of mitigation area to project impact area. Project impact area is the total area within the River Environmental overlay zone where structures will be built, vegetation will be removed, or ground disturbance will occur as a result of the proposal. Mitigation area is not counted as part of the project impact area;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- b. Mitigation must occur within the River Environmental overlay zone, within 50 feet of the River Environmental overlay zone, or within 50 feet of the top of bank of the Willamette River in the North Reach. If the mitigation area is not on the site where the project occurs, then the applicant must own the property or have an easement or deed restriction sufficient to ensure the right to carry out, monitor, and maintain the mitigation for 3 years;
- c. The mitigation must be conducted no later than six months from the time of development or alteration. The mitigation can occur at the same time as the proposed development or alteration;
- d. Nuisance and prohibited plants identified on the *Portland Plant List* must be removed within the area to be replanted. Trees removed to meet this subparagraph must be replaced as specified in subparagraph B.10.c, above;
- e. Existing native plants can be used to meet the standards of this paragraph if the vegetation is protected and maintained as specified in Section 33.248.065;
- f. Required plants and planting densities:
 - (1) One tree, three shrubs, and four other plants are required to be planted for every 100 square feet of replanting area. Trees may be clustered. Plants must be selected from the *Portland Plant List* and must be compatible with the conditions of the site; or
 - (2) One tree and three shrubs are required for every 100 square feet of replanting area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the *Portland Plant List* and must be compatible with the conditions of the site;

Commentary

33.475.430.B.11.i The standards that are referred to in this subparagraph govern plant materials, installation, irrigation and monitoring and reporting for mitigation and restoration plantings.

33.475.450 Corrections To Violations of River Environmental Overlay Zone Development Standards

The recommended regulations for corrections to violations match the regulations that currently govern violations of standards in the Environmental Overlay zones. The regulations are intended to facilitate timely remediation for damage to resources and functional values that occur as a result of a violation.

This is a new chapter. For ease of readability the text is not underlined.

- g. If more than 10 trees, shrubs or groundcover plants are used to meet the above standard, then no more than 50 percent of the trees, shrubs or groundcover plants may be of the same genus. If more than 40 trees, shrubs or groundcover plants are used, then no more than 25 percent of the plants may be of the same genus;
- h. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent;
- i. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met; and
- j. Mitigation carried out to meet these standards may be installed in conjunction with planting carried out to meet the Vegetation Enhancement Standard of 33.475.120, 220, or 320, but plantings installed as mitigation will be in addition to what the vegetation standard requires, and will not be subject to the cost limitations described in 33.475.120.D, 33.475.220.D, or 33.475.320.D.

33.475.450 Corrections to Violations of River Environmental Overlay Zone Development Standards

- A. Purpose.** The purpose of the correction regulations is to ensure the timely restoration of natural resources and functional values that have been degraded due to a violation of the River Environmental overlay zone standards.

These regulations establish a process to determine which review requirements will be applied to remedy a violation that takes place in the River Environmental overlay zone. The type of review required depends on the circumstances of the violation. Section 33.475.450.B details methods for correcting such violations and Title 3 of the City Code details the enforcement penalties.

- B. Correction Options.** Applicants must choose one of the following options to correct environmental code violations.

- 1. When these options may be used.
 - a. If all of the following are met, the applicant may choose Option One, Option Two, or Option Three:
 - (1) No more than 12 diameter inches of trees were removed;
 - (2) No more than one Madrone 4 inches or less, Garry Oak 4 inches or less, or Pacific Yew 2 inches or less was removed;
 - (3) No ground disturbance occurred riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (4) The correction will remove all illegal development; and
 - (5) The correction will replant illegal clearing.
 - b. If any of the following occurred, the applicant may not use Option One, but may chose either Option Two or Option Three:
 - (1) More than 12 diameter inches of trees were removed;
 - (2) More than one Madrone 4 inches or less, Garry Oak 4 inches or less, or Pacific Yew 2 inches or less was removed;
 - (3) A Madrone larger than 4 inches, Garry Oak larger than 4 inches, or Pacific Yew larger than 2 inches was removed;
 - (4) Disturbance occurred riverward of the top of bank of the Willamette River, or within 30 feet of the top of bank of a stream, wetland or other water body.
 - c. If the applicant cannot meet Options One or Two, Option Three must be used.
 - d. If the violation also violates a condition of approval of a land use review, no trees have been removed, and disturbance did not occur riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body, the applicant may choose Option One or the process described in Section 33.730.140. The applicant may not choose Options Two or Three.
 - e. If the violation also violates a condition of approval of a land use review, trees have been removed, and disturbance occurred riverward of the top of bank of the Willamette River or within 30 feet of the top of bank of a stream, wetland or other water body, the applicant must use the process described in Section 33.730.140. The applicant may not choose one of the options in this section.
2. Option One, Remove and Repair. This option results in removal of illegal development and replanting and repair of any damage. All of the requirements of this subsection must be met. Adjustments and modifications to these requirements are prohibited.
- a. All items and materials placed in the area of violation are removed and no new disturbance area is created;
 - b. Any soil compaction resulting from the violation is tilled or otherwise broken up to a depth of 6 inches prior to planting; and
 - c. Violation remediation planting. The area to be planted is the area disturbed by the violation. All of the following must be met:
 - (1) The area disturbed by the violation activity must be replanted;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (2) One tree, one shrub, and five groundcover plants are required to be planted for every 50 square feet of planting area. Plants must be native and selected from the *Portland Plant List*;
 - (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted as remediation, or seven additional plants as described in B.2.c.2 must be planted on the site for every 50 square feet disturbed;
 - (4) Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;
 - (5) Trees must be a minimum one inch in diameter unless they are oak, madrone, or conifer, which may be three- to five-gallon size. No more than 10 percent of the trees may be oak or madrone. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots; and
 - (6) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met.
- d. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. If any tree removed was a Garry Oak, Madrone, or Pacific Yew, the replacement trees must be of the same species. Planted trees must be a minimum one inch in diameter unless they are oak, Madrone, or conifer, which may be three- to five-gallon size.
3. Option Two, Retain and Mitigate. This option results in legalizing the illegal development and mitigating for any damage. All of the requirements of this subsection must be met. Adjustments and modifications to these standards are prohibited.
- a. The applicable standards of paragraphs 33.475.430.B must be met; and
 - b. Violation remediation planting. The area to be planted is the area disturbed by the violation. Where development is approved for the area disturbed by the violation, an area of the same size elsewhere on the site must be planted. All of the following must be met:
 - (1) The area disturbed by the violation activity must be replanted;
 - (2) One tree, one shrub, and five groundcover plants are required to be planted for every 50 square feet of planting area. Plants must be native and selected from the *Portland Plant List*.
 - (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted as remediation, or seven additional plants as described in B.3.b.2 must be planted on the site for every 50 square feet disturbed;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (4) Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;
 - (5) Trees must be a minimum one inch in diameter unless they are oak, madrone, or conifer, which may be three- to five-gallon size. No more than 10 percent of the trees may be oak or madrone. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots; and
 - (6) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met.
- c. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. If any tree removed was a Garry Oak, Madrone, or Pacific Yew, the replacement trees must be of the same species. Planted trees must be a minimum 1 inch in diameter unless they are oak, Madrone, or conifer, which may be three- to five-gallon size.
4. Option Three, River Review. This option requires River Review, using the approval criteria and procedures below:
 - a. Approval criteria. The applicable approval criteria of Subsection 33.865.120 must be met.
 - b. Review procedures. Reviews are processed as follows:
 - (1) Type III. A Type III review is required for any development, exterior alteration, or exterior improvement within a wetland, stream channel, drainageway, or water body.
 - (2) Type II. All other reviews to correct violations are processed through a Type II procedure.
 - (3) All River Reviews must provide the information required in Section 33.865.040, Supplemental Application Requirements

Commentary

33.475.460 Removal or Remediation of Hazardous Substances

The regulations in this section apply to removal or remediation of hazardous substances. The goal of these regulations is ensure that these cleanup actions do not unnecessarily impair river-dependent and river-related uses or natural resources.

Oregon State Law (ORS 465.315(3)) governs whether local requirements, such as the River Plan, apply to state approved cleanups. The onsite portion of a state approved cleanup may be exempt from the procedural requirements of the Code to obtain local permits. What constitutes the on-site portion of the remedial action is generally identified in the record of decision or other cleanup approval or selection documents.

When a cleanup activity is exempt from local procedures, the person conducting the cleanup is required to ensure that the local government's substantive requirements are met. The Bureau of Development Services implements what it calls an "exempt process" for evaluating hazardous substance removal or remediation plans compliance with the City's substantive regulations. The regulations in this section are the City's substantive requirements for clean ups that are applied through the exempt permit process or the standard permit process if the cleanup project is not exempt. Cleanup conducted under state law in a City right of way is not exempted and must comply with all applicable City requirements.

Under federal law (42 U.S.C. 9621 (e)(1)), EPA has its own process for determining the extent to which substantive requirements of City Code will be considered in a federal approved cleanup.

The requirements are intended to refine the cleanup design to be in conformance with City requirements and the Oregon Statewide Planning Goals particularly Goal 15: the Willamette Greenway. Goal 15 includes requires protection of significant fish and wildlife habitats, protection of natural vegetative fringe along the river, and setbacks from the river for non-water related or non-water dependent uses. The regulations have been written in a way that will provide the person conducting the cleanup and the regulating agency with the flexibility required to design the most appropriate removal or remediation action.

33.475.460.E.1 The North Reach is the City's working harbor. The zoning for most of the area requires that uses on riverfront sites be river-dependent or river-related—meaning the use must that rely on the river for waterborne transportation. This regulation is intended to ensure that, to the extent practicable, the removal or remediation of hazardous substances does not preclude river-dependent and river-related use of suitable riverfront sites. The City's objective is to ensure that the cleanup does not leave an otherwise suitable river front site unsuitable for marine terminals, docks, or other development or activities that are river-dependent or river-related.

This is a new chapter. For ease of readability the text is not underlined.

Clean Up of Contaminated Sites

33.475.460 Removal or Remediation of Hazardous Substances

- A. General.** The following regulations are substantive requirements that apply to actions taken to remove or remediate hazardous substances. All of the regulations must be met unless it demonstrated to be impracticable pursuant to subsection G, below.
- B. Where these regulations apply.** The regulations of this section apply to the portion of the site located within the boundaries of the removal or remediation action.
- C. Review procedure.**
1. Except as described in paragraph C.2, below, compliance with these regulations is processed through a Type II procedure.
 2. If the action to remove or remediate hazardous substances is subject to this Code but exempt from procedural requirements, the action must comply with the substantive requirements of these regulations to the extent required under state or federal law.
- D. Relationship to other regulations in this chapter.** Actions to remove or remediate hazardous substances that are approved or selected under Oregon or federal cleanup law are exempt from the procedural requirements of this chapter. When development is occurring in conjunction with actions taken to remove or remediate hazardous substances, but which is not in itself a remediation or removal action, then that development must meet all other applicable regulations and procedural requirements of this chapter. Remedial actions within City rights of way or not approved or selected by state or federal cleanup authorities must meet all other applicable regulations and procedural requirements of this chapter. A person conducting a cleanup otherwise exempted from the procedural requirements may choose to obtain a permit.
- E. Regulations that apply to all actions to remove or remediate hazardous substances.** The following regulations apply to all proposals for the removal or remediation of hazardous substances:
1. The removal or remedial actions and the final remedy must not preclude the use of the site consistent with the uses allowed by the base zone or an approved conditional use. If the site is within the River Industrial overlay zone, the final remedy must allow the use of the site for river-dependent or river-related industrial activities unless the site is found to be unsuitable for river-dependent or river-related uses. Generally, this means that the final remedy must allow dredging necessary to establish or maintain navigation to and from riverfront sites, the placement of piles or dolphins, or the development of a marine industrial facility, dock, or wharf or other river-dependent or river-related structure; and

Commentary

33.475.460.E.2 Goal 15 requires that buildings be separated from the river. The City's river setback (called greenway setback outside of the North Reach) requires that development in the river general and river recreational zones be set back 50 feet from the top of bank. This regulation is intended to ensure that the setback standard can be implemented at the time of development or redevelopment.

33.475.460.F.1 The requirements of this subsection are aimed at encouraging the person conducting the cleanup to design a remedy that leaves identified natural resource areas intact as much as possible. The City is aware that this will not be possible in all cases, and therefore requires re-vegetation when ground disturbance and native plant removal cannot be avoided. The re-vegetation requirements are modeled on the Pleasant Valley Natural Resource overlay zone mitigation planting requirements. The tree replacement requirement is similar to requirements in the environmental overlay zones and the Pleasant Valley Natural Resource overlay zone.

This is a new chapter. For ease of readability the text is not underlined.

2. Buildings, structures and equipment installed in the River General or River Recreational overlay zones for the purpose of removing or remediating hazardous substances must not be located within or riverward of the river setback. The river setback is described in Sections 33.475.210 and .310. When designing and locating buildings, structures or equipment the person conducting the cleanup must take into account the purpose of the setback standard which is to keep structures away from the river, and reserves space for development of the greenway trail in cases where the greenway trail is designated on the site.

F. Regulations that apply to actions to remove or remediate hazardous substances that occur in specific areas. The following regulations apply to actions to remove or remediate hazardous substances based on specific locations:

1. The following regulations apply to areas within the River Environmental overlay zone landward of the top of bank:
 - a. Disturbance of the ground outside of the actual soil removal areas and removal of native vegetation must be avoided. If avoiding disturbance or native vegetation removal is not practicable, disturbance and removal must be minimized.
 - b. Where ground disturbance or removal of native vegetation cannot be avoided, the area must be replanted. The replanting standards are as follows:
 - (1) Nuisance and prohibited plants identified on the *Portland Plant List* must be removed within the area to be replanted and within 10 feet of any plantings;
 - (2) Plant density. The replanting area must meet one of the following plant and planting density standards:
 - One tree, three shrubs, and four other plants are required to be planted for every 100 square feet of replanting area. Trees may be clustered. Plants must be selected from the Portland Plant List and must be compatible with the conditions of the site; or
 - One tree and three shrubs are required for every 100 square feet of replanting area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the Portland Plant List and must be compatible with the conditions of the site;
 - (3) Plant diversity. If more than 10 trees, shrubs or groundcover plants are used to meet the above standard, then no more than 50 percent of the trees, shrubs or groundcover plants may be of the same genus. If more than 40 trees, shrubs or groundcover plants are used, then no more than 25 percent of the plants may be of the same genus;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (4) Plant size. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent; and
 - (5) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.
- c. Tree replacement. Trees that are 4 inches or greater in diameter that are removed must be replaced as follows:
- (1) Ratio. One diameter inch of tree must replace every one inch of tree removed. Every diameter inch of evergreen tree removed must be replaced with an equal number of inches of evergreen tree;
 - (2) Size. The replacement trees must be a minimum ½-inch diameter;
 - (3) Type. The replacement trees must be native trees selected from the *Portland Plant List*;
 - (4) Location. All replacement trees must be planted within the River Environmental overlay zone, within 50 feet of the River Environmental overlay zone, or within 50 feet of the top of bank of the Willamette River in the North Reach. The person conducting the cleanup must own the property where the trees are planted or have an easement or deed restriction sufficient to ensure the success of the tree planting; and
 - (5) Replacement trees can be counted toward meeting the requirements of subsubparagraph F.1.b(2), above.
- d. All vehicle areas and construction staging areas installed for purposes of conducting the removal and remediation actions must be removed from the River Environmental overlay zone when they are no longer necessary for remedy construction. All such areas must be removed by the time the project is complete and the areas must be replanted according to the standards of subparagraph F.1.b, above.

Commentary

33.475.460.F.2.a If the river bank will be altered significantly as a result of the removal or remediation of hazardous substances, the City requires that the bank be restored using soil bioengineering instead of engineered inert materials to the extent practicable. The City's priority is a natural bank that can sustain vegetation for soil stabilization, improve ecological values and provide riparian functionality. However, the City recognizes that there will be cases when bioengineering will not be practicable. If rock armoring is used on the bank, the City requires re-grading to a slope level that will allow vegetation to be maintained, and requires that live willow or dogwood stakes be planted between the rocks to provide a minimum level of vegetative cover.

This is a new chapter. For ease of readability the text is not underlined.

2. The following regulations apply to the area between the top of bank and the ordinary high water mark:
 - a. When there is significant alteration of the area between the top of bank and the ordinary high water mark the regulations of this subparagraph must be met. A significant alteration is an alteration that affects a substantial portion of the bank, includes more than 50 cubic yards of excavation or fill, changes the ground contours, results in the removal of buildings, or requires significant engineering or in-water work. Minor bank alterations such as installation of monitoring wells, sampling cores, installation of extraction systems, repair and maintenance of storm water systems, removal of debris, temporary road access to the shoreline, relatively small amounts of grading and fill, and installation of temporary erosion control measures do not constitute significant alteration.
 - (1) The area between the top of bank and the ordinary high water mark where the alteration occurs must be designed using biotechnical techniques including soil bioengineering. Figures 475-8 and 475-9 show examples of biotechnical techniques. If the person conducting the cleanup stabilizes the river bank using biotechnical techniques, additional development on the site will be exempt from meeting the Vegetation Enhancement Standard in 33.475.120, .220, or .320. In addition to using biotechnical techniques, the following requirements apply:
 - Rock armoring or other hard surface armoring methods must not be used in substantial amounts on the surface between the top of bank and the Ordinary High Water Mark. This is not intended to preclude using rock or other hard surface stabilization methods below the surface if necessary to contain hazardous substances or to preclude the use of rocks or gravel as part of the biotechnical technique;
 - The bank must be sloped or terraced in a way that allows the establishment and maintenance of vegetation as the primary soil stabilization method;
 - Large wood, including root wads, tree boles and logs, must be used to reduce localized erosion, improve bank stabilization, and improve ecological values; and
 - At least eighty percent of the area between the top of bank and the ordinary high water mark that is being altered as a result of the remedy must be planted with shrubs. At least one tree must be planted for every 400 square feet of altered area. All of the area that is not planted with shrubs or trees must be fully covered with ground cover plants. All plants must be selected from the Portland Plant List and should be appropriate for the conditions on the site. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- (2) If biotechnical techniques are not practicable and rock armoring is used on the surface between the top of bank and the Ordinary High Water Mark, then the slope of the bank must be shallow enough to allow a combination of rock and vegetation. At a minimum, live native willow or dogwood stakes should be planted in the interstices between the rocks at a ratio of three stakes for every square yard of rock armoring.
 - b. When there is a minor alteration to the area between the top of bank and the ordinary high water mark, the regulations of paragraph F.1, above apply.
3. In the area that is riverward of the Ordinary High Water Mark, the substrate must be natural. If a natural substrate is not practicable and a hard treatment is necessary, the project must incorporate as many of the following as practicable:
 - a. Provide shallow beaches in the near shore area. Shallow means zero to 20 feet deep measured from the ordinary low water mark;
 - b. Avoid a submerged slope that would require engineered treatments to remain stable such as a slope steeper than 1:7 (rise to run ratio);
 - c. Integrate large wood, or other natural wave deflection structures or techniques that mimic the function of large wood, into the near-shore environment. Rock armoring, chemically treated wood, articulated block, and industrial debris is discouraged;
 - d. Avoid in-water structures that will impact the navigation channel; and
 - e. Consider water access to abutting upland industrial sites and avoid in-water structures that will preclude river-dependent or river-related development from accessing and utilizing the river for transport, transfer and conveyance of goods and materials to and from the upland site.

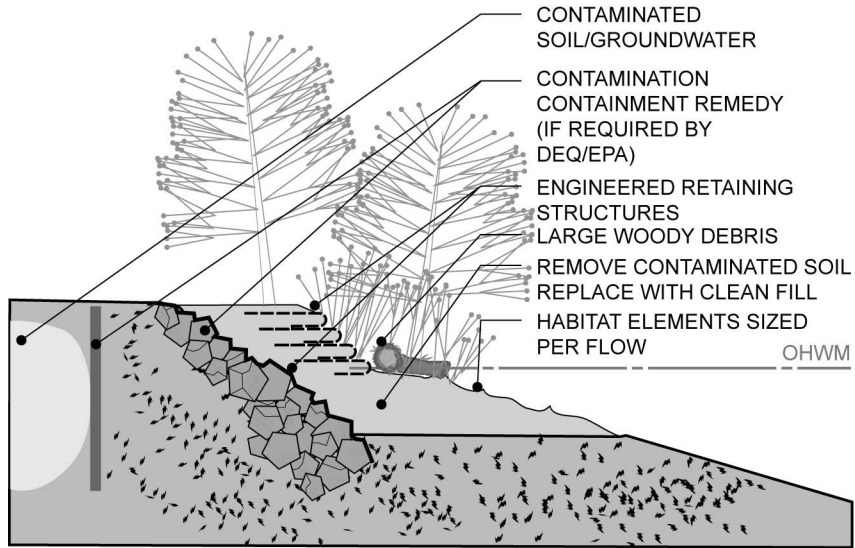
G. Demonstration of Impracticability. A person conducting a cleanup may be exempted from full compliance with a requirement in this section if the person demonstrates that compliance with the regulation is not capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project remedial purposes. The person must still comply with that requirement to the extent practicable and remains subject to all other applicable requirements.

Commentary

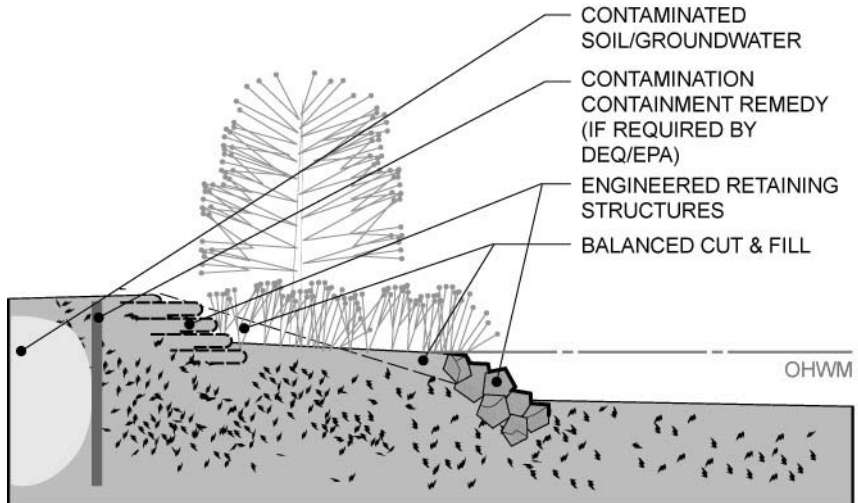
Figures 475-8 and 475-9 The examples that accompany this subsection were developed as part of a bank design charrette conducted by River Plan staff and attended by biologists, bank design experts, landscape architects, and City, state and federal agency representatives.

This is a new chapter. For ease of readability the text is not underlined.

**Figure 475-8
Soil Bioengineering**



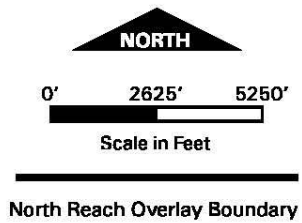
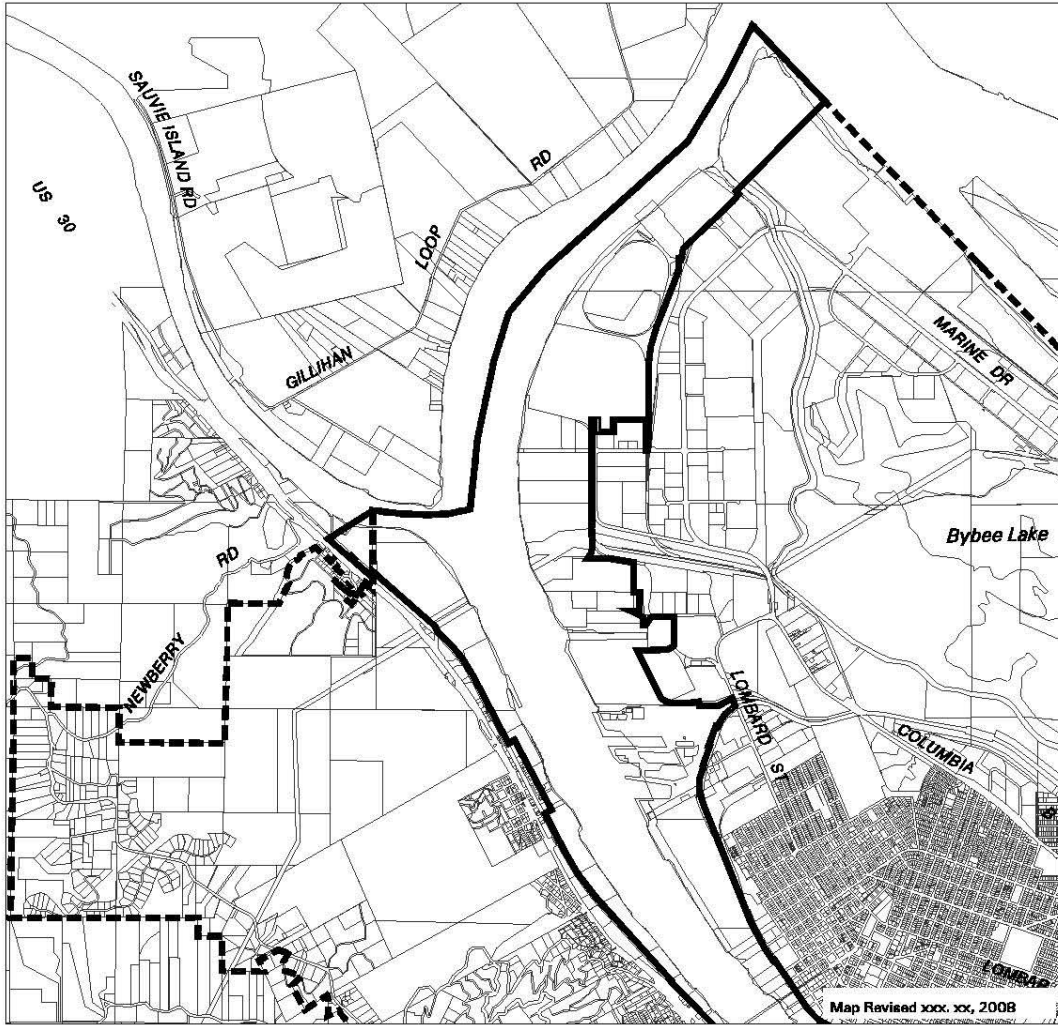
**Figure 475-9
Marsh Bench**



Commentary

The following maps show the area within which the River Overlay zones and regulations apply.

This is a new chapter. For ease of readability the text is not underlined.

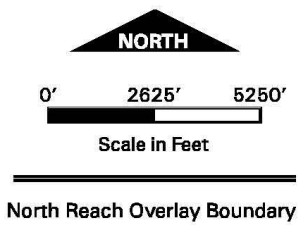
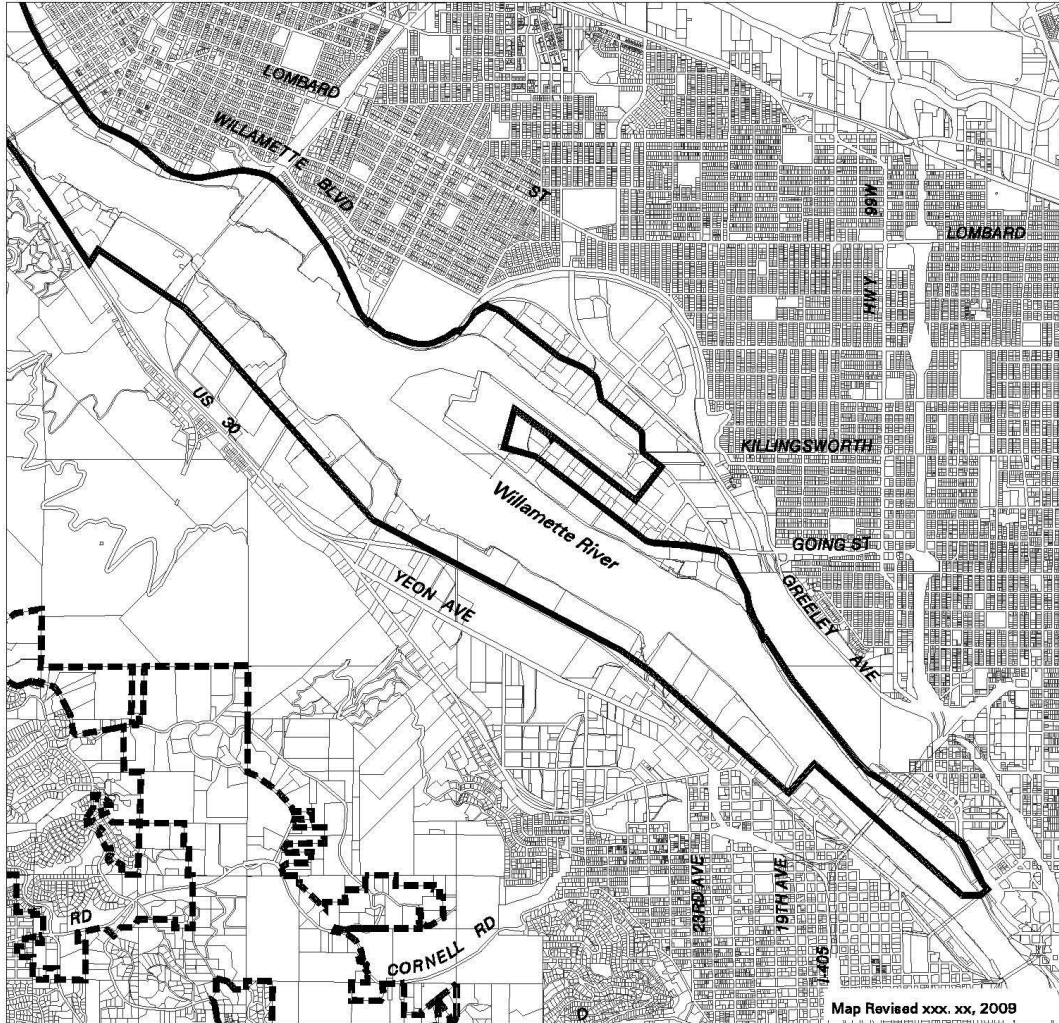


Map 475-1
Willamette River
North Reach Overlay Boundary
Map 1 of 2

Bureau of Planning • City of Portland, Oregon

Commentary

This is a new chapter. For ease of readability the text is not underlined.



Map 475-1
Willamette River
North Reach Overlay Boundary
Map 2 of 2

Bureau of Planning & Sustainability • City of Portland, Oregon

Commentary

33.10.130.B.1 Clarification for rights-of-way

The amendment in this paragraph clarifies that land within public rights-of-way that are also within one of the City's environmental overlay zones is regulated by Title 33.

33.10.130.C Clarification for water bodies

The amendment in this subsection eliminates dredging from the list of activities on or in water bodies that Title 33 does not regulate. Planning Commission recommends that dredging in the North Reach be regulated by Title 33 when the dredging will occur outside of the federal navigation channel in water that is less than 35 feet deep. The land use review will ensure that the dredging has the least detrimental impact to shallow water and other aquatic habitats as practicable, and that mitigation is conducted to offset any unavoidable impacts to aquatic habitat.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

Changes to other Chapters of Title 33

CHAPTER 33.10 LEGAL FRAMEWORK AND RELATIONSHIPS

33.10.030 When the Zoning Code Applies

- A. All land and water.** The zoning code applies to all land and water within the City of Portland except as provided in Subsections B., C., and D. below. All land divisions, uses and development must comply with all of the requirements specified in the zoning code for that location.
- B. Clarification for rights-of-way.** Land within private rights-of-way, including rail rights-of-way and utility rights-of-way, is regulated by Title 33. Land within public rights-of-way is regulated by Title 17, Public Improvements, and not by Title 33, except in the following situations where both Titles apply:
1. Rights-of-way in the greenway, river environmental, environmental conservation, environmental protection, pleasant valley natural resource, and scenic resource overlay zones, including the creation of new rights-of-way and the expansion or vacation of existing rights-of-way;
 2. The act of creating or dedicating public rights-of-way through a land division;
 3. Development within design districts when specified in Chapter 33.420, Design Overlay Zone;
 4. Structures that project from private property over rights-of way, such as oriel windows; and
 5. Proposals for park-and-ride facilities for mass transit.
- C. Clarification for waterbodies.** The siting of fills or structures on or over waterbodies is subject to the zoning code provisions. The zoning code does not regulate shipping, ~~dredging~~, boating, and other similar uses on or in water bodies.
- D. Private rights-of-way.** The creation of private rights-of-way is regulated by Title 33, Planning and Zoning. Street improvements in private rights-of-way are allowed by right in all zones.

Commentary

33.248.090.D Landscape Area Preparation

This is a new subsection that was recently adopted by City Council, and will be effective as of July 1, 2010. The subsection ensures that nuisance groundcovers and shrubs are removed from all required mitigation areas in the city, and that nuisance trees are removed from mitigation areas in the Environmental Overlay Zones, Pleasant Valley Natural Resource overlay zone, River Natural overlay zone, and River Water quality overlay zone. The amendment adds the River Environmental overlay zone to the list of zones where nuisance trees must be removed.

33.258.070.D.2.a(6) Nonconforming Development

What is nonconforming development?

Nonconforming development exists where a site met all the regulations at the time it was developed but does not meet the current regulations because of subsequent changes to the Zoning Code. For example, many parking lots were built before Portland required landscaping. Such development is "grandfathered in," meaning that it can remain so long as there are no changes to the site.

What are upgrades to nonconforming development?

Upgrading nonconforming development means bringing it closer to compliance with the current regulations.

When are such upgrades required?

If an owner is making alterations to the site, upgrading nonconforming development may be required. This upgrade is typically required when the alterations cross a certain dollar threshold. Some items are exempt from the threshold, meaning they do not count toward the threshold. These can include improvements that are required by City regulations, such as seismic upgrades, or improvements that contain a substantial public benefit, such as earthquake upgrades or stormwater management facilities.

In keeping with the kinds of exemptions described above, Planning Commission recommends exempting actions to remove or remediate hazardous substances from the threshold that triggers nonconforming upgrades because the clean up of hazardous substances has substantial public benefit.

33.248.090 Mitigation and Restoration Plantings

A.-C. No change

D. Landscaped Area Preparation. All new required mitigation areas must be cleared of groundcovers and shrubs listed on the Nuisance Plants List. If the site is within the Environmental Overlay Zone, the Pleasant Valley Natural Resource Overlay Zone, ~~and the River Natural Overlay Zone, and the River Water Quality Overlay Zones, or the River Environmental Overlay Zone in the Greenway Overlay Zone,~~ then trees listed on the Nuisance Plants List must be removed from the required mitigation area.

E.-G. No change

33.258.070 Nonconforming Development

A.-C. No change

D. Development that must be brought into conformance.

1. No change
2. Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below. When alterations are made that are over the threshold of Subparagraph D.2.a., below, the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits.
 - a. Thresholds triggering compliance. The standards of Subparagraph D.2.b., below, must be met when the value of the proposed alterations on the site, as determined by BDS, is more than \$124,100. The following alterations and improvements do not count toward the threshold:
 - (1) Alterations required by approved fire/life safety agreements;
 - (2) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
 - (3) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;
 - (4) Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; ~~and~~
 - (5) Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements; and
 - (6) Removal or remediation of hazardous substances.

Commentary

33.272 Public Trails

Planning Commission recommends deleting the word "Recreation" from the title of this chapter. Public trails provide more than just a recreational purpose and the chapter title should be consistent with the purpose. This chapter has also been reorganized to be more consistent with the formatting of other zoning code chapters.

33.272.020.A This subsection is being added to address the requirements of the Dolan vs. City of Tigard Supreme Court decision. The results of that case require local governments to find that an exaction is roughly proportional to the impacts of the proposed development before the exaction can be required. The standards of chapter 33.272, Public Trails constitutes an exaction for the purpose of construction of the trail.

Planning Commission recommends updating the language in this subsection to refer specifically to rough proportionality and to authorize the Bureau of Development Services to create an administrative procedure for determining rough proportionality. Planning Commission recommends that the administrative rule be a clear and objective formula. The outline of the recommended formula is described on the following commentary pages. The formula relates the impact on the trail system from the proposed development to the size of the exaction. The formula is based on the City's justification for requiring dedication and construction of a public trail on the SK Northwest site on the Willamette riverfront in SE Portland. The SK Northwest decision was appealed to the State Land Use Board of Appeals and Oregon Court of Appeals. In both cases, the City's finding of rough proportionality, and application of the trail requirements were upheld.

While the elements and steps of the formula have been tested, the data to be used in the formula needs additional refinement. Planning Commission recommends that staff continue to work with representatives from the City Attorney's office, the Bureau of Development Services, the Portland Office of Transportation, and Portland Parks and Recreation to develop and finalize the administrative rule with the goal of having a final formula prior to implementation of this code.

33.272.020.B The regulations of this chapter will not apply when removal and remediation of hazardous substances is being conducted. The development of the greenway trail should occur when the site is being developed rather than when it is being cleaned up. In addition, the City does not want to add cost and complexity to the removal and remediation of hazardous substances.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

CHAPTER 33.272
PUBLIC RECREATIONAL TRAILS

(Amended by: Ord. No. 166835, effective 5/23/95; Ord. No. 174263, effective 4/15/00; Ord. No. 177082, effective 1/20/03.)

Sections:

- 33.272.010 Purpose
- 33.272.020 Where These Regulations Apply
- ~~33.272.030020~~ Dedication of Public Right-Of-Way or Easement
- ~~33.272.040030~~ Construction of the Trail
- 33.272.050 Trail Standards
- ~~33.272.060040~~ Use of Trail
- ~~33.272.070050~~ Hours of Use
- ~~33.272.080060~~ Trespass
- ~~33.272.090070~~ Trail Maintenance and Liability
- ~~33.272.100080~~ Standards for City Acceptance of Deeded Land

33.272.010 Purpose

The public ~~recreational~~ trail requirements are intended to:

- Increase recreational opportunities within the City of Portland and connect these recreational opportunities with a regional recreational trail system;
- Increase public access to and along the Willamette River and to other significant natural resource areas;
- Provide emergency vehicle access;
- Provide access to increase public safety;
- Assist in flood protection and control;
- Assist in shoreline anchoring;
- Support alternative modes of transportation;
- Provide connections to other transportation systems;
- Implement the City's Comprehensive Plan policies regarding public recreational trails;
- Help create a pleasant, aesthetically pleasing urban environment; and
- Provide consistent standards for trail development.

33.272.020 Where These Regulations Apply

A. General. The regulations of this chapter apply to all sites that have the public trail symbol designation shown on the Official Zoning Maps. The regulations of this chapter apply when application of the regulations is determined to be logically related and roughly proportional to the impacts of the proposed development. The Bureau of Development Services has the authority to develop and maintain administrative rules establishing a clear and objective formula for making a determination of rough proportionality. A determination that the regulations of this chapter do not apply does not preclude acquisition and construction of a public trail through other legal means.

B. Exception. The regulations of this chapter do not apply when the proposal is for the removal or remediation of hazardous substances and the actions are conducted under ORS.465.200 through .545 and 465.900.

Commentary

Recommended Process For Assessing Rough Proportionality

Planning Commission recommends amending section 33.272.020 to refer specifically to rough proportionality, and authorizing the Bureau of Development Services to create and implement an administrative rule for determining rough proportionality. The public trail standards of this chapter will apply when the meeting the standards is found to be roughly proportional.

Rough proportionality will be assessed using an **objective formula**. The formula will not be a standard in the zoning code, but rather an administrative procedure applied by BDS to determine if the trail standards are applicable. The formula has been designed to relate a development's impact on the trail system to the size of the exaction. The formula includes several steps:

Step 1: Determine the percent of impact

This number expresses the percentage of total bicycle and pedestrian trips along a trail segment that are being generated by the proposed development.

Percent of Impact Calculation:

The number of trips to and from the site that will be made by bicycles and pedestrians (A) divided by total bike/ped trips in the segment (B)

$$A / B = \text{Impact (I)}$$

A equals: the number of peak hour trips to the site (based on the ITE manual) multiplied by the percentage of those trips that are expected to be made by bike/ped¹

B equals: estimated number of peak hours bike/ped trips along the segment²

Step 2: Determine the percent of exaction

This number expresses the percentage of the total trail system that the trail designation on the development site represents. The trail designation is represented by the trail stars on the zoning map.

Percent of exaction calculation:

Length of trail designation on the site (C) divided by the length of the trail system³ (D)

$$C / D = \text{Exaction (E)}$$

--continued on next commentary page

C. Columbia South Shore Plan District. Sites in the Columbia South Shore Slough Trail area and Cross-Levee Trail area must also comply with the regulations of Section 33.515.260. These areas are shown on Map 515-4.

D. South Waterfront subdistrict of the Central City Plan District. Sites in the South Waterfront subdistrict of the Central City Plan District must also comply with the regulations of Section 33.510.253. The regulations of that section specify when public trails must be constructed within the South Waterfront subdistrict.

33.272.030020 Dedication of a Public Right-Of-Way or Easement

All applicants for a land use review or for building permits on lands designated with a ~~recreational~~ public trail symbol on the zoning map are required to grant an easement for the ~~recreational~~ trail. The easement must be recorded with the County Recorder/Auditor's Office ~~done as part of recording a land use review~~ and finalized prior to obtaining a final certificate of occupancy. The land may be donated to the City instead of granting an easement when the standards of Section 33.272.030100 are met. Trails shown adjacent to public rights-of-way may be constructed in the public right-of-way, subject to approval from the Office of Transportation.

33.272.040030 Construction of Trails

A. Single-dwelling zones. The construction of the ~~recreational~~ trail in single-dwelling residential zones is only required for Land Divisions~~subdivisions~~ and Planned Developments ~~PUDs that involve the creation of a street.~~ Construction of the trail is not required as part of development on an e~~Existing single-dwelling lot. s are not required to construct the trail.~~

~~B. Columbia South Shore Plan District.~~ ~~Sites in the Columbia South Shore Slough Trail area and Cross-Levee Trail area must also comply with the regulations of Section 33.515.260. These areas are shown on Map 515-4. Other trails in the Columbia South Shore Plan District must comply only with the regulations of this chapter.~~

~~C. South Waterfront subdistrict of the Central City plan district.~~ ~~Sites in the South Waterfront subdistrict must comply with the regulations of Section 33.510.253. The regulations of that section specify when recreational trails must be constructed within the South Waterfront subdistrict.~~

BD. All other zones. Construction of the ~~recreational~~ public trail is required on lands designated with a ~~recreational~~ public trail symbol on the zoning maps in any of the following situations listed below.

1. When there is new development;
2. When exterior alterations to existing development are 35 percent or greater of the assessed improvement value of the total improvements on the site; or

Commentary

Example (steps 1 and 2): Fictional development on a site in South Waterfront—211 residential units, a 15,000 square foot of retail shop, and a 5,000 square foot coffee shop.

Impact (I):

(A) = 17.5 bike/ped trips (175 total peak hours trips based on ITE manual x 10%)

(B) = 150 peak hour trips along the trail segment (the segment is in the Central City)

(I) = **0.116** (17.6 / 150; proposal represents 11.5% of bike/ped trips within the segment)

Exaction (E):

(C) = 650' (length of trail designation on the site)

(D) = 5700' (length of trail segment)

(E) = **0.114** (650 / 5700; the trail on the site is 11.4% of the trail segment)

Step 3: Determine rough proportionality

If the impact number (I) is greater than the exaction number (E), then meeting all of the trail requirements is proportional.

If the exaction number (E) is within 66 percent (2/3) of the impact number (I), then meeting all of the trail requirements is roughly proportional.

If the exaction number (E) is within 33 percent (1/3) of the impact number (I), then granting an easement for the trail is roughly proportional, but construction of the trail is not roughly proportional.

If the exaction number (E) is less than 33 percent of the impact number (I), then meeting the trail requirements is not proportional

Example (step 3): Fictional development on a site in South Waterfront—211 residential units, a 15,000 square foot of retail shop, and a 5,000 square foot coffee shop.

(I) 0.116

(E) 0.114

The impact number is greater than the exaction number. In this case, granting an easement and building the trail is roughly proportional.

Appealing the determination:

The applicant will be allowed to appeal the number used in the first part of Step 1—the total number of trips to the site. The Portland Bureau of Transportation currently implements a process for appealing the ITE manual estimations of total trips. The procedure is called an alternate rate study and that process can be used within the context of this determination. PBOT will make the determination based on technical information.

There will not be a process available to dispute other aspects of the rough proportionality determination. If City Council finds that the logic of this formula and the numbers used for it represent rough proportionality, then we should not reevaluate the logic or the numbers on a case by case basis. The numbers will be updated regularly so that they represent the most up-to-date data available.

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Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

3. When there is a Land Division or Planned Development. ~~When streets are constructed in a subdivision, industrial park, or PUD.~~

CE. Prior to certificate of occupancy. The trail must be constructed prior to the issuance of a certificate of occupancy, unless the site is eligible for the trust fund provisions of Subsection 33.515.260.B, or the special timing provisions of Paragraph 33.510.253.D.4.

33.272.050 Trail Standards

~~F.~~ Trail standards. A public ~~recreational~~ trail must comply with the standards of Portland Parks and Recreation for recreational trails or, where the trail is located in a public right-of-way, it must comply with the standards of the Portland Office of Transportation.

~~G.~~ Environmental review. ~~If the trail is located within the Environmental zones, the trail must comply with the requirements of Chapter 33.430.~~

33.272.060040 Use of Trail

Public use and conduct on the ~~recreational~~ trail are subject to the regulations in Chapter 12, Prohibited Conduct, of Title 20, Parks and Recreation; and Chapter 50, Columbia South Shore Slough Trail of Title 20 except as otherwise limited by the terms of an easement between the applicant and the City.

33.272.070050 Hours of Use

The ~~recreational~~ trail and access paths must be open to the public between the hours of 5 a.m. and 10 p.m., except as otherwise limited by the terms of an easement between the applicant and the City.

33.272.080060 Trespass

Nothing in this chapter is intended to authorize public use of private property. Public use of private property is a trespass unless appropriate easements and access have been acquired.

33.272.090070 Trail Maintenance and Liability

A. City maintenance. The City will accept maintenance and liability, similar to its responsibilities for City-owned park property, for a ~~recreational~~ trail segment if the City Engineer or the Director of Portland Parks and Recreation finds all of the following:

1. The applicant requests that the City assume the responsibilities;
2. The trail lies within an easement or right-of-way granted to the City for trail purposes;
3. The trail has been constructed to City standards;
4. The trail is physically continuous for at least 1/4-mile along the designated route. This requirement will be waived if the trail has not been made part of a physically continuous segment of at least 1/4-mile within 2 years after completion of the segment under consideration; and

Commentary

¹ For the rough proportionality formula, the percentage of trips expected to be made by bicycles and pedestrians will be set at **10%** of the total number of trips to a site. This recommendation is based on data from past three years of Service Efforts and Accomplishments Reports (2006-2008). The SEA report is produced yearly by the Office of the Auditor and the report collects information regarding commuting by bike. Over the past three years, the citywide average of people reporting that they use a bicycle as their primary commute vehicle is **10%**. Planning Commission also recommends that this number be updated as additional data on commuting by bike is gathered.

² The number of bike/ped trips within the public trail system is estimated to be **150** during peak hours within the Central City and inner southeast and inner northeast neighborhoods. The number of bike/ped trips within the public trail system is estimated to be **75** during peak hours in the outer neighborhoods. These estimates are based on daily bicycle traffic counts conducted between 2001 and 2007 at multiple locations along the Willamette River Greenway, the Eastbank Esplanade, and the Springwater Corridor. To estimate peak hour usage from the data on daily usage, staff multiplied a rough average of the daily counts taken at close-in locations by 10%, and did the same for locations farther away from the Central City. Ten percent of daily use is a typical formula used by traffic engineers to estimate peak usage.

³ The length of the trail system will be represented by the length of the public trail (as shown by the stars on the zoning map) between the nearest bicycle and pedestrian arterials to the site. This is consistent with the definition of trail system used in the SK Northwest case.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

5. If the applicant desires to use a private security force to patrol the trail area, the owner has signed an agreement holding the City harmless from all claims, suits, or actions of any nature, caused or arising out of the actions of the private security force, its subcontractors, agents, or employees.

- B. Applicant maintenance.** The applicant retains maintenance and liability responsibilities unless these responsibilities are accepted by the City. Where the applicant retains maintenance and liability responsibilities, the trail segment must be maintained at a level at least equal to those segments maintained by the City.

33.272.100080 Standards for City Acceptance of Deeded Land.

The land may be donated to the City instead of granting an easement if the following standards are met:

- A.** The trail is constructed and meets the City's trail construction standards or the trust fund option described under Subsection 33.515.260.B. has been applied.
- B.** The property owner meets the hazardous substances standards in the City's standard trail easement agreement.

Commentary

33.430.250.E

This approval criterion has been amended to ensure that uses approved through a Conditional Use review are given status when evaluating the extent to which a proposal has minimized impacts to natural resource areas.

**CHAPTER 33.430
ENVIRONMENTAL ZONES**

Map 430-13 The River Plan: North Reach Area Natural Resources Inventory

33.430.020 Environmental Reports

The application of the environmental zones is based on detailed studies that have been carried out within ~~eight~~ nine separate areas of the City. The City's policy objectives for these study areas are described in the reports. Each study report identifies the resources and describes the functional values of the resource sites. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of these reports. The City has adopted the following ~~eight~~ nine environmental study reports:

- *bullets 1-8 no change*
- River Plan / North Reach

33.430.080 Items Exempt From These Regulations

The following items, unless prohibited by Section 33.430.090, below, are exempt from the regulations of this chapter. Other City regulations such as Title 10, Erosion Control, must still be met:

A.-C. No change

D. The following new development and improvements:

1. Planting of native vegetation listed on the *Portland Plant List* when planted with hand-held equipment. Temporary drip irrigation to the new plantings is allowed for up to 3 years;
- 2.-11. No change

33.430.250 Approval Criteria

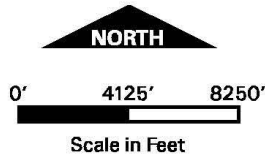
A. – D. No change

E. Other development in the Environmental Conservation zone or within the Transition Area only. In Environmental Conservation zones or for development within the Transition Area only, the applicant's impact evaluation must demonstrate that all of the following are met:

1. Proposed development minimizes the loss of resources and functional values, consistent with allowing those uses generally permitted or allowed in the base zone without a land use review or uses approved through a Conditional Use review;
- 2.-6. No change

Commentary

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Language to be **deleted** is shown in ~~strikethrough~~



MAP NOTES: Small numbers within boxes represent quarter-sections

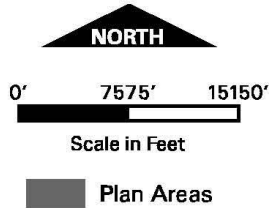
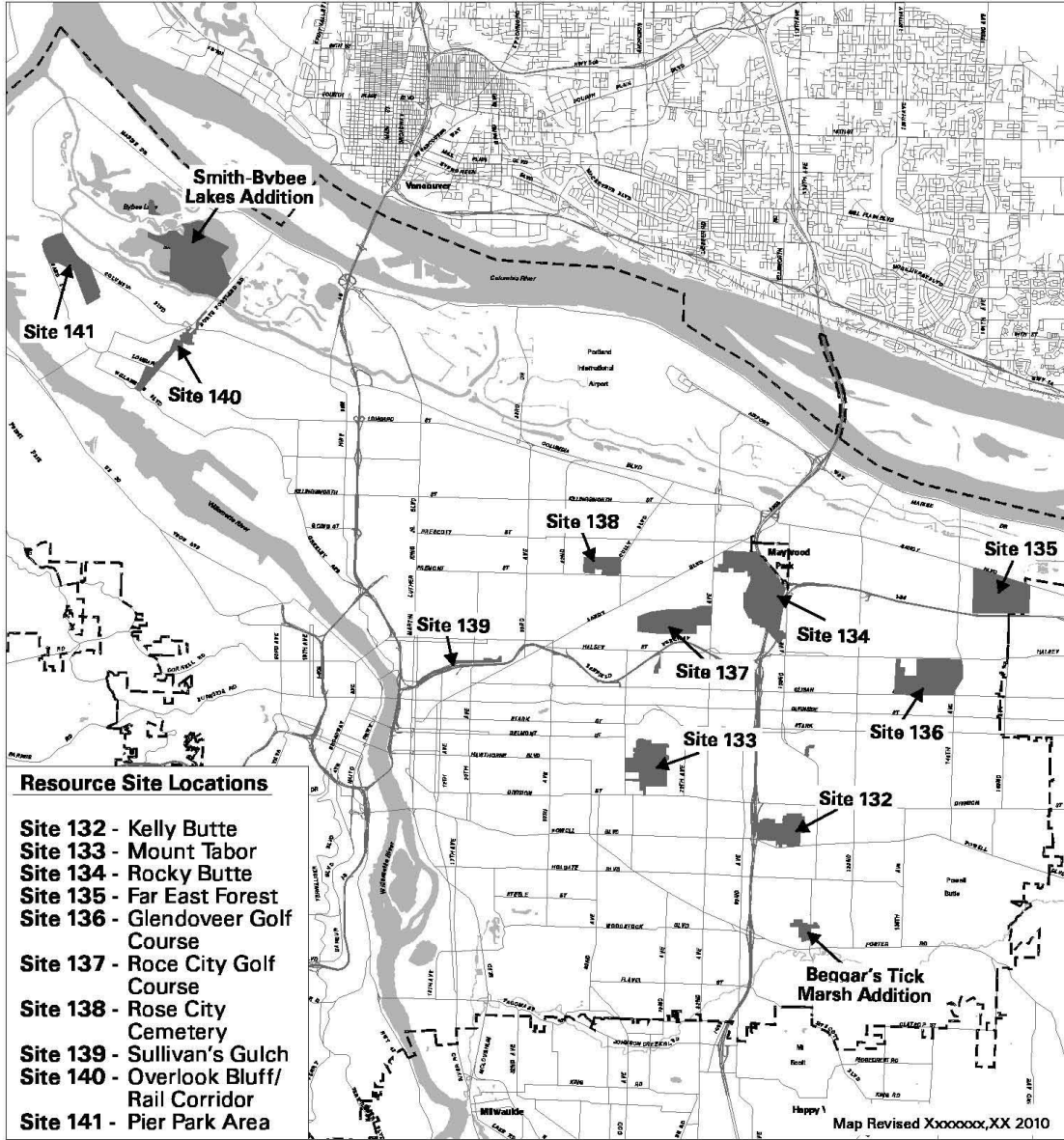
Map 430-2 Columbia Corridor Industrial and Environmental Mapping Project Area

Map 1 of 2

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Commentary

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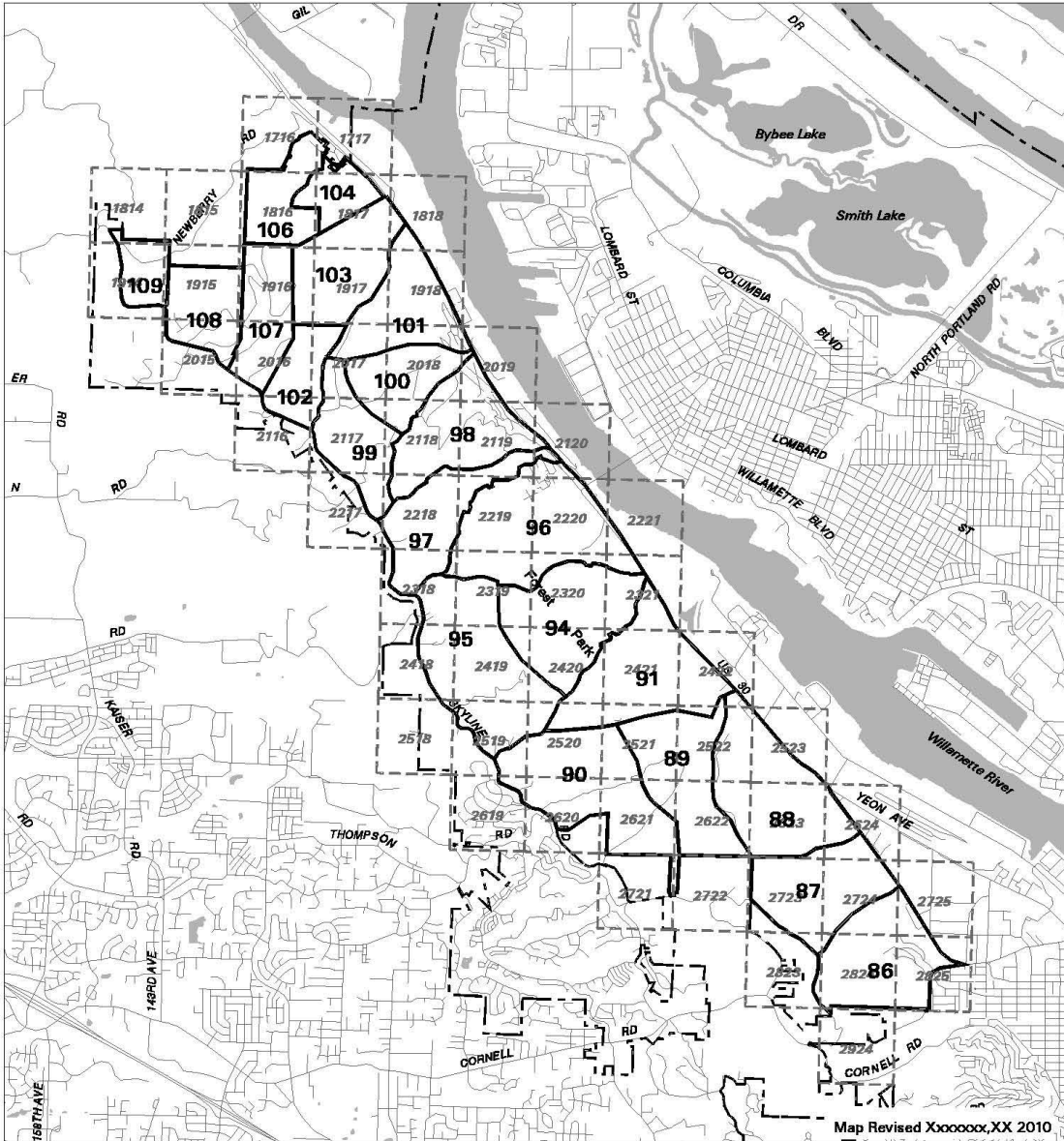


Map 430-3 East Buttes, Terraces and Wetlands Conservation Area

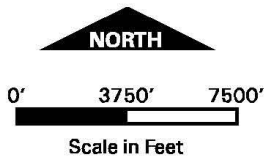
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Commentary

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Map 430-6 Northwest Hills Natural Areas Protection Plan Area

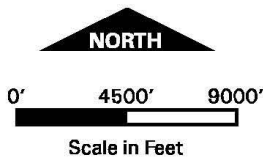
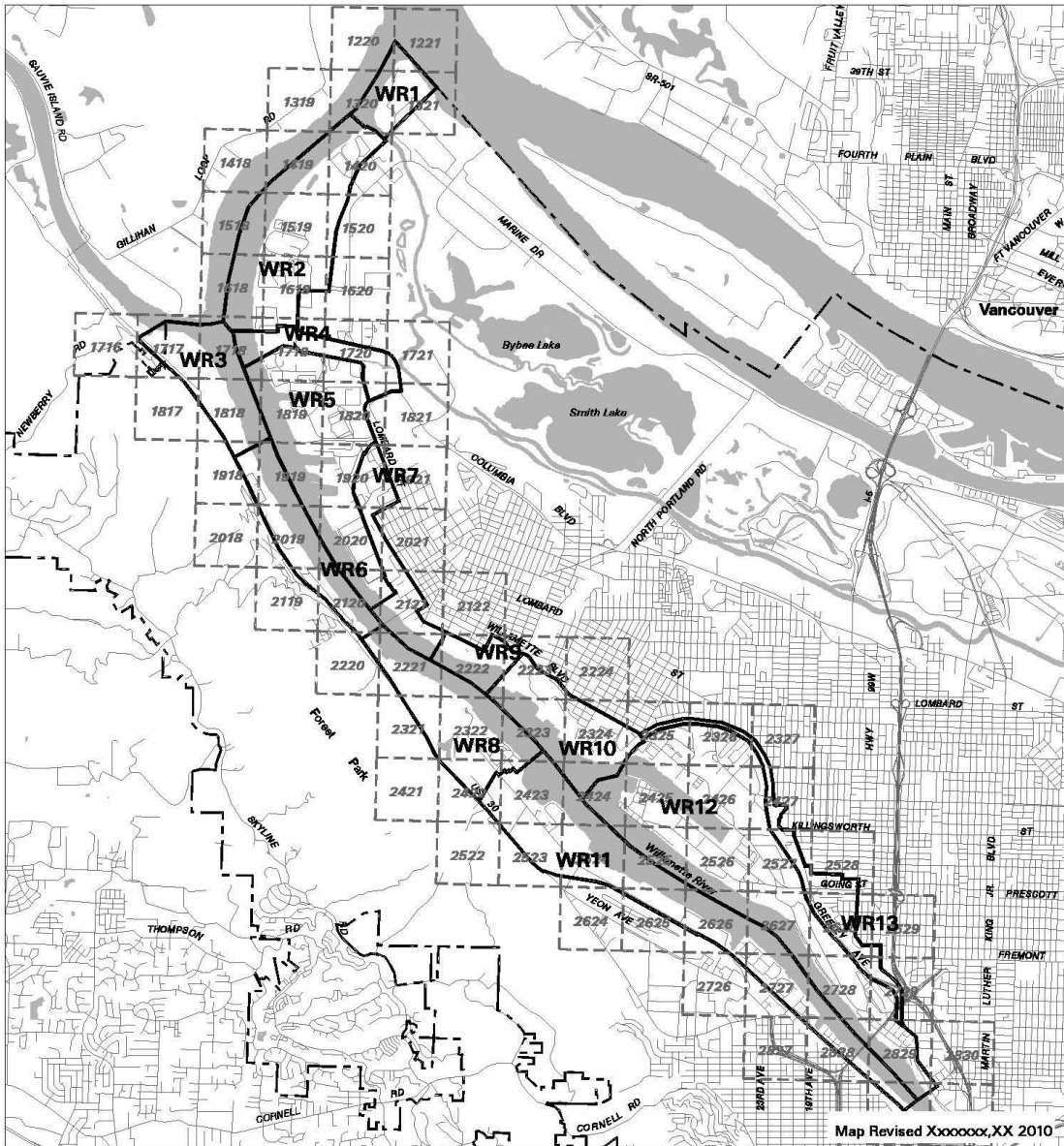


MAP NOTES: Small numbers within boxes represent quarter-sections

Bureau of Planning & Sustainability • City of Portland, Oregon

Commentary

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Language to be **deleted** is shown in ~~strikethrough~~



Map 430-13 The River Plan: North Reach Area Natural Resources Inventory

MAP NOTES: Small numbers within boxes represent quarter-sections

Bureau of Planning & Sustainability • City of Portland, Oregon

Commentary

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

CHAPTER 33.440 GREENWAY OVERLAY ZONES

Sections:

General

- 33.440.010 Purpose
- 33.440.030 Greenway Overlay Zones
- 33.440.050 Relationship to State and Federal Reviews
- 33.440.060 Sunset Provision

Use Regulations

- 33.440.100 Use-Related Restrictions

Development Regulations

- 33.440.200 Application of the Development Standards
- 33.440.210 Development in the Greenway Setback
- 33.440.220 Floor Area Ratios
- 33.440.230 Landscaping
- 33.440.240 Public Recreational Trails
- 33.440.250 Public Viewpoints
- 33.440.260 View Corridors
- 33.440.270 Nonconforming Uses and Development

Greenway Review

- 33.440.300 Purpose
- 33.440.310 Where Greenway Review Applies
- 33.440.320 Items Exempt from Greenway Review
- 33.440.330 Procedures
- 33.440.340 Notice to State Parks and Recreation Division
- 33.440.345 Supplemental Application Requirements
- 33.440.350 Approval Criteria
- ~~33.440.360 Greenway Goal Exceptions~~

Map 440-1 Willamette Greenway Public Access

33.440.030 Greenway Overlay Zones

A. Purpose. The purpose of the greenway overlay zones is to implement the land use pattern identified in the Willamette Greenway Plan and the water quality requirements of Metro Code 3.07.340.B (Title 3). There are five greenway overlay zones, each with its own focus and purpose. The purpose of each of the overlay zones is stated below.

1. River Natural. The River Natural zone protects, conserves, and enhances land of scenic quality or of significant importance as wildlife habitat.
2. River Recreational. The River Recreational zone encourages river-dependent and river-related recreational uses which provide a variety of types of public access to and along the river, and which enhance the river's natural and scenic qualities.

Commentary

33.440.030.A.4 River Industrial Zone

The River Industrial zone will no longer exist as a *Greenway Overlay Zone*. All of the River Industrial zone is located in the North Reach and therefore the regulations will be located in the recommended River Overlay Zones chapter (33.475).

33.440.030.B This subsection is being amended to improve readability and clarity.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

3. River General. The River General overlay zone allows for uses and development which are consistent with the base zoning, which allow for public use and enjoyment of the waterfront, and which enhance the river's natural and scenic qualities.
- ~~4. River Industrial. The River Industrial zone encourages and promotes the development of river-dependent and river-related industries which strengthen the economic viability of Portland as a marine shipping and industrial harbor, while preserving and enhancing the riparian habitat and providing public access where practical.~~
45. River Water Quality. The River Water Quality zone is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the setback.

B. Where these regulations apply.

1. General. The regulations of this chapter apply to all land and fills and structures in water within the Willamette Greenway Plan boundary shown on Map 440-1 and designated on the Official Zoning Maps with River Natural, River Recreational, River General, ~~River Industrial~~, or River Water Quality overlay zones.

(Renumber Map 440-1 to 440-2)

2. Exceptions.

- a. ~~except that the area within~~ The interior of Ross and Hardtack Islands which is presently subject to the Ross Island Management Plan will not be subject to the regulations of this chapter during such time as the Ross Island Management Plan ~~remains~~ is in effect.
- b. ~~In addition,~~ The public trail standards of Section 33.440.240, below, apply to all lands ~~designated on~~ within the Willamette Greenway Plan boundary designated with the recreational public trail symbol but which are outside of the greenway zones.
- c. ~~However,~~ The regulations of this chapter do not apply within the South Waterfront subdistrict of the Central City plan district. Sites in the South Waterfront subdistrict are instead subject to Section 33.510.253, Greenway Overlay Zone in South Waterfront Subdistrict.
- d. The regulations of this chapter do not apply to the River General and River Recreational overlay zones located within the Willamette River North Reach overlay boundary shown on Map 475-1. See Chapter 33.475, River Overlay Zones for regulations that apply within the Willamette River North Reach overlay boundary.

Commentary

33.440.030.D The River Industrial zone will no longer exist as a *Greenway Overlay Zone*. All of the River Industrial zone is located in the North Reach and therefore the regulations will be located in the recommended River Overlay Zones chapter (33.475).

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

- C. Removal or remediation of hazardous substances.** For projects limited to the removal or remediation of hazardous substances conducted under ORS 465.200 through 465.510 and 465.900, the regulations of this chapter apply only to the portion of the site located within the boundaries of the removal or remedial action areas, as delineated by the Department of Environmental Quality.
- D. Map symbols.** The greenway overlay zones are shown on the Official Zoning Maps with the following map symbols:

<u>Overlay Zone</u>	<u>Map Symbol</u>
River Natural	n
River Recreational	r
River General	g
River Industrial	i
River Water Quality	q

33.440.050 Relationship to State and Federal Reviews

In addition to any City requirements, ~~all~~ development within or riverward of the greenway setback, including fills, ~~must be approved~~ may be regulated by the Oregon Division of State Lands and the U.S. Army Corp of Engineers. City approval does not imply approval by these agencies.

33.440.060 Sunset Provision

The River Water Quality Overlay Zone will be deleted from the Zoning Code when revised Willamette River Greenway regulations are adopted.

33.440.100 Use-Related Restrictions

- A. Generally.** In most cases, the greenway zones do not restrict primary uses that are allowed in the base zones by right, with limitations, or as a conditional use. Exceptions to this are in the River Recreational, ~~River Industrial~~, and River Water Quality zones. The restrictions on uses are stated in Subsection B. below. The location of development for an allowed use is regulated by the development standards below. **Any** changes to the land associated with the use are subject to greenway review unless exempted. See 33.440.310 and 33.440.320 below.
- B. Use restrictions.**
1. River Recreational zone. Primary uses in the River Recreational zone are limited to recreational uses which are river-dependent or river-related.
 - ~~2. River Industrial zone. In the River Industrial zone, river-dependent and river-related primary uses are allowed by right on sites that front the river. Primary uses that are not river-dependent or river-related may be allowed on sites that front the river if they are approved through greenway review. They must comply with the approval criteria of 33.440.350.B. below. There are no special use restrictions on sites that do not have river frontage.~~

Commentary

33.440.100.B.4

The River Water Quality zone (q-zone) was not intended to affect the uses allowed in the Greenway. The zone applies in combination with other greenway overlay zones—some of which affect allowed use on a site. The purpose statement for the q-zone says that the zone is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the setback (emphasis added). The use limitation as currently written has no practical affect on the allowed uses within the greenway setback. There are no greenway review approval criteria related to use in the q-zone, so greenway review is not required for a use that is not river-dependent or river-related. This amendment is intended to clarify the code and to ensure that development within the greenway setback will continue to require greenway review and will continue to be subject to the River Water Quality zone application requirements and approval criteria (limit impacts, mitigate for unavoidable impacts).

33.440.210.C.2

The River Water Quality zone (q-zone) applies an expanded setback area as a way to limit impacts from development on water quality resources. In the q-zone, the setback is expanded from 25 feet landward of top of bank to 50 feet or 200 feet landward from top of bank. While the expanded setback is intended to require minimization of impacts and mitigation for unavoidable impacts, the q-zone regulations were not intended to effectively prohibit non-river-dependent and non-river-related development within the expanded setback area. By requiring a greenway goal exception within the entire q-zone greenway setback, this type of development is effectively prohibited in the entire area. The recommended change limits the requirement for a greenway goal exception to the area that is within 25 feet from top of bank, consistent with the requirement in all other greenway zones. Greenway review will continue to be required for all development that is within the q-zone greenway setback.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

- ~~23.~~ River Natural and River General zones. There are no special use restrictions in the River Natural and River General zones.
34. River Water Quality zone. There are no special use restrictions associated specifically with the River Water Quality zone. However, any use restrictions that apply as a result of an accompanying Greenway Overlay zone also apply within the River Water Quality zone. ~~In the River Water Quality zone, use restrictions apply only within the greenway setback. Primary uses that are river-dependent or river-related are allowed and do not need to comply with Section 33.440.345, Supplemental Application Requirements or the approval criteria of Subsection 33.440.350.C. Primary uses that are not river-dependent or river-related may be allowed if they are approved through greenway review. Existing uses that change to a non-river-dependent or non-river-related use are subject to greenway review.~~

33.440.210 Development in the Greenway Setback

A.-B. No change

C. Development regulations.

1. Development landward of the greenway setback. Development, exterior alterations, excavations, and fills landward of the greenway setback are not required to be river-dependent or river-related and are subject to greenway review, unless exempt under Section 33.440.320, Exemptions.
2. Development within the greenway setback.
 - a. River-dependent and river-related development. Development, exterior alterations, excavations, or fills within the greenway setback that are river-dependent or river-related may be allowed if approved through greenway review, unless exempt under Section 33.440.320, Exemptions.
 - b. Development that is not river-dependent or river-related.
 - (1) General. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate in the greenway setback.
 - (2) Exception. Within the River Water Quality zone, development, exterior alterations, excavations, and fills that are not river-dependent or river-related do not require a Greenway Goal Exception when located outside of the area that is within the first 25 feet landward of the top of bank. See Figure 440-3.

Commentary

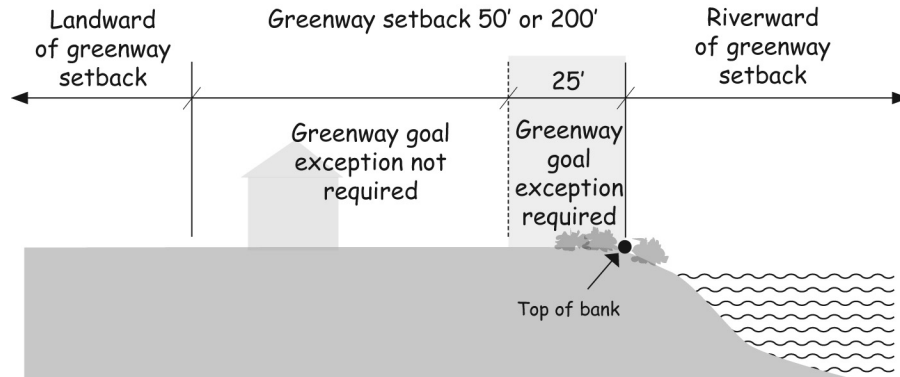
33.440.310.F When Greenway Review Applies

This exemption is being deleted because the River Industrial zone will not exist in the Greenway Overlay zones. All of the River Industrial zone is located in the North Reach and therefore the regulations for the River Industrial zone have been moved to the recommended River Overlay Zones chapter (33.475)

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

3. Development riverward of the greenway setback. Riverward of the greenway setback, development, exterior alterations, excavations, or fills that are river-dependent or river-related may be allowed if approved through greenway review, unless exempt under Section 33.440.320, Exemptions. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate riverward of the greenway setback.

Figure 440-3
Greenway Goal Exception



(renumber Figure 440-3 to Figure 440-4)

33.440.310 When Greenway Review Applies

Unless exempted in 33.440.320 below, the following items are subject to greenway review:

- A. New development;
- B. Exterior alterations to development, including the removal of trees and shrubs and the application of herbicides;
- C. A change of use or development within or riverward of the greenway setback, where the use or development is no longer river-dependent or river-related;
- D. Changes to the land and structures in the water, including excavations and fills, bridges, and docks;
- E. The dedication or extension of rights-of-way and any new development or improvements in rights-of-way when within the River Natural zone or within or riverward of the greenway setback; and
- ~~F. Non river dependent or river related primary uses in the River Industrial Zone; and~~
- FG. Non river-dependent or river-related primary uses in the River Water Quality Zone.

Commentary

33.440.320.A Exemptions from Greenway Review

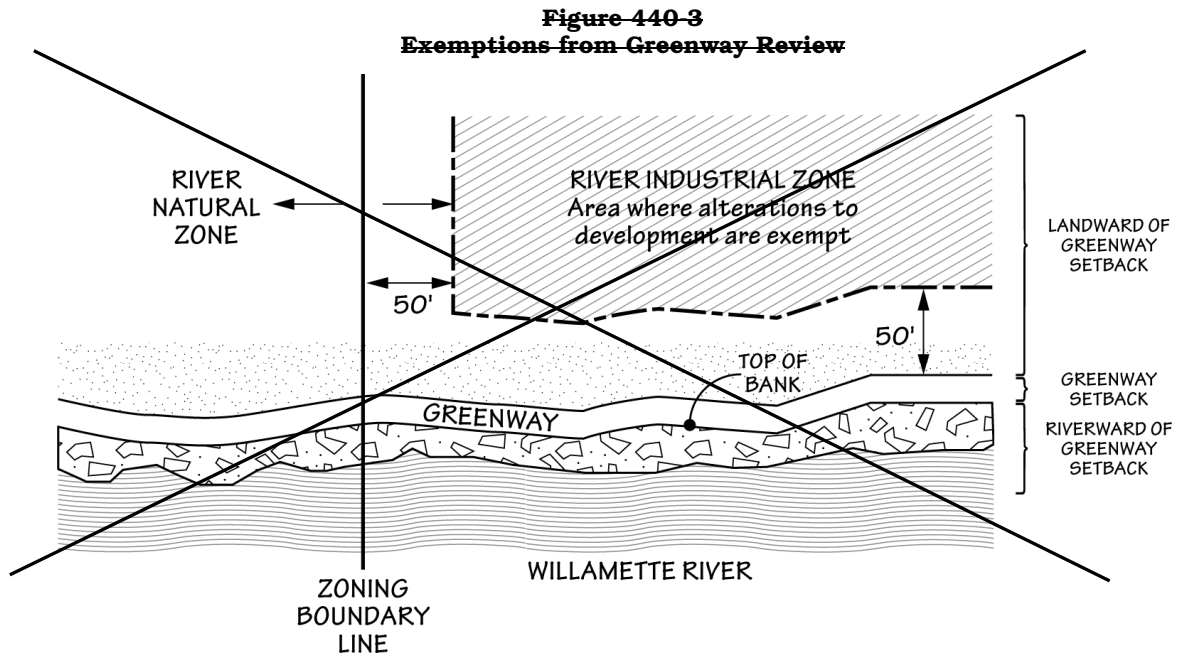
This exemption is being deleted because the River Industrial zone will not exist in the Greenway Overlay zones. All of the River Industrial zone is located in the North Reach and therefore the regulations for the River Industrial zone have been moved to the recommended River Overlay Zones chapter (33.475)

33.440.320 Exemptions from Greenway Review

Greenway review is not required for any of the situations listed below. The situations listed below are still subject to the Greenway development standards. The situations are:

- ~~A.~~ As illustrated in Figure 440-3, alterations to development in the River Industrial zone that are outside of the areas listed below:
- ~~1.~~ The greenway setback;
 - ~~2.~~ Riverward of the greenway setback;
 - ~~3.~~ Within 50 feet landward of the greenway setback; or
 - ~~4.~~ Within 50 feet of River Natural zoned land;
- BA.** River-dependent development, exterior alterations, excavations, and fills in the River Water Quality zone are exempt from the requirements of Section 33.440.345, Supplemental Application Requirements, and the approval criteria of Subsection 33.440.350.G.
- CB.** Alterations to development landward of the greenway setback when not in or within 50 feet of River Natural zoned land, that either do not require a building permit or are valued at less than \$25,000;
- DC.** Changes to the interior of a building where there are no exterior alterations;
- ED.** Development of or changes to the greenway trail or access paths provided that all development standards including the standards of Chapter 33.272, Public ~~Recreational~~ Trails, are met. Development of or changes in a viewpoint or view corridor, as indicated on Map ~~440-2440-1~~, will require greenway review;

(Re-letter F through M to be E through L)



Commentary

33.440.345.A.1.b Supplemental Application Requirements

The application requirements have been amended to be consistent with the revised definition of top of bank and the new measurements section which describes how to measure top of bank.

33.440.345 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, Application Requirements, the following information is required for Greenway review applications:

A. Supplemental site plans. One copy of each plan must be at a scale of at least one inch to 100 feet.

1. An existing conditions site plan, showing the following:
 - a. Topography shown by contour lines at two foot vertical contours in areas of slope less than 10 percent and at five foot vertical contours in areas of slope ten percent or greater;
 - b. The top of bank and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See Section 33.910.030, Environmental-Related Definitions, Top of Bank.
 - ~~c. and~~ The greenway setback area;
 - ~~e~~d. Distribution outline of shrubs and ground covers with a list of most abundant species;
 - ~~e~~f. Trees identified by species, including the location of the drip line;
 - ~~e~~f. Streams, wetlands, other water bodies, and drainage patterns, using arrows to indicate the direction of major drainage flow;
 - ~~f~~g. Existing improvements such as structures, buildings, utility lines, fences, paved areas, roads, culverts, and bridges;
 - ~~g~~h. Areas of known soil or groundwater contamination, areas of uncontained hazardous materials, and underground storage tanks; and
 - ~~h~~i. Stormwater management facilities.

2.-3. (No change)

B. (No change)

Commentary

33.440.350.B River Frontage Lots in the River Industrial zone

This approval criterion has been revised and moved to the River Overlay Zones chapter (33.475).

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

33.440.350 Approval Criteria

The approval criteria for a greenway review have been divided by location or situation. The divisions are not exclusive; a proposal must comply with **all** of the approval criteria that apply to the site. A greenway review application will be approved if the review body finds that the applicant has shown that all of the approval criteria are met.

- A. For all greenway reviews.** The Willamette Greenway design guidelines must be met for all greenway reviews.
- ~~**B. River frontage lots in the River Industrial zone.** In the River Industrial zone, uses that are not river dependent or river related may locate on river frontage lots when the site is found to be unsuitable for river dependent or river related uses. Considerations include such constraints as the size or dimensions of the site, distance or isolation from other river dependent or river related uses, and inadequate river access for river dependent uses.~~

(Re-letter C through H to be B through G)

Commentary

33.440.360 The approval criteria for a *Greenway Goal Exception* have been moved to a new chapter in the 800's section of the zoning code. This change is consistent with the structure of the zoning code that has approval criteria primarily in the 800's.

~~33.440.360 Greenway Goal Exception~~

~~A. When a greenway goal exception is required.~~ Approval of an exception to Statewide Planning Goal 15 ~~Willamette Greenway, is required to locate a development or right of way that is not river dependent or river related within or riverward of the greenway setback. A greenway goal exception is not required to add revetments to a riverbank.~~

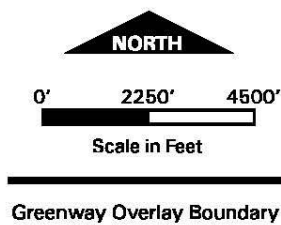
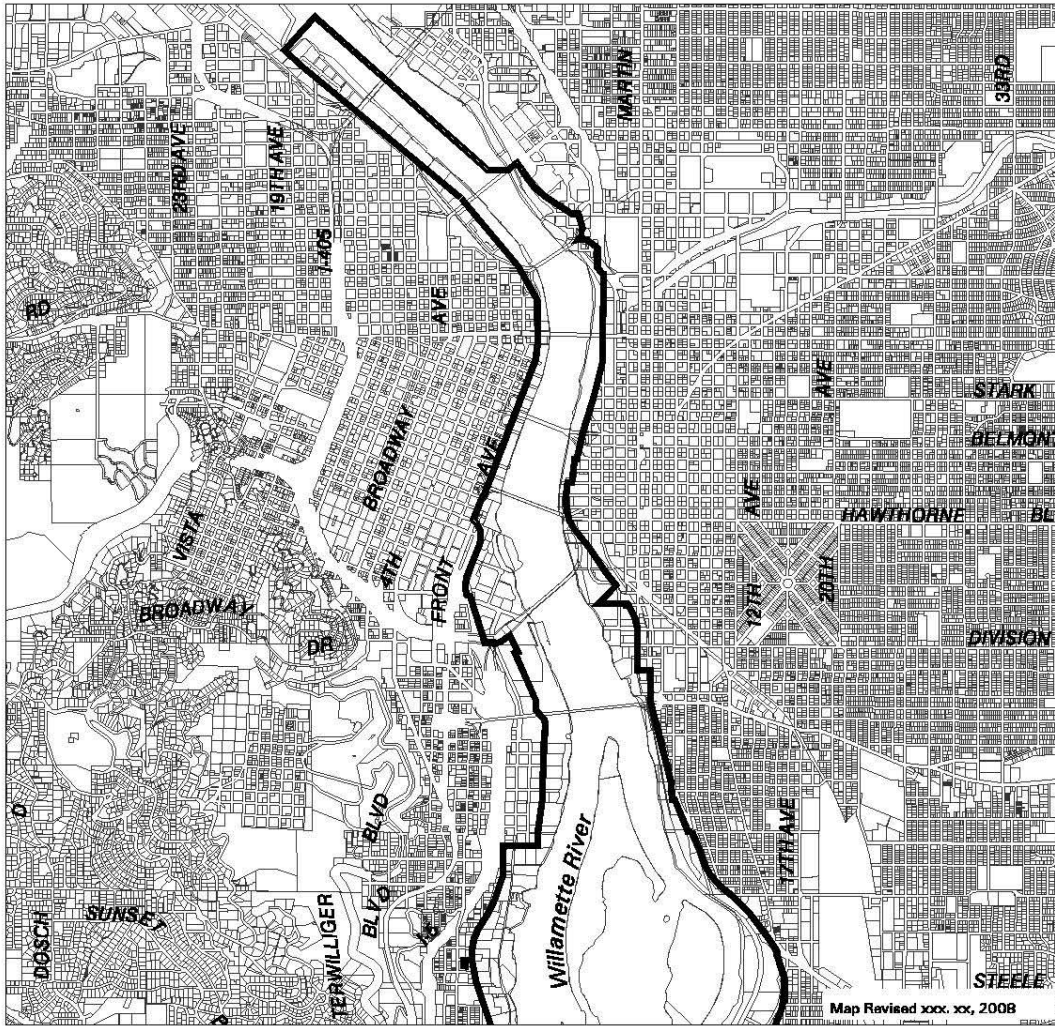
~~B. Approval criteria.~~ Requests for greenway goal exceptions will be approved if the review body finds the applicant to have shown that all of the following approval criteria are met:

- ~~1. The proposed use is allowed in the base zone by right, with limitations, or as a conditional use;~~
- ~~2. The proposal will not have a significant adverse effect on the inventoried greenway values of the site or on abutting sites or water areas;~~
- ~~3. The proposal will not significantly reduce lands available for river dependent or river related uses within the City;~~
- ~~4. The proposal will provide a significant public benefit;~~
- ~~5. The intensification of existing uses or change in use must be limited, to the greatest possible degree, so that such lands will remain compatible with the preservation of the natural, scenic, historical, and recreational qualities of such lands;~~
- ~~6. The proposal cannot reasonably be accommodated in a location which does not require a goal exception;~~
- ~~7. Of all other potential locations within the greenway that require a goal exception, there are none with significantly better long term environmental, economic, social, and energy consequences after mitigation measures;~~
- ~~8. The proposal is compatible with other adjacent uses, or will be so rendered through measures designed to reduce adverse impacts; and~~
- ~~9. Development and fills riverward of the greenway setback must show that there are no practical on-site alternatives which achieve the same level of public benefit.~~

Commentary

Planning Commission recommends adding the following maps to Chapter 33.440, *Greenway Overlay Zones* as a way to more clearly delineate the area within which the *Greenway Overlay Zones* regulations apply.

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~

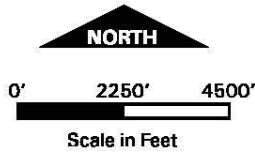
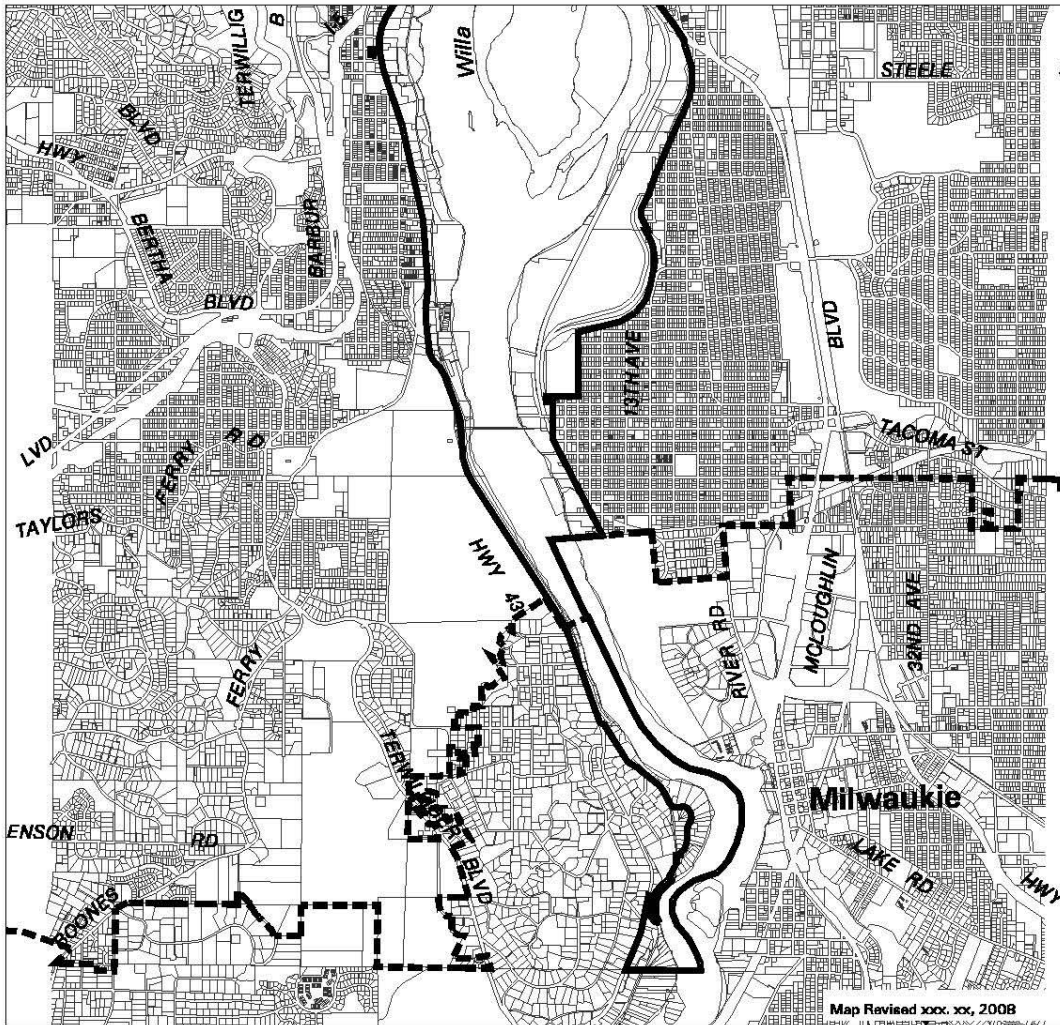


Map 440-1
Willamette River
Greenway Overlay Boundary
Map 1 of 2

Bureau of Planning • City of Portland, Oregon

Commentary

Language to be **added** is underlined
Language to be **deleted** is shown in ~~strikethrough~~



Greenway Overlay Boundary

Map 440-1 Willamette River Greenway Overlay Boundary

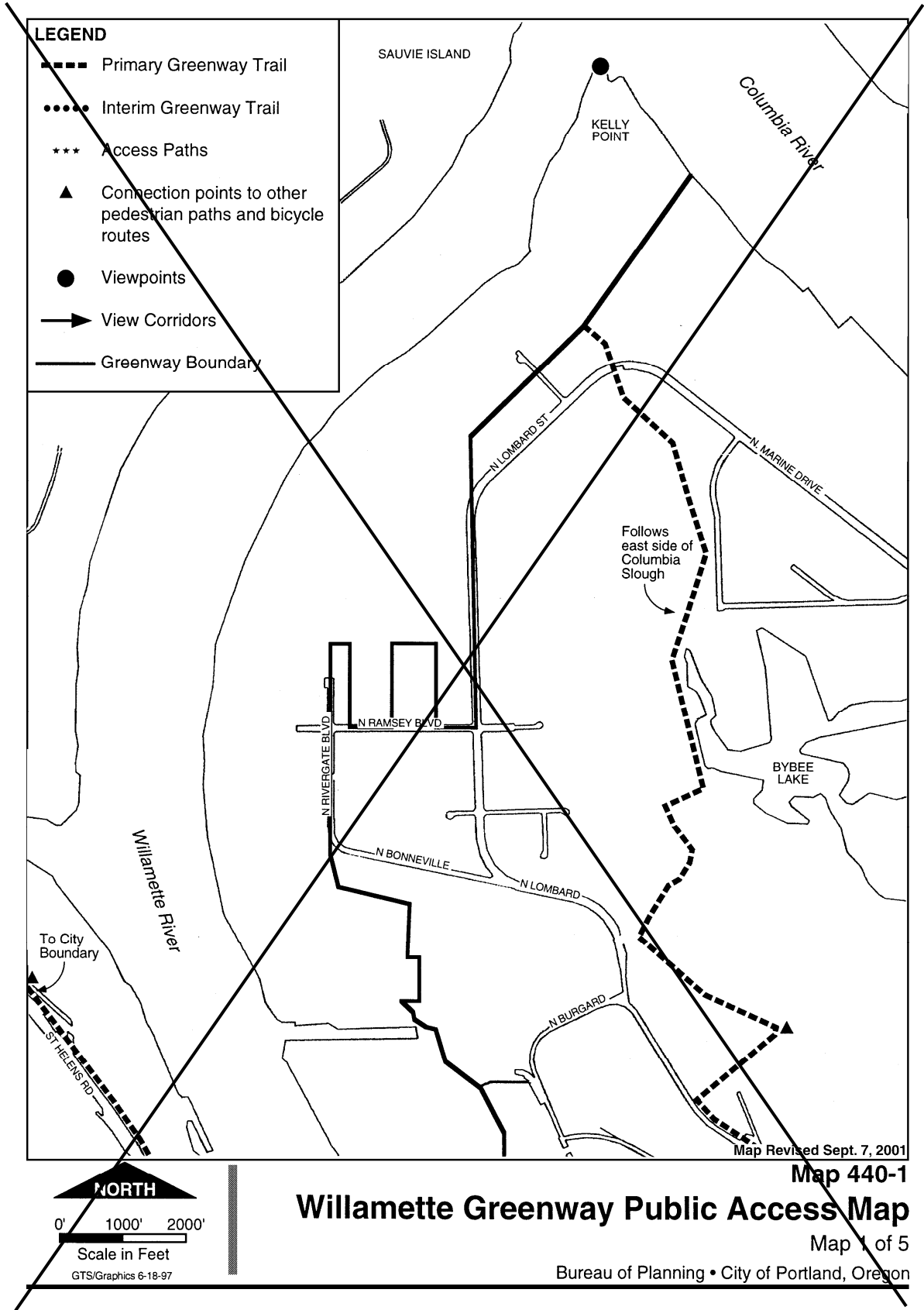
Map 2 of 2

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Commentary

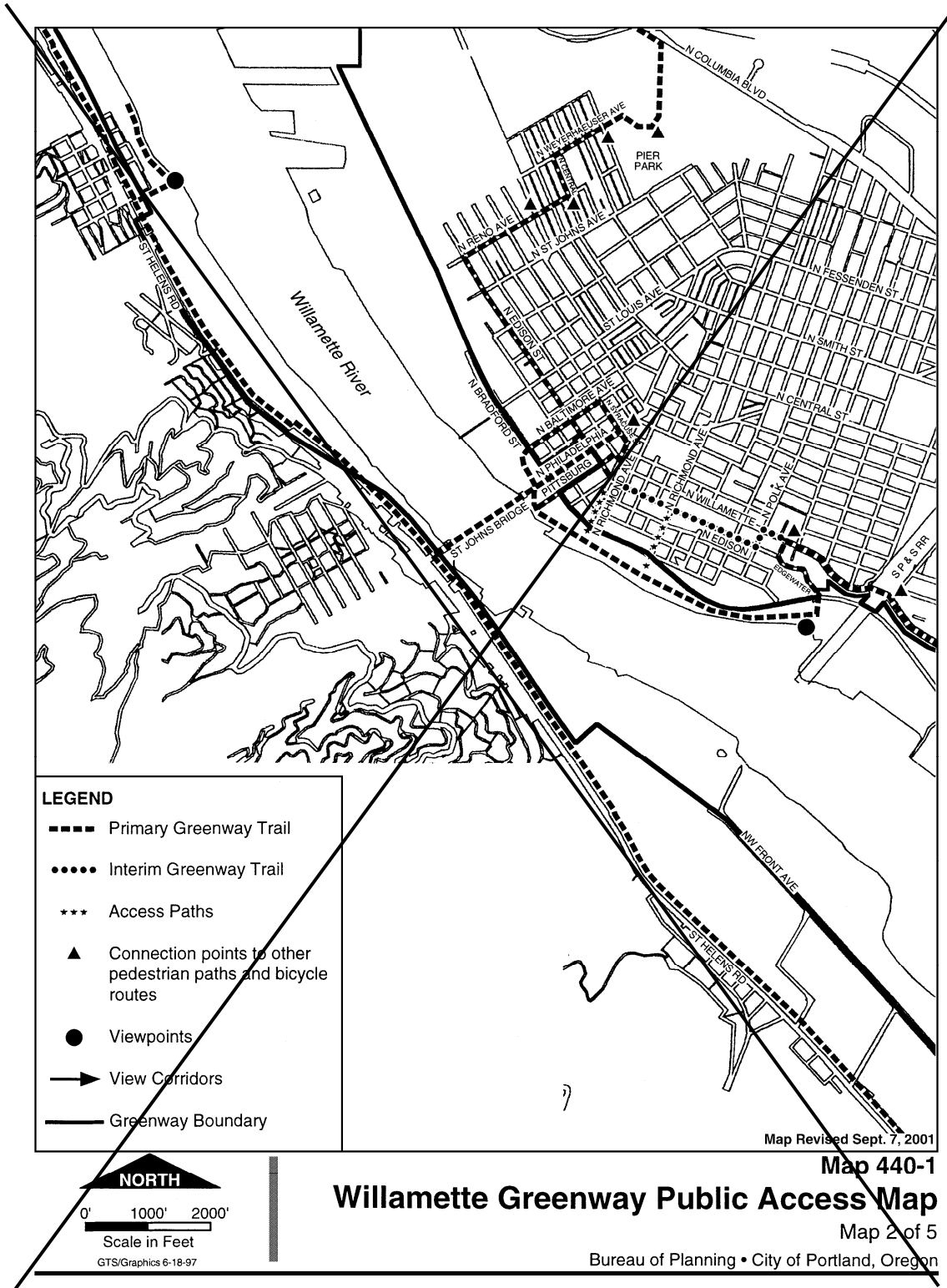
Maps 440-1 are being renumbered to 440-2 and the first three maps in series are being deleted. The first three maps show public access in the North Reach and the regulations for the North Reach will live in Chapter 33.475, River Overlay Zones.

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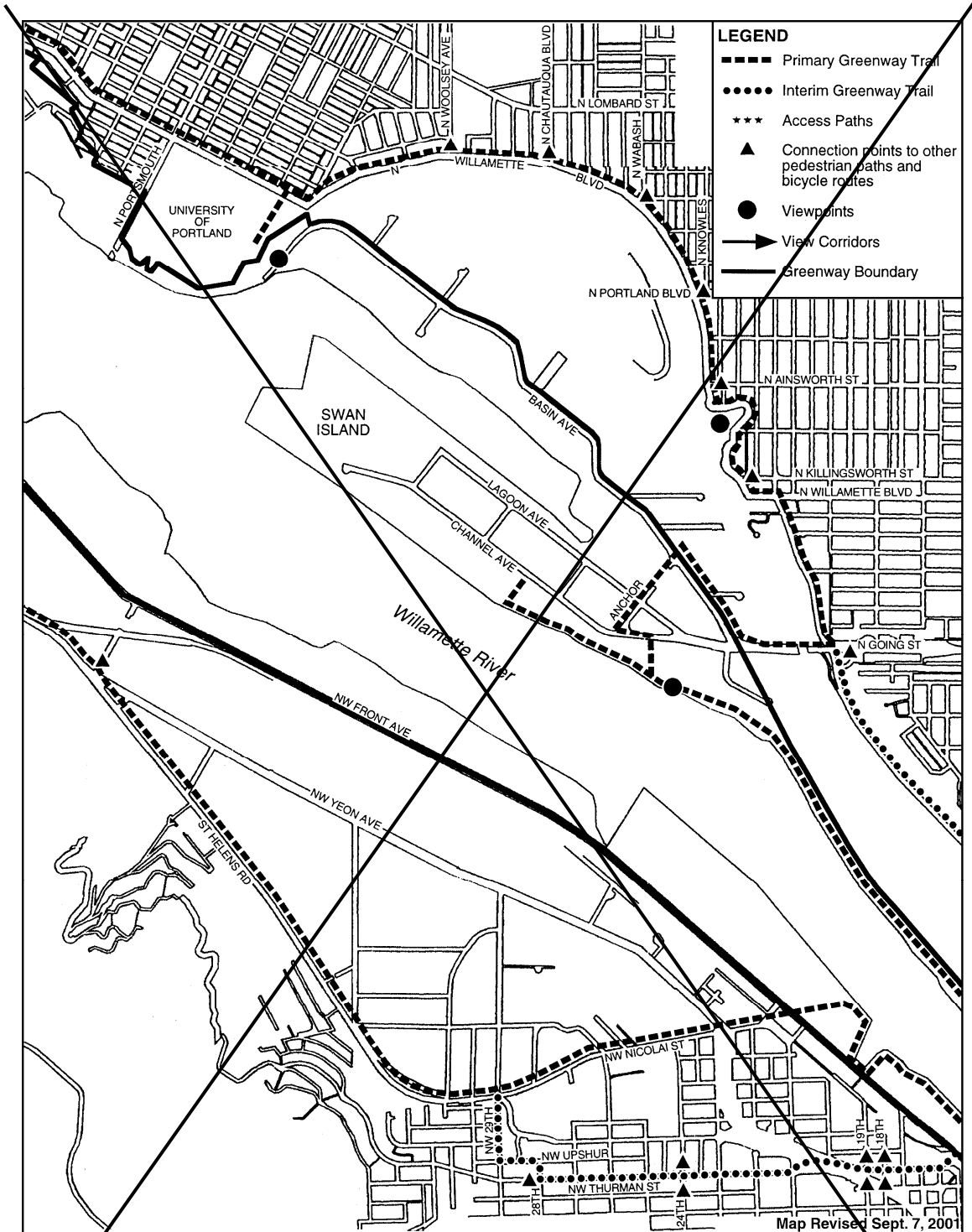
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Commentary

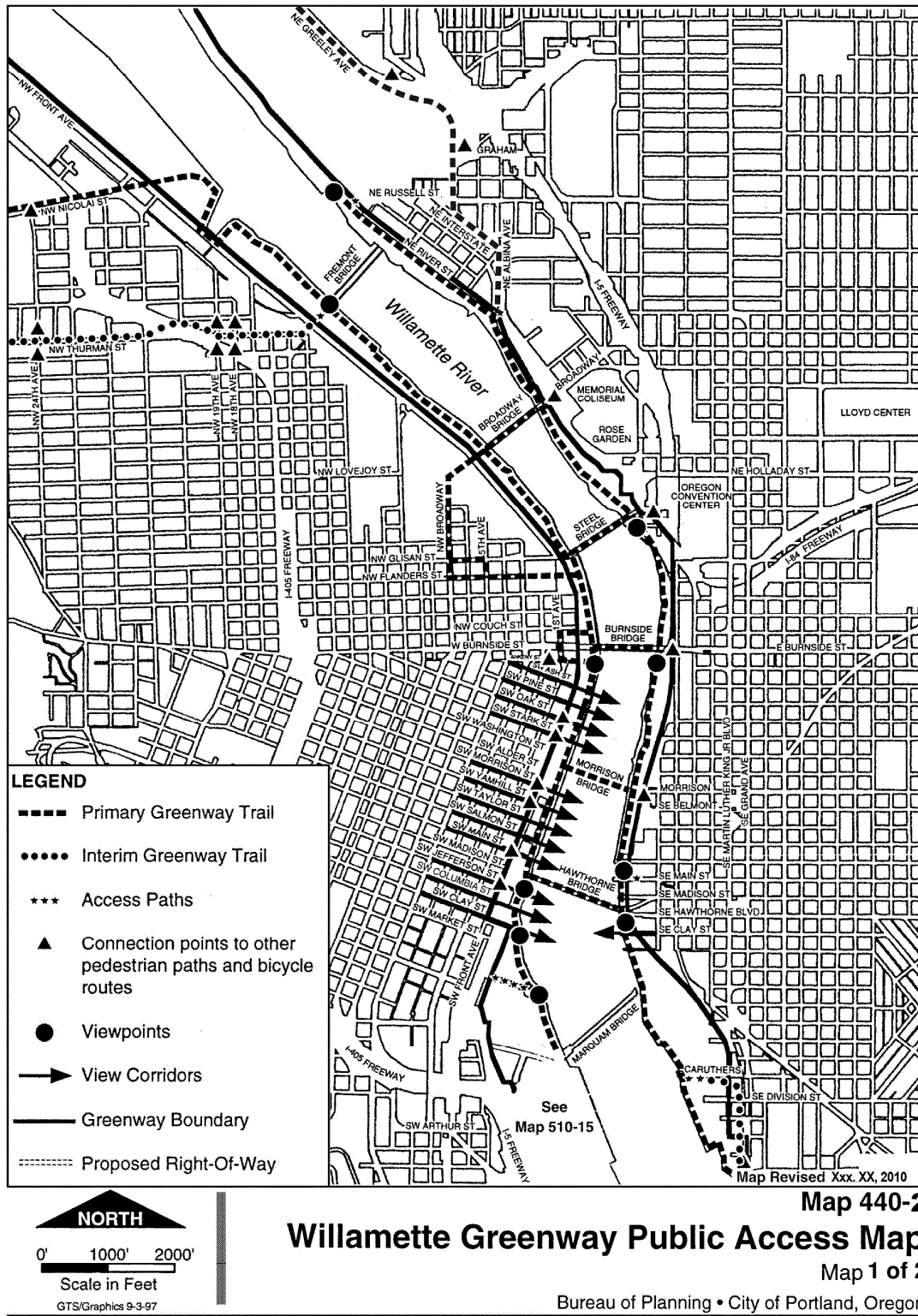
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Map 440-1
Willamette Greenway Public Access Map
 Map 3 of 5
 Bureau of Planning • City of Portland, Oregon

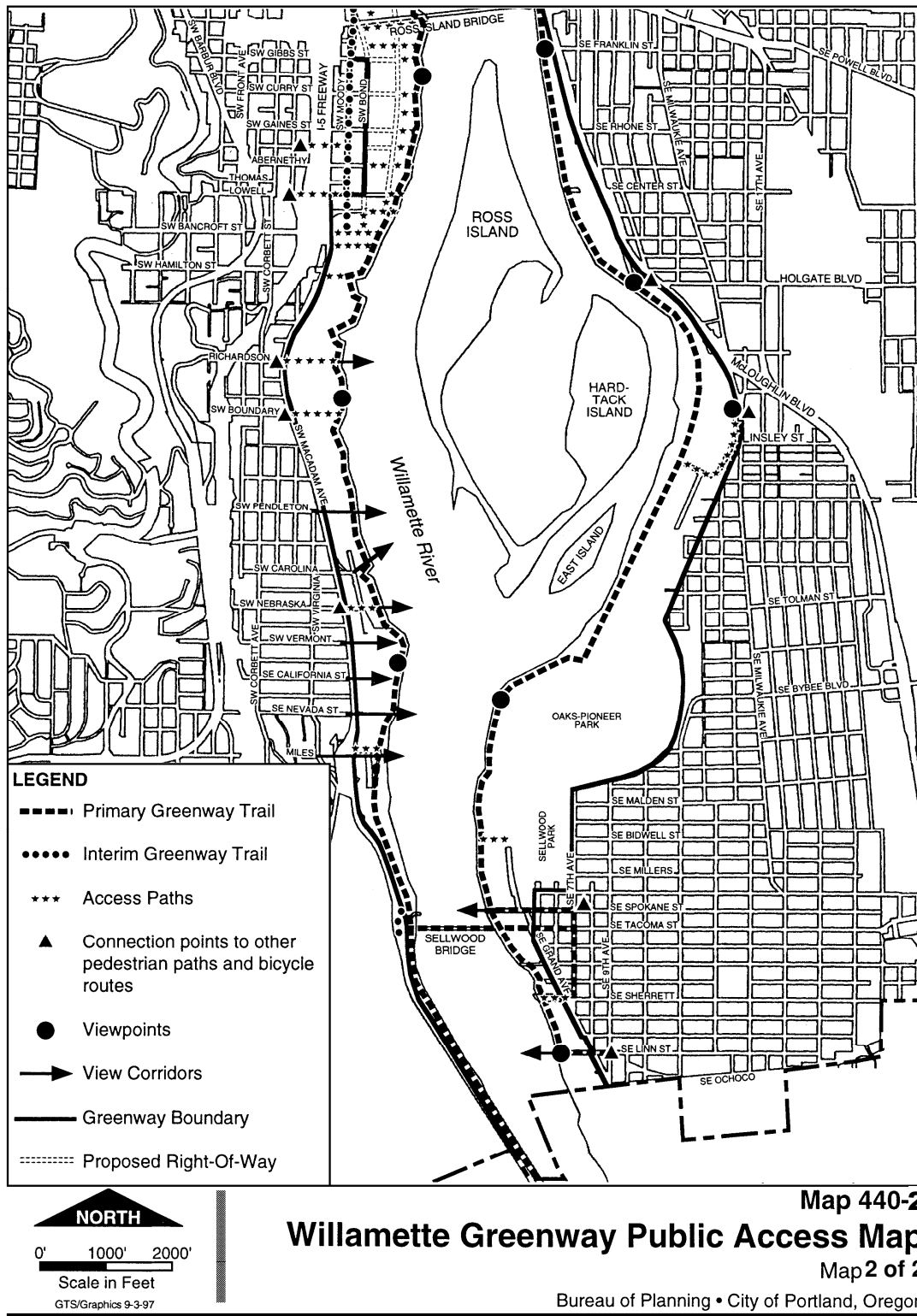
Commentary

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Commentary

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Commentary

33.510.253.D.3 The requirement to provide a public access easement for a trail or viewpoint will not apply when removal or remediation of hazardous substances is being conducted. The development of the greenway trail and viewpoints should occur when the site is being developed rather than when it is being cleaned up. In addition, the City does not want to add complexity and cost to the removal or remediation of hazardous substances.

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33.510.253 Greenway Overlay Zone in South Waterfront Subdistrict

A-C No change

D. Required South Waterfront Greenway improvements.

1.-2. No change

3. Trail and pedestrian connections and public viewpoints.

a. General. Except as provided below, ~~W~~when development on an ownership, or alterations to structures, the site, or rights-of-way are made ~~which~~ that are over the thresholds of Paragraph D.1., above, the applicant must provide public access easements that will accommodate a trail, pedestrian connections, and viewpoints that meet the standards of Paragraph E.5., Trail and pedestrian connections; and Paragraph E.6., Public viewpoints;

b. Exception. The requirements of subparagraph D.3.a, above, do not apply when the proposal is for the removal or remediation of hazardous substances and the actions are conducted under ORS.465.200 through .545 and 465.900.

Commentary

33.583 St. Johns Plan District

Amendments to the St. Johns plan district will address the noise impacts of industrial operations and reduce the potential for conflicts between industrial development and residential development.

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CHAPTER 33.583
ST. JOHNS PLAN DISTRICT
(Added by: Ord. No. 178452, effective 7/10/04.)

Sections:

General

- 33.583.010 Purpose
- 33.583.020 Where These Regulations Apply

Use Regulations

- 33.583.100 Purpose
- 33.583.110 Prohibited Uses
- 33.583.120 Retail Sales And Service Uses in the EG and EX Zones

Development Standards

- 33.583.200 Purpose
- 33.583.210 Drive-Through Facilities
- 33.583.220 Exterior Activities in the EG and EX Zones
- 33.583.230 Housing Types Prohibited in the EG and EX Zones
- 33.583.240 Minimum Density in the R1 Zone
- 33.583.250 Maximum Building Height
- 33.583.260 Bonus Option in the CN2 Zone
- 33.583.270 Building Coverage and Landscaping in the EX Zone
- 33.583.280 Residential Uses in the EG1 Zone
- 33.583.285 Additional Regulations in the Riverfront Subdistrict
- 33.583.290 Additional Regulations in the Baltimore Woods Subdistrict
- 33.583.300 Additional Regulations in the Industrial Noise Impact Area

Map 583-1 St. Johns Plan District

Map 583-2 Maximum Heights

33.583.010 Purpose

The St. Johns plan district provides for an urban level of mixed-use development including commercial, employment, office, housing, institutional, and recreation uses. Specific objectives of the plan district include strengthening St. Johns' role as the commercial and civic center of the North Portland peninsula. These regulations:

- Stimulate business and economic vitality;
- Promote housing and mixed-use development;
- Reduce the potential for conflict between industrial operations and nearby residential areas;
- Discourage auto-oriented uses and development;
- Enhance the pedestrian environment;
- Enhance the character of buildings in the plan district; and
- Support the Willamette greenway and opportunities to celebrate the Willamette River as a unique element of the urban environment.

Commentary

33.583.290 Additional Regulations in the Baltimore Woods Subdistrict

In 2004 City Council adopted the St. Johns / Lombard Plan. That plan focused on land use and transportation issues and identified strategies, actions and future planning efforts to create a more livable and economically viable town center and main street in St. Johns. The plan did not address the area known to residents of St. Johns as the Baltimore Woods—the area along N. Decatur Street north of N. New York Avenue. This area is zoned General Employment 2 and is sandwiched between several heavy industrial operations along the waterfront, including the Port of Portland's Toyota Terminal, and the residential neighborhood of Cathedral Park. In the recent past, medium density residential development has been approved for vacant lots in the Baltimore Woods through conditional use review. As a result of the increased residential use in the Baltimore Woods area and the rest of St. Johns, complaints about the noise, odor and light emanating from the industrial operations have increased. Neighbors and industrial property owners agree that steps need to be taken to reduce the potential for conflicts that can occur when residential development is built near industrial operations. Planning Commission recommends several changes to address this issue:

1. New residential development will have a height limit of 40 feet. The height limit is being applied as a way to control the overall density and bulk of the development. The surrounding neighborhood is zoned R5 which is a low density, single-dwelling residential zone. The development that has occurred in the past 10 years in the Baltimore Woods has been at a higher density than R5—typically the density of the new development has been at an R2 level.
2. Require the owner of new residential units to sign a statement that acknowledges that the home is near industrial operations and that they will likely experience impacts from noise, odor and light and those impacts will exceed the level of impacts that can be expected in a neighborhood that is not directly adjacent to a working industrial area.
3. Require that new residential structures built within roughly 500 feet of an industrial or employment zone or the railroad tracks be built with a higher level of sound insulation. This proposal has been drafted in consultation with the City's Noise Officer and is similar in nature to the sound insulation requirement that applies to residential structures near the Portland Airport. The additional requirements have the potential to increase the cost of construction, however the benefits of reducing potential health hazards offsets the increased costs. (See section 33.583.300 for recommended code.)
4. Revise the conditional use approval criteria for residential uses in employment and industrial zones to require that the new residential development be protected against impacts from employment and industrial uses within 1000 feet of the site. Currently, the approval criteria only require that the new residential development be buffered against impacts from uses in the zone where the residential use will be established. (See subsection 33.815.130.E for recommended revisions to the approval criteria.)

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33.583.290 Additional Regulations in the Baltimore Woods Subdistrict

- A. Purpose.** The regulations in this subdistrict are intended to reduce the potential for conflicts between industrial operations and nearby residential uses.
- B. Where these regulation applies.** The following regulation applies to sites within the Baltimore Woods Subdistrict shown on Map 583-1.
- C. Maximum height in the EG2 zone.** The maximum building height for new residential uses is 40 feet.
- D. Industrial impacts disclosure statement.** Prior to the issuance of a building permit for new residential construction or reconstruction where the total cost of improvements is 75 percent or more of the total assessed improvement value of the site, the owner must sign the City's industrial impacts disclosure statement. The industrial impacts disclosure statement acknowledges that the property is located near employment and industrial uses and signifies the owner's awareness of the associated nuisance impacts including noise, odor and light levels. The industrial impact disclosure statement must be recorded in the County records by the owner. The statement is available at the Development Services Center.

Commentary

33.583.300 Additional Regulations in the Industrial Noise Impact Area

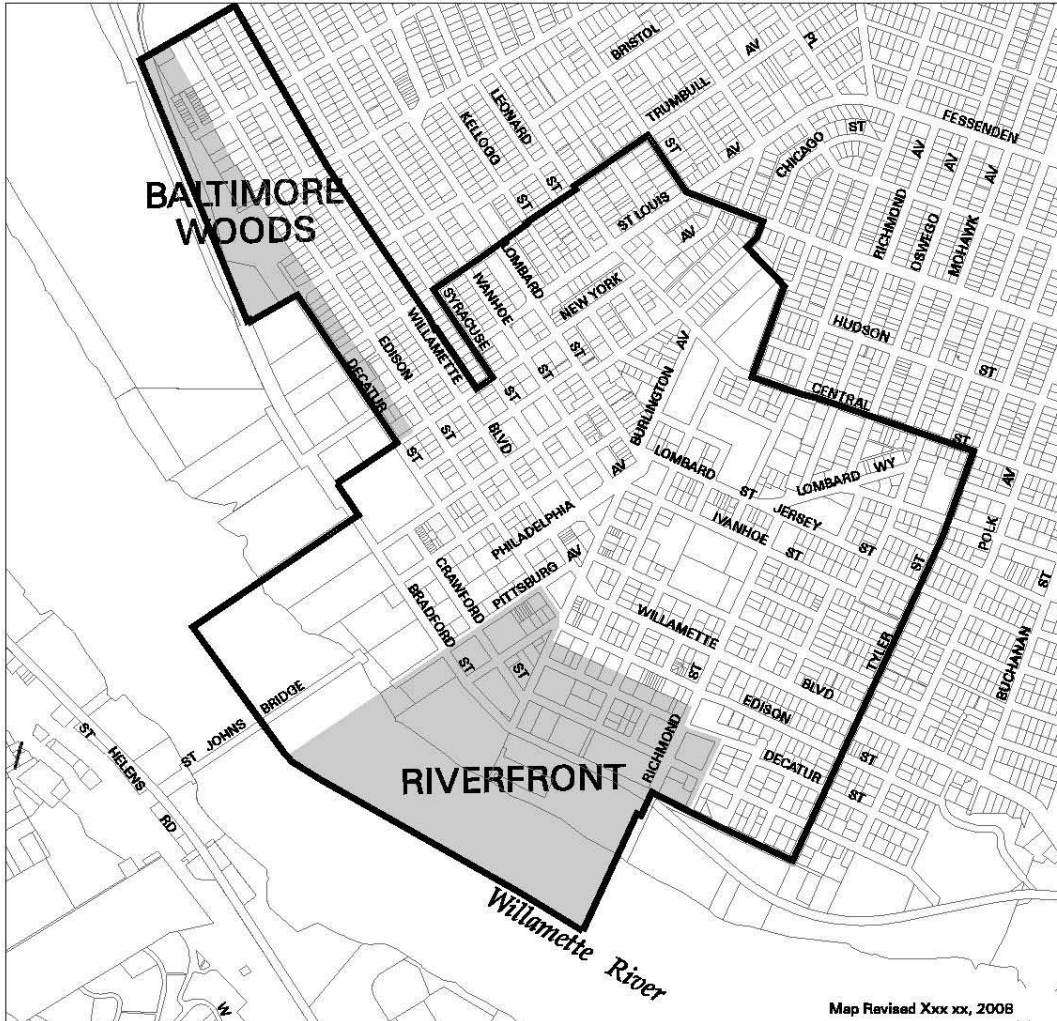
Noise associated with operations at the Toyota Terminal has an impact on residential development in the St. Johns and Cathedral Park neighborhoods. Operations at the terminal occur 24 hours a day and involve loading trains during the night. Loud noises are an inherent part of these industrial operations and without proper sound protection, the noise can become a health hazard for people living near the source. As parts of St. Johns grow and transform into a vibrant waterfront neighborhood, the conflicts between industrial and residential development will increase. In order to reduce the potential for conflict between industrial operations and residents, additional sound insulation will be required in all new and substantially reconstructed residential structures within roughly 500 feet of an industrial or employment zone or the railroad tracks. This proposal has been drafted in consultation with the City's Noise Officer and is similar in nature to the sound insulation requirement that applies to residential structures near the Portland Airport. The additional requirements have the potential to increase the cost of construction, however the benefits of reducing potential health hazards offsets the increased costs.

33.583.300 Additional Regulations in the Industrial Noise Impact Area

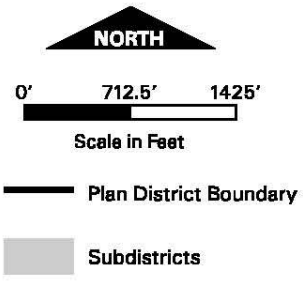
- A. Where these regulations apply.** The following regulations apply within the Industrial Noise Impact Area shown on Map 583-3.
- B. Noise insulation required.** All new residential structures must be constructed with sound insulation or other means to achieve the following design standards. Reconstructed structures where the total cost of improvements is 75 percent or more of the total assessed improvement value of the site must also meet this standard. Garages and similar accessory structures that do not include living space are exempt from the standards:
1. 45 dBA hourly Leq interior sound level during daytime hours (7:00 am to 10 pm); and
 2. 38 dBA hourly Leq interior sound level during nighttime hours (10:00 pm to 7:00 am).
- C. Certified by acoustical engineer.** An engineer registered in Oregon who is knowledgeable in acoustical engineering must certify that the building plans comply with the design standards for sound insulation prior to the issuance of a building permit.
- D. City provides list.** The City will provide a list of at least three registered engineers knowledgeable in acoustical engineering.

Commentary

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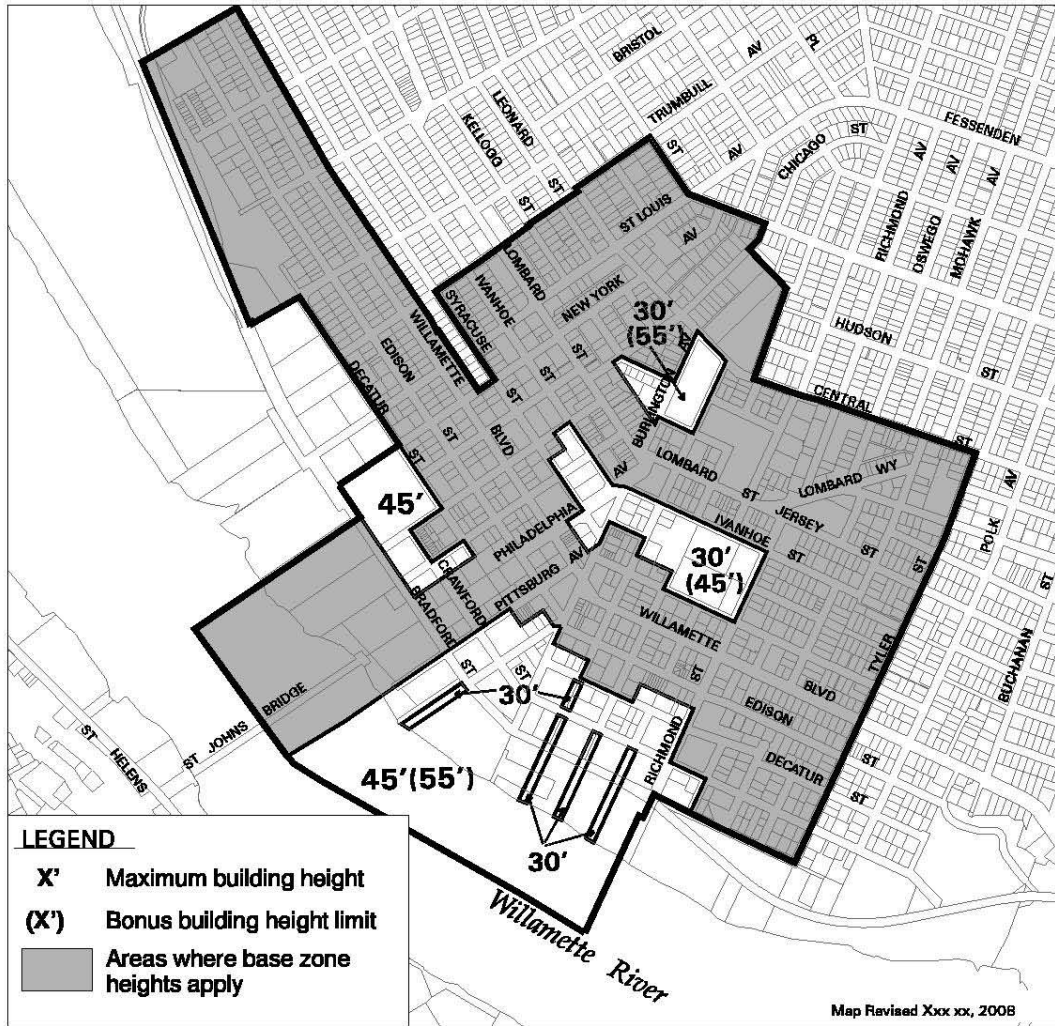
Map 583-1
Proposed
St Johns Plan District
and Subdistricts



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Commentary

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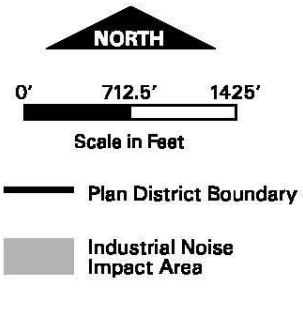
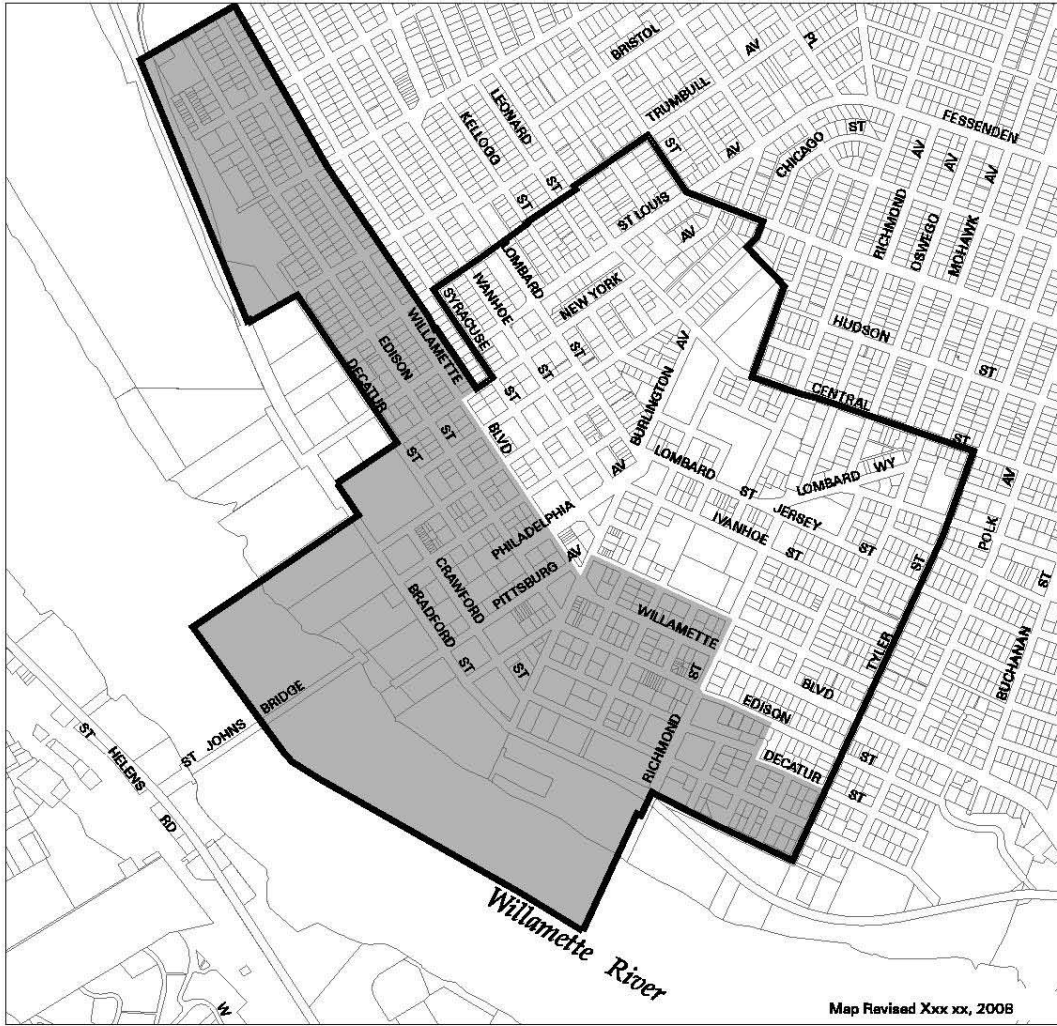


Map 583-2 Proposed St Johns Plan District Maximum Heights

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Commentary

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Map 583-3 Proposed St Johns Plan District Industrial Noise Impact Area

Bureau of Planning • City of Portland, Oregon

Commentary

33.585 Swan Island Plan District

This plan district will be deleted. Many of the provisions of this plan district have been integrated into the regulations of the 33.475, River Overlay Zones, and some of the regulations are obsolete.

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CHAPTER 33.585

SWAN ISLAND PLAN DISTRICT

~~(Added by Ord. No. 167054, effective 10/25/93. Amended by: Ord. No. 167650, effective 6/10/94;
Ord. No. 174263, effective 4/15/00.)~~

Sections:

General

~~33.585.010 Purpose~~

~~33.585.020 Where the Regulations Apply~~

Use Regulations

~~33.585.030 Additional Allowed Primary Uses~~

~~33.585.040 Additional Allowed Accessory Uses~~

Development Standards

~~33.585.050 Landscaping Within the Greenway Setback~~

~~Map 585-1 Swan Island Plan District~~

General

33.585.010 Purpose

~~The Swan Island Plan District is intended to foster the continuation and growth of the Portland Ship Repair Yard. The shipyard is a primary industry dependent on the Willamette River. Activities occurring in the shipyard cover a range that runs from heavy industrial to temporary housing for the crews of ships undergoing repair or refitting. The variety of sizes and types of ships and industrial construction projects attracted to the shipyard frequently requires that the area be reconfigured. The provisions of the Swan Island Plan District are intended to foster the growth and competitiveness of this unique waterfront basic industry. The provisions of this plan district replace the Swan Island Development Program's provisions affecting the transportation and circulation components of the island's development within the plan district.~~

33.585.020 Where the Regulations Apply

~~The regulations of this chapter apply to the Swan Island Plan District. The boundaries of the plan district are shown on Map 585-1 at the end of this chapter, and on the Official Zoning Maps.~~

Use Regulations

33.585.030 Additional Allowed Primary Uses

~~**A. Purpose.** Because the demand for use of the ship repair facilities is not constant it is in the public interest to allow nonriver related or nonriver dependent activities to temporarily use the underutilized portions of the repair yard facility.~~

~~**B. Additional primary uses allowed.** Within the Swan Island Plan District the following construction activities that are not river related and river dependent are permitted: construction of modular housing, large scale metal fabrication of such things as cranes, bridge trusses and spans, platforms and derricks, and military and aeronautics machinery.~~

Commentary

~~33.585.040 Additional Allowed Accessory Uses~~

- ~~**A. Purpose.** The nature of the ship repair activity brings to the site the ship's crews whose living quarters are on board vessels which are being repaired. The large size and unique nature of the activity requires more flexibility in the area of accessory use activities than are allowed by the yard's industrial zoning.~~
- ~~**B. Additional accessory uses.** The following additional accessory uses are allowed within the Swan Island Plan District.~~
- ~~1. Office: Temporary (up to 2 years) office trailers, office space for contractors and subcontractors, offices of naval architects, testing services and government offices.~~
 - ~~2. Household or Group Living: Temporary (up to 2 years) housing for Navy and other vessel crews. Housing is allowed only if associated with a ship repair/refurbishing project.~~
 - ~~3. Industrial Services: Welding, machine tooling, metalworking, carpentry, plumbing, and other building activities supporting a ship repair or other large construction project occurring in the shipyard are allowed for up to 2 years. Surface preparation and painting of ships and other equipment being constructed in the ship repair yards. Warehousing of materials and supplies needed for ship repair and fabrication projects. Exterior storage and laydown areas for ship's and contractor's equipment and supplies. Temporary storage of equipment used to cleanup or manage hazardous waste. In ground fuel tanks and pumps for shipyard tenants. Grit storage and handling and grit recycling. Barge mounted surface preparation and coating facilities. Temporary storage of vehicles and equipment.~~

Development Standards

~~33.585.050 Landscaping Within the Greenway Setback~~

- ~~**A. Purpose.** The Portland Ship Repair facilities are designed to allow their flexible modification and reconfiguration. This flexibility is essential both for the shipyard's ability to accommodate multiple concurrent projects and its ability to accommodate the wide variety of ship types and sizes that are attracted to its facilities. The City's greenway zone regulations assume that developed property along the Willamette will be relatively stable in its configuration and require that activities that are not water-related or water-dependent be separated from the top of the river's bank by a landscaped greenway setback. The regulations of this section are intended to accommodate the ongoing changes in facility configuration inherent in the shipyard's operations while also addressing the appearance and character of the Willamette's riverbank.~~

Commentary

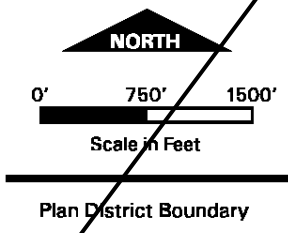
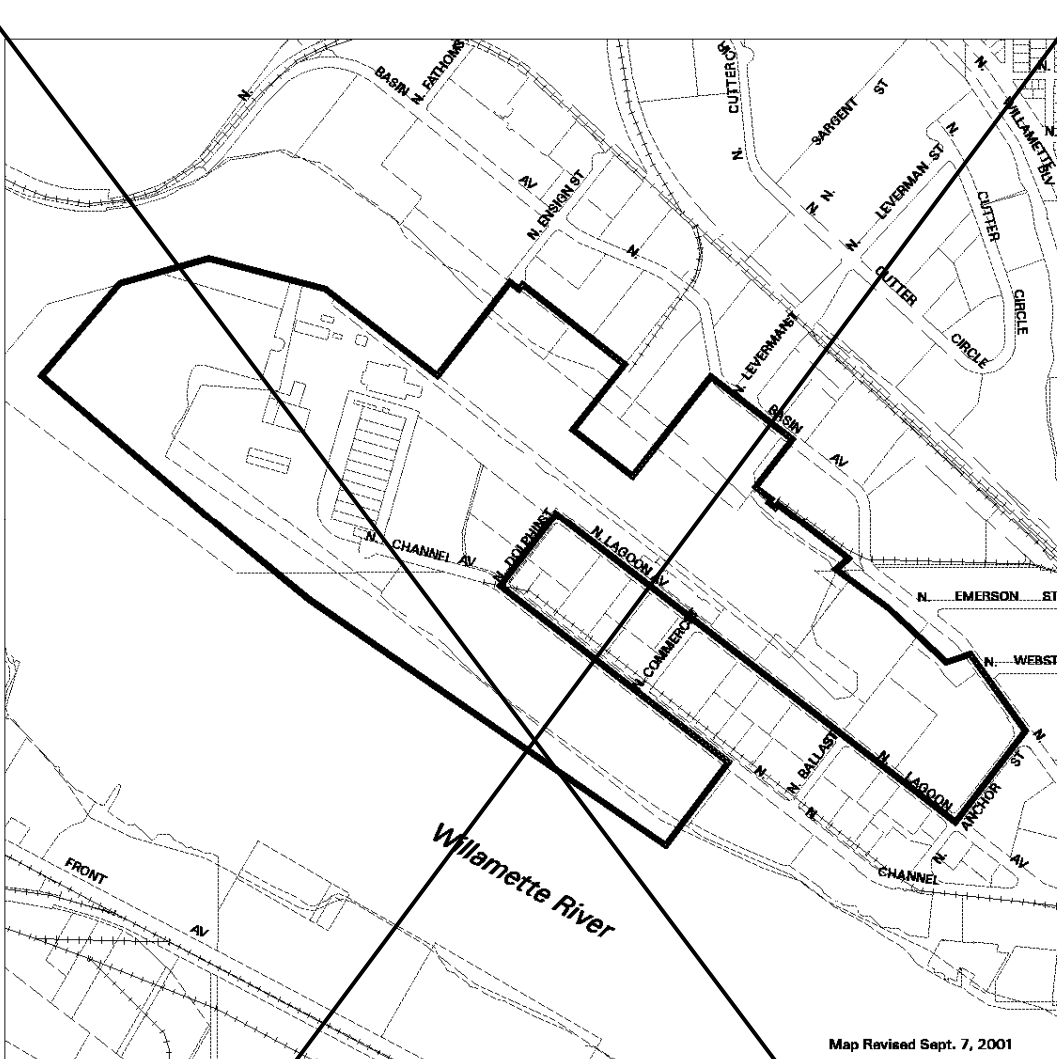
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~~**B. Alternative greenway setback landscaping requirements.** As an alternative to compliance with Section 33.440.210 Greenway Setback, a riverbank development mitigation plan may be developed and implemented. Such a mitigation plan must conform with the following requirements:~~

- ~~1. Procedure. The riverbank mitigation plan will be reviewed through a Type III procedure. Approval and compliance with the river bank mitigation plan will constitute the required greenway review for building permit applications within the area covered by the mitigation plan.~~
- ~~2. Approval Criteria. The approval criteria for a riverbank mitigation plan are:
 - ~~a. The mitigation plan includes a strategy for improving the appearance of the riverbank as seen from the water. Riverbank appearance improvements may include the use of landscaped areas; public art; temporary screening mechanisms; enhancement of riverbank habitat areas for fish, wildlife and native vegetation; and, establishment of locations for public access to the riverbank and river surface.~~
 - ~~b. The mitigation plan recognizes that views of ships and industrial construction projects are in themselves interesting and represent an enhancement of the industrial area of the Willamette.~~
 - ~~c. The mitigation plan meets the Willamette Greenway Design Guidelines.~~~~

Commentary

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Map 585-1 Swan Island Plan District

Bureau of Planning • City of Portland, Oregon

Commentary

33.700.110 Prior Conditions of Approval

According to current code, conditions of approval for a greenway review will no longer apply in the North Reach after the River Plan is adopted because greenway review will no longer be in effect in the North Reach. While technically greenway review will no longer be in effect, River Review will replace greenway review, and many of the River Review approval criteria are similar in nature and purpose to greenway review approval criteria. In adopting the River Plan, the City is not retreating from the policies implemented through a greenway review, instead the City is merely renaming the review. Therefore, this section will be amended to ensure that the conditions of approval for a greenway review continue to apply after the River Plan/North Reach is adopted.

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33.700.110 Prior Conditions of Land Use Approvals

This section addresses situations where a use, development, or land division was approved with conditions as part of a land use review under zoning or land division regulations that no longer apply to the site. Over time, there are instances when uses or development previously approved with conditions are subject to new zoning or land division regulations. This may result from a change of the content of zoning or land division regulations or from legislative zone changes including annexation rezonings.

A Conditions of approval prior to 1981. (No Change)

B. Conditions of approval after 1981. The regulations stated below apply to all prior conditions of approval for all types of land divisions, Planned Unit Developments (PUD), and any other quasi-judicial review approved in association with a land division or PUD, and for land use reviews applied for after January 1, 1981, unless the conditions of approval or the ordinance adopting the conditions provide for their continuance.

1.-3. (No Change)

4. Greenway review. If a use or development is subject to conditions under a greenway review, the conditions continue to apply.

45. Other land use actions. If the use or development was approved with conditions under a review which is no longer in effect on the site (such as site review, design review, significant environmental concern review), the conditions no longer apply.

Commentary

33.810.020 Initiating a Comprehensive Plan Map Amendment

Map 810-1 shows prime industrial land in the working harbor. Prime industrial lands are areas possessing characteristics that are difficult or impossible to replace in the region. Nearly all of the industrial sanctuary land in the North Reach is identified as prime industrial land and by Metro as Regionally Significant Industrial Area. In the working harbor, these lands are where Oregon's primary rail, highway, water and pipeline infrastructure converge. The prime industrial land in the working harbor functions as intact, buffered districts and supports a significant share of the region's economic base and reduces freight transportation costs for Oregon consumers and exporters. The economic viability of the working harbor would be undermined by converting prime industrial land to another zone. For these reasons, Planning Commission recommends that quasi-judicial comprehensive plan map amendments be prohibited for land shown on Map 810-1.

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33.810.020 Initiating a Comprehensive Plan Map Amendment

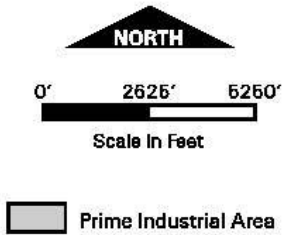
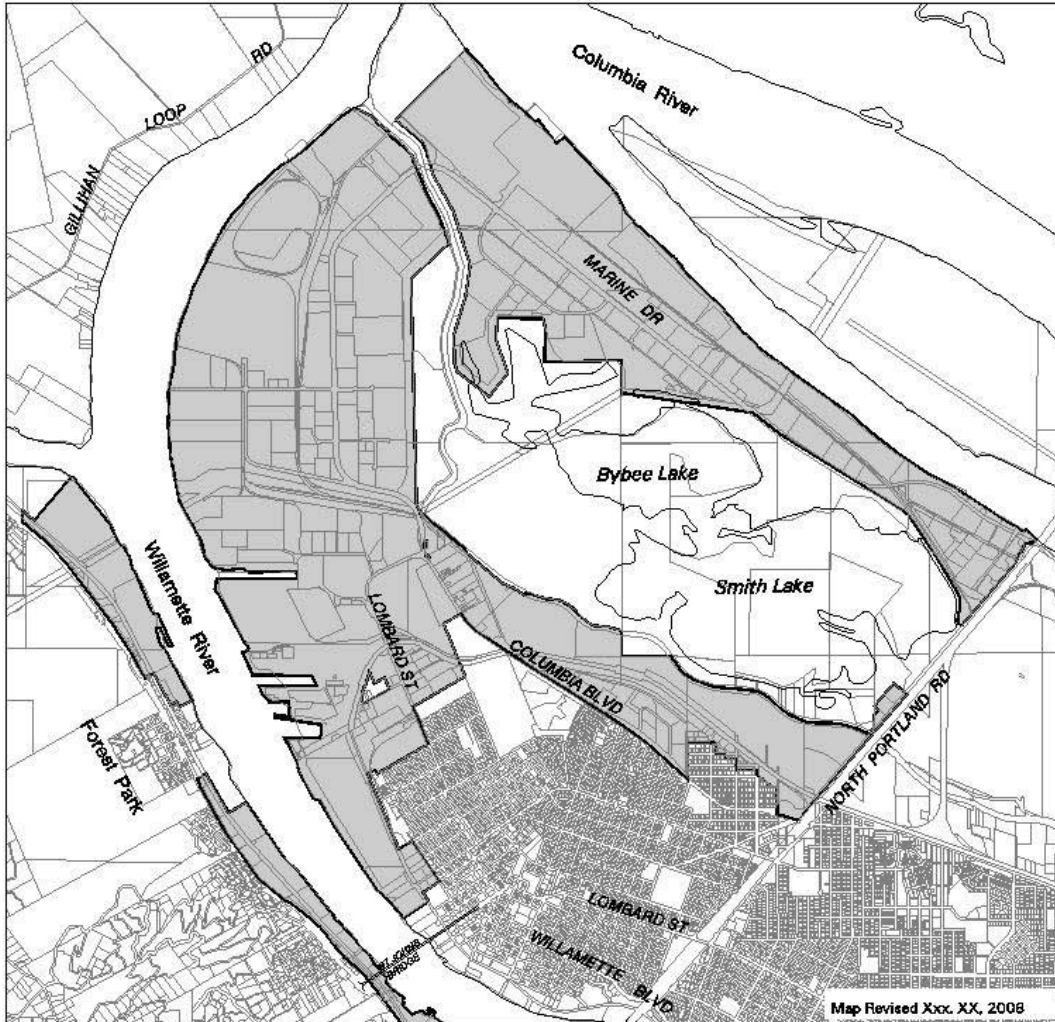
A. Quasi-Judicial.

1. General. Requests for Comprehensive Plan Map amendments ~~which~~ that are quasi-judicial may be initiated by an applicant, the Planning Commission, or the City Council. The Director of BDS may request that the Planning Commission ~~to~~ initiate an amendment. Initiations by a review body are made without prejudice ~~towards~~ against the outcome.
2. Exception. Quasi-judicial Comprehensive Plan Map amendments are prohibited within prime industrial land shown on Map 810-1 unless initiated by the Planning Commission or City Council.

- #### **B. Legislative.**
- Requests for Comprehensive Plan Map amendments ~~which~~ that are legislative may be initiated by the Planning Commission or the City Council. Others may request the Planning Commission to consider an initiation. Initiations by a review body are made without prejudice ~~towards~~ against the outcome.

Commentary

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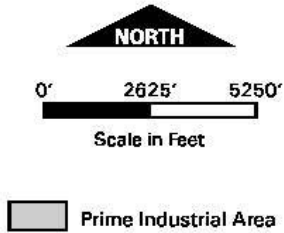
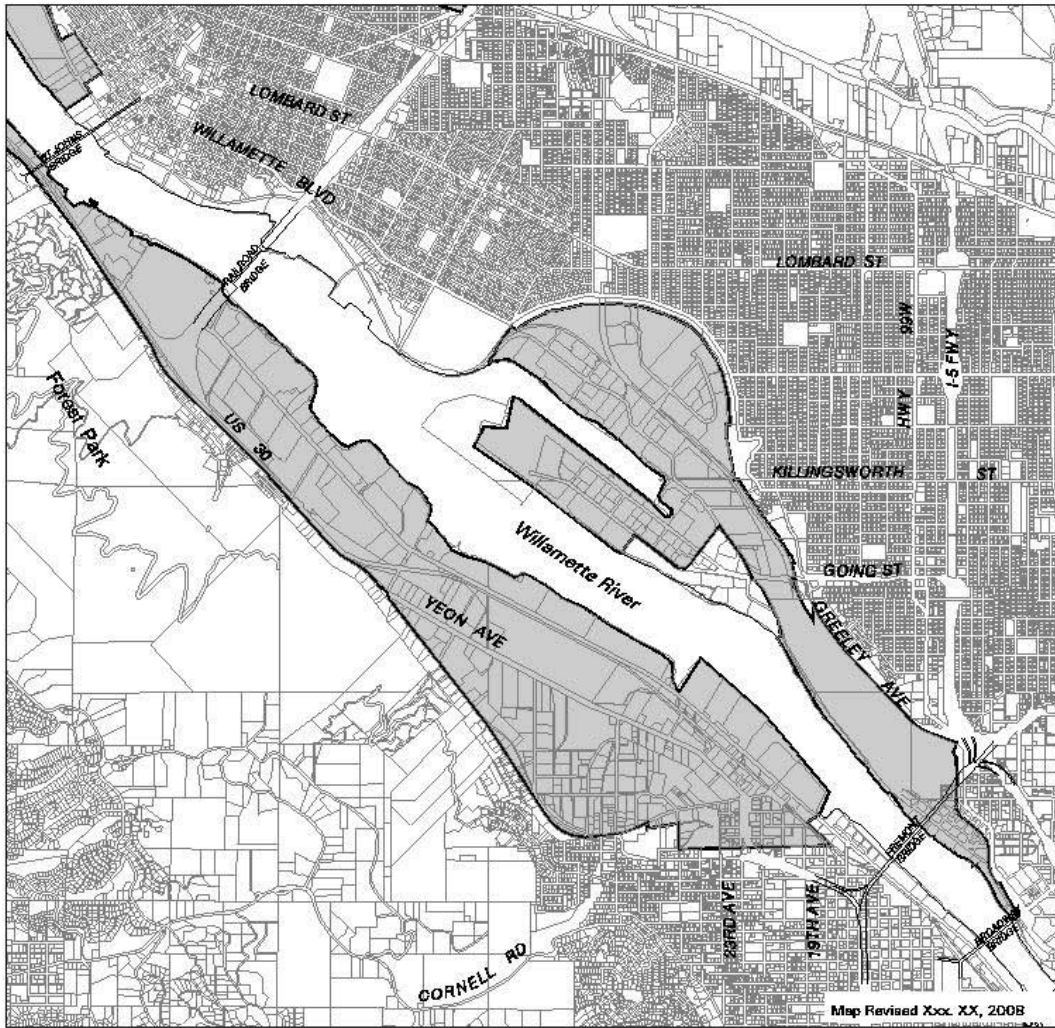


Map 810-1
Proposed
Prime Industrial Land
Map 1 of 2

Bureau of Planning & Sustainability • City of Portland, Oregon

Commentary

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Map 810-1
Proposed
Prime Industrial Land

Map 2 of 2

Bureau of Planning & Sustainability • City of Portland, Oregon

Commentary

33.815.130.E Residential uses in the EG2, EG1, IG2, IG2 and IH zones.

The revisions to approval criterion E are intended to ensure that the future residents of projects in industrial and employments zones are protected from impacts from nearby light and heavy industrial uses. The changes clarify existing code language and policy.

The layout of the site and the design of the structures should address the types and levels of impacts from nearby industrial facilities. Nearby has been clarified to mean within 1000 feet of the site. This will ensure that potential conflicts (including complaints from neighbors) that could arise between the residents and the industrial uses are minimized to the extent practicable. It will also ensure that impacts from noise and light have little, if not zero, negative impact on the health and wellbeing of the residents.

CHAPTER 33.815 CONDITIONAL USES

33.815.130 Residential Uses in the EG1, EG2, IG1, IG2, and IH Zones

These approval criteria promote the preservation of land for industrial uses while allowing residential uses in limited situations where they will not interfere with industry. Residential uses in these zones are only protected from nuisance impacts, including noise, odor and light, to the same standard as uses allowed by right. In the IG1, IG2, and IH zones, criterion A., B., C., and D. must be met. In the EG1 and EG2 zones, criterion A., B., and C. must be met and either D. or E. The approval criteria are as follows:

- A.** The proposed use will not have a significant adverse effect on truck and freight movement.
- B.** The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street designations and capacity, level of service or other performance measures; access to arterials; connectivity; transit availability; on-street parking impacts; access restrictions; neighborhood impacts; impacts on pedestrian, bicycle, and transit circulation; and safety for all modes;
- C.** City-designated scenic resources are preserved; and
- D.** The proposal is for houseboats or houseboat moorages which will not interfere with industrial use of the waterway or with adjacent industrial uses; or
- E.** The proposal is for new development where:
 - 1. The proposal can be designed and developed so that housing is ~~buffered~~protected from potential nuisance impacts, including noise, odor and light, from uses allowed by right in the zone and other employment and industrial zones within 1000 feet of the site; and
 - 2. The proposal includes a site and building designs, a landscape plan, and a transportation plan that~~which~~ will limit to the maximum extent practicable any conflicts between residential, employment, and industrial uses. Techniques that can be used to limit conflicts include additional vegetation, setbacks, or soundwalls.

Commentary

This is a new chapter. For ease of readability, the text is not underlined.

33.840 Greenway Goal Exception

Statewide Planning Goal 15 requires that development be separated from the river. In order to meet this requirement the City of Portland implements a greenway setback that requires that development that is non-river-dependent and non-river-related set back a certain distance from the top of bank. In the South Waterfront subdistrict, the setback is 100 feet. Planning Commission is recommending requiring a 50 foot setback in certain areas of the North Reach. The bulk of the greenway area outside of the North Reach has 25 foot setback.

A greenway goal exception is currently required in situations where an applicant proposes to place development that is not river-dependent or river-related within or riverward of the greenway setback. Planning Commission recommends carrying forward this requirement in the River Overlay Zones in the North Reach.

**CHAPTER 33.840
GREENWAY GOAL EXCEPTION**

Sections

- 33.840.010 Purpose
- 33.840.020 When a Greenway Goal Exception is Required
- 33.840.040 Procedure
- 33.840.100 Application Requirements
- 33.840.200 Approval Criteria

33.840.010 Purpose

33.840.020 When A Greenway Goal Exception is Required

Approval of an exception to Statewide Planning Goal 15 - Willamette Greenway, is required to locate a development or right-of-way that is not river-dependent or river-related within or riverward of the greenway or river setback. A greenway goal exception is not required to add revetments to a riverbank.

33.840.040 Procedure.

A greenway goal exception is processed through a Type III procedure.

33.840.200 Approval Criteria

Requests for a greenway goal exception will be approved if the review body finds that the applicant has shown that all of the following approval criteria are met:

- A.** The proposed use is allowed in the base zone by right, with limitations, or as a conditional use;
- B.** The proposal will not have a significant adverse effect on identified natural resources and functional values of the site or on abutting sites or water areas;
- C.** The proposal will not significantly reduce lands available for river-dependent or river-related uses within the City;
- D.** The proposal will provide a significant public benefit;
- E.** The intensification of existing uses or change in use must be limited, to the greatest possible degree, so that such lands will remain compatible with the preservation of the natural, scenic, historical, and recreational qualities of such lands;
- F.** The proposal cannot reasonably be accommodated in a location that does not require a goal exception;
- G.** Of all other potential locations within the greenway that require a goal exception, there are none with significantly better long-term environmental, economic, social, and energy consequences after mitigation measures;
- H.** The proposal is compatible with other adjacent uses, or will be so rendered through measures designed to reduce adverse impacts; and
- I.** Development and fills riverward of the river setback must show that there are no practical on-site alternatives that achieve the same level of public benefit.

Commentary

This is a new chapter. For ease of readability, the text is not underlined.

33.860 Comprehensive Natural Resource Plans

This chapter has been designed to allow a comprehensive review of multiple development actions occurring over time in natural resource areas. This review will allow applicants to plan development and mitigation actions within the City's natural resource overlay zones for up to 10 years. The City in turn will be able to evaluate the development proposals within the context of the overall cumulative impacts on natural resource values and require mitigation accordingly.

In addition, through a Comprehensive Natural Resource Plan, a property owner can gain flexibility to conduct mitigation in a phased approach that is more in line with how the development activity is anticipated to unfold over the years. This will help to avoid situations where mitigation for one development action is conducted and then removed a few years later when additional development is approved. The Comprehensive Natural Resource Plan will allow a coordinated approach to planning development over time so that development actions and mitigation will occur in a coordinated, efficient and holistic manner.

These plans are intended as a tool to provide flexibility for universities (where a Conditional use Master Plan is also required), or for large industrial facilities with ownerships that span multiple overlay zones (such as the Port). A Comprehensive Resource Review can take the place of Environmental Review, Pleasant Valley Resource Review or River Review. Comprehensive Resource Review can not take the place of a Greenway Review because Greenway Review includes much more than just natural resource considerations. Greenway Review also considers design elements, the relationship between the structures and the public realm and public access to the Willamette River Greenway. These are not issues that can be addressed at this time through a Comprehensive Natural Resource Plan. As the River Plan progresses into planning for the Central and South reaches, staff will integrate the greenway and river codes and at that time the option for utilizing the Comprehensive Natural Resource Plan process will be made available for the Central and South reaches.

This is a new chapter. For ease of readability the text is not underlined.

CHAPTER 33.860
COMPREHENSIVE NATURAL RESOURCE PLANS

Sections

- 33.860.010 Purpose
- 33.860.020 When a Comprehensive Natural Resource Plan Is Allowed
- 33.860.030 Duration of a Comprehensive Natural Resource Plan
- 33.860.040 Procedure
- 33.860.050 Amendments to a Comprehensive Natural Resource Plan
- 33.860.100 Application Requirements
- 33.860.200 Approval Criteria
- 33.860.250 Overlay Zone Map Refinement

33.860.010 Purpose

For sites within one or more of the City's natural resource overlay zones, a Comprehensive Natural Resource Plan is intended to allow for the following:

- A.** Comprehensive consideration of future plans for sites where multiple development actions are anticipated over time within one or more natural resource overlay zones. An adopted resource plan may substitute for case by case Environmental Review, Pleasant Valley Resource Review, or River Review. Comprehensive Natural Resource Plans may be completed at various levels of detail. Generally, the more specific the plan, the less review will be required as the future development is built;
- B.** Comprehensive consideration of the long-term cumulative impacts of development within a natural resource overlay zone, with attention paid to site-specific goals and objectives. With a Comprehensive Natural Resource Plan impacts to natural resources may be avoided by coordinating the timing of different development actions;
- C.** Mitigation and resource enhancement strategies that occur throughout the life of the plan, with greater flexibility for when and how specific mitigation actions occur in relation to specific development impacts;
- D.** A more integrated structure for considering overlay zone mapping refinements; and
- E.** Greater coordination with local, state and federal agencies.

Commentary

3.860.040 Review Procedure

Tentative proposals may be identified in a *Comprehensive Natural Resource Plan*. These are development actions that are generally anticipated, but lack sufficient detail to evaluate the details. For example construction management plans may not be available until the specific designs are completed. These tentative proposals can be approved subject to a second Type 1 review to evaluate those details.

This is a new chapter. For ease of readability the text is not underlined.

33.860.020 When a Comprehensive Natural Resource Plan Is Allowed

A Comprehensive Natural Resource Plan is allowed as an alternative to Environmental Review, Pleasant Valley Resource Review, or River Review for sites that are fully or partially within one or more of the following natural resource overlay zones:

- A. Environmental Protection;
- B. Environmental Conservation;
- C. Pleasant Valley Natural Resource; or
- D. River Environmental.

33.860.030 Duration of a Comprehensive Natural Resources Plan

The Comprehensive Natural Resource Plan must include proposed development and possible future development that might occur within the next 10 years. An approved resource plan remains in effect until development allowed by the plan has been completed or the plan is amended or superseded.

33.860.040 Procedure

A Comprehensive Natural Resource Plan is processed through a Type III procedure. Some proposals in a Comprehensive Natural Resource Plan may be identified as tentatively approved, and subject to an additional Type I procedure at a later date. The additional review will evaluate more detailed proposals and ensure conformance with the plan.

33.860.050 Amendments to a Comprehensive Natural Resource Plan

Amendments to a Comprehensive Natural Resource Plan are required for any development within the boundaries of the River Environmental, Pleasant Valley Natural Resources, environmental conservation, or environmental protection overlay zones that is not in conformance with the approved Comprehensive Natural Resource Plan. Amendments are not required for development listed as exempt from the relevant overlay zone regulations. Amendments are subject to the same approval criteria as the initial resource plan, plus the additional criteria in 33.860.200. The thresholds and procedures for amendments are stated below.

- A. **Type III procedure.** Unless the resource plan specifically provides differently, the following amendments to a resource plan are processed through a Type III procedure:
 - 1. Any proposed development within the environmental protection overlay;
 - 2. A proposed reduction in the area of the environmental protection overlay;
 - 3. Proposed development to be added to the site that was not included in the original resource plan;
 - 4. Substantial changes to conditions of approval; and
 - 5. Proposed development that was previously reviewed, but was denied because it was found not to be in conformance with the approval criteria.

Commentary

3.860.100.C Application Requirements

Comprehensive Natural Resource Plans may be completed at various levels of detail. Generally, the more specific the plan, the less review will be required as the future uses and development are built.

This is a new chapter. For ease of readability the text is not underlined.

- B. Type II procedure.** Unless the resource plan specifically provides differently, amendments to a resource plan not specifically stated in Subsection A. above are processed through a Type II procedure.

33.860.100 Application Requirements

An application for a Comprehensive Natural Resource Plan must include the following components:

- A.** An inventory of identified significant natural resources and functional values present within the site. Identified resources and functional values are those identified and described in the applicable City-adopted Natural Resources Inventory. The applicant may choose to provide a site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the location, type, extent, and quality of the City designated natural resources on the site. This assessment may verify or challenge the site feature information in the City's inventory. Site features include, for example, physical aspects of the site such as streams, wetlands, seeps and springs, topography, floodplains, vegetation, special habitat areas, or use of the site by plant/animal species of interest;
- B.** A description of proposed natural resource overlay zoning map refinements to be approved with the adoption of the resource plan.
- C.** A list of proposed development within natural resource areas to be approved with the adoption of the resource plan. The list must identify the development that will be allowed without further land use reviews, and the development that will be tentatively approved.
- D.** Other information necessary to understand the natural resource impacts associated with the listed development proposals.
- E.** A list of management objectives and strategies that will be used to maintain or enhance identified resources and functional values.
- F.** A description of the specific natural resource enhancement and mitigation actions proposed with the resource plan. This may include actions to be taken both on- and off site, as well as specific physical actions and programmatic actions related to natural resource conservation and protection.
- G.** Site plans and other maps necessary to understand the listed development and mitigation actions anticipated over the life of the resource plan, including maps of areas where mitigation and enhancement will occur and where development and uses will occur.
- H.** Timetables for the development and mitigation actions;
- I.** A summary of anticipated state and federal permits required for the proposed development and mitigation actions; and
- J.** The supplemental application requirements that would be required if the proposal were going through Environmental Review, River Review, or Pleasant Valley Resource Review.

Commentary

33.860.200 Approval Criteria

The approval criteria for a Comprehensive Natural Resource Plan have been modeled on the approval criteria for a Conditional Use Master Plan. The criteria focus comprehensively on the proposed development actions that will occur over the life of the plan. The criteria address the cumulative impacts of development over time, mitigation and phasing for mitigation actions, and the integration of resource conservation, protection and enhancement into the overall goals for the site.

33.860.200.D This criterion describes how to balance the need for detailed plans with the level of detail possible with a comprehensive plan. It allows certain actions to be identified for additional review. Tentative approval is appropriate for development that is generally anticipated but lacks specific development plans at the time of the resource plan submittal.

This is a new chapter. For ease of readability the text is not underlined.

33.860.200 Approval Criteria

A Comprehensive Natural Resource Plan, or an amendment to a Comprehensive Natural Resource Plan, will be approved if it meets the following approval criteria:

- A.** The plan establishes coordinated phasing of the development actions within the natural resource overlay zones, with the goal of avoiding impacts that might arise if each action were planned separately. The plan includes the timing of anticipated construction access routes, building construction sequencing, and disturbance area boundaries for the site as a whole;
- B.** The plan will integrate natural resource conservation, protection and enhancement with other site planning plan goals and objectives;
- C.** On balance, the proposed mitigation demonstrates that all anticipated significant detrimental impacts on identified resources and functional values will be compensated for within the life of the plan. Each mitigation action is not required to directly correlate with a specific development proposal, but the overall mitigation plan will be evaluated against the overall list of anticipated uses and development actions, including cumulative impacts. The mitigation plan must include performance standards for judging mitigation success, a specific timetable for mitigation actions during the life of the plan, and a specific monitoring schedule;
- D.** The plan must demonstrate that all relevant approval criteria that would apply if the proposal was proceeding through an Environmental Review, Pleasant Valley Natural Resource Review, or River Review, including approval criteria from an adopted Natural Resource Management Plan, are met. Consideration will be given to the level of detail provided with the plan application. Proposals that address most of the relevant approval criteria, but are not detailed enough to address all of the relevant approval criteria may be identified for tentative approval. Conditions of approval may be imposed to list those aspects of the plan subject to tentative approval, and to specify which approval criteria need further evaluation through a later review.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

33.860.250 Overlay Zone Map Refinement

The boundaries of the River Environmental, environmental conservation, environmental protection, and Pleasant Valley Natural Resource overlay zones may be modified as part of a Comprehensive Natural Resource Plan in any of the three situations stated below. All other requests for boundary changes are processed as a change of an overlay zone, as stated in Chapter 33.855, Zoning Map Amendments.

- A. Creation of new resource areas.** The natural resource overlay zone will be expanded as part of the Comprehensive Natural Resource Plan to include areas identified for mitigation.
- B. Loss of existing resource areas.** The natural resource overlay zone may be removed from an existing natural resource zone where approved development will eliminate the natural resource.
- C. Minor modification of natural resource zone boundaries based on a more detailed site-specific environmental study.** The natural resource zone line location may be modified to more accurately reflect the location of the identified resources and functional values on the site. The identified resources and functional values are those identified and described in the applicable City-adopted Natural Resources Inventory. The applicant may supplement the City's inventory information with a site specific assessment. The proposed new overlay zone line must be consistent with any legislative intent expressed when the overlay was applied to the site.

Commentary

This is a new chapter. For ease of readability, the text is not underlined.

33.865 River Review

This chapter contains the review process, application requirements and approval criteria for River Review. This is a new chapter and it replaces *Greenway Review* in the North Reach. Planning Commission recommends that River Review be located in the 800's series of chapter to be consistent with the organization of the Zoning Code.

This is a new chapter. For ease of readability the text is not underlined.

CHAPTER 33.865 RIVER REVIEW

Sections:

- 33.865.010 Purpose
- 33.865.020 When River Review is Required
- 33.865.030 Procedure
- 33.865.040 Supplemental Application Requirements
- 33.865.100 Approval Criteria
- 33.865.110 Modification of Site-Related Development Standards
- 33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards
- 33.865.200 Use of Performance Guarantees
- 33.865.210 Special Evaluations by a Trained Professional

33.865.010 Purpose

River Review is intended to:

- Provide a mechanism for evaluating the suitability of river front sites in the River Industrial Overlay Zone for river-dependent or river-related uses;
- Protect, conserve and enhance identified resources and functional values in the River Environmental overlay zone, compensate for unavoidable significant detrimental impact to those resources and functional values, and ensure the success of mitigation and enhancement activities;
- Help the City meet existing and future requirements pursuant to federal and state laws including the Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act, the Migratory Bird Treaty Act, and the National Flood Insurance Act;
- Provide flexibility for unusual situations. River Review allows for evaluation of alternative development scenarios that may have less detrimental impact on protected resources, and allows for the evaluation of off-site mitigation proposals;
- Provide a mechanism for the evaluation of detailed, site-specific information on the location or quality of resources and functional values;
- Provide a mechanism for modifying the location of the River Environmental overlay zone to reflect permitted changes in the location or quality of resources and functional values.
- Provide for the replacement of resources and functional values that are lost through violations of the River Environmental overlay zone standards;
- Provide a mechanism to modify the River Environmental overlay zone standards of Chapter 33.475, River Overlay Zones; and
- Allow for modifications to site-related development standards when modification will result in greater resource protection.

Commentary

33.865.020 When River Review is Required

River Plan staff anticipate that there will be fewer River Reviews in the future than there are greenway reviews today due the new option of meeting river environmental overlay zone development standards and the elimination of the *Greenway Design Guidelines*.

This is a new chapter. For ease of readability the text is not underlined.

33.865.020 When River Review is Required

River Review is required in the following situations:

- A.** When an applicant proposes a non river-dependent or non river-related primary use in the River Industrial Overlay Zone;
- B.** When a development or regulated activity in the River Environmental overlay zone is not exempt from the River Environmental overlay zone regulations and either does not meet the standards of subsection 33.475.430.B or there are no development standards applicable to the proposal;
- C.** When River Review is required to correct a violation of the River Environmental overlay zone regulations, as described in subsection 33.475.450.B.4; or
- D.** When an applicant wishes to fine tune the boundary of the River Environmental overlay zone based on a detailed environmental study that more accurately identifies the location and quality of resources and functional values. Minor boundary changes are allowed through River Review. Map error corrections are reviewed under 33.855.070, Corrections to the Official Zoning Maps, and removal of the River Environmental overlay zone is processed as a change of overlay zone as stated in 33.855.060, Approval Criteria for Other Changes; or
- E.** To modify the boundary of River Environmental overlay zone to reflect permitted changes in the location or quality of resources or functional values. The River Review zone boundary change procedure does not apply to changes caused by violations of subsection 33.475.430.B.

33.865.030 Procedure

A River Review is processed through a Type IIx procedure, except as described in subsection 33.475.450.B when River Review is required to correct a violation of the River Environmental overlay zone regulations.

33.865.040 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, the following information is required when the River Review application is for development in the River Environmental overlay zone, or for modification of the River Environmental overlay zone boundary:

- A. Supplemental site plan requirements.** One copy of each plan must be at a scale of at least one inch to 40 feet. Site plans must show existing conditions, conditions prior to a violation (if applicable), proposed development, and construction management. A mitigation site plan is required when the proposed development will result in unavoidable significant detrimental impact on the identified resources and functional values ranked high or medium in the *Willamette River Natural Resource Inventory*. A remediation action site plan is required when significant detrimental impacts occur in violation of the Code and no permit was applied for. The Director of BDS may waive items listed in this subsection if they are not applicable to the specific review; otherwise they must be included. Additional information such as wetland characteristics or soil type may be requested through the review process.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

1. The existing conditions site plan must show the following:
 - a. For the entire site:
 - (1) Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, centerline of stream, ordinary high water, or wetland boundary as appropriate
 - (2) 100-year floodplain and floodway boundaries;
 - (3) The top of bank of the Willamette River, and the structures and topographic contours referenced to determine the top of bank. The site plan depicting the top of bank must be drawn accurately to scale, and be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. The scale of the drawing must be between 1 inch = 50 feet, and 1 inch = 10 feet. Ground elevations must be shown by contour lines at 2-foot vertical intervals. See Section 33.910.030, Environmental-Related Definitions, Top of Bank;
 - (4) Boundaries of the River Environmental overlay zone. These boundaries may be scaled in relation to property lines from the Official City Zoning Maps;
 - (5) Topography shown by contour lines at two foot vertical contours in areas of slopes less than ten percent and at five foot vertical contours in areas of slopes ten percent or greater;
 - (6) Drainage patterns, using arrows to indicate the direction of major drainage flow; and
 - (7) Existing improvements such as structures, or buildings, utility lines, fences, etc.
 - b. Within the River Environmental overlay zone:
 - (1) Distribution outline of shrubs and ground covers, with a list of most abundant species; and
 - (2) Trees over 4 inches in diameter identified by species. In the case of a violation, also identify the trees that were cut or damaged by showing stump diameter and species.
2. A proposed development site plan must show the following:
 - a. Location of all proposed development;
 - b. Location of proposed utility lines and connections, stormwater systems and septic or sewer facilities;
 - c. Proposed final contour lines at 2-foot vertical intervals in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- d. All area where ground disturbance and vegetation removal will occur; and
 - e. Location and species of existing tree, shrubs and ground covers to remain;
3. A construction management site plan must show the following:
- a. All area where ground disturbance and vegetation removal will occur including equipment maneuvering areas;
 - b. Proposed grading plan with existing and proposed contours. The grading plan must show proposed alteration of the ground at 2-foot vertical contours in areas of slopes less than ten percent and at 5-foot vertical contours in areas of slopes ten percent or greater;;
 - c. Location of excavation and fill and total quantities of each;
 - d. Areas where existing topography and vegetation will not be affected by the development proposal;
 - e. Identification of trees to be removed using a bold X and the location of trees to remain including the required root protection zone;
 - f. Location of site access and egress;
 - g. Equipment and material staging and stockpile areas;
 - h. Erosion control measures; and
 - i. Measures to protect trees and vegetation.
4. An on-site or off-site mitigation or remediation site plan must show the following
- a. Distribution outline, species composition, and percent cover of ground covers to be seeded or planted;
 - b. Distribution outline, species composition, size, and spacing of shrubs to be planted;
 - c. Location, species, and size of each tree to be planted;
 - d. A planting table listing all trees, shrubs, groundcover or seeds to be installed including the ratio of seeds to area to be planted, species name (common and scientific), number, size and spacing;
 - e. The area of the mitigation site in square feet;
 - f. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;

Commentary

33.865.040.B Supplemental narrative

The *Willamette River Natural Resource Inventory* is Volumes 3A and 3B of the River Plan.

This is a new chapter. For ease of readability the text is not underlined.

- g. Water bodies to be created, including depth;
- h. Water sources to be used, including volumes; and
- i. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings.

B. Supplemental narrative. The following is required:

- 1. Impact evaluation. An impact evaluation is required to determine compliance with the approval criteria, and to evaluate practicable development alternatives for a particular site. The alternatives must be evaluated on the basis of their impact on identified resources and functional values. Significant resources and functional values are identified in the *Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)*, and a supplemental environmental assessment can be provided to more accurately identify resources and functional values on the site. In the case of a violation, the impact evaluation is used to determine the nature and scope of the significant detrimental impacts.

- a. An impact evaluation includes:

- (1) Identification, by characteristic and quantity, of the resources and their functional values found on the site. The *Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)* provides site-specific information on natural resource features including:

- open water;
- shallow water (river depth 0-20 feet);
- beach;
- riparian vegetation;
- upland and bottomland forest;
- grassland;
- flood area and floodplain;
- wetlands, streams and ponds; and
- special habitat area.

Commentary

33.865.040.B.1.b

The certified mitigation bank is currently under development. Staff are working to have the bank operational by the time this code goes into effect.

This is a new chapter. For ease of readability the text is not underlined.

The Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008) provides site-specific information on the functional values provided by the various natural resource features including:

- Microclimate and shade;
- Stream flow moderation and water storage;
- Bank function, and sediment, pollution and nutrient control;
- Large wood and channel dynamics;
- Organic inputs, food web and nutrient cycling;
- Fish and wildlife habitat;
- Habitat connectivity/movement corridor;

The Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008) also provides information on special status species, which include wildlife or plants identified by Oregon Department of Fish and Wildlife, Oregon Natural Heritage Information Center, US Fish and Wildlife Service, or NOAA National Marine Fisheries Service that are known or reasonably expected to occur within or use a site. The application must contain current information regarding any special status species known or expected to occur on the site;

- (2) Identification of significant detrimental impacts on identified resources and functional values that are unavoidable. Actions that could cause detrimental impacts and should be identified include:
 - excavation and fill both in the water and above the ordinary high water mark. The quality and source of fill material is an important factor to be considered;
 - clearing and grading;
 - construction;
 - vegetation removal;
 - altering bathymetry;
 - altering a vegetated riparian corridor or upland vegetated area;
 - altering the floodplain;
 - altering the temperature of the river especially the altering of existing cold water sources;
- (3) Evaluation of practicable alternative locations, design modifications, or alternative methods of development that both achieve the project purpose, taking into account cost and technology, and minimize significant detrimental impacts on identified resources and functional values; and
- (4) Determination of the practicable alternative that best meets the applicable approval criteria.

Commentary

This is a new chapter. For ease of readability the text is not underlined.

- b. An impact evaluation for a violation includes:
 - (1) Description, by characteristics and quantity, of the resources and functional values on the site prior to the violation; and
 - (2) Determination of the impact of the violation on the resources and functional values.
2. Biological assessment. A biological assessment developed for the purposes of a federal or state permit may be submitted in place of some or all of the impact evaluation if the biological assessment includes the information described in subparagraph B.1, above. In the event that the applicant submits a biological assessment in place of some or all of the impact evaluation, the applicant must identify which aspects of the impact evaluation are covered by the biological assessment and, if necessary, identify which pieces of information will be included in the impact evaluation.
3. Supplemental environmental site assessment. A site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the existence, location, type, extent, and quality of the natural resources and functions on the site can be provided as part of the supplemental narrative. The assessment may verify, supplement, or challenge the information in the City's inventory for the purpose of informing the impact evaluation and identifying mitigation obligations;
4. Construction management plan. Identify measures that will be taken during construction or remediation to protect the remaining resources and functional values at and near the construction site and provide a description of how areas that are not affected by the construction will be protected. For example, describe how trees will be protected, erosion controlled, construction equipment controlled, and the timing of construction; and
5. Mitigation or remediation plan. The purpose of a mitigation or remediation plan is to compensate for unavoidable significant detrimental impacts on identified resources and functional values that result from the chosen development alternative or violation. A mitigation or remediation plan includes:
 - a. Resources and functional values to be restored, created, or enhanced within mitigation or remediation area. If credits will be purchased from a City certified mitigation bank, the mitigation plan must identify the total number and the type of credits being purchased;
 - b. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;
 - c. Construction timetables;
 - d. Operations and a long-term maintenance plan;
 - e. Monitoring and evaluation procedures that include periodic reporting;

Commentary

33.865.100.A River frontage lots in the River Industrial Overlay Zone

This approval criterion must be met when an applicant wants to develop a site in the River Industrial overlay zone with a use that is not river-dependent or river-related. In order meet the criterion, the site must be found to be unsuitable for river-dependent or river-related uses. The criterion describes the types of constraints that could render a site unsuitable for river-dependent or river-related use. The parameters of the criterion are limited to physical characteristics that diminish the feasibility of improving the site for barge or ship access.

33.865.100.B Development within the River Environmental Overlay Zone

The approval criteria for development within the River Environmental overlay zone are intended to protect and conserve the natural resources and functional values that exist in the overlay zone. The approval criteria are modeled on the environmental conservation overlay zone approval criteria and will allow development to occur as long as the applicant can show that all other practicable alternatives to locating development in the resource area have been explored and are not practicable within the context of project purpose. In cases where development will occur and resource values will be diminished, mitigation is required to compensate for the loss of function due to the development. These approval criteria are not modeled on the environmental protection zone criteria because precluding all development at the river's edge would have significant detrimental impacts on the economic functional values of the working harbor.

This is a new chapter. For ease of readability the text is not underlined.

- f. Remedial actions for unsuccessful mitigation;
- g. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings; and
- h. If off-site mitigation is proposed, demonstration that on-site mitigation is not practicable or ecologically beneficial.

33.865.100 Approval Criteria.

Requests for a River Review will be approved if the review body finds that the applicant has shown that all applicable approval criteria have been met.

A. River frontage lots in the River Industrial overlay zone. In the River Industrial overlay zone, primary uses that are not river-dependent or river-related may locate on a site that fronts the river only when the site is found to be unsuitable for river-dependent or river-related uses. Evaluation factors for this determination include physical constraints such as insufficient moorage depth, barriers to moorage construction or dredging, or the improbability of the provision of street or rail access. Other suitability considerations include the size or dimensions of the site, impracticable river access or other physical characteristics that significantly impede the ability of the site to be developed with a river-dependent or river-related use.

B. Development within the River Environmental overlay zone. The applicant's impact evaluation must demonstrate that all of the following are met:

- 1. Resource enhancement projects:
 - a. There will be no net loss of total resource area; and
 - b. There will be a significant improvement of at least one functional value.
- 2. All other proposals in the River Environmental overlay zone:
 - a. Proposed development minimizes the loss of identified resources and functional values consistent with the uses that are generally permitted or allowed in the base zone without a land use review, or permitted or allowed by an approved conditional use;
 - b. Proposed development locations, designs, and construction methods have the least significant detrimental impact on identified resources and functional values of all practicable and significantly different alternatives, including alternatives on the same site but outside of the River Environmental overlay zone ;
 - c. There will be no significant detrimental impact on areas of the site reserved for mitigation, areas within the River Environmental overlay zone not proposed for development at this time, downstream river habitat within the North Reach, or other sites in the North Reach where environmental restoration is in progress or complete;

Commentary

33.865.100.B.2.d Mitigation

Mitigation for unavoidable impacts from development will be required for every River Review. Mitigation ensures that the benefits of the natural resources and functional values that currently exist in the North Reach are not lost over time.

The applicant will be required to show that the proposed mitigation compensates for all significant detrimental impacts to identified natural resources and functional values including the interim loss of resource area and functionality. Lost resource features and functions on the site will have to be fully replaced with in-kind resources, and any interim loss of functionality that will happen between the time the impacts occur and the time the mitigation site is mature will have to be addressed. This reflects a policy of no-net-loss of resource features and functional values.

On-site mitigation opportunities must be explored first before off-site mitigation can be approved. On-site mitigation is a priority in cases where there is adequate space, and appropriate conditions exist to support successful mitigation. An adequate on-site mitigation area should be able to sustain on-going resource functionality and habitat connectivity without being negatively impacted by surrounding development. On-site opportunities will be evaluated within the context of existing, proposed and future development on the site.

There are three options for off-site mitigation:

1. The first option is for the applicant to develop a mitigation plan and implement it at one of the City's identified River Restoration Sites. In this case, the applicant will be required to demonstrate that they have sufficient legal control of the mitigation area to ensure that the mitigation is successful over the long-term. This option is limited to the City's identified River Restoration Sites because those sites have been identified as important for creating a network of key habitat areas in the North Reach. Mitigation at these site will ultimately be combined with restoration that the City implements over time.
2. The second option is to pay a fee-in-lieu of mitigation. City staff are in the process of developing a procedure for quantifying a fee-in-lieu for mitigation. The applicant will be required to provide information about the resources on the site in order for the City to determine the appropriate fee. The methodology for quantifying the mitigation requirement will be based on methodologies used by the federal government when assessing mitigation requirements. The first methodology is called Habitat Evaluation Procedure and is used by the U.S. Fish and Wildlife Service. The procedure is based on indicator species and uses models to calculate a score for the habitat area being evaluated. The HEP models are run and scores are derived for the site both before and after the development, or habitat alteration, occurs and the difference between the two scores represents the impact, or loss of habitat value, that must be mitigated for. The second methodology is called Habitat Equivalency Assessment and is used by the National Oceanic and Atmospheric Administration. HEA provides an analytical framework for estimating how much restoration is needed to compensate for the temporal loss of natural resources functions (i.e. the time between when the resource function is lost and the replacement habitat has grown into full function). The outcome of the HEA equation is typically an additional number of square feet/acres/credits of restoration necessary to compensate for the interim loss of the habitat. The fee-in-lieu option is a temporary option. It will expire in two years (July 2012) when the City hopes a mitigation bank will be up and running in the North Reach. The City use the these funds on activities directly associated with restoration (e.g., land acquisition, design, construction, and long-term maintenance).

This is a new chapter. For ease of readability the text is not underlined.

d. Mitigation:

- (1) The mitigation plan must demonstrate that all significant detrimental impacts on identified resources and functional values, and the interim loss of functional value will be compensated for. The amount of mitigation due as compensation will be based on the amount and relative condition of the resources and functional values impacted by the proposal, the extent to which the project design minimizes impacts, the uniqueness of the resources and functional values, and the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site will achieve full function. To the extent practicable, the resources and functional values restored or enhanced as mitigation must be the same kind of resource, performing the same functional value as the lost resource.
- (2) Mitigation must occur on-site when practicable, and ecologically beneficial. Factors to be considered when evaluating this criterion include:
 - The potential for the long-term success of the restored resources and functional values in the mitigation area;
 - The amount, size, shape, and connectivity potential of on-site mitigation areas;
 - The location of the mitigation area in relation to existing, proposed or future development on the site, and the impact development may have on the mitigation area;
 - Contamination; and
 - Any other site specific issue or constraint.
- (3) If on-site mitigation is not practicable or ecologically beneficial, then off-site mitigation is allowed as follows:
 - At one of the City's identified River Restoration Sites. The identified River Restoration Sites are shown in the River Plan / North Reach Volume 1A. River Restoration Site #2, Kelly Point Park and Site # 6 Cathedral Park can not be used for mitigation by anyone other than the City of Portland. The applicant must own the area where the mitigation will occur, or possess a legal instrument that is approved by the City as sufficient to carry out and ensure the success of the mitigation plan (such as an easement or deed restriction);
 - Through payment of a mitigation fee-in-lieu. The Bureau of Development Services shall adopt and maintain the mitigation fee-in-lieu payment schedule. The mitigation fee-in-lieu option will expire two years after the implementation date of this provision; or
 - Through the purchase of mitigation credits from a City certified mitigation bank.

Commentary

33.865.100.B.2.d Mitigation (cont.)

3. The third option will be to purchase credits from a City certified mitigation bank. The City will develop a certification process for any private bank that wants to establish credits to sell in the North Reach.

33.865.100.B.2.e Other Regulatory Approvals

This approval criterion is intended to reduce the potential for the City to render decisions or conditions of approval that are duplicative or inconsistent with state and federal agencies that are reviewing the same proposal. One of the goals of the River Plan/North Reach is to improve regulatory efficiency and reduce instances when a City land use review decision or recommendation is at odds with or duplicative of decisions that are rendered by the Oregon Department of State Lands or the United States Army Corps of Engineers. That said, this approval criterion is not intended to obligate the City to render synonymous decisions, but the City must ensure that its decisions and recommendation do not undermine or contradict the decisions and recommendations of DSL or the COE. In most cases, meeting this approval criterion will require coordination with the state and federal agencies.

33.865.100.C Modifications to zone boundaries

These approval criteria are the same criteria used for modifications of Environmental Overlay zone boundaries and the boundary of the Pleasant Valley Natural Resource Overlay zone.

This is a new chapter. For ease of readability the text is not underlined.

- (4) In cases where the proposal is subject to mitigation as the result of obtaining permits from the Oregon Department of State Lands or the U.S. Army Corps of Engineers, the mitigation required for those permits can count toward meeting this mitigation requirement as long as that mitigation is found to adequately compensate for impacts to the identified natural resources and functional values.
- e. If other regulatory approvals have been obtained from the Oregon Department of State Lands or the U.S. Army Corps of Engineers, the conditions of approval for this River Review must not contradict, circumvent or otherwise undermine decisions made by those agencies.

C. Modification of River Environmental overlay zone boundaries. Modifications of River Environmental overlay zone boundaries that reflect permitted changes in the location or quality of resource areas will be approved upon finding that the applicant's statement demonstrates that either Paragraph C.1 or C.2 are met. For the minor modification of environmental zone boundaries based on a more detailed site specific environmental study, the applicant's impact evaluation must demonstrate that Paragraph C.3, below, is met:

1. Successful mitigation. An approved mitigation plan has been successful and a new, restored, or enhanced resource exists which should be included in the River Environmental overlay zone; or
2. Approved loss of resource area. All of the following must be met:
 - a. All approved development in a resource area has been completed;
 - b. All mitigation required of this development has been successful; and
 - c. The identified resources and functional values at the developed site no longer exist, or have been subject to a significant detrimental impact.

Commentary

33.865.110 Modification of Site-Related Development Standards

This approval criterion allows adjustments to site-related development standards to be considered and approved as part of a River Review. The applicant must show that granting the adjustment will result in greater protection of the resources and functional values on the site and that the proposal is consistent with the purpose of the standard that is being adjusted. This approval criterion is the same as a criterion used in Environmental Overlay zones and the Pleasant Valley Natural Resource Overlay zone.

33.865.120 Corrections to Violations of the River Environmental Overlay Zone Standards

These approval criteria are the same criteria that are used for violations of the Environmental Overlay zones and for violations of the Pleasant Valley Natural Resource Overlay zone.

This is a new chapter. For ease of readability the text is not underlined.

3. Minor modification of River Environmental overlay zone boundaries based on a more detailed site-specific environmental study. The River Environmental overlay zone line location may be modified to more accurately reflect the location of natural resources and functional values on the site.

33.865.110 Modifications of Site-Related Development Standards

The review body may consider modifications to site-related development standards as part of the River Review process. These modifications are done as part of the River Review process and are not required to go through the adjustment process. Adjustments to use-related development standards (such as floor-area ratios, intensity of use, size of the use or concentration of uses) are subject to the adjustment process of Chapter 33.805. In order to approve these modifications, the review body must find that the development will result in greater protection of the resources and functional values identified on the site and will, on balance, be consistent with the purpose of the applicable regulations.

33.865.120 Corrections to violations of the River Environmental Overlay Zone Standards

For corrections to violations of the River Environmental development standards the application must meet all applicable approval criteria stated in Subsection 33.865.100.B, above, and Subsection A, and Paragraphs B.2 and B.3, below. If these criteria cannot be met, then the applicant's remediation plan must demonstrate that all of the following are met:

- A. The remediation is done in the same area as the violation; and
- B. The remediation plan demonstrates that after its implementation there will be:
 1. No permanent loss of any type of resource or functional value;
 2. A significant improvement of a least one functional value; and
 3. There will be minimal loss of resources and functional values during remediation until the full remediation program is established.

33.865.200 Performance Guarantees

The Director of BDS may require performance guarantees as a condition of approval to ensure mitigation or remediation. See Section 33.700.050, Performance Guarantees.

33.865.210 Special Evaluation by a Professional

A professional consultant may be hired to evaluate proposals and make recommendations if the Director of BDS finds that outside expertise is needed due to exceptional circumstances. The professional will have expertise in the specific resource or functional value or in the potential adverse impacts on the resource or functional value. A fee for these services will be charged to the applicant in addition to the application fee.

Commentary

33.910 Definitions

Ordinary High Water Mark: This term is used in several chapters of the Zoning Code and currently the code does not provide a definition. There are several different understandings of how to identify this mark. Stakeholders have asked for a clear statement regarding which definition to apply in relation to Zoning Code regulations. The definition included here is the definition that the U.S. Army Corps of Engineers uses and requires that the location of the mark be determined in the field.

Stream: The modification to this definition provides additional clarity for the sub-categories of perennial, intermittent, and ephemeral streams. Planning Commission proposes to measure the default top of bank differently based on whether the stream is perennial, intermittent or ephemeral.

Top of Bank: The existing definition of top of bank is problematic when the shoreline is variable. The definition has been clarified and a section has been added to 33.930 describing how to measure top of bank.

This new definition would also apply to other banks outside the North Reach. The change from degrees to percent slope makes this language more consistent with other code chapters, which refer to percent slope.

Language to be **added** is underlined.
Language to be **deleted** is shown in ~~strikethrough~~.

33.900.010 List of Terms

The following terms are defined in Chapter 33.910, Definitions, unless indicated otherwise.

Dredge Material

Ordinary High Water Mark

33.910.030 Definitions

Bulkhead. A retaining wall along a waterfront.

Cargo conveyor. A cargo conveyor is an elevated conveyance system that is supported by one or more footings on the ground and is used to transfer material to and from a vessel in the river.

Environment-Related Definitions

- **Drainageway.** An open linear depression, whether constructed or natural, which functions for the collection and drainage of surface water. It may be permanently or temporarily inundated. Drainageways include sloughs. Road-side ditches are not drainageways unless the open channel is a segment of an existing stream or drainageway.
- **Dredge Material.** Rock, gravel, sand, silt and other inorganic substances removed from waters.
- **Ordinary High Water Mark.** That line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- **Stream.** An area where enough natural surface water flows to produce a stream channel, such as a river or creek, that carries flowing surface water during some portion of the year. This includes:
 - The water itself, including any vegetation, aquatic life, or habitat;
 - Beds and banks below the high water level which may contain water, whether or not water is actually present;
 - The floodplain between the high water level of connected side channels;
 - Beaver ponds, oxbows, and side channels if they are connected by surface flow to the stream during a portion of the year; ~~and~~
 - Stream-associated wetlands.
 - Perennial stream. Stream that flows throughout the year; permanent stream;
 - Intermittent stream. Stream that flows only at certain times of the year, as when receiving water from springs or from a surface source; stream that does not flow continuously, as when water losses from evaporation or seepage exceed the available stream flow; and
 - Ephemeral stream. Stream or portion of stream that flows briefly in direct response to precipitation in the immediate vicinity, and with channels at all times above water table.
- **Top of Bank.** The first major change in the slope of the incline from the ordinary high water ~~mark level~~ of a water body. See Section 33.930.150, Measuring Top of Bank. A major change is a change of ten degrees or more. If there is no major change within a distance of 50 feet (measured horizontally) from the ordinary high water ~~mark level~~, then the top of bank will be the default location described in Section 33.930.150, Measuring Top of Bank. ~~the elevation 2 feet above the ordinary high water level.~~

Commentary

River-Related: The region's marine and rail transportation activity are concentrated in the North Reach and are interdependent parts of a multimodal trade gateway. Uses in the North Reach sometimes switch between primary reliance on river access and primary reliance on rail infrastructure. These switches are generally temporary in nature and are influenced by rail rates, switches between cargo types and moorage dredging limitations. The current definitions of river-dependent and river-related do not address this occurrence and the result could have negative implications for the long-term viability of the working harbor. Planning Commission recommends amending the definition of river-related so that a use that is primarily dependent on rail access is considered to be river-related if the site has a dock or other infrastructure that can be used for loading or unloading cargo from the ship or barge. The difference between river-dependent and river-related in this case is that the river-related use does not have to be dependent on access to a water body.

Planning Commission also recommends amending the definition of river-related to clearly allow accessory businesses that need to be located on a riverfront site because they are integral to the operation of the primary use.

Language to be **added** is underlined.
Language to be **deleted** is shown in ~~striketrough~~.

River-Related. A use or development ~~which that~~ is not directly dependent upon access to a water body but which provides goods or services that are directly associated with river-dependent land or waterway use or development, and which, if not located adjacent to water, would result in a public loss of quality in the goods or services offered. Uses that are not directly dependent upon access to a water body, but have infrastructure on-site that can transfer cargo or people to or from a water body, and are directly dependent upon access to an on-site rail right-of-way for transportation purposes are considered to be river-related. Accessory businesses that are located on sites with a primary river-dependent or rail-dependent use and that are integral to the industrial operation of the primary use (e.g. a contractor) or expand the use of specialized facilities of the primary use are considered river-related. Residences (including houseboats), parking areas, spoil and dump sites, roads and highways, restaurants, businesses, factories, and recreational vehicle parks are not generally considered dependent or related to water. Public trails, ~~and~~ viewpoints, ~~and~~ resource enhancement projects adjacent to the river are river-related development. Bridge exit and entrance ramps supported by piers or pillars, as opposed to fill, are river-related development. Removal or remedial actions of hazardous substances conducted under ORS 465.200 through 465.510 and 475.900 are considered river-related development for the duration of the removal or remedial action.

Commentary

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Language to be **deleted** is shown in ~~strikethrough~~.

CHAPTER 33.930 MEASUREMENTS

Sections:

- 33.930.010 Purpose
- 33.930.020 Fractions
- 33.930.030 Measuring Distances
- 33.930.040 Measuring Distances on Maps
- 33.930.050 Measuring Height
- 33.930.060 Determining Average Slope
- 33.930.070 Determining the Area of the Facade of a Building
- 33.930.080 Determining the Plane of a Building Wall
- 33.930.090 Determining the Garage Wall Area
- 33.930.100 Measuring Lot Widths and Depths
- 33.930.110 Measuring Areas with Squares of Specified Dimensions
- 33.930.120 Setback Averaging
- 33.930.130 Measuring Tree Diameter
- 33.930.140 Measuring the Root Protection Zone
- 33.930.150 Measuring Top of Bank

33.930.120 Setback Averaging

Certain regulations allow for setbacks to be averaged. In these situations the required setback may be reduced to the average of the existing setbacks of the lots that are on both sides of the site. See Figure 930-18. The following rules apply in calculating the average. The regulation of setback averaging detailed in this section does not apply to the river setback averaging that is allowed in Chapter 33.475, River Overlay Zones.:

- A.** The setbacks used for the calculations must be for the same type of structure that is being averaged. For example, only garage entrance setbacks may be used to average a garage entrance setback, and only deck setbacks may be used to average a deck setback.
- B.** Only the setbacks on the lots that abut each side of the site and are on the same street may be used. Setbacks across the street or along a different street may not be used.
- C.** When one abutting lot is vacant or if the lot is a corner lot, then the average is of the setback of the nonvacant lot and the required setback for the zone.

Commentary

33.930.150 Measuring Top of Bank:

This more specific description of how to measure top of bank supplements the definition. See section 33.910.030 for the definition of top of bank.

This recommended measurement language responds to several common points of confusion identified by the Bureau of Development Services. The section provides prescriptive standards that must be followed in order to locate the top of bank and determine compliance with development standards that refer to the location of top of bank. Examples and graphics are used in describing how to measure top of bank. It should be recognized that all possible scenarios cannot be anticipated. In situations where the measurement does not provide a clear determination, the purpose and intent of the development standard in question and its relationship to other regulations and situations must be consulted. Common surveying practices may be taken into consideration when applying this measurement standard as well.

If resources allow, the Bureau of Planning and Sustainability will use new LIDAR mapping technology to establish a top of bank map for the North Reach within the next three years. This section may be further amended at that time.

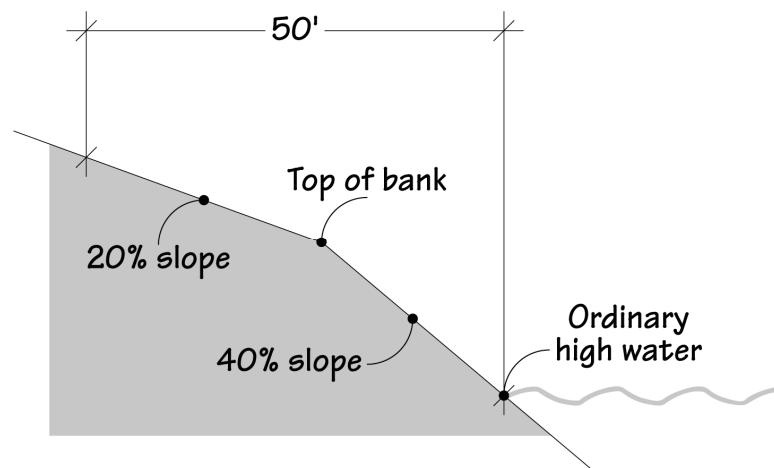
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33.930.150 Measuring Top of Bank

See Section 33.910.030, Environmental-Related Definitions, Top of Bank.

- A. Using Percent Slope.** Percent slope is determined by dividing the vertical rise by the horizontal run, and converting that decimal to a percentage. For example, a slope section that rises 10 feet over a distance of 20 feet is a 50 percent slope.
- B. Identifying the Major Change in Slope that is the Top of Bank.** A major change in slope is a change in percent slope of twenty or more, from a steeper grade to a less steep grade. For example, a change from a 40 percent slope to a 20 percent slope is a major change in the slope. See Figure 930-20.

Figure 930-20



Commentary

33.930.150.C Default Top of Bank

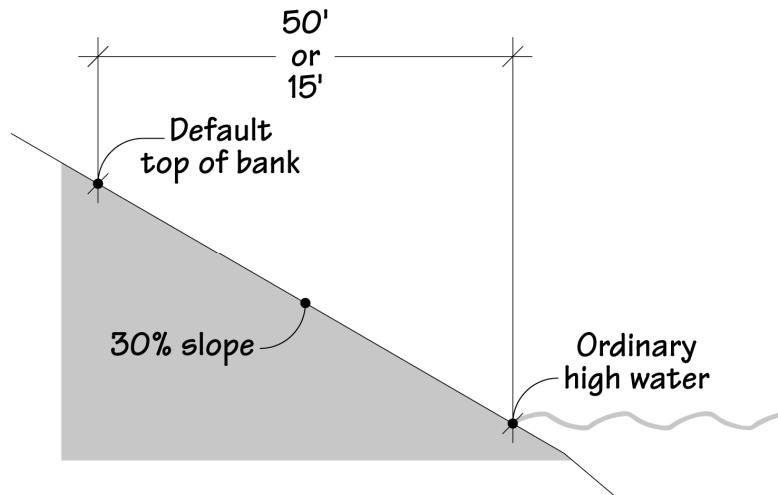
For smaller streams, the existing definition has been difficult to apply consistently, especially in areas where a stream is in a deep ravine, or where the stream is within a relatively level plain. The recommended 50 foot and 15 foot default locations would create greater certainty, and reduce the number of instances where a survey is necessary to determine the top of bank.

Language to be **added** is underlined.
Language to be **deleted** is shown in ~~strikethrough~~.

C. Default Top of Bank. If there is no major change in slope within a distance of 50 feet (measured horizontally) from the ordinary high water mark, then the top of bank will be one of the following default locations:

- For the Willamette and Columbia Rivers, the default top of bank is 50 feet (measured horizontally) from the ordinary high water mark. See Figure 930-21.
- For perennial streams, the default top of bank is 15 feet (measured horizontally) from the ordinary high water mark.
- For intermittent and ephemeral streams, the default top of bank is 15 feet (measured horizontally) from the centerline of the stream.
- For seeps, wetlands and other water bodies, the default top of bank is 15 feet (measured horizontally) from the ordinary high water mark.

Figure 930-21



Commentary

33.930.150.D Relationship to Other Structures

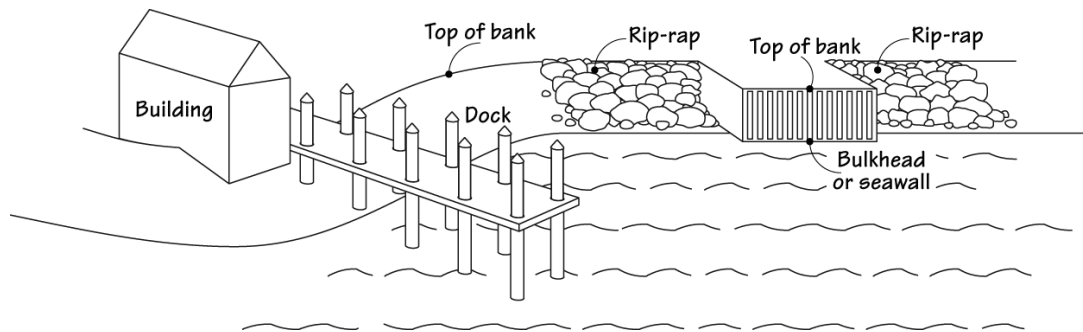
The graphic below provides some examples of how the measurement of top of bank is influenced by structures located on or near the river bank. As mentioned previously, not all situations can be anticipated. In situations where the measurement standard does not provide a clear determination, the purpose and intent of the development standard in question and its relationship to other regulations and situations must be consulted. Common surveying practices may be taken into consideration when applying this measurement standard as well.

Language to be **added** is underlined.
Language to be **deleted** is shown in ~~strike~~through.

D. Relationship to Other Structures.

1. Where a structure straddles the top of bank, the top of bank line is drawn as a straight line through the structure, connecting the top of bank line on either side.
2. Where there is a vertical bulkhead or seawall, the top of bank is the point at the top of the bulkhead that is closest to the river.
3. Docks, pilings, slips, wharves and other similar structures built over the water are not factored into the determination of top of bank. Where there is a dock, wharf or other structure on the bank, measurements of slope are taken on the underlying dry land.
4. Where the bank itself is a structure, such as a rip-rap slope at the edge of reclaimed land, the top of bank line is based on the predominant slope of that structure, rather than the slope of individual boulders or structural elements.

Figure 930-22



Commentary

24.50.060 Provisions for Flood Hazard Reduction

This regulation mandates that all fill placed at or below the flood protection elevation be balanced with an equal amount of soil removal. The regulation does not mandate that the cut occur on the site of the fill but allows the cut to be conducted within the same flood hazard area. In the past it has been hard for property owners in the North Reach to locate an off-site location for a balanced cut. The amendment to this subsection will facilitate off-site cutting by allowing the property owner to pay for the cut to be conducted at one of the North Reach Restoration Program sites. The amount of the fee will be determined by the Bureau of Environmental Services on a case-by-case basis but River Plan staff working with BES staff have estimated that the cost to conduct excavation will be approximately \$1.85 per cubic foot. The actual cost for off-site balanced cutting will also include a management fee.

The River Restoration Program will track when a cut will occur on one of the programs restoration sites and will ensure that the cut occurs as close as possible to the location of the fill in order to off-set any localized affects of the fill.

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Changes to Other City Titles

24.50.060 Provisions for Flood Hazard Reduction.

A-E. No change

F.

1-7 No change

8. Balanced Cut and Fill Required. In all Flood Management Areas of the City not addressed by Section 24.50.060 G, balanced cut and fill shall be required. All fill placed at or below the base flood elevation shall be balanced with at least an equal amount of soil material removal. Soil material removal shall be within the same flood hazard area identified in Section 24.50.050 A. through I.
 - a. Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.
 - b. Temporary fills permitted during construction shall be removed.
 - c. Payment allowed in lieu of balanced cut and fill. Properties within the North Reach Overlay Boundary (See Map 33.475-1) may elect to pay into the River Restoration Fund in lieu of creating a balanced cut and fill. The amount of the payment shall be determined by the Bureau of Development Services.