



Revised Staff-Proposed Draft
May 05, 2017
Based on PSC guidance

CENTRALCITY 2035

Volume 2A ZONING CODE & MAP AMENDMENTS

Part 2: River, Scenic and Trails

Proposed Draft June 20, 2016

Portland’s Central City 2035 Plan proposes changes to create a prosperous, healthy, equitable and resilient urban core.

For more information:

Visit the project website www.portlandoregon.gov/bps/CC2035

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Guide to Reading CC2035 Plan, Volume 2A, Part 2

CC2035 Plan, Volume 2a, Part 2 contains zoning code amendments to implement the Central City plan district, Comprehensive Plan Map and Zoning Map and other related code amendments to support the policy framework of the draft *Central City 2035 Plan*. Also included are code commentary pages that help clarify the intent of the code changes and expected implementation. The document is formatted to facilitate readability; showing revised code changes on the right-hand pages and related commentary on the facing left-hand pages.

Edits to the zoning code are shown in the following ways:

- **Existing zoning code sections:** Language to be added is underlined and language to be deleted is shown in ~~strikethrough~~. PSC amendments and minor edits made by staff are highlighted and underlined or ~~highlighted and shown in strikethrough~~. Minor edits include:
 - Clarifications that do not change the intent of the code
 - Corrections to references
 - Removal of duplicative language
- **New zoning code sections:** All of the language is new and for ease of reading is not underlined. PSC amendments and minor edits made by staff that add language are highlighted and underlined and amendments that deleted language are ~~highlighted and shown in strikethrough~~. (see above for definition of minor edits)
- **Existing and new zoning code sections:** Language that has been edited in a substantive way by staff and has not been previously reviewed by PSC are shown in **highlighted bold Bookman Old Style** font. Substantive edits include:
 - Code that reflects a concept approved by PSC but for which PSC has not seen the exact code language
 - Changes to the intent of the code (these are also described in a corresponding decision table)
- **Commentary:** Commentary has been updated to reflect amendments to the zoning code. The edits to commentary are not underlined, shown in strikethrough or highlighted.
- **Clerical edits** are not highlighted. Clerical edits include typos, spelling or numbering errors, etc.

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Commentary

Chapter 33.475 is a new chapter and is not underlined for ease of reading

New Chapter 33.475 River Overlay Zones

This new chapter establishes the development regulations for sites within the Willamette Greenway boundary in the Central Reach, except for sites within the South Waterfront Subdistrict and sites zoned industrial. The greenway regulations for the South Waterfront Subdistrict are found in 33.510.253. In the future, as river planning for the North and South reaches is completed, Chapter 475 will be updated specifically for those areas and will replace Chapter 440 Greenway Overlay Zones in its entirety. Industrially zoned sites in the Central Reach will be included in the update of the industrial North Reach because Central Reach sites zoned industrial share common characteristics with those in the North Reach.

The River overlay zone terminology replaces the Greenway overlay zone terminology of 33.440. In the Central Reach, the applicable river overlay zones are River General and River Environmental.

33.475 River Overlay Zones

475

Sections:

General

- 33.475.010 Purpose
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- 33.475.030 Where These Regulations Apply
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- ~~33.475.050 Property Line Adjustments~~
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- 33.475.215 Marine Passenger Docks ~~and Marine Passenger Terminals~~
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- 33.475.400 Use Regulations
- 33.475.410 Environmental Report
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- 33.475.500 Removal or Remediation of Hazardous Substances

Map 475-1 Central Reach River Overlay Boundary

Map 475-2 Willamette River Top of Bank

Map 475-3 ~~Landscaping Requirements at~~ Governor Tom McCall Waterfront Park and Eastbank Crescent Public Beaches

Commentary

33.475.010.A. Purpose

The River General and River Environmental overlay zones exist within the Greenway Boundary within the Central Reach. The River General overlay zone covers entire sites and includes development standards for the river setback, landscaping and lighting. There are no use restrictions outside of the river setback area in the River General overlay zone. Instead the base zones govern the allowed uses including urban scale residential, commercial, mixed-use development and open space/recreation uses that bring people to the riverfront.

The River Environmental overlay zone is a new overlay zone that overlaps the River General overlay zone. The River Environmental overlay zone is applied to high or medium ranked riparian corridors and wildlife habitat as identified in the *Central Reach Natural Resources Protection Plan* (2017). The document also shows the location, extent and relative condition of natural resources. The river, riverbank and riparian areas within at least 50 feet of the top of bank are ranked high or medium. The width of the riparian area may be wider than 50 feet from the top of bank depending on the natural resources present, including vegetated floodplains. The River Environmental overlay zone does not apply to low-ranked natural resources, for example developed floodplains located more than 50 feet from top of bank. This approach is consistent with best available science, including Metro's Title 13 Nature in Neighborhoods Program and City of Portland's *Natural Resources Inventory Update* (2012), adopted as part of the 2035 Comprehensive Plan. These reports documented that the absolute minimum width of a protected riparian corridor around rivers, streams and wetlands should be 50 feet. Federal regulations and maps related to the floodway and floodplain may change in the near future and result in necessary changes to the requirements of this section.

33.475.020.B. Map Symbols

This subsection provides the map symbols for River General and River Environmental overlay zones. The River General overlay zone has a map symbol g* to differentiate it from the River General overlay zones that exist in the other reaches and outside of the boundary of these regulations in the Central Reach.

There are code section spaces between the River g* and River e regulations that are placeholders for the other river overlay zones that will be included in this chapter in the future. In the North and South reaches, there are the River Industrial and River Recreational overlay zones. When the City updates the Willamette Greenway Plan for these reaches, the regulations of 33.440 will be replaced by 33.475. The final 33.475 will include the following sections:

- 33.475.100 River Industrial Overlay Zone (future - not included)
- 33.475.200 River General Overlay Zone (included)
- 33.475.300 River Recreational Overlay Zone (future- not included)
- 33.475.400 River Environmental Overlay Zone (included)
- 33.475.500 Clean Up of Contaminated Sites (included)

The River Environmental overlay zone will always be applied along with one of the other river overlay zones. It is not a freestanding overlay zone.

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 central reach of the Willamette River. This purpose is achieved by applying regulations that control development of land, change of use and intensification of use. The regulations reflect the desired character of the central reach of the Willamette River—a character that includes:

- A healthy river and watershed;
- A thriving riverfront with regional gathering spaces, active and passive recreational uses, maritime and commercial activities, and a welcoming mixed-use community; and
- Multi-modal access to, along and in the river.

The River Overlay Zones also implement the City’s responsibilities under ORS 390.310 to 390.368.

33.475.020 River Overlay Zones

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

1. 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 riverfront.
2. River Environmental. The River Environmental overlay zone protects, conserves and enhances important natural resource functions and values while allowing environmentally sensitive development. The purpose of the zone is to limit the impacts from development and vegetation maintenance on the natural resources and functional values contained within the overlay zone. The environmental regulations encourage flexibility and innovation in site planting and provide for development that is carefully designed to be sensitive to the site’s protected resources. Mitigation is required for unavoidable impacts and is intended to have no net loss of natural resource features or functions over time. The River Environmental overlay zone applies to specific natural resource areas identified in a detailed study titled *Central Reach Natural Resources Protection Plan (2015)*. This overlay zone always 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 General	g*
River Environmental	e

Commentary

33.475.030 and 33.475.040 Where and When These Regulations Apply

These sections clarify where and when the regulations in this chapter apply to uses and development that occur on the land and in the water. Map 475-1 depicts the area within which the river overlay zones and regulations of this chapter apply in the Central Reach minus South Waterfront (see 33.510.253) and sites zoned industrial. The latter will continue to meet the regulations of 33.440 Greenway Overlay Zones until such time as new regulations are adopted and those new regulations apply.

33.475.040.B.2 Exemptions

Some development and activities that occur within the River Environmental overlay zone will be exempt from regulation. These activities exempt from the regulations are important for the continued operation of existing facilities. Examples include the 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 these 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.

33.475.030 Where These Regulations Apply

The regulations of this chapter apply to the land and the water within the Central Reach portion of the Willamette Greenway Plan boundary shown on Map 475-1 and designated on the Official Zoning Maps with the River General (g*) and the River Environmental (e) overlay zones. The regulations of this chapter do not apply to the River General (g) overlay zone located within the Greenway Overlay zZones boundary shown on Map 440-1. See Chapter 33.440, Greenway Overlay zZones for regulations that apply to the River General (g) overlay zone within the Greenway Overlay zZones boundary.

33.475.040 When These Regulations Apply

- A. **River General overlay zone.** The regulations in Sections 33.475.200 through 33.475.230 apply to any changes to land or development in the River General (g*) overlay zone including rights-of-way.
- B. **River Environmental overlay zone.** The regulations in 33.475.400 through 33.475.450 apply in the River Environmental (e) overlay zone as follows:
 1. Unless exempted by Paragraph B.2., the regulations apply to:
 - a. Development;
 - b. Removing, cutting, mowing, clearing, burning or poisoning native trees or plants;
 - c. Changing topography, grading, excavation or filling; and
 - b. Resource enhancement.
 2. Exemptions. The following items are exempt from the River Environmental overlay zone regulations:
 - a. Change of ownership;
 - b. Temporary emergency procedures necessary for the protection of life, health, safety, or property;
 - c. Changes to the interior of a building where there are no exterior alterations;
 - d. Operation, maintenance, alterations, repair, and replacement of existing structures, exterior improvements, irrigation system, stormwater facilities, non-potable water systems, roads, utilities, public trails and paths, public viewpoints, public interpretive facilities, and erosion control measures ~~that are located above the ordinary high water mark~~. Alterations, repair and replacement is not exempt whenever total square footage, building coverage or utility size is increased;

Commentary

33.475.040.B.2.e.

Under the current greenway regulations all dredging, channel maintenance and removal of gravel/materials from the river is exempt from Greenway review. This narrows that 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. 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 the ordinary high water mark (OHWM) and 20 feet below the OHWM. Using 35 feet as the trigger for review is appropriate 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 shallow water areas.

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

33.475.040.B.2.f

The River General overlay zone regulates removal of structures and debris prior to planting vegetation. If the structures or debris are located above the ordinary high water mark (OHWM), then removal is exempt from the regulations of 33.475.400. If the structures or debris are located below the OHWM, then the regulations of 33.475.400 must be met.

33.475.040.B.2.i

Removal of non-native vegetation with handheld equipment and thinning of small trees allows for basic maintenance to ensure survivability of native vegetation within the River Environmental overlay zone. Disturbance areas must be replanted to meet the landscaping standards of Table 475-1. Because the River Environmental overlay zone may extend landward of the river setback, outside of the river setback, subarea 3 landscaping standards apply. This will ensure a consistent approach to planting trees throughout the River Environmental overlay zone.

It is possible that after the thinning of trees and removal of non-native vegetation, the remaining vegetation already meets the landscaping standards of Table 475-1. In this situation, no additional planting is required.

- e. Dredging, channel maintenance, and the removal of materials from the river as follows:
- (1) Dredging, channel maintenance, and the removal of material within the federal navigation channel.
 - (2) Dredging, channel maintenance, and the removal of materials outside the federal navigation channel as follows:
 - Dredging and the removal of materials in waters that are 35 feet deep or deeper, **measured from the ordinary high water mark**; 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.
- f. Removal of structures and debris, ~~application of soil amendments, placement of temporary erosion control measures, and planting of vegetation as required by 33.475.220 Landscaping Standards.~~ Removal of structures is not exempt if the structure is located ~~above~~ below the ordinary high water mark of the Willamette River, streams or drainageways or located within 30 feet of a wetland;
- g. Installation of temporary erosion control measures;
- gh. Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;
- hi. Continued maintenance of existing gardens, lawns, and other planted areas, including the installation of new plants except those listed on the *Nuisance Plants List*;
- ij. Changes to existing disturbance areas to accommodate outdoor activities such as events, play areas and gardens as long as plantings do not include plants on the *Nuisance Plants List* and no trees six or more inches in diameter are removed;
- jk. Structures Development located on an existing dock, wharf, or pier, ~~including A dock, wharf, or pier includes the~~ on any gangway that provides access to the dock, wharf or pier;
- kl. Removal or pruning of trees that are not more than 1.5 inches in diameter and other vegetation that is not listed as native on the *Portland Plant List*. The removal or pruning must be done with handheld equipment. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance area located outside and landward of the river setback must be replanted to meet the subarea 3 standard of Table 475-1.

Commentary

33.475.040.B.2.m

This allowance permits lightweight utility vehicle use that is needed for efficient vegetation management without creating significant soil compaction. The ground pressure of no more than 7.5 psi was chosen based on a typical lightweight utility vehicle's wheel to ground pressure. Small augers for drilling planting holes are typical types of equipment that would be allowed, provided the wheel to ground pressure is no more than 7.5 psi. For a comparable ground pressure, a typical human footprint has a ground pressure of 8.7 to 11.6 psi.

33.475.040.B.2.p

Typically, when ground disturbance is exempt from the River Environmental overlay zone requirements, temporary disturbances must be replanted to meet the landscaping standards of Table 475-1. However, when the exemption specifies that the temporary disturbance be less than 100 square feet in size, the landscaping standards of Table 475-1 cannot be met if the applicant chooses to plant a medium or large canopy tree. Therefore, for temporary disturbances required to be less than 100 square feet in size the applicant can replant the area with shrubs and seed with grasses and forbs; no trees are required.

~~Removal and trimming of vegetation if the following are met:~~

- ~~(1) All vegetation removal activities must be surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site;~~
- ~~(2) The removal or trimming is conducted with handheld equipment or equipment with a wheel surface-to-ground pressure of no more than 7.5 psi;~~
- ~~(3) Any temporary disturbance area is planted to meet the landscaping standards of 33.475.220; and~~
- ~~(4) The vegetation that is proposed for removal or trimming is one of the following:~~
 - ~~• Vegetation listed on the *Nuisance Plant List*;~~
 - ~~• Dead, dying or dangerous trees or portions of trees when they pose an immediate danger, as determined by the City Forester or certificate arborist;~~
 - ~~• Vegetation located within a designated view corridor. Tree removal is not exempt. View corridors are shown on Map 480-1; or~~
 - ~~• Vegetation located within 10 feet of an existing structure. Tree removal is not exempt.~~

lm. Planting of native vegetation listed on the *Portland Plant List* when planted with hand held equipment or equipment with a wheel surface-to-ground pressure of no more than 7.5 psi;

mn. Public street and sidewalk improvements meeting all of the following:

- (1) Improvements must be within an existing public right-of-way used by truck or automobile traffic; and
- (2) Streets and sidewalks must not exceed the minimum width standards of the Bureau of Transportation Engineering.

no. Groundwater monitoring wells constructed to the standards of the Oregon Water Resources Department and water quality monitoring stations, ~~when~~ re access is by foot only;

op. 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, no native trees are ~~not~~ removed, and disturbed area is planted with the following (top of bank is shown on Map 475-2):

- (1) Three shrubs per 100 square feet; and
- (2) Grass and forb seed mix at a ratio of 30 pounds per acre restored to pre-construction conditions;

Commentary

33.475.040.B.2.q

Typically, when ground disturbance is exempt from the River Environmental overlay zone requirements, temporary disturbances must be replanted to meet the landscaping standards of Table 475-1. However, when the exemption specifies that the temporary disturbance be less than 100 square feet in size, the landscaping standards of Table 475-1 cannot be met if the applicant chooses to plant a medium or large canopy tree. Therefore, for temporary disturbances required to be less than 100 square feet in size the applicant can replant the area with shrubs and seed with grasses and forbs; no trees are required.

33.475.040.B.2.t

Signage includes signs installed on land or in the water. Examples of signs in the water include navigation guides, speed limits or hazard markers.

~~pg.~~ 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, no ground is disturbed riverward of top of bank, no more than 100 square feet of ground surface is disturbed landward of the top of bank of water bodies, and disturbance area is planted with the following (top of bank is shown on Map 475-2):

~~(1) Three shrubs per 100 square feet; and~~

~~(2) seeded with a gGrass and forb seed mix at a ratio of 30 pounds per acre planted to meet the landscaping standards of 33.475.220;~~

~~qr.~~ Utilities installed above or below developed portions of the public right-of-way, and stormwater management facilities within the public right-of-way so long as provided that there no ground is disturbed riverward of top of bank (top of bank is shown on Map 475-2);

~~f.~~ 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 or equipment with a wheel surface to ground pressure of no more than 7.5 psi;~~

~~(2) The disturbance is temporary; and~~

~~(3) No trees are removed;~~

~~t. Signs;~~

s. Installation of fencing in the following situations:

(1) Fencing on an existing paved surface;

(2) Fencing around stormwater facilities that meet the Stormwater Management Manual; or

(3) 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;

t. Installation of signage provided no trees over six inches in diameter are removed; and

u. Removal of trash, provided that native vegetation is not removed or damaged. This includes removal of trash from the river bed and from the water. Removal of trash does not include the removal or remediation of hazardous substances.

Commentary

33.475.040.C Removal or Remediation of Hazardous Substances

The requirements of 33.475.500 only apply in areas where the removal or remediation actions are implemented. Outside of the removal or remediation action areas, all other procedures and regulations of this chapter, including the landscaping standards, must be met.

- C. **Removal or Remediation of Hazardous Substances.** The regulations in 33.475.500 apply to actions to remove or remediate hazardous substances that have been approved or selected under Oregon or federal cleanup law. The regulations in 33.475.500 only apply to the portions of the site where the removal or remediation actions will occur; other portions of the site outside of the removal or remediation areas must meet all other applicable regulations and procedural requirements of this chapter. Remedial actions within City public rights of way and actions not approved or selected by a state or federal cleanup authority must meet all other applicable regulations and procedural requirements of this chapter and may not use 33.475.500. The applicant conducting the removal or remediation action may choose to meet the regulations and procedural requirements of this chapter, or may choose to meet the regulations of 33.475.500 or all other applicable regulations of this chapter.

33.475.050 Property Line Adjustments

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

33.475.0650 Supplemental Permit Application Requirements

The following information is required when a permit for development or exterior alteration in the River Overlay Zones is reviewed for compliance with this chapter.

Commentary

A. Supplemental site plan.—A site plan 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. The following supplemental site plans are required when a permit for development or exterior alteration within the River Overlay zones is reviewed for compliance with this chapter. Five copies of each required site plan must be submitted. The site plans must show the entire site, must be drawn accurately to a scale that is between 1 inch to 50 feet and 1 inch to 10 feet, and must show all property lines with dimensions, a north arrow and a date. Additional site plans that show only a portion of the site may be submitted. All copies of site plans must be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches; and

B. Information required. The following information must be provided on the site plan in addition to the application requirements of 33.730.060. The information in paragraphs 1 and 2 must be submitted with permit application plans. Submission of the information in paragraph 3 is optional.

1. An existing conditions site plan including:
 - a. Location of all base zone and overlay zone lines on the site;
 - b. Location of the top of bank, river setback line and the landscaping sub areas;
 - c. Outline of any existing development, including existing river bank stabilization treatments, stormwater treatment facilities, environmental enhancement or mitigation areas, and trails and paths;
 - d. Extent of the 100-year floodplain;
 - e. ~~Trees, including the location of the trunk and crown cover, must be identified as follows:~~
 - (1) The location, size including trunk and canopy crown diameter, and species of trees that are 1.5 3 inches or greater in diameter that are within the area where ground disturbance or vegetation removal will occur, or that are within 50 feet of the area where ground disturbance and vegetation removal will occur; have crown cover that overlaps that area, must be indicated on the site plan; and
 - (2) The area of canopy crown cover and species composition of trees located outside of and within 50 feet of the area where ground disturbance and vegetation removal will occur.
 - f. Vegetation, other than trees, within the area where ground disturbance or vegetation removal will occur, and vegetation other than trees within 50 feet of the area where ground disturbance and vegetation removal will occur. Vegetation may be shown as the area of cover with a list and percent cover of plant species present; and
 - g. 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.

Commentary

33.475.210 River Setback

OAR 660-015-0005 and Statewide Planning 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 and structures that are river-dependent and river-related development. The setback also does not apply to the major public trails, viewing areas located at designated viewpoints, view corridors, hazardous material clean up or to natural resource enhancement or mitigation. The setback is 50 feet from the top of bank of the Willamette River in the Central Reach for non-river dependent and river-related uses and development. One of the main goals of the River Plan/Central Reach is to provide enough space within the river setback for public recreation, natural resource protection and enhancement and other river-related development and activities in the city's most urban section of riverfront. An expanded setback in the Central Reach helps fulfill the stated goals and policies of the Central City 2035 Plan for the Willamette River.

The setback is based on the location of the top of bank. A new top of bank map is included, which is based on Light Detection and Ranging (LIDAR) data. It is intended that applicants use the top of bank as mapped by the City or provide a surveyed top of bank based on the definition, Chapter 33.910, and measurements, Chapter 33.930.

The City is currently ground truthing this map and will bring forward any necessary amendments during the City Council phase.

Best available science, including Metro's Title 13 Nature in Neighborhoods Program and City of Portland's Natural Resources Inventory, have documented that the absolute minimum area for protection of riparian corridors around rivers, streams and wetlands is 50 feet. A 50-foot setback that includes trails and other development does not meet the minimum requirement for protection of riparian corridors. However, due to the extent of existing development that already encroaches into the riparian corridor, as well as other Central City goals that encourage activation of and access to the Willamette River, a 50-foot setback is the maximum practical for the Central City. In other reaches of the Willamette River a wider setback that is more protective of the riparian corridor may be appropriate.

2. A proposed development or exterior alterations plan including:
 - a. Outline of the proposed project area, including:
 - (1) limits of the temporary and permanent disturbance areas, including equipment staging and maneuvering areas, ingress and egress areas, and areas to be left undisturbed;
 - (2) areas of ground disturbance, stockpiling or grading;
 - (3) outfalls and river bank stabilization treatments;
 - (4) trails and paths;
 - (5) areas of vegetation to be left undisturbed including the root protection zone for trees;
 - (6) environmental enhancement or mitigation areas,
 - b. Location and size (cubic yards) of fill to be placed within the 100-year floodplain;
 - c. Location and description of all proposed erosion control measures;
 - d. Location and description of all proposed stormwater management facilities;
 - e. Location of proposed fencing, and identification of where the fencing is temporary and where it is permanent indicated with the fencing is temporary and permanent;
 - f. Location of exterior lighting; and
 - g. A landscaping plan indicating the size, species, and location of all vegetation to be planted.

3B. Photos of the site. Submission of photographs of the site are not required but are encouraged to supplement the existing conditions site plan.

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

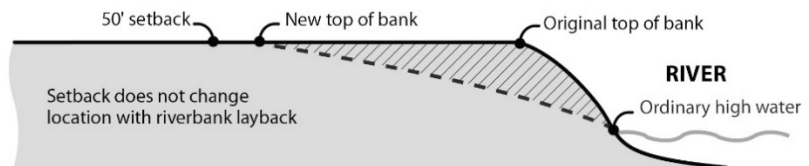
- A. Purpose.** The purpose of the river setback is to keep structures separated from the river in areas where the land is not being reserved for river-dependent and river-related uses. Separating structures from the river facilitates protection, maintenance, restoration, preservation and enhancement of the natural, scenic, historic and recreational qualities of the Willamette River in the Central 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.

Commentary

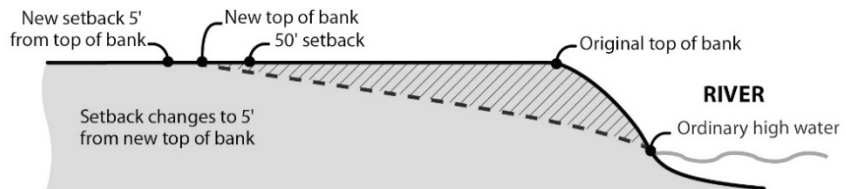
33.475.210.C

When the river bank is laid back to reduce the steepness and enhance riparian and in-water habitat, the location of the setback remains in its existing location unless laying the bank back creates a top-of-bank that is landward of the original setback. In that situation the new setback is 5 feet landward from the new top-of-bank. See examples below.

Example 1: The new top of bank is riverward of the original setback.

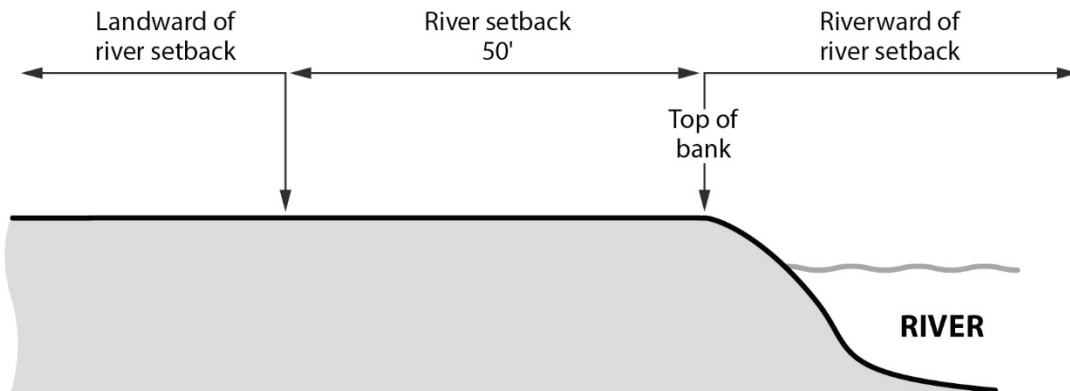


Example 2: The new top of bank is landward of the original setback, so a new setback is established 5 feet from top of bank.



- 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, in the River General overlay zone, a marine transportation terminal is a river-dependent primary use, but not all development associated with the terminal is river-dependent. The dock is river-dependent, but the parking lot and offices are not.
- C. The river setback.** 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. Top of bank is shown on Map 475-2 or is determined as described in 33.910.030, Definitions, and 33.930.150, Measuring Top of Bank. Where alteration to the river bank carried out to meet 33.475.440.GH 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. See Figure 475-2. In all cases the setback line must be at least 5 feet landward of the new top of bank line. See Figure 475-3.

**Figure 475-1
River Setback**



D. River setback 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, ~~of~~ and fills that are not river-dependent or river-related are allowed within or riverward of the river setback only if it meets 33.475.210.E, Encroachment into the setback, or is approved through River Review and a Greenway Goal Exception.

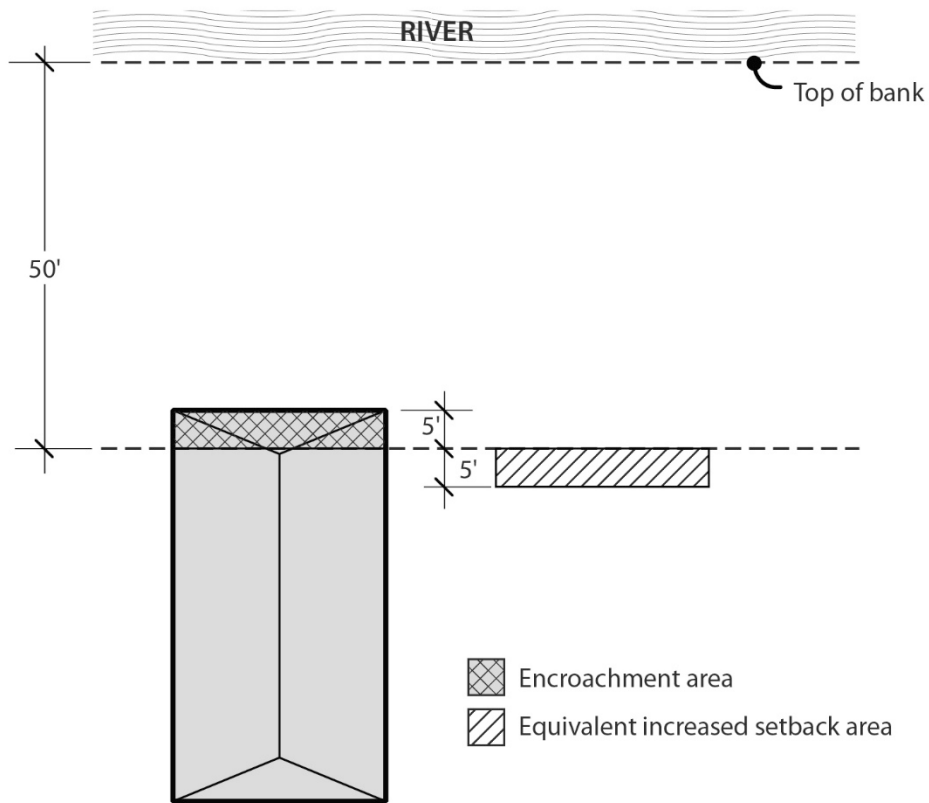
Commentary

33.475.210.E Encroachment into the setback.

One of the main goals of the River Plan/Central Reach is to provide flexibility for property owners in the Central City to expand and redevelop on site. This standard allows non-river-dependent and non-river-related development to encroach up to 5 feet into the river setback as long as the setback is enlarged an amount equal to the square footage of the encroachment. The regulations also stipulate that at no point can development encroach closer than 45 feet from top of bank.

- E. **Encroachment into the setback.** Development that is not river-dependent or river-related may encroach up to 5 feet into the river setback as long as provided that the setback is increased by an area equivalent in size to the encroachment area. The area that is increased must be located is provided adjacent and contiguous to the original setback area. See Figure 475-2.

**Figure 475-2
Encroachment into the River Setback**



Commentary

33.475.215 Marine Passenger Docks

As stated in 33.910.030, the river-related definition is updated to add certain uses and development associated with a marine passenger dock (and a marine passenger terminal) with a primary purpose to load and unload passengers from marine vessels. Passenger waiting and queuing areas, security checkpoints, and machine shops associated with marine passenger docks and marine passenger terminals can locate in the river setback.

Section 33.475.215 limits building coverage to 5,000 square feet for river-related development associated with marine passenger docks within the river setback. Allowed river-related development could be located in multiple stories as long as the building footprint within the river setback does not exceed 5,000 square feet. Staff looked at the queuing area at the Salmon Springs dock, the average square footages for similar uses associated with an aviation passenger terminal and the square footage for other related uses provided by an interested property owner to calculate the square footage limitation. The elements that are essential to the loading and unloading of passengers are the queuing and security areas (and thus river-related). Some amount of passenger waiting area (with seating) is appropriate within the setback, especially for seniors and those with special needs. If a larger waiting area is needed, it can locate contiguous to the river setback. Limiting the footprint of this development in the river setback to essential river-related development will help address other Willamette River goals and objectives including the conservation and enhancement of natural, scenic and historic resources, recreation or public access.

33.475.220.B. Required Landscaping

New development must comply with this standard, which is intended to increase vegetation along the Willamette River to improve multiple ecosystem functions, increase habitat and provide other environmental benefits. Legally nonconforming development can maintain their nonconforming landscaping or may choose to come further into conformance; but may not become more nonconforming. If the owner of a legal nonconforming development alters their site, they are subject to Chapter 33.258. Alterations costing more than \$154,000 will require that 10% of project value be dedicated to coming more into conformance with existing zoning codes. Landscaping is one option that counts towards becoming more conforming.

This requirement does not apply to Governor Tom McCall Waterfront Park because the park is in the center of Portland's urban center, serves the entire region as a recreational destination and has multiple and varied uses and activities including large scale events. There is a master plan for the park that includes improvements and landscaping that will accommodate the current and future uses and activities at the park.

The landscaping requirement also does not apply to the mapped portion of the "Eastbank Crescent Beach"; a naturally occurring beach near the Hawthorne Bridge on the east side of the Willamette River. If the Eastbank Crescent is improved as a public beach and swimming area, landscaping will be determined as part of a public planning process for that area.

33.475.215 Marine Passenger Docks and Marine Passenger Terminals

- A. Purpose.** River-related development provides goods or services that are directly associated with river-dependent land or waterway use. River-related development is typically allowed within the river setback, however certain river-related development associated with a marine passenger dock, while river-related in nature, does not need to be fully located within the river setback. In order to ensure that these particular types of river-related development do not overwhelm or dominate within the river setback, the total amount of footprint allowed within the setback is limited. The limitation will ensure that the river setback can accommodate other river-related or river-dependent development and provide opportunities for recreation, public access, and the conservation and enhancement of natural, scenic and historic resources. The standard to limit the built area of river-related development associated with marine passenger docks in the river setback ensures that other goals of the Willamette River Greenway (Statewide Planning Goal 15) such as conservation, enhancement and maintenance of natural resources, recreation and public access, scenic and historic values can be met. [NOTE: The purpose statement for this code section will be provided at the Planning and Sustainability Commission public hearing on 7/26]
- B. Standard.** Passenger waiting and queuing areas, security checkpoints, cold food storage, and machine shops associated with marine passenger docks for subregional travel ~~and marine passenger terminals~~ **marine passenger terminals** for regional travel are limited to a 5,000 square feet ~~foot~~ footprint within or riverward of the river setback.

33.475.220 Landscaping

The following regulations apply in the River General overlay zone. Modifications and adjustments are prohibited.

- A. Purpose.** The landscaping regulations are intended to increase vegetation along the Willamette River. Adding a diversity of vegetation within the river setback will improve multiple ecosystem functions, increase fish and wildlife habitat, provide shade, cool the air, and create visual diversity. The regulations are also intended to accommodate safe and enjoyable public access to and along the Willamette River.
- B. Required landscaping.**
1. Governor Tom McCall Waterfront Park and the Eastbank Crescent beach, shown on Map 475-3, ~~is~~ are exempt from this Section.

Commentary

33.475.220.B.2.c Exceptions

On contaminated sites, the Oregon Department of Environmental Quality works with the property owners and other jurisdictions to determine the appropriate removal or remediation actions to clean up the site. The areas where the removal or remediation actions are implemented do not need to meet the landscaping standards. Outside of the removal or remediation areas, the landscaping standards must be met.

Within utility easements, the roots of trees and shrubs may impact the underground utilities. Future maintenance may require removal of vegetation. Grass and forbs are required to minimize erosion and provide some natural resources functions.

Within scenic (s) overlay zones trees and shrubs can grow and fully or partially block the protected view. Trees are not allowed to be planted in the s overlay. Shrubs may be planted and depending on the topography of the site and the species of shrub may have no impact on the view. Shrubs are encouraged because they provide multiple riparian corridor functions and wildlife habitat. Land within the s overlay must be seeded with grasses and forbs to minimize erosion and provide some natural resources functions.

Where the riverbank between the ordinary high water mark and the top of bank is steep and armored with rip rap or where the rip rap is very thick, vegetation cannot survive. Rather than plant the armored bank, the equivalent size of landscaped area can be provided elsewhere on-site provided that area is outside of the river setback but within the river overlay zones. While on-site landscaping located within 100-200 feet of the Willamette River or within the river's floodplain provides riparian corridor functions and wildlife habitat, on-site landscaping located more than 100-200 feet from the river does provides wildlife habitat.

Most of the Central Reach sites that have river frontage are already developed. Incorporating landscaping landward of the river setback at an equivalent size to the subarea 1 area that would have been landscaped may not be feasible. There is an option to pay a fee-in-lieu of landscaping.

Resources enhancement areas and mitigation areas have planting standards that require a higher density of tree planting than the landscaping requirements. When the standards for enhancement and mitigation areas are met, the planting density will automatically meet the landscaping requirements. Outside of the areas used for resource enhancement or mitigation, the landscaping standards must be met.

2. Required landscaping for all other areas. For areas not exempt from this section, all other areas, land within and riverward of the river setback that is not covered with a building or other structure or developed with a trail or viewing area must be landscaped to meet Table 475-1, Landscaping Planting Density. Subareas are shown on Figure 475-3 and described below. There are three planting densities allowed within each subarea. The applicant may choose which planting density standard to apply within each subarea, and more than one planting density may occur on a site. For example, the applicant may choose planting density 1 for all the subareas, or planting density 2 for subarea 1, planting density 3 for subarea 2, and planting density 1 for subarea 3.

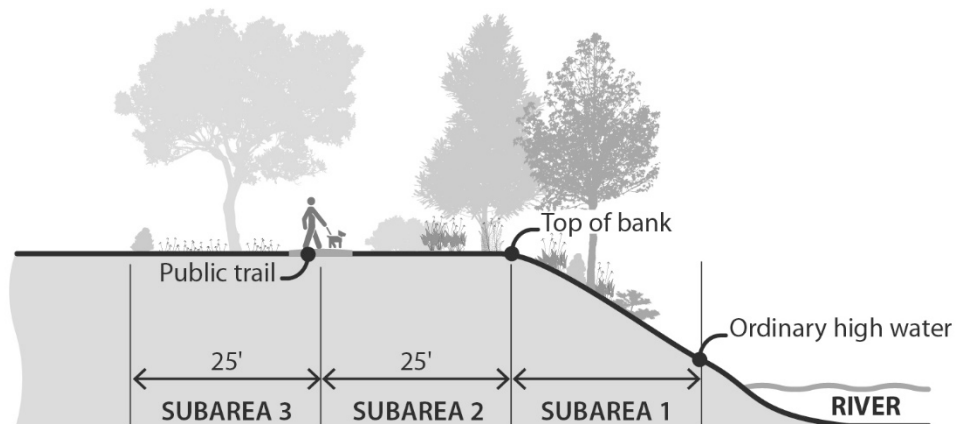
a. Subareas:

(1) Subarea 1. Subarea 1 extends from the ordinary high water mark to the top of bank of the Willamette River.

~~b.~~(2) Subarea 2. Subarea 2 extends from the top of bank to a point 25 feet landward of the top of bank of the Willamette River.

~~c.~~(3) Subarea 3. Subarea 3 extends from a point 25 feet landward of the top of bank ~~and to~~ a point 50 feet landward of the top of bank of the Willamette River (top of bank is shown on Map 475-2).

**Figure 475-3
Landscaping Area**



~~b.~~ Vegetation planted to meet the resource enhancement standards of 33.475.440.H or the mitigation standards of 33.475.440.L may be counted towards meeting the landscaping standard.

~~c.~~ Exceptions.

(1) Landscaping is not required within resource enhancement areas that meet the standards of 33.475.440.G;

(2) Landscaping is not required within mitigation areas that meet the standards of 33.475.440.K;

Commentary

- (31) Landscaping is not required within portions of sites where contamination removal or remediation actions meet the standards of 33.475.500;
- (42) Within utility easements Trees and shrubs are not required within utility easements but the area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre;
- (53) Trees and shrubs are not required within a scenic (s) overlay zones view corridor shown on Map 480-1 but the area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees may not be planted within a scenic (s) overlay zones view corridor shown; or
- (64) If the area to be landscaped within subarea 1 has an average slope of 30 percent or steeper (30 percent slope represents a rise over run ratio of 1:3.3) and the area with an average slope of 30 percent or steeper is armored with rip rap, or the area within subarea 1 has rip rap that is at least four feet deep, then the required subarea 1 landscaping may be planted on an area of the site that is landward of the river setback but within the River overlay zone, or the applicant may pay a revegetation fee-in-lieu as described below. If the landscaping will be provided on-site, the total area outside of subarea 1 to be landscaped must be equivalent in size to the area that would have been required to be landscaped in subarea 1. More than one landscaped area may be provided to achieve the total, but other required landscaping may not count toward the total:
- Revegetation fee-in-lieu use and administration. The revegetation fee is collected by Bureau of Development Services and is administered by the Bureau of Environmental Services (BES). The fees collected are used for revegetation projects on public or private property within the same reach of the Willamette River as the site. The reaches are shown on Map 475-1.
 - Calculation of required fee-in-lieu contributions. Applicants must contribute the cost to purchase and plant trees, shrubs and groundcover plants as set out in the next bullet. The cost to purchase and plant trees and plants will be adjusted annually as determined by the Director of BES based on current market prices for materials, labor and maintenance.
 - Required fee-in-lieu contribution. The applicant must contribute the cost to purchase, plant and maintain one tree, three shrubs and four ground cover plants per 100 square feet of required planting area before a building permit will be issued. The fee calculation will be rounded up to the next multiple of \$10. The minimum area to be used in this calculation is 100 square feet. Calculations that are not a multiple of 100 will be rounded up to the next multiple of 100.

Commentary

Table 475-1

The intent of Table 475-1 is to allow a mix of tree types, densities and heights. Applicants may choose to install a mix of tree sizes, and planting densities, within each subarea. However, applicants are not required to choose a mix of densities, unless the total area to be planted is greater than 600 square feet. The shrub and grass densities are consistent across the entire setback, only the density of trees may vary depending on the size at maturity of the tree species.

Planting a mix of tree types, densities and heights will provide a diversity of habitat. In addition, a diversity of trees will create unique experiences along the river for the public.

Title 11, Trees, code section 11.60.020.C. Canopy, includes canopy size categories. Tree canopy types are categorized as small, medium, or large based on the estimated canopy size at maturity. The "Portland Tree and Landscaping Manual" suggested plant lists include the size categories recognized for many trees. To determine the size category of a tree not listed in the "Portland Tree and Landscaping Manual" the applicant will provide an objective source of information about the tree's mature height, crown spread, and growth rate. This information can come from published sources, internet sources, or nursery information such as cut sheets.

The canopy size category is calculated according to the following formulas, which incorporate the estimated height and crown spread of a mature specimen and the tree species' growth rate:

1. Small trees have a canopy factor of less than 40, Medium trees have a canopy factor from 40 to 90, and Large trees have a canopy factor greater than 90;
2. $\text{Canopy factor} = (\text{Mature height of tree}) \times (\text{Mature canopy spread}) \times (\text{Growth rate factor}) \times 0.01$;
3. The growth rate factor is 3 for fast-growing trees, 2 for medium growing trees, and 1 for slow-growing trees

Table 475-1 Landscaping Planting Density			
Subarea	Planting Density 1: Small Trees[1]	Planting Density 2: Medium Trees[1]	Planting Density 3: Large Trees[1]
Landscaping Subarea 1	One tree, three shrubs, and four other ground cover plants must be planted for every 100 square feet. Trees may be clustered. All plants must be native.	One tree, six shrubs, and eight other ground cover plants must be planted for every 200 square feet. Trees may be clustered. All plants must be native.	One tree, nine shrubs, and 12 other ground cover plants must be planted for every 300 square feet. Trees may be clustered. All plants must be native.
Landscaping Subarea 2	<p>One tree and one of the following two options for every 100 square feet. Trees must be separated from other trees by at least 20 feet on center. Shrub species must not exceed 3 feet in height at maturity.</p> <p>Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</p> <p>Option 2: Three shrubs and four other groundcover plants.</p>	<p>One tree and one of the following two options for every 200 square feet. Trees must be separated from other trees by at least 20 feet on center. Shrub species must not exceed 3 feet in height at maturity.</p> <p>Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</p> <p>Option 2: Six shrubs and eight other groundcover plants.</p>	<p>One tree and one of the following two options for every 300 square feet. Trees must be separated from other trees by at least 20 feet on center. Shrub species must not exceed 3 feet in height at maturity.</p> <p>Option 1: Three <u>Nine</u> shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</p> <p>Option 2: <u>Nine</u> shrubs and 12 other groundcover plants.</p>
Landscaping Subarea 3	One tree for every 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees must be separated from other trees by at least 20 feet on center. Shrubs or other ground cover are not required, however if they are included they must meet the standards for Landscaping Subarea 2.	One tree for every 200 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees must be separated from other trees by at least 20 feet on center. Shrubs or other ground cover are not required, however if they are included they must meet the standards for Landscaping Subarea 2.	One tree for every 300 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Trees must be separated from other trees by at least 20 feet on center. Shrubs or other ground cover are not required, however if they are included they must meet the standards for Landscaping Subarea 2.

[1]Tree sizes is based on Title 11.60.020.C Canopy Size

Commentary

33.475.220.C. Landscaped area site preparation.

The Central Reach's urban riverfront has been highly altered with hardscaped materials and debris. This standard is intended to help ensure that the site conditions are conducive to plant survival over time when the planting of vegetation is required.

Erosion control measures, which include existing riverbank rip rap, do not need to be removed.

33.475.220.D. Plant Requirements

This subsection details plant requirements. Willow and tree cuttings and branches cut off existing trees, can be planted directly into rip rap.

Within a 600 square foot area, to meet the diversity requirement of at least 2 different species and two different sizes of tree, the applicant would need to plant one of the following options:

- 3 small trees (300 sq. ft.) and 1 large tree (300 sq. ft.);
- 1 small (100 sq. ft.), 1 medium (200 sq. ft.) and 1 large (300 sq. ft.); or
- 2 small (200 sq. ft.) and 2 medium (400 sq. ft.).

As the total landscaping area gets larger, a wider mix of tree sizes can be chosen. For 1,200 sq. ft. there is a wide mix of sizes that could be used to meet the requirement. It is up to the applicant to show how they are meeting the planting density.

- C. Landscaped area site preparation.** Before installing the required landscaping, the following standards must be met:
1. All prohibited and nuisance plants listed on the *Portland Plant List* must be removed within and riverward of the river setback.
 2. All structures and debris located within and riverward of the river setback must be removed except for river-dependent and river-related structures, ~~legal~~ non-conforming ~~structures~~ development, erosion control measures, flood control facilities, large wood, and bioengineered structures. Examples of bioengineered structures include bundles of plant materials or soil cells wrapped in biodegradable fabrics.
 3. If the area to be planted is not currently vegetated, the soil must be amended with 12 inches of growing medium. If the planting area is in subarea 1, has an average slope of 30 percent or less steeper ~~20 percent of steeper slope~~ (2030 percent slope represents a rise over run ratio of ~~1:5~~ 1:3.3), and is armored with rip rap, the growing medium may be placed in planting wells. The composition of the growing medium must meet one of the following:
 - a. For all planting 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
 - b. For all planting areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A landscape architect or civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
 4. Placement of the growing medium is not allowed when the ground is frozen or saturated; and
 5. Temporary erosion control measures are required until permanent stabilization measures are functional. Temporary erosion control measures must be biodegradable or removed after permanent stabilization measures are functional or within 3 years, whichever is sooner.
- D. Plant requirements.** Trees must be a minimum ½-inch caliper, bareroot, or live stakes, unless they are oak or madrone, which may be one gallon size. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species must be used.

Commentary

33.475.230 Exterior Lighting

The standards are intended to minimize the adverse health, safety, and livability impacts of exterior lighting on humans, fish and wildlife, including glare, light spill, and encroachment into habitat areas. The standards and exemptions are also intended to continue providing for public safety in public parks and along trails and rights of way, and to support river dependent uses. These standards are also proposed in the South Waterfront Subdistrict under the River General (g) overlay zone regulations (see 33.253.E.5.h).

This section includes general standards for directionality and shielding of exterior light fixtures that apply throughout the overlay zone. These standards will support policies calling for energy efficiency, reducing light pollution and glare, and reducing light-related hazards to birds. This section also includes standards for exterior lighting on land proximate to the Willamette River. These standards restrict the location, spacing, brightness and spectral character of lighting to reduce impacts on birds, pollinators, and other wildlife and their habitat.

33.475.230 Exterior Lighting

- A. Purpose.** The standards for exterior lighting are intended to:
- Avoid or minimize light glare and light spill from artificial lighting and associated negative impacts on fish and wildlife and their habitats;
 - Reduce light pollution and glare impacts on residential developments;
 - Maintain public safety and security along the Greenway major public trails, in parks, along public rights-of-way, and on piers and gangways; and
 - Provide flexibility for river dependent operations associated with docks.
- B. General standards.** The following standards apply to all exterior lights located within the River General (~~g*~~) overlay zone.
1. Exterior lights must not project light upward or to the side of the fixture; and
 2. The top and sides of all exterior light fixtures must be shielded with 100 percent opaque materials.
- C. Additional standards for areas near the Willamette River.** The following standards apply to all permanent exterior lights located within and riverward of the river setback, and all permanent exterior lights located within 25 feet landward of the river setback. Exterior lights within Governor Tom McCall Waterfront Park, and exterior lights within public rights-of-way are exempt from the standard in this Subsection Subsubparagraph, but must meet the standards in Subparagraph B.:
1. Exterior lights are allowed only if the lights are for the as followings uses or development:
 - a. In property owned or managed by the City of Portland Parks and Recreation Park and Open Area uses;
 - b. In a public right of way, The major public trail;
 - c. When associated with a major public trail or A public viewing area; or
 - d. When associated with a rRiver-dependent or river-related development.
 2. Structures that support exterior light fixtures must be set back at least 5 feet from the top of bank of the Willamette River **unless the structure that supports the exterior light fixture is located on a except for docks, pier** and gangways, and must be setback at least 30 feet from any other stream, drainageway, wetland or water body (top of bank is shown on Map 475-2);
 3. Structures that support exterior light fixtures must be spaced at least 25 feet apart;
 4. Lamps must fall below 3000K or within an S/P ratio range of 1 to 1.2; and
 5. Exterior lights must not project directly into the Willamette River.

Commentary

33.475.240 Public Viewpoints

Statewide Planning Goal 15 Willamette River Greenway calls for protecting, enhancing, and maintaining the natural, scenic, historical and recreational qualities of lands along the river. The provision allows public viewpoints within the river setback to help support scenic, natural and public recreation goals and policies for the Willamette River. This standard applies to sites that are within the River Overlay zone boundary and are designated in the *Central City Scenic Resources Protection Plan*.

33.475.250 Nonconforming Uses and Development

Nonconforming uses and development exist 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 can remain as long as there are no changes to the site.

The language allows nonconforming uses and development to continue. Expansion of the use or development may occur provided that it is not within or riverward of the river setback. This means that new overhanging or cantilever structures like decks or bay windows are not allowed. These structures would bring the nonconforming development further out of compliance with river setback regulations. Development may change to allow river-dependent and river-related development by right, consistent with Statewide Planning Goal 15, Willamette River, and other zoning code regulations.

33.475.260 Property Line Adjustments

In the past, property line adjustments have been approved that resulted in eliminating river frontage. The proposed regulations ensure that property line adjustments do not create more than one river overlay zone on the site with the exception of the River Environmental overlay zone, which is intended to coincide with other river overlay zones. The river overlay zones each have a different purpose and set of regulations.

33.475.240 Public Viewpoints

- A. **Purpose.** Public viewpoints **providing stopping places along major public the Greenway trails and the Willamette River** where the public can view and enjoy the natural, scenic, **historic, cultural,** recreational and economic qualities of the **Greenway Willamette River.**
- B. **Viewpoint Requirement.** All sites designated with a viewpoint **symbol on Map 480-1 in the Central City Scenic Resources Protection Plan** are required to provide a public viewpoint. The viewpoint design is addressed through the Central City Fundamental Design Guidelines. In addition, the viewpoint must comply with the Use of Trail, Hours of Use, Trespass and Trail Maintenance and Liability sections of Chapter 33.272, Major Public Trails. The Trails Maintenance and Liability section is applicable when the viewpoint is located along the physically contiguous trail segment.

33.475.250 Nonconforming Uses and Development

Nonconforming uses and development in the River General overlay zone are subject to the regulations and reviews of Chapter 33.258, Nonconforming Situations. The additional regulations stated below apply to development within or riverward of the river setback that is not river-dependent or river-related:

- A. The development may continue;
- B. The development may be changed to an allowed river-dependent or river-related development by right;
- C. The development may be changed to another nonconforming development if within the existing building. If outdoors, it may not be changed to another nonconforming development; and
- D. The development may be expanded, but not within or riverward of the river setback. Expansion includes adding additional floor area.

33.475.260 Property Line Adjustments

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

Commentary

33.475.420 Review Procedures

The River Environmental overlay zone includes a multi-track system that allows some types of development and activity to be exempt from regulations, allows some development and exterior alteration if it meets standards, and requires some development to go through a land use review. The standards are modelled after the standards listed in Chapter 33.430, Environmental Zones; however, there are some differences specific to the Central Reach.

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.

33.475.410 Environmental Report

The application of the River Environmental overlay zone is based on a detailed study titled *Central Reach Natural Resources Protection Plan (2016)*. The report identifies the type, location, extent and relative condition of natural resource features and describes the 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 will be reviewed through one of the following tracks:

- A. **Standards.** Several specific types of development and exterior alterations are allowed within the River Environmental overlay zone if the proposal meets certain standards. ~~Standards are provided for bulkheads, rights-of-way, utility lines, stormwater outfalls, trails, viewpoints, resource enhancement, exterior lights, 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 meet the objective standards of this section or go through the discretionary River Review process. 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 33.475.440.
- B. **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 standards or there are no River Environmental development standards 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 Prohibitions

This section prohibits the packaging and storage of most hazardous substances, the planting and propagation of identified nuisance plants and the dumping of trash or yard debris within the River Environmental overlay zone area. All of these materials and activities negatively impact protection and enhancement of high and medium ranked natural resources.

33.475.440 Standards

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 required.

33.475.440.A 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 Central 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.

33.475.440.B Standards for utility lines

The standards in this paragraph apply to both new utilities and upgrades to existing utilities.

33.475.430 Prohibitions

The following are prohibited within the River Environmental ~~O~~verlay ~~Z~~zone:

- A. The packaging or storage of hazardous substances except as follows:
 - 1. Use of consumer quantities of hazardous substances is allowed. Consumer quantities of hazardous substances are packaged and distributed in a form intended or suitable for sale through retail sale outlets for consumption by individuals for purposes of personal use; and
 - 2. Marine vessel fueling stations are allowed.
- B. The planting or propagation of any plant listed on the *Nuisance Plant List*; ~~or~~ and
- C. Dumping of trash or yard debris.

33.475.440 Development Standards

Unless exempted by 33.475.040.B.2., the standards in this Section apply to development and exterior alterations in 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. **Standards for rail rights of way.** The following standards apply to rail rights-of-way:
 - 1. ~~The D~~disturbance area associated with the development of a rail right-of-way must occur ~~be~~ within a corridor that is not more than 20 feet wide. No disturbance is allowed outside of the 20-foot-wide corridor;
 - 2. Disturbance associated with the rail corridor or development of the rail corridor must 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 any other stream, wetland, or water body (top of bank is shown on Map 475-2);
 - 3. Tree removal is allowed as specified in Subsection ~~J~~K.; and
 - 4. Mitigation is required as specified in Subsection ~~K~~L.
- B. **Standards for utility lines.** The following standards apply to new utility lines and upgrades to existing utility lines, including stormwater conveyance facilities, and private connections to ~~existing or new~~ utility lines, ~~and upgrades of existing utility lines~~:
 - 1. The disturbance area for the installation of a ~~private connection to an existing or new utility line must be no more than 10 feet wide;~~
 - 2. ~~The disturbance area for the installation of a new utility line or upgrades to an~~ existing utility lines, including utility trenching, must be no more than 15 feet wide;
 - 3. ~~The D~~disturbance area associated with the installation of a utility line or a private connection to a utility line must not occur ~~be~~ riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of any other stream, wetland, or other water body (top of bank is shown on Map 475-2);
 - 4. Tree removal is allowed as specified in Subsection ~~J~~K.;

Commentary

54. ~~The temporary disturbance areas must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback must be replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a scenic (s) overlay zone. Disturbance areas must be planted to meet the landscaping standards of 33.475.220; and~~

65. Exemption. If a proposed utility line or upgrade to an existing utility line runs through an area that has already been approved as a permanent disturbance area, or allowed by standards of this section, it is exempt from Paragraphs B.1., ~~and B.2., and B.3.~~

C. Standards for stormwater outfalls. The following standards apply to the installation of stormwater outfalls:

1. ~~The D~~disturbance area associated with the installation or replacement of a stormwater outfall must ~~occur within an area that no~~not be more than 15 feet wide;
2. When constructed open channels or vegetated swales are proposed, the slope between the stormwater source and the water body must not exceed 15 percent at any point;
3. 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*;
4. Tree removal is allowed as specified in Subsection ~~J~~K.; and
5. Mitigation is required as specified in Subsection ~~K~~L.

D. Standards for placement of piles. The following standards apply to the placement of up to four ~~new~~ single piles or two ~~new~~ multiple-pile dolphins for each 100 feet of shoreline:

1. The placement of the piles or dolphins must be associated with a river-dependent or river-related use;
2. An equal number of piles or dolphins as are placed in the river environmental overlay zone, plus one, must be removed from the ~~R~~iver ~~E~~nvironmental overlay zone within the Central Reach. The boundaries of the Central Reach are shown on Map 475-1; and
3. If the applicant does not own the property where the pile or dolphin removal will occur, ~~they the applicant~~ must have an easement or deed restriction sufficient to allow the necessary removal.

Commentary

33.475.440.E. Standards for Trails

In the Central City, major public trails are shown as a star (★) symbol on the Official Zoning Maps. During site development, a trail easement dedication and potentially the construction of the trail is required. These standards are intended to allow for major public trails to locate within the River Environmental overlay zone, but limit the impacts of the trails, and associated public use on the natural resource functions of the riparian corridor.

If the trail crosses a stream it needs to set back 10 feet from the top-of-bank on both sides of the stream. This is different than standards for other development in this section which require disturbance area to be setback 30 feet from a stream. The reason for the allowance for trails to be located closer to streams is to facilitate completion of a contiguous trail along both sides of the Willamette River in the Central City. Much of the trail along the Willamette River is already constructed and new segments need to connect with the existing. In the North Reach and South Reach, the conditions and circumstances of the major public trails, zoning, land use and existing natural resource may warrant a different standard for stream crossings.

33.475.440.F Standards for Viewing Areas

This standard allows for the construction and maintenance of public viewing areas that are designated in the Central City Scenic Resources Protection Plan. Trees, including native trees, may be removed. The area where vegetation is removed must be revegetated with ground cover. Trees cannot be planted in view corridors because they grow and block or partially block the view. Shrubs can be planted along with the ground cover in the view corridors.

- E. Standards for trails.** The following standards apply to the construction of a new major public trail and alterations to an existing major public trail:
1. The trail must be setback at least 10 feet, and disturbance associated with construction of the trail must be setback at least 5 feet, from the top of bank of the Willamette River, or a stream, a wetland or other water body (top of bank is shown on Map 475-2);
 2. The trail and disturbance associated with construction of the trail must be setback at least 30 feet from the top of bank of a wetland or other water body;
 3. The total width of the trail must be no more than 16 feet;
 4. The total width of disturbance area must be no more than 24 feet;
 5. Tree removal is allowed as specified in Subsection JK; and
 6. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a scenic (s) overlay zone. Temporary disturbance areas must be planted to meet the landscaping planting standards of 33.475.220.

EF. Standards for public viewing areas. The following standards apply to the construction of a public viewing area:

1. The viewing area must be associated with a viewpoint designated in the Central City Scenic Resources Protection Plan shown on Map 480-1;
2. The total disturbance area must be no more than 800 square feet in area;
3. The permanent disturbance area associated with the viewing area must not be more than 500 square feet in area;
- 3-4. The total disturbance area must not be located below the top-of-bank of the Willamette River (top of bank is shown on Map 475-2), stream, or any other water body, and must not be located within 30 feet of a wetland;
- 4-5. Tree removal is allowed as specified in Subsection JK.; and
- 5-6. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a scenic (s) overlay zone. Temporary disturbance areas must be planted to meet the landscaping planting standards of 33.475.220.

Commentary

33.475.440.G Standards for View Corridors

This standard allows for removal of trees within the scenic (s) overlay zones. The area where vegetation is removed must be revegetated with ground cover. Shrubs may be planted along with the ground cover in the view corridors.

33.475.430.H Standards for resource enhancement

These standards are intended to ensure that the river bank is less steep 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, which has little to no habitat value.

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.

33.475.440.I Standards for site investigative work

Typically, when there is ground disturbance exempt from the River Environmental overlay zone requirements, then temporary disturbances must be replanted to meet the landscaping standards of Table 475-1. However, when the exemption specifies that the temporary disturbance be less than 100 square feet in size, then the landscaping standards of Table 475-1 cannot be met if the applicant chooses to plant a medium or large sized tree. Therefore, for temporary disturbances required to be less than 100 square feet in size, the applicant can replant the area with shrubs and seed with grasses and forbs; no trees are required.

FG. Standards for view corridors. The following are standards apply to pruning or removing vegetation in a scenic (s) overlay zone establishment or maintenance of view corridors shown on Map 480-1.

1. Tree removal and pruning is allowed as specified in Subsection JK; and
2. Temporary disturbance areas must be replanted with three shrubs per 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Temporary disturbance areas must be landscaped to meet the standards of 33.475.220.

GH. Standards for resource enhancement. The following standards apply to resource enhancement projects:

1. There must be no excavation, or fill, or construction activity, below ordinary high water mark of any river, stream, wetland or other water body;
2. The riverbank may be re-graded if the slope after grading is shallower than the slope prior to grading and the slope is no greater than 20 percent (20 percent slope represents a rise to run ratio equal to 1:5);
3. Rock armoring must not be used on the surface between the top of bank and the ordinary high water mark of any water body except as required surrounding outfalls (top of bank is shown on Map 475-2);
4. 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;
5. No structures are proposed landward of the top of bank except public trails that meet the regulations of 33.475.440.E, and structures associated with public viewing areas that meet the regulations of 33.475.440.EF.;
6. All nuisance plants listed on the *Portland Plant List* must be removed;
7. Tree removal is allowed as specified in Subsection K; and
- 7-8. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1. Trees may not be planted within a scenic (s) overlay zone. Areas where ground disturbance has occurred must be planted to meet the landscaping planting standards of 33.475.220.

HI. Standards for site investigative work. The following standards apply to site investigative work. Site investigative work includes soil tests and test pits, land surveys, and groundwater and water quality monitoring stations.

1. No more than 100 square feet of disturbance area is allowed per test pit or monitoring station site investigative work activity;

Commentary

33.475.440.J Standards for development in a City of Portland park

These standards allow the City of Portland Bureau of Parks and Recreation (Parks) to install park amenities in City parks located in the Central 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, kiosks, etc. The standards limit the amount of additional disturbance that will occur within the River Environmental overlay zone to a total of 2,200 square feet of additional permanent disturbance area. The standards also limit tree removal and require mitigation.

33.475.440.K Standards for tree removal or pruning of vegetation

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. Under certain circumstances, the standards also allow the removal of native trees up to 12 inches in diameter. The removal of trees is limited to the areas within which the development or activity will occur and replacement is required for trees over 6 inches in diameter.

Trees may not be replaced within the scenic overlay zones because they may grow and block views that are intended to be protected.

2. Disturbance associated with site investigative work must be temporary;
3. No trees are removed; and
4. Temporary disturbance area must be planted with three shrubs per 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre. Areas where ground disturbance has occurred must be planted to meet the landscaping planting standards of 33.475.220.

IJ. **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 another set of development standards contained in this Section.

1. The total disturbance area must not be more than 2,200 square feet;
2. Disturbance area must not be located below the top-of-bank of the Willamette River (top of bank is shown on Map 475-2), streams, or other water body, or located within 30 feet of a wetland;
- 4.3. Tree removal is allowed as specified in Subsection JK.; and
- 5.4. Mitigation is required as specified in Subsection KL.

JK. **Standards for removal or pruning of vegetation tree removal.** The following standards apply to the removal or pruning of vegetation trees 6 inches or greater in diameter:

1. All vegetation removal activities must be surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site;
2. The removal or pruning must be conducted with handheld equipment or equipment with a wheel surface-to-ground pressure of no more than 7.5 psi;
3. Temporary disturbance area located within and riverward of the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside and landward of the river setback is replanted to meet the subarea 3 standard of Table 475-1;
4. The vegetation that is removed or pruned is limited to the following:
 - a. Vegetation listed on the Nuisance Plant List;
 - b. Dead, dying or dangerous trees or portions of trees when they pose an immediate danger, as determined by the City Forester or certified arborist. All sections of wood more than 12 inches in diameter must be placed in the River Environmental overlay zone of the ownership within which the wood was cut unless the City Forester authorizes the removal because the wood is diseased and will threaten the health of other trees;
 - c. Vegetation that exceeds the height restriction of a view corridor **with special height restrictions designated in the Central City Scenic Resources Protection Plan** shown on Map 480-2;

Commentary

- 1-d. Trees that are not native trees on the *Portland Plant List* may be removed with hand-held equipment or equipment with a wheel surface to ground pressure of no more than 7.5 psi; or
- 2-e. Generally, Madrone, Garry Oak or Pacific Yew that are less than 6 inches in diameter, or other native trees on the *Portland Plant List* may not be removed except native trees 6 inches or greater but less than 12 inches in diameter may be removed if the removal or pruning is in conjunction with development or exterior improvements approved under the standards of this section as follows:
- a-(1) Within the a rail right-of-way and or within 10 feet of the rail right-of-way;
 - b-(2) Within the a utility line corridor;
 - c-(3) Within the disturbance area for installation or replacement of stormwater outfalls;
 - d-(4) Within a major public trail;
 - e-(5) Within a public viewing areas associated with viewpoints designated in the *Central City Scenic Resources Protection Plan shown on Map 480-1*;
 - f-(6) Within a scenic (s) overlay view corridor shown on Map 480-1; and
 - (7) Within a resource enhancement area; or
 - g- (8) Within the disturbance area associated with development in a City of Portland park.
3. — Madrone, Gary Oak or Pacific Yew that are larger than 6 inches may not be removed;
- 4-5. Trees that are over 6 inches in diameter that are removed must be replaced as shown in Table 475-2 and must meet the following:
- 4-a. Replacement vegetation must meet all of the following:
 - a-(1) Trees must be a minimum ½-inch caliper, bareroot or live stakes, 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;
 - b-(2) The planting must occur within the River Overlay Zones. Trees must not be planted within a scenic (s) overlay zone view corridor designated in the *Scenic Resources Protection Plan, shown on Map 480-1*. If the vegetation is not planted on the applicant’s site, then the applicant must own the property or have an easement or deed that ensures the vegetated area will not be developed; and
 - c-(3) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met; and
 - 5-b. ~~Vegetation~~Trees planted to meet the landscaping requirements of 33.475.220 may be counted towards meeting the tree replacement standard.

Commentary

33.475.440.L Standards for mitigation

Mitigation is required for most development in or alteration of the River Environmental overlay zone. 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 and established vegetation is removed and replaced with new plantings, there is a loss of resource functional value until the new vegetation becomes established.

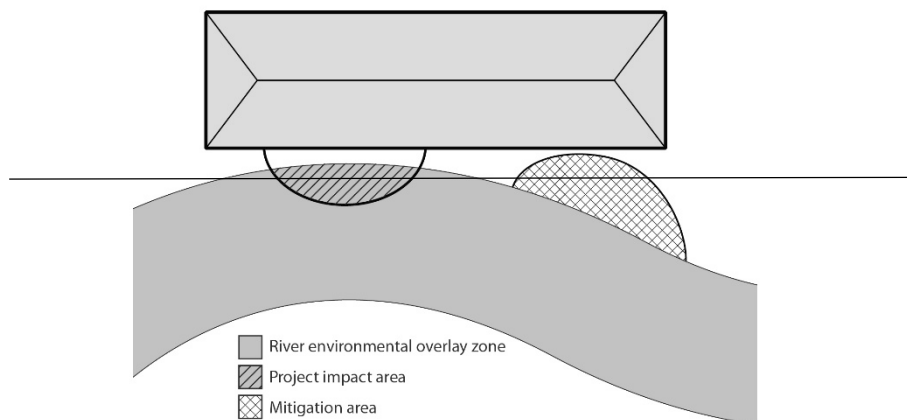
Mitigation is usually installed within the River Environmental overlay zone. However, if the land within the River Environmental overlay zone is already planted at a high density, then the mitigation can be done elsewhere on-site provided that the mitigation area is contiguous to the River Environmental overlay zone.

Table 475 – 2 Tree Replacement in River Environmental Overlay Zone		
Size of tree to be removed (inches in diameter)	Option A (no. of native trees to be planted)	Option B (combination of native trees and shrubs)
At least 1.5 and up to 6	1	Not applicable
At least More than 6 and up to 12	2	Not applicable
More than 12 and up to 20	3	1 tree and 3 shrubs
More than 20 and up to 25	5	3 trees and 6 shrubs
More than 25 and up to 30	7	5 trees and 9 shrubs
More than 30	10	7 trees and 12 shrubs

KL. Standards for mitigation. The following standards apply to mitigation required by Paragraphs Subsections A., C., through F and H.

1. 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;
2. Mitigation must occur in the River Environmental overlay zone within the Central Reach. The boundaries of the Central Reach are shown on Map 475-1. or in an area that is contiguous to the River Environmental Overlay Zone, see Figure 475-4;
3. If the mitigation area is not on the site where the project occurs, then the applicant must own the property or possess a legal instrument, such as an easement or deed restriction that is approved by the City as sufficient to ensure the right to carry out, monitor, and maintain the mitigation for 10 years;

**Figure 475-4
Mitigation Area Contiguous to River Environmental Overlay Zone**



Commentary

33.475.440.L.5.

The tree replacement standard specifies the number of trees that must be planted to replace the trees removed. The trees planted can be counted towards meeting the mitigation planting density. Additional tree planting may be required to fulfill the mitigation ratio.

Table 475-3

This table represents the same planting density as the landscaping planting density for subarea 1, described in Table 475-1. It is intended to result in a multi-storied habitat with tree canopy, shrub layer and ground cover that provide a wide range of riparian corridor and wildlife habitat functions. This planting density applies everywhere in the River Environmental overlay zone where mitigation is conducted.

Title 11, Trees, code section 11.60.020.C. Canopy, includes canopy size categories. Tree canopy types are categorized as small, medium, or large based on the estimated canopy size at maturity. The "Portland Tree and Landscaping Manual" suggested plant lists include the size categories recognized for many trees. To determine the size category of a tree not listed in the "Portland Tree and Landscaping Manual" the applicant shall provide an objective source of information about the tree's mature height, crown spread, and growth rate. This information can come from published sources, internet sources, or nursery information such as cut sheets.

The canopy size category is calculated according to the following formulas, which incorporate the estimated height and crown spread of a mature specimen and the tree species' growth rate:

1. Small trees have a canopy factor of less than 40, Medium trees have a canopy factor from 40 to 90, and large trees have a canopy factor greater than 90;
2. Canopy factor = (Mature height of tree) x (Mature canopy spread) x (Growth rate factor) x 0.01;
3. The growth rate factor is 3 for fast-growing trees, 2 for medium growing trees, and 1 for slow-growing trees.

4. Nuisance plants identified on the *Portland Plant List* must be removed within the area to be replanted. Trees removed to meet this Paragraph must be replaced as specified in Subsection J.;
5. Plantings required for tree removal, as specified in Subsection J., can be counted towards mitigation if the planting is located within the River Environmental overlay zone or in an area that is contiguous to the River Environmental overlay zone;
6. Required planting density standards are specified in Table 475-3. Trees may be clustered. Trees must not be planted within a view corridor shown on Map 480-1. Plants must be selected from the *Portland Plant List*;

Table 475-3 Planting Density			
	Small Trees[1]	Medium Trees[1]	Large Trees[1]
Planting Density	<p>One tree and three shrubs for every 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre, and one of the following two options for every 100 square feet.</p> <p><u>Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</u></p> <p><u>Option 2: Three shrub and four other groundcover plants.</u></p>	<p>One tree and six shrubs for every 200 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre, and one of the following two options for every 200 square feet.</p> <p><u>Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</u></p> <p><u>Option 2: Six shrub and eight other groundcover plants.</u></p>	<p>One tree and nine shrubs for every 300 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre, and one of the following two options for every 300 square feet.</p> <p><u>Option 1: Nine shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or</u></p> <p><u>Option 2: Nine shrub and 12 other groundcover plants.</u></p>

[1] Tree sizes is based on Title 11.60.020.C Canopy Size

7. 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. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species must be used;
8. Trees must be a minimum ½-inch caliper, bareroot or live stake, 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
9. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

Commentary

33.475.440.M

Typically, application of soil, including placing fill in the River Environmental overlay zone, requires River Review. However, the landscaping standards of 33.475.220 require amending the soil prior to installing the required plants. This standard, 33.475.440.M, exactly matches the landscaping soil amendment standard to ensure that applying soil amendments as required by the landscaping standard does not require River Review.

33.475.440.N

The intent of this standard is to support public recreational uses within the Willamette River, including public swimming, while minimizing the impacts of structures on in-water habitat. The temporary structure must be located in an Open Space (OS) zone to ensure that it is associated with a park and open space use. The structure may be free-floating, meaning accessed by the water, with an anchor to the river bottom or it may be attached to an existing dock, pier or piling by a rope, chain or a walkway. (A walkway is considered part of the temporary structure and, in combination with the floating portion, should meet the size and location requirements.) The standard limits the impact of the structure on the natural resources by setting a maximum size for the structure, specifying the location within the waterbody and limiting the time when the structure may be in place. The width is based on minimizing impacts of the structure by allowing sunlight to penetrate the sides, which reduces impacts on native fish. The length is intended to allow multiple uses including public swimming, non-motorized boating or fishing. No portions of the structure, including any walkways, may be closer than 50 feet from the ordinary low water mark. This will minimize the impact of the structure on shallow water habitat. And the structure may only be located in the river during the in-water work period, which is July 1 and October 31, which is between peak juvenile migration seasons. The time frame that the structure may be in the river is inclusive of set up and tear down.

Commercial uses that are not river-dependent or river-related and are proposed to be located on a floating structure would require a *Greenway Goal* exception.

M. Standards for application of soil amendments. The following standards apply to the application of soil amendments:

1. The depth of the soil amendment must be no more than 12 inches;
2. The soil must not be applied below the ordinary high water mark of the Willamette River, streams, or other water body, or within 30 feet of a wetland;
3. The composition of the growing medium must meet one of the following:
 - a. For all planting 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
 - b. For all planting areas located within the flood hazard area, the growing medium must be a blend of loamy soil, sand, small gravels and compost. A landscape architect or civil engineer must certify that the growing medium is adequate to support the establishment and growth of vegetation, and is heavier than water.
4. Placement of soil is not allowed when the ground is frozen or saturated; and
5. Temporary erosion control measures are required until permanent stabilization measures are functional. Temporary erosion control measures must be biodegradable or removed after permanent stabilization measures are functional or within 3 years, whichever is sooner.

N. Standards for placement of temporary floating structures. The following standards apply to temporary floating structures:

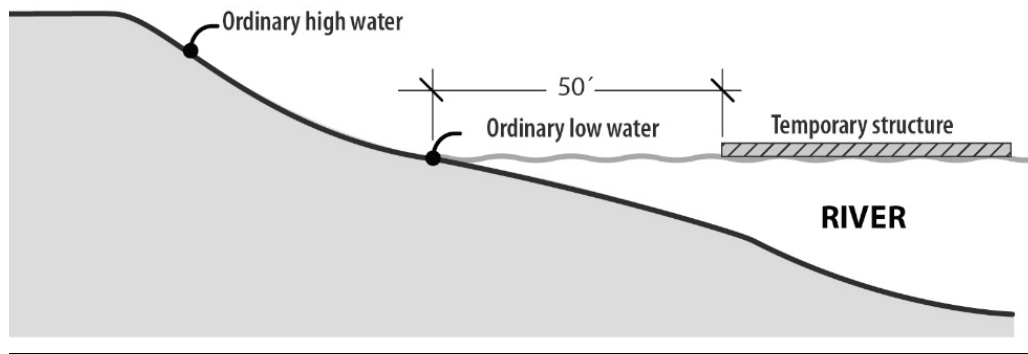
1. The structure and all work necessary to install and remove the structure is allowed in the river only between July 1 and October 31;
2. The structure must be located within the OS zone;
3. There are no more than 4 structures in the Central Reach at one time;
4. The structure is free-floating or is attached to an existing dock, pier or piling. Free-floating means that the structure is anchored to the river bottom and is not accessible from the riverbank via anything other than the water;
5. The dimensions of the entire temporary structure must not be greater than 12 feet by 100 feet;
6. The structure has no walls and no roof;
7. The structure is at least 50 feet away from the riverbank. The 50 feet is measured horizontally from the ordinary low water mark. See Figure 475-4; and
8. The hours of operation are between 6 am and 10 pm.

Commentary

33.475.450 Corrections to Violations of River Environmental Overlay Zone Development Standards

The regulations are intended to facilitate timely remediation for damage to resources and functional values that occur as a result of a violation.

Figure 475-4



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;

Commentary

- (2) No ground disturbance occurred riverward of the top of bank of the Willamette River (top of bank is shown on Map 475-2) or within 30 feet of the top of bank of a stream, wetland or other water body;
 - (3) The correction will remove all illegal development; and
 - (4) The correction will replant illegal clearing.
- b. If any of the following occurred, the applicant may not use Option One, but may choose either Option Two or Option Three:
 - (1) More than 12 diameter inches of trees were removed;
 - (2) A Madrone larger than 6 inches, Garry Oak larger than 6 inches, or Pacific Yew larger than 6 inches was removed; or
 - (3) Disturbance occurred riverward of the top of bank of the Willamette River (top of bank is shown on Map 475-2), 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 paragraph 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;
 - 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 to meet the standards of Table 475-3;

Commentary

- (2) ~~One tree, six shrubs, and eight other ground cover plants are required to be planted for every 200 square feet of planting area. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species must be used. All plants must be native;~~
 - (3) A second area, equal in size to the area disturbed by the violation activity, must also be replanted to meet the standards of Table 475-3 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;
 - (54) 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;
 - (65) Trees must be a minimum one ½ inch in diameter, bareroot or live stake, 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 Trees must not be planted within a Scenic (s) overlay zone view corridor designated in the Scenic Resources Protection Plan, shown on Map 480-1. Trees may be clustered. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots;
 - (76) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met; and
 - (87) 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 33.475.440.B must be met;
 - 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 to meet the standards of Table 475-3;

Commentary

- (2) One tree, one shrub, and five groundcover plants are required to be planted for every 50 square feet of planting area. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species are used. 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 to meet the standards of Table 475-3 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 ½ inch in diameter, bareroot or live stake, 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. Trees must not be planted within a Scenic (s) overlay zone view corridor designated in the Scenic Resources Protection Plan, shown on Map 480-1. Trees may be clustered. 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; and
- 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-one 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

33.475.500 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 to ensure that cleanup actions do not impair river-dependent and river-related uses and development, public access and recreation or natural resource protection and enhancement.

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: Willamette River Greenway. Goal 15 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.

Portions of state or federally approved cleanups may be exempt from procedural requirements of the section. Under Oregon State Law (ORS 465.315(3)) the onsite portion of a state approved cleanup is exempt from the procedural requirements of the Code to obtain local permits if the substantive requirements of the local jurisdiction are met.

The regulations in this section are the City's substantive requirements for clean ups that must be met regardless of whether the cleanup may be exempt from procedural requirements or not. 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. Cleanup conducted under state law in a City right-of-way is not exempt 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 federally approved cleanup.

33.475.500.E

Statewide Planning Goal 15 requires that structures or buildings be separated from the river. The City's river setback (called greenway setback outside of this chapter) requires that development in the River General overlay zone in the Central City that is not river-dependent or river-related be set back 50 feet from the top of bank. Structures required as part of remediation actions are considered river-related and allowed within the setback. The standard seeks to ensure that after cleanup actions are complete, the location of structures associated with the remediation will allow for future river-dependent and river-related development, such as development of the major public trails.

Clean Up of Contaminated Sites

33.475.500 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 one or more are 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, 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 and the person performing the action must notify the City that the action is exempt. A person conducting a cleanup otherwise exempted from the procedural requirements may choose to obtain a permit.
- 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 Chapter 33.475. Any part of ~~development~~ an action that is not in itself a remedial or removal action must meet all other applicable regulations and procedural requirements of this chapter.
- ~~**E. Determination Letter.** To obtain a letter from the City of Portland Bureau of Development Services determining substantial conformance with standards 33.475.500, a supplemental site plan, as described in 33.865.040.A, is required.~~
- FE. Regulations that apply to actions to remove or remediate hazardous substances.** The following regulations apply to 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 or riverward of the river setback, the final remedy must allow the use of the site for river-dependent or river-related 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 development of the Greenway major public trails, dredging necessary to establish or maintain navigation to and from riverfront sites, the placement of piles or dolphins, or the development of a marine facility, dock, or wharf or other river-dependent or river-related structure;

Commentary

33.475.500.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 revegetation requirements are intended to allow flexibility in the type and size of trees planted.

2. Buildings, structures and equipment required as part of removal or remediation actions must be located and designed taking into account the purpose of the river setback standard which is to keep structures at least 50 feet away from the top of bank of the river, reserve space for public access to the river and development of the major public greenway trails, and allow for natural resource enhancement (top of bank is shown on Map 475-2); and
3. Water quality treatment facilities must be located outside of the River Environmental overlay zone.

GF. Regulations that apply to actions to remove or remediate hazardous substances that occur in specific areas. The following regulations apply to actions within the River Environmental overlay zone to remove or remediate hazardous substances based on specific locations:

1. The following regulations apply to areas landward of the top of bank (top of bank is shown on Map 475-2):
 - a. Disturbance of the ground and removal of native vegetation must be avoided outside of the actual soil removal areas. 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] Planting density. The replanting area must meet one of the following plant and planting density standards specified in Table 475-4. Trees may be clustered. Trees must not be planted within a view corridor designated in the Scenic Resources Protection Plan, shown on Map 480-1.

Commentary

Table 475-4

This table represents the same planting density as the mitigation planting density, Table 475-3, and the landscaping planting density for subarea 1, Table 475-1.

Title 11, Trees, code section 11.60.020.C. Canopy includes canopy size categories. Tree canopy types are categorized as small, medium, or large based on the estimated canopy size at maturity. The "Portland Tree and Landscaping Manual" suggested plant lists include the size categories recognized for many trees. To determine the size category of a tree not listed in the "Portland Tree and Landscaping Manual", the applicant shall provide an objective source of information about the tree's mature height, crown spread, and growth rate. This information can come from published sources, internet sources, or nursery information such as cut sheets.

The canopy size category is calculated according to the following formulas, which incorporate the estimated height and crown spread of a mature specimen and the tree species' growth rate:

1. Small trees have a canopy factor of less than 40, Medium trees have a canopy factor from 40 to 90, and large trees have a canopy factor greater than 90;
2. $\text{Canopy factor} = (\text{Mature height of tree}) \times (\text{Mature canopy spread}) \times (\text{Growth rate factor}) \times 0.01$;
3. The growth rate factor is 3 for fast-growing trees, 2 for medium growing trees, and 1 for slow-growing trees.

Table 475-4 Planting Density			
	Small Trees[1]	Medium Trees[1]	Large Trees[1]
Planting Density	One tree and three shrubs for every 100 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre, and one of the following two options for every 100 square feet:	One tree and six shrubs for every 200 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre, and one of the following two options for every 200 square feet:	One tree and nine shrubs for every 300 square feet and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre, and one of the following two options for every 300 square feet:
	Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or	Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or	Option 1: Nine shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or
	Option 2: Three shrub and four other groundcover plants.	Option 2: Six shrub and eight other groundcover plants.	Option 2: Nine shrub and 12 other groundcover plants.

[1] Tree sizes is based on Title 11.60.020.C Canopy Size

- [3] Plant diversity. For planting areas over 600 square feet, at least two different tree species and sizes, three different shrub species, and four different groundcover species are used. If more than 10 trees or shrubs are used to meet the above standard, then no more than 50 percent of the trees or shrubs 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;
 - [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 1.5-4 inches or greater in diameter that are removed must be replaced based on Table 475-5:

Commentary

Table 475-5

The tree replacement information in Table 475-5, Tree Replacement in Hazardous Substance Clean-up Sites, is the same as the tree replacement standards in Table 475-2.

33.475.500.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.

Table 475-5 Tree Replacement in Hazardous Substance Cleanup Sites		
Size of tree to be removed (inches in diameter)	Option A (no. of native trees to be planted)	Option B (combination of native trees and shrubs)
At least 4 and up to 12	2	Not applicable
More than 12 and up to 20	3	1 tree and 3 shrubs
More than 20 and up to 25	5	3 trees and 6 shrubs
More than 25 and up to 30	7	5 trees and 9 shrubs
More than 30	10	7 trees and 12 shrubs

[21] Size. The replacement trees must be a minimum ½-inch diameter or bareroot unless they are oak or madrone, which may be one gallon size. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent.

[32] Type. The replacement trees must be native trees selected from the *Portland Plant List*;

[43] 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 Central Reach (top of bank is shown on Map 475-2). 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

[54] Replacement trees can be counted toward meeting the requirements of subparagraph G.1.b(2).

- 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 G.1.b, above.
2. The following regulations apply to the area between the top of bank and the ordinary high water mark:
 - a. When there is an alteration to the area between top of bank and the ordinary high water mark that is greater than 500 square feet or includes more than 50 cubic yards of excavation or fill, changes the ground contours, results in the removal of buildings, requires engineering of the river bank or includes in-water work, the following should be met (top of bank is shown on Map 475-2):

Commentary

- [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 (top of bank is shown on Map 475-2). Figures 475-5 and 475-6 show examples of biotechnical techniques. In addition to using biotechnical techniques, the following requirements apply:
- Rock armoring or other hard surface armoring methods must not be used between the top of bank and the Ordinary High Water Mark except as needed surrounding outfalls. 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;
 - If the site is currently used for public recreation, including access to a beach or the river, the bank must be sloped or terraced in a way that allows for at least one public access way to the beach or river;
 - Large wood, including root wads, tree boles and logs, must be used to reduce localized erosion, improve bank stabilization, and improve ecological values and, if the site is currently used for public recreation, support continued use of beaches and the river; 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.
- [2] If biotechnical techniques are not practicable, as described in 33.475.500.H, 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 (top of bank is shown on Map 475-2). At a minimum, live native willow or dogwood stakes should be planted in adequate soil, in the interstices between the rocks at a ratio of three stakes for every square yard of rock armoring.

Commentary

33.475.500.F.3

If the river bottom, which is the ground below the ordinary high water mark, will be altered significantly as a result of the removal or remediation of hazardous substances, the City requires that the river bottom be restored to support use by fish and people. The City's priority is a natural river bottom with improved ecological values and allows for public access where possible. However, the City recognizes that there will be cases when this will not be practical. If angular or large rock is necessary, the City requires adding a top layer of small gravel over the large rock.

- b. When there is a minor alteration of less than 500 square feet or less than 50 cubic yards of excavation or fill to the area between the top of bank and the ordinary high water mark, the regulations of paragraph G.1, above apply (top of bank is shown on Map 475-2).
3. In the area that is riverward of the Ordinary High Water Mark, the following apply:
- a. Avoid in-water permanent structures that will impact the navigation channel or will preclude river-dependent or river-related development from accessing and utilizing the river for public recreation, transportation, tourism, or the transport, transfer and conveyance of goods and materials to and from the upland site;
 - b. 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;
 - c. If the area is a beach or is a shallow water depositional area, then the final design should include all of the following:
 - (1) At least six inches depth of substrate that is ½-inch rounded gravel or smaller in size should be placed over capping material;
 - (2) The submerged slope should be no steeper than 1:7 (rise to run ratio); and
 - (3) Public access from the Greenway major public trails or abutting upland sites to the river should not be precluded.
 - d. If the area is not a beach or is not a shallow water depositional area, then the final substrate should be rounded rock no larger than 6 inches (D100=6”) with an average gradation size of 3 inches (D50=3”). Angular rock is discouraged.

HG. Demonstration of Impracticability. A person conducting a cleanup may be exempted from compliance with any requirement in this section if the person demonstrates that compliance with the requirement 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. To demonstrate impracticability the applicant must submit an engineering analysis, a cost schedule and any other information, such as desired future use of the site, that supports a demonstration that a requirement cannot be fully met.

Commentary

Figures 475-5 and 475-6

The examples that accompany this subsection were developed as part of a river bank design charrette conducted by River Plan staff as part of River Plan/North Reach, and attended by biologists, bank design experts, landscape architects, and City, state and federal agency representatives. Staff updated the figures to reflect types of contamination clean-up that have occurred in the Willamette River in recent years.

Figure 475-5

Example 1: Upland and In-Water Contamination Cleanup

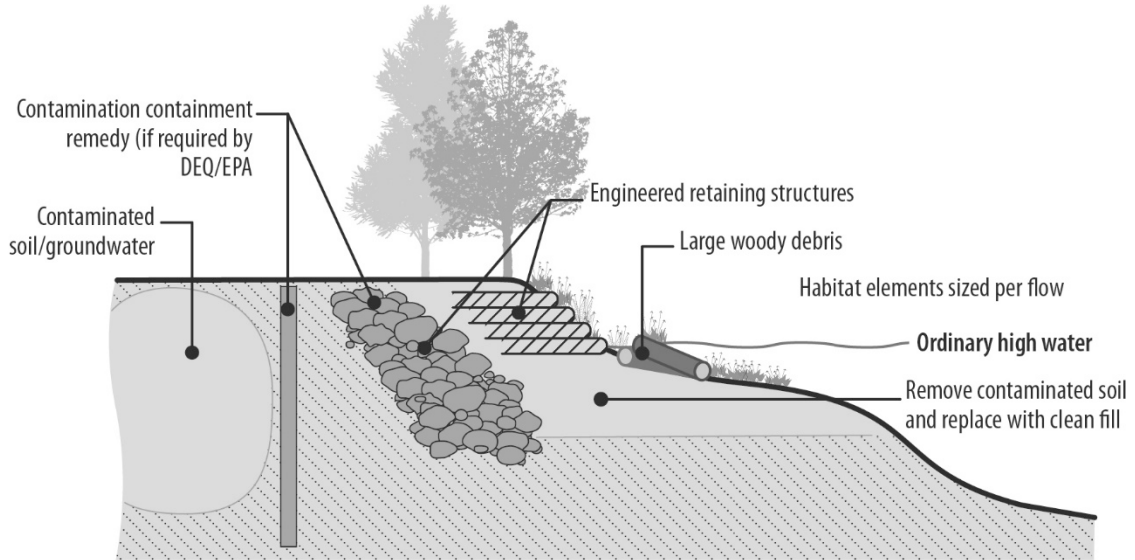
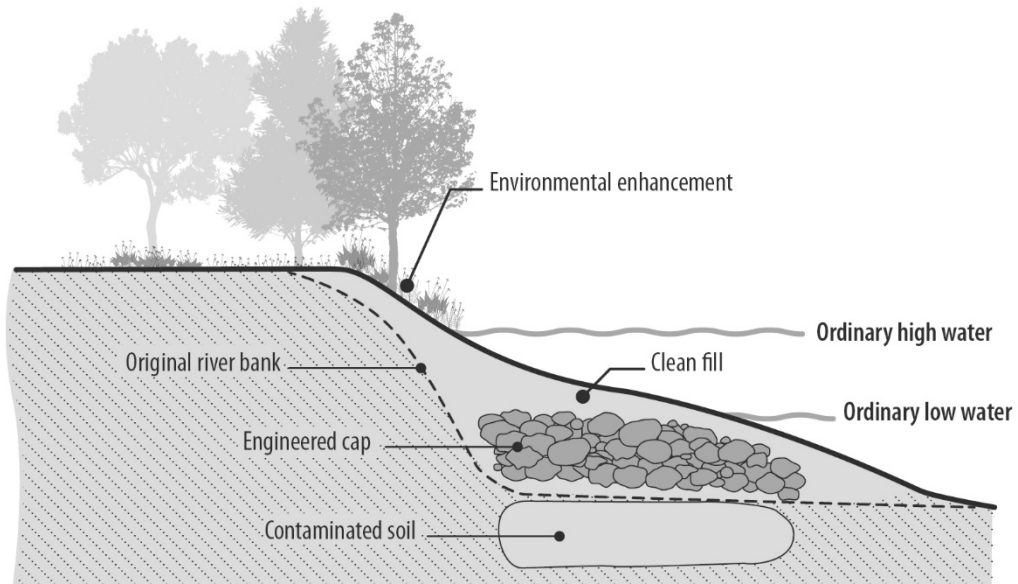


Figure 475-6

Example 2: In-Water Contamination Cleanup



Commentary

Map 475-1

This map depicts the Central Reach portion of the Willamette Greenway Boundary that is subject to the regulations of Chapter 475. Industrially zoned sites in the northeast and southeast portion of the Central Reach in the Central City remain subject to the regulations of the Greenway Overlay Zones Chapter, 33.440. Revised regulations for these sites will be reviewed as part of the update to the Greenway Plan for the North Reach, which predominantly addresses river industrial sites and development. The Greenway overlay zone regulations for the South Waterfront Subdistrict are contained in 33.510.253 and therefore, the South Waterfront Subdistrict is not included on this map and the regulations of this chapter do not apply.


Proposed Central Reach River Overlay Boundary

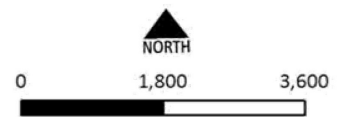
Map 475-1

Map Revised Xxxxx X, 201X



Legend

-  Proposed Central Reach River Overlay Boundary



Scale in Feet
Bureau of Planning and Sustainability
Portland, Oregon

Commentary

Map 475-2

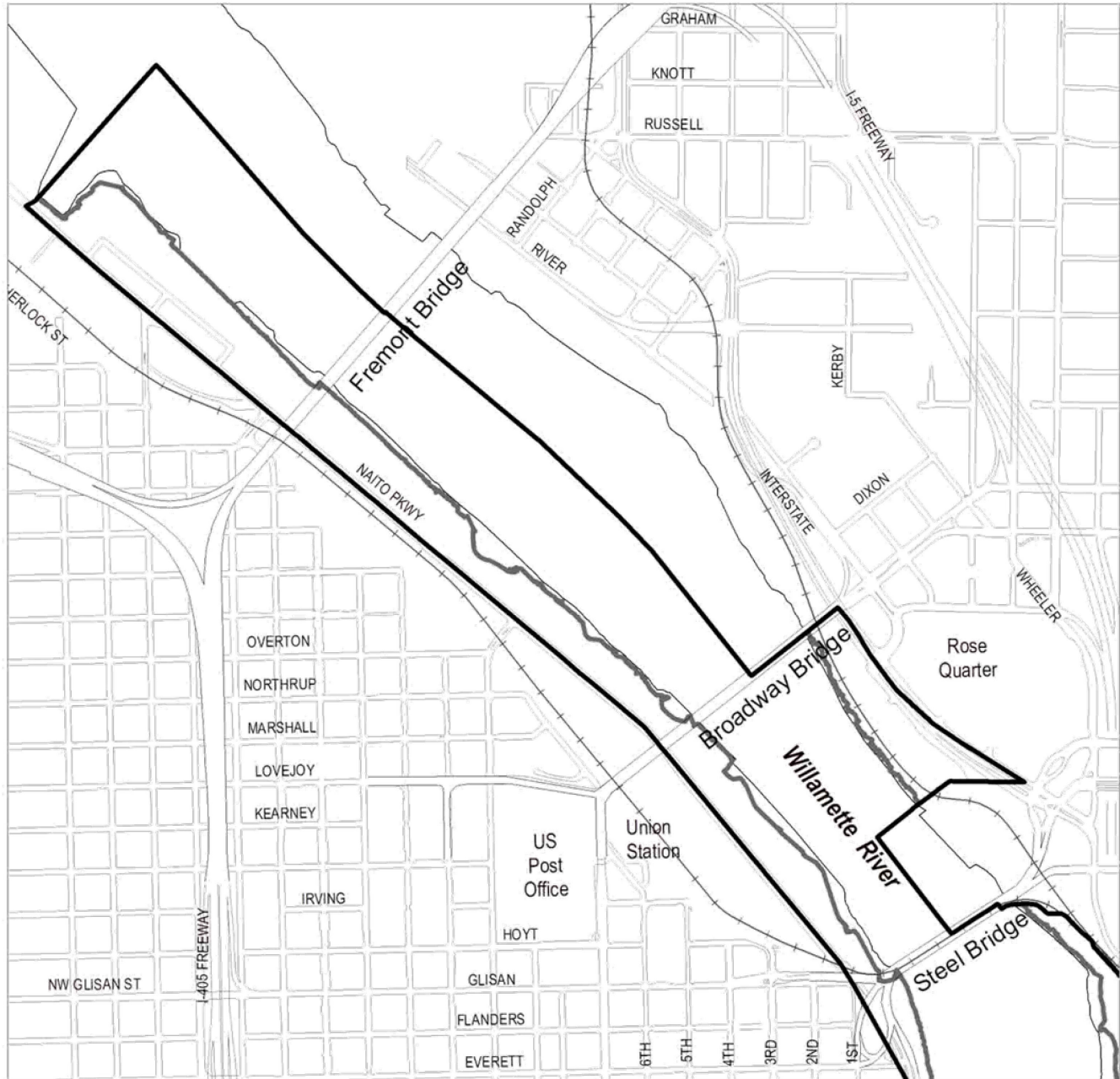
This map series shows the mapped top of bank for the Central City using Light Detection and Ranging (LIDAR). The top of bank is defined in 33.910 as the largest decrease in slope that is 10 percent or greater between the ordinary high water mark of a water body and a point 50 feet landward from the ordinary high water mark. See Section 33.930.150, Measuring Top of Bank. If there is no decrease in slope that is 10 percent or greater within a distance of 50 feet from the ordinary high water mark, then the top of bank will be the default location described in Section 33.930.150, Measuring Top of Bank.

Proposed Central Reach Top of Bank



Map 475-2

Map 1 of 3

Map Revised Xxxxx X, 201X



Legend

-  Proposed Central Reach River Overlay Boundary
-  Top of Bank (where mapped)



Commentary

Proposed Central Reach Top of Bank



Map 475-2

Map 2 of 3

Map Revised Xxxxx X, 201X



Legend

-  Proposed Central Reach River Overlay Boundary
-  Top of Bank (where mapped)



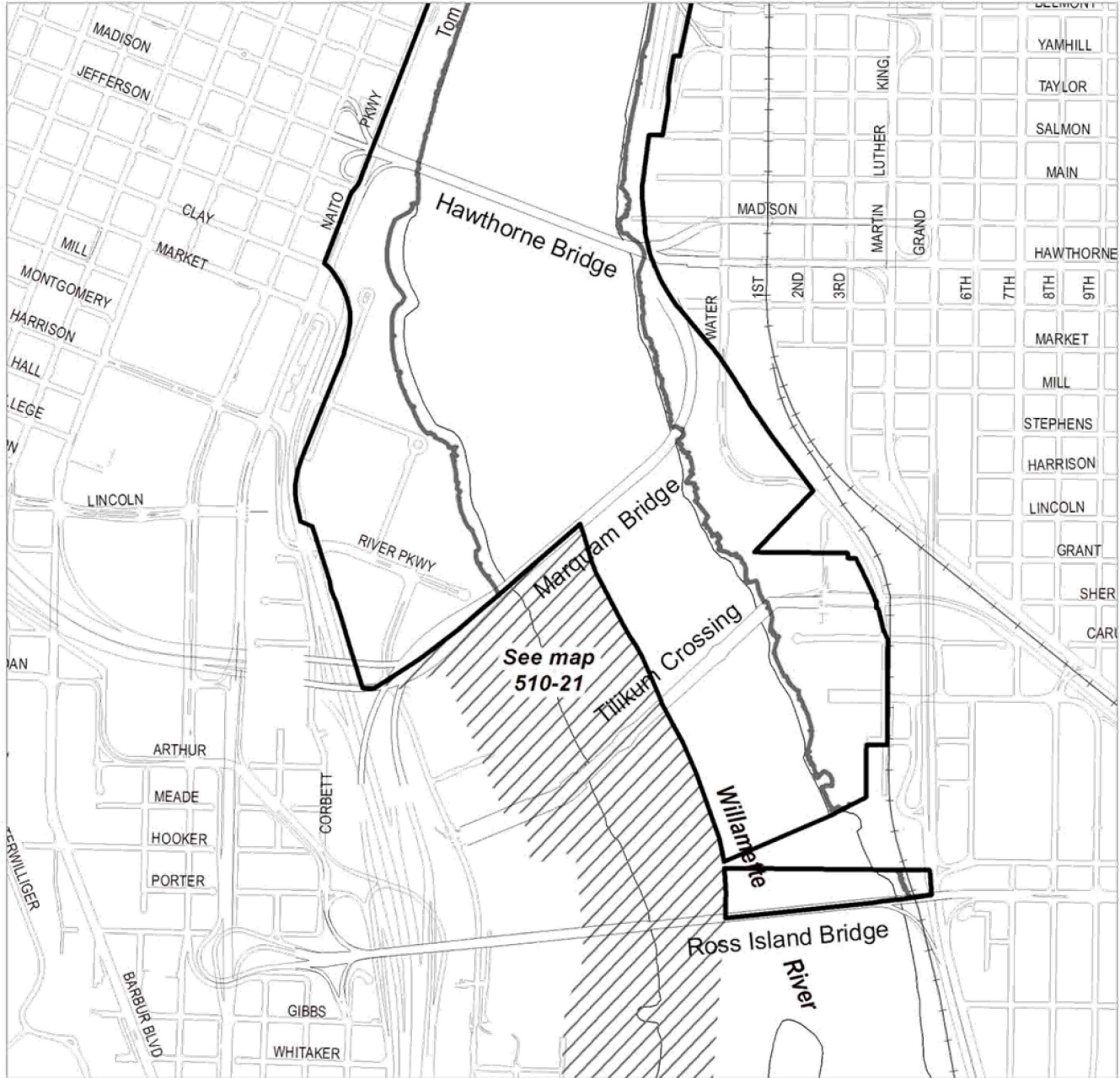
Commentary

Proposed Central Reach Top of Bank



Map 475-2

Map 3 of 3

Map Revised Xxxxx X, 201X



Legend

-  Proposed Central Reach River Overlay Boundary
-  Top of Bank (where mapped)



Commentary

Map 475-3

This map depicts Governor Tom McCall Waterfront Park and the public beach at Eastbank Crescent. There are different requirements at these locations, such as landscaping.



Areas Exempt from Landscaping Requirements

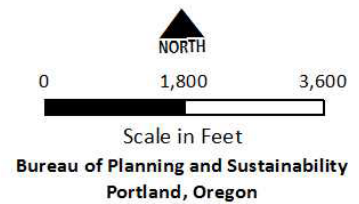
Map 475-3

Map Revised Xxxxx X, 201X



Legend

-  Proposed Central Reach River Overlay Boundary
-  Exempt Areas



Commentary

33.430 Environmental Overlay Zones

430

Sections:

General

- 33.430.010 Purpose
- 33.430.015 Purpose of the Environmental Protection Zone
- 33.430.017 Purpose of the Environmental Conservation Zone
- 33.430.020 Environmental Reports
- 33.430.030 Relationship to Other Environmental Regulations
- 33.430.033 Relationship to Scenic Resources Zone
- 33.430.035 Other City Regulations
- 33.430.040 Overlay Zones and Map Symbols
- 33.430.050 Subareas of Environmental Zones
- 33.430.060 Where These Regulations Apply
- 33.430.070 When These Regulations Apply
- 33.430.080 Items Exempt From These Regulations
- 33.430.090 Prohibitions

Development Standards

- 33.430.110 Purpose
- 33.430.120 Procedure
- 33.430.130 Permit Application Requirements
- 33.430.140 General Development Standards
- 33.430.150 Standards for Utility Lines
- 33.430.160 Standards for Land Divisions and Planned Developments
- 33.430.165 Standards for Property Line Adjustments
- 33.430.170 Standards for Resource Enhancement Projects
- 33.430.175 Standards for Right-of-Way Improvements
- 33.430.180 Standards for Stormwater Outfalls
- 33.430.190 Standards for Public Recreational Trails
- 33.430.195 Standards for Tree Removal in the Scenic Resources Overlay Zone

Environmental Review

- 33.430.210 Purpose
- 33.430.220 When Review is Required
- 33.430.230 Procedure
- 33.430.240 Supplemental Application Requirements
- 33.430.250 Approval Criteria
- 33.430.260 Use of Performance Guarantees
- 33.430.270 Special Evaluation by a Trained Professional
- 33.430.280 Modification of Base Zone Development Standards

Natural Resource Management Plans

- 33.430.310 Purpose
- 33.430.320 Scope
- 33.430.330 Procedure
- 33.430.340 Components
- 33.430.350 Approval Criteria for Adoption and Amendment

Commentary

Corrections to Violations of This Chapter

33.430.400 Purpose

33.430.405 Correction Options

33.430.407 Recurring Violations of This Chapter

Notice and Review Procedure

33.430.410 Purpose

33.430.420 When These Regulations Apply

33.430.430 Procedure

Map 430-1 Balch Creek Watershed Protection Plan Area

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

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

Map 430-4 Fanno Creek and Tributaries Conservation Plan Area

Map 430-5 Johnson Creek Basin Protection Plan Area

Map 430-6 Northwest Hills Natural Areas Protection Plan Area

Map 430-7 Skyline West Resource Protection Plan Area

Map 430-8 Southwest Hills Resource Protection Plan Area

Map 430-9 East Columbia Neighborhood Natural Resources Management Plan Area

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

Map 430-11 Forest Park Natural Resources Management Plan Area

Map 430-12 Peninsula One Natural Resources Management Plan Area

Map 430-13 Middle Columbia Corridor/Airport Natural Resources Inventory Environmental Mapping Project Area

Map 430-14 Bank Reconfiguration and Basking Features Area

Map 430-## The River Plan: Central 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~~ eighteen 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~~ eighteen environmental study reports:

- Balch Creek Watershed Protection Plan
- Columbia Corridor Industrial and Environmental Mapping Project
- East Buttes, Terraces and Wetlands Conservation Plan
- Fanno Creek and Tributaries Conservation Plan
- Johnson Creek Basin Protection Plan
- Northwest Hills Natural Areas Protection Plan
- Skyline West Conservation Plan
- Southwest Hills Resource Protection Plan
- ESEE Analysis and Recommendation for Natural, Scenic and Open Space Resources within Multnomah County Unincorporated Areas

Commentary

33.430.033

The scenic resources overlay zone (s) is applied to view corridors and scenic corridors throughout Portland. Scenic resources are addressed by statewide land use planning Goal 5, along with natural, cultural and historic resources. When a s overlay is applied in the same location as a conservation or protection overlay, the regulations of both this chapter and chapter 33.480 must be met. The recommendations of the Economic, Social, Environmental and Energy Analysis (ESEE) for the scenic resources, which are contained in various scenic resource protection plans, must be considered as part of environmental review.

- Middle Columbia Corridor/Airport Economic, Social, Environmental and Energy (ESEE) Analysis

33.430.033 Relationship to Scenic Resource Zone

When a Scenic Resource zone has been applied at the location of an environmental zone environmental review must include consideration of the development standards of Chapter 33.480, and the scenic qualities of the resource as identified in the *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*.

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.-B. No change

C. Existing development, operations, and improvements, including the following activities:

1. Maintenance, repair, and replacement of existing structures, exterior improvements, roads, public recreational trails, public rest points, public viewing points areas, public interpretative facilities, and utilities. Replacement is not exempt whenever coverage or utility size is increased;
- 2.-6. No change

Commentary

33.430.080.C.7.

Chapter 33.10 states that the city does regulate dredging within the river. This exemption allows dredging and channel maintenance within deep waters of the river and within the federal navigation channels. However, dredging in or near shallow water and beaches could have significant detrimental impacts on the habitat that the shallow water provides and is not exempt. Beaches and shallow water play important roles in the life cycle of aquatic species, including salmon, and impacts to these areas should be avoided and mitigated if the impacts can't be avoided. Shallow water is identified as water between zero and 20 feet deep, however 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 shallower areas.

33.430.080.C.8.

Zoning code Chapter 33.480, Scenic Resource Zone, applies a scenic (s) overlay to view corridors. View corridors were designated in the Scenic Resources Protection Plan (1991). 33.480 is clear that if the s overlay overlaps with an environmental overlay zone, then the regulations of 33.430 must be met. The changes to this section are intended to make the relationship between 33.430 and 33.480 clear.

In addition to the relationship between the code section, a new exemption is included that allows trimming of tree limbs to maintain a view. Tree removal is not exempt. There is a new standard that allows some tree removal within view corridors.

7. Dredging, channel maintenance, and the removal of materials from rivers as follows:
- a. Dredging, channel maintenance, and the removal of material within the federal navigation channel;
 - b. Dredging, channel maintenance, and the removal of materials outside the federal navigation channel as follows:
 - (1) Dredging and the removal of materials in waters that area 35 feet deep or deeper; or
 - (2) Channel, slip and berth maintenance that has been approved by the U.S. Army Corps of Engineers; and
 - c.) The placement of dredged materials within the environmental overlay zones is not exempt.
78. Removal or trimming of vegetation when no development or other activities subject to the development standards or review requirements of this chapter are proposed, if the following are met:
- a. All vegetation removal or trimming activities must be surrounded or protected to prevent erosion and sediment from leaving the site or negatively impacting resources on the site. Permanent erosion control, such as replanting areas of bare soil, must be installed.
 - b. The vegetation proposed for removal or trimming is one of the following:
 - (1) Trees or plants listed on the Nuisance Plant List;
 - (2) Dead, dying, or dangerous trees or portions of trees when they pose an immediate danger, as determined by the City Forester or an arborist. Removing these portions is exempt only if all sections of wood more than 12 inches in diameter either:
 - Remain, or are placed, in the resource are of the same ownership on which they are cut; or
 - Are removed, if the City Forester authorizes removal of diseased wood because it will threaten the health of other trees;
 - (3) Non-native non-nuisance trees and plants;
 - (4) Trees or tree limbs that are within 10 feet of an existing building and structures attached to buildings, such as decks, stairs and carports;

Commentary

33.430.190.D.

Tree removal is being moved to the end of the subsection because tree removal is allowed in both the trail and the viewing area associated with the trail. The tree removal standards are being updated to simplify them and make them the same as the standards for tree removal within a Scenic Resources overlay zone.

- (5) ~~Trees or plants that exceed the height restriction of a view corridor with special height restrictions designated in the Scenic Resources Protection Plan or Central City Scenic Resources Protection Plan. Within view corridors the scenic (s) overlay zone, shown on Map 480-1, Ttrees that exceed the height restrictions specified in the Scenic Resources Protection Plan (1991)of a City-designated view corridor may be removed or prunedtrimmed to maintain the view corridor.; or~~
- (6) ~~Within the scenic (s) overlayScenic Resource Zone, tree limbs may be trimmed to maintain a view. Tree removal-with the scenic (s) overlay zone is not exempt.~~

Renumber 8 - 11 to be 9 - 12

D.-E. No change

33.430.170 Standards for Resource Enhancement Projects

A. Bank reconfiguration. The following standards apply to bank reconfiguration projects that take place in the Bank Reconfiguration and Basking Features Area shown on Map 430-14. Slough and drainageway banks, which are the area between the ordinary high water mark and the top of bank, may be regraded when all of the following are met:

- 1.-7. No change
8. No structures are proposed except for public viewing areas developed as part of the project. The public viewing areas must meet the following:
 - a. The viewing area contains no more than 500 square feet of permanent disturbance area;
 - b. The viewing area is at least 30 feet from the top of bank of a stream, drainageway, wetland or other water body;

33.430.190 Standards for Major Public Recreational Trails

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

A.-C. No change

~~D.~~ Tree removal and replacement standards are as follows:

1. ~~Native trees 12 or more inches in diameter may not be removed. Each native tree more than 6 but less than 12 inches in diameter removed must be replaced as shown in Table 430-3;~~
2. ~~Non-native non-nuisance trees may be removed if each tree at least 6 inches in diameter is replaced as shown in Table 430-3;~~

Commentary

33.430.195

The regulations for the scenic (s) overlay zone are found in 33.480. The regulations are different for scenic corridors and view corridors. In scenic corridors, the intention is to preserve tree canopy. In view corridors, the intention is to allow some tree removal. This regulation in the environmental overlay zone is to be clear that tree removal in view corridors that correspond with a conservation or protection overlay is allowed per the standard. This standard does not apply to scenic corridors.

The standard is intended to allow trees to be removed that are blocking a view. Natural resources, including trees, and scenic resources, including views, are both State Land Use Planning Goal 5 resources. The standards balance the benefits of both trees and the view by allowing tree removal within the view corridor and requiring those trees to be replaced outside of the view corridor. Native trees that are larger than 12 inches in diameter can be removed through Environmental Review.

3. ~~Trees listed on the Nuisance Plants List may be removed if each tree at least 6 inches in diameter is replaced with one tree; and~~
4. ~~Replacement trees and shrubs must meet the planting standards of Subsection 33.430.140.K; and~~

ED. If a public viewing area is proposed, the following must be met:

1. The viewing area may create up to 500 square feet of permanent disturbance area;
2. The viewing area is at least 30 feet from the top of bank of a stream, drainageway, wetland or other water body; and
3. The viewing area is not in the floodway;

E. Tree removal and replacement standards:

1. Native trees up to 12 inches in diameter and non-native trees of any size may be removed with hand-held equipment or equipment with a wheel/surface-to-ground pressure of no more than 7.5 psi;
2. Trees that are more than 6 inches in diameter that are removed must be replaced as shown in Table 430-3; and
3. Replacement trees must meet the planting standards in 33.430.140.K.

33.430.195 Standards for Tree Removal in ~~Scenic (s) Overlay~~the Scenic Resource Zone ~~View Corridors~~

The following standards apply to removal of native trees up to 12 inches in diameter and non-native trees of any size that are located within an environmental overlay zone and the Scenic Resource Zonezone within scenic (s) resource overlay zone view corridors as described 33.480.050.A.:

- A.** Trees may be removed with hand-held equipment or equipment with a wheel/surface-to-ground pressure of no more than 7.5 psi;
- B.** Trees that are more than 6 inches in diameter that are removed must be replaced as shown in Table 430-3, and replacement ~~vegetation~~**trees** must be planted outside of the Scenic Resource overlay zone;
- C.** Temporary disturbance areas caused by the tree removal must be replanted to meet one of the following options. **Shrubs planted to meet this standard may be counted towards meeting the replacement requirements shown in Table 430-3:**
 1. Option 1. Three shrubs and four other plants must be planted for every 100 square feet of temporary disturbance area; or
 2. Option 2. Three shrubs must be planted for every 100 square feet of temporary disturbance area and the remainder of the temporary disturbance area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; and
- D.** Replacement plantings must meet the planting standards in 33.430.140.K.

Commentary

Environmental Review

33.430.250 Approval Criteria

A.–B. No change

C. **Public recreational facilities.** In resource areas of environmental zones, public recreational trails, rest points, ~~public viewing points~~ public viewing points areas, and interpretative facilities will be approved if the applicant's impact evaluation demonstrates that all of the following are met:

D.–E. No change

Commentary

33.440 Greenway Overlay Zones

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

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 ~~Major 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.

Commentary

33.440.030.B Where these regulations apply

The Willamette River Central Reach is regulated by 33.475, River Overlay Zones, and 33.510, Central City Plan District. Chapter 33.440 applies to the North and South reaches of the Willamette Greenway and industrially zoned parcels in the Central Reach.

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 and in the river, and which enhance the river's natural and scenic qualities.
3. River General. The River General ~~Overlay Zone~~ zone allows for uses and development which are consistent with the base zoning, which allow for public use and enjoyment of the ~~water~~ riverfront, 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.
5. 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 North and South reaches and industrially zoned sites within the Central reach of the Willamette Greenway Plan boundary. The North and South reaches and industrially zoned sites within the Central reach of the Willamette Greenway Plan boundary are shown on Map 440-1, and are designated on the Official Zoning Maps with River Natural, River Recreational, River General, River Industrial, or River Water Quality overlay zones.
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 in effect.
 - b. ~~In addition,~~ The major 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 major public trail symbol but which are outside of the greenway zones. 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.

C.-D.[No change]

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.

Commentary

33.440.100.B.4

The River Water Quality zone (q-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 greenway setback. The use limitation has no practical effect 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. The amendment clarifies the code 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).

33.440.100 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.
3. River Natural and River General zones. There are no special use restrictions in the River Natural and River General zones.
4. 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.G. 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.~~

C.-D. No change

Commentary

33.440.210.C.2.b.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 to natural resources, the q-zone regulations are not intended to effectively prohibit non-river-dependent and non-river-related development within the expanded setback area. The amended code 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. See new Figure 440-3 that illustrates this regulation.

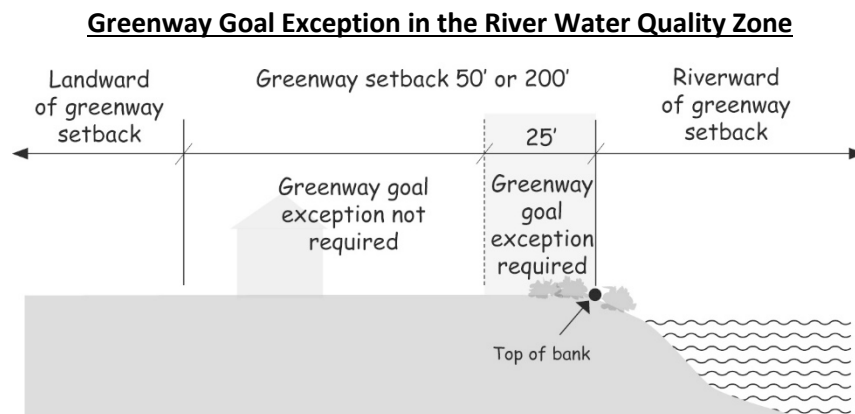
33.440.210 Development in the Greenway Setback

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, fills, and associated tree removal 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.
3. Development riverward of the greenway setback. Development, exterior alterations, excavations, fills, and associated tree removal riverward of the greenway setback that are river-dependent or river-related may be allowed if approved through a 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 [New]



Commentary

33.440.220 Floor Area Ratios

The maximum floor area ratio (FAR) is 2 to 1 for the first 200 feet inland measured from the ordinary high water line, except in any of the following situations:

- A. The site is already subject to a more restrictive FAR; or
- ~~B. The site is located in the Central City plan district, where the plan district FAR limits apply;~~
or
- ~~C.B.~~ The use is an industrial use in an IH or IG base zone.

33.440.240 Major Public Recreational Trails

- A. **Purpose.** ~~Major pPublic recreational~~ trails provide public access to and along both sides of the Willamette River. Major pPublic recreational trails are one of the tools used to comply with the public access requirements of the Comprehensive Plan and the Willamette Greenway Plan.
- B. **Major pPublic recreational trail requirements.** All sites with a major public recreational trail symbol shown on the Official Zoning Maps must comply with the requirements of Chapter 272, Major Public Recreational Trails, provide and install the official Greenway Trail signs as required by the Parks Bureau, and meet the trail design guidelines contained in the Willamette Greenway Plan.
- C. **Major Public Recreational Trails in the River Natural and River Water Quality zones.** Major public Recreational trails must be designed to minimize disturbances on the natural environment of the River Natural and the River Water Quality zoned lands.

Commentary

33.440.270.D. Nonconforming Uses and Development

Within the greenway setback in the River Water Quality zone development may expand building square footage as long as the overall building footprint is not enlarged. The provision allows for a vertical increase in square footage (e.g., a second story addition) that does not add to the total footprint area or increase impervious surface that would have negative impacts on the water quality of the Willamette River.

33.440.270 Nonconforming Uses and Development

Nonconforming uses and development in the greenway zones are subject to the regulations and reviews of Chapter 33.258, Nonconforming Situations. The additional regulations stated below and apply to development within or riverward of the greenway setback that is not river-dependent or river-related.

- A. The development may continue.
- B. The development may be changed to an allowed river-dependent or river-related development by right.
- C. The development may be changed to another nonconforming development if within a building if outdoors, it may not be changed to another nonconforming development.
- D. The development may be expanded, but not within or riverward of the greenway setback except in the River Water Quality zone. In the River Water Quality zone, development may be expanded within the greenway setback when the building coverage of the development is not increased.

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. When no development is proposed, removal of trees allowed under the exemptions below are subject to the tree permit requirements of Title 11, Trees. Exempt situations are:

- A.- C. [No changes]
- D. Development of or changes to the greenway trail or access paths provided that all development standards including the standards of Chapter 33.272, Major Public Recreational Trails, are met. Development of or changes in a viewpoint or view corridor, as indicated on Map 440-1, will require greenway review;
- E.-M. [No changes]

Commentary

33.440.330 Procedures

All development that does not require a Greenway Goal Exception is processed through the Type II procedure. All development that requires a Greenway Goal Exception is processed through a Type III procedure, and must be approved by City Council. See ~~Section~~ Chapter 33.440.360-840, Greenway Goal Exception and Chapter 33.850, Statewide Planning Goal Exceptions.

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 setback area 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 the definition of top of bank in 33.910.030;

Commentary

33.440.360

The approval criteria for a *Greenway Goal Exception* have been moved to a new Chapter 33.840.

- c. Distribution outline of shrubs and ground covers with a list of most abundant species;
- d. Trees identified by species, including the location of the drip line;
- e. Streams, wetlands, other water bodies, and drainage patterns, using arrows to indicate the direction of major drainage flow;
- f. Existing improvements such as structures, buildings, utility lines, fences, paved areas, roads, culverts, and bridges;
- g. Areas of known soil or groundwater contamination, areas of uncontained hazardous materials, and underground storage tanks; and
- h. Stormwater management facilities.

2.-3. [No changes]

B. No change

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;~~

Commentary

- ~~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

Maps 440-1 Willamette Greenway Public Access Map (Maps 1-5)

Map 440-1 is a series of maps that delineate the Willamette Greenway Boundary, primary and interim major trail alignments, access paths and connection points to other pedestrian paths and bicycle routes. The creation of Chapter 475, River Overlay Zones, applies to most of the Central Reach/ Central City portion of the Willamette Greenway. The greenway regulations for the South Waterfront Subdistrict can be found in Chapter 510. Industrial zoned sites that are mapped sites in Map 440-4, will continue to have the regulations of Chapter 440 apply.

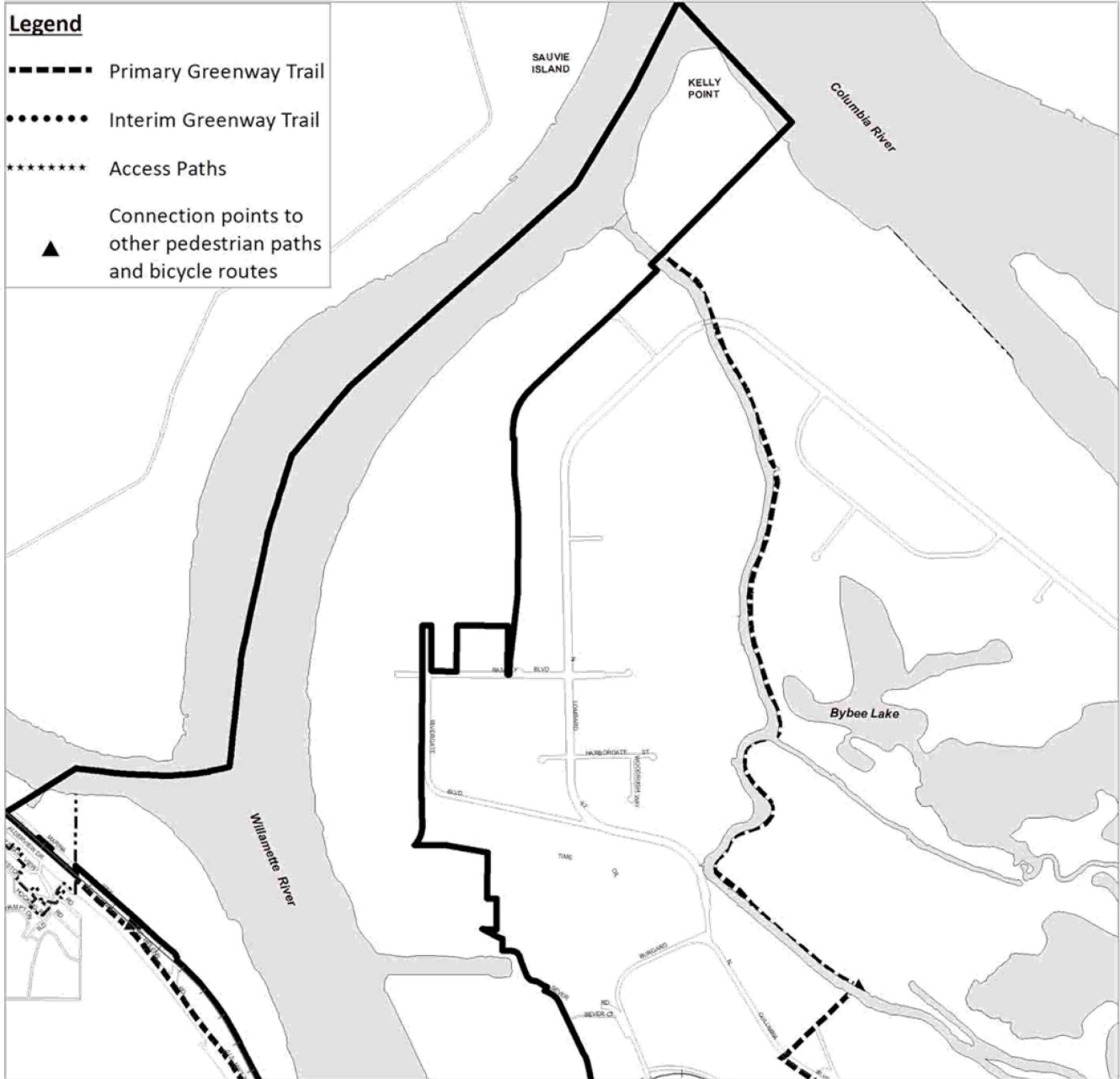
There are no changes to Maps 1-3 of 5 and Map 5 of 5. These maps are included in this draft for information only.

Proposed Willamette Greenway Public Access Map

Map 440-1

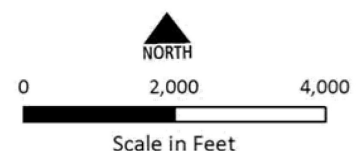
Map 1 of 5

Map Revised Xxxxx X, 201X



Legend

- City Boundary
- ▭ Proposed Greenway Boundary



Scale in Feet
Bureau of Planning and Sustainability
Portland, Oregon 122

05/05/2017

Revised Staff-Proposed Draft Central City 2035 Plan
Chapter 33.440, Greenway Overlay Zones

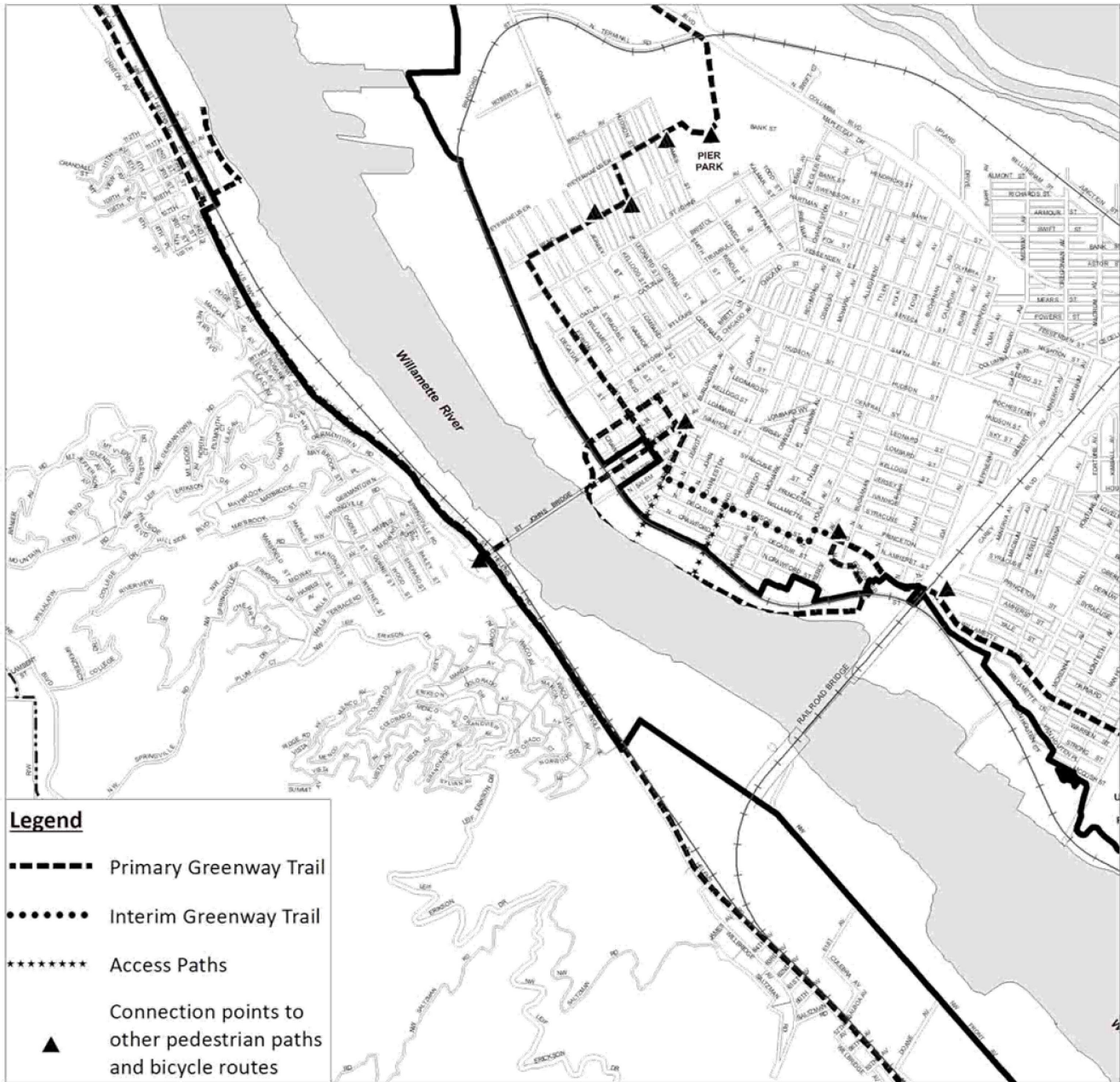
Commentary

Proposed Willamette Greenway Public Access Map

Map 440-1

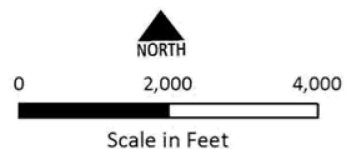
Map 2 of 5

Map Revised Xxxxx X, 201X



Legend

- City Boundary
- Proposed Greenway Boundary



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Chapter 33.440, Greenway Overlay Zones

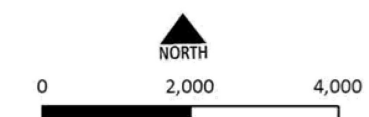
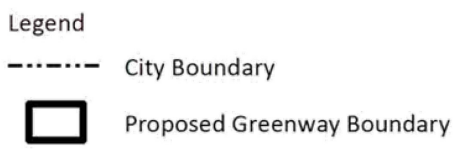
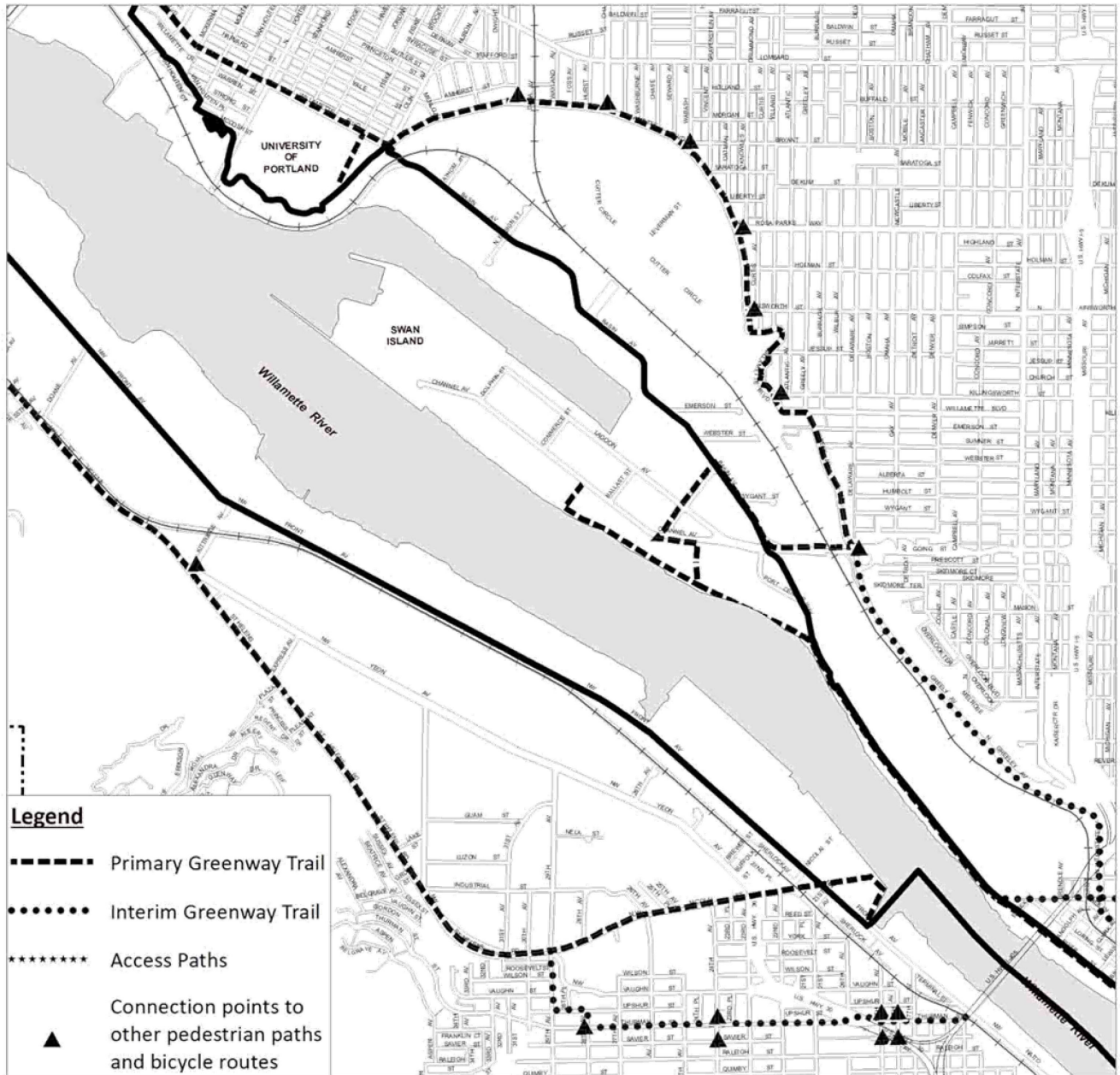
Commentary

Proposed Willamette Greenway Public Access Map

Map 440-1

Map 3 of 5

Map Revised Xxxxx X, 201X



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Chapter 33.440, Greenway Overlay Zones

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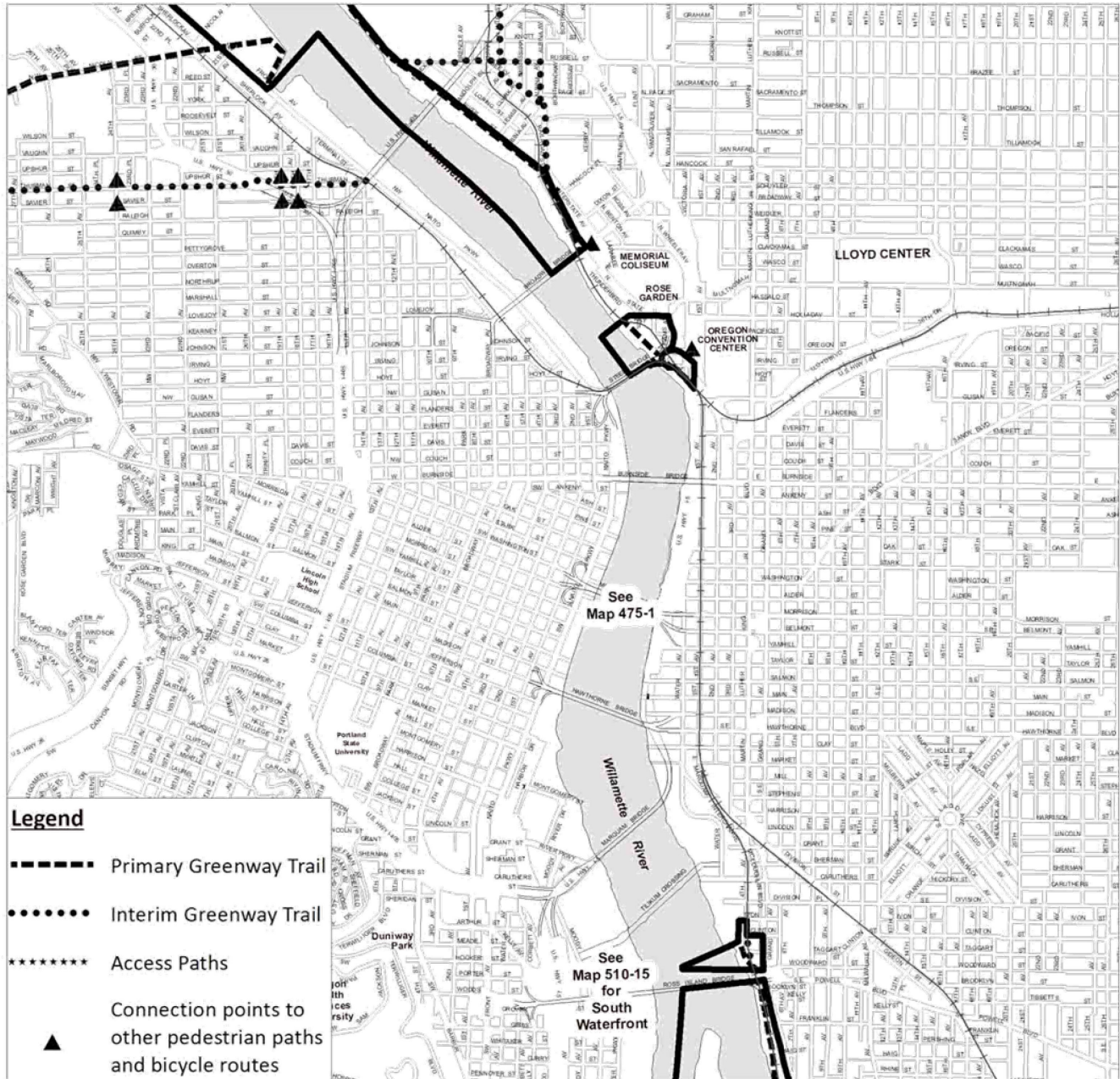
Commentary

Proposed Willamette Greenway Public Access Map

Map 440-1

Map 4 of 5

Map Revised Xxxxx X, 201X


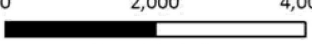


Legend

- Primary Greenway Trail
- Interim Greenway Trail
- Access Paths
- ▲ Connection points to other pedestrian paths and bicycle routes

Legend

- City Boundary
- Proposed Greenway Boundary


 NORTH
 0 2,000 4,000

 Scale in Feet

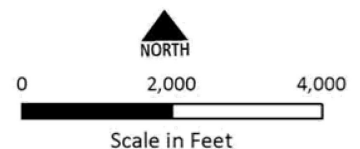
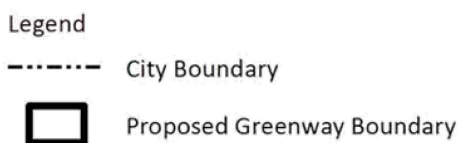
Commentary

Proposed Willamette Greenway Public Access Map

Map 440-1

Map 5 of 5

Map Revised Xxxxx X, 201X



Commentary

33.480.010 Purpose

BPS has produced a new scenic resources inventory and protection plan for the Central City and areas with view of or across the Central City. The *Central City Scenic Resources Protection Plan* updates and replaces some of the information and decisions of the *Scenic Resources Protection Plan (1991)*.

33.480.020 Map Symbol

Before application of the environmental conservation and protection overlay zones there were scenic overlay zones based on the *Scenic Resources Protection Plan (1991)*. The scenic overlays were removed when the environmental conservation and protection overlays were applied. It was assumed at that time that scenic resources would be addressed by Environmental Review. However, without the scenic overlays it is not possible to know when scenic resources must be considered. Therefore, the City reapplied the scenic overlay zones where they overlap with the environmental overlay zones.

33.480 Scenic Resource Zones

480

Sections:

- 33.480.010 Purpose
- 33.480.020 Map Symbol
- 33.480.030 Application of the Scenic Resource Zone
- ~~33.480.0640 Relationship to Environmental Zones~~
- 33.480.040 Development Standards
- 33.480.050 Tree Removal Review
- ~~33.480.060 Relationship to Environmental Zones~~

~~Map 480-1 Scenic Resources~~

33.480.010 Purpose

The Scenic Resource zone is intended to:

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

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

33.480.020 Map Symbol

The Scenic Resource zone is shown on the Official Zoning Maps with a letter "s" map symbol.

33.480.030 Application

The Scenic Resource zone is to be applied to all significant scenic resources identified in *the Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*. Any changes to land or development, including rights-of-way, within the Scenic Resource zone are subject to the regulations of this chapter.

~~33.480.0640 Relationship to Environmental Overlay Zones~~

~~When an environmental zone has been applied at the location of a designated scenic resource, the regulations of 33.430, Environmental Overlay Zones must be met. Environmental review must include consideration of the scenic qualities of the resource as identified in the ESEE Analysis for *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*. The development standards of this Chapter must be considered as part of that review.~~

Commentary

33.480.040.A.2

The base zones include height limits for development and vegetation. When the view corridor, shown in the *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan* sets a height limit that is more restrictive than the base zone, the view corridor height limit takes precedence. In some situations, the view corridor height limit is **not** more restrictive than the height limits of the base zone; therefore, the base zone takes precedence.

33.480.040 Development Standards

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

- A. View Corridors.** All development and vegetation with a view corridor designation in the *Scenic Resources Protection Plan* or *Central City Scenic Resources Protection Plan* are subject to the regulations of this Subsection.
1. Purpose. The intent of the view corridor designation is to establish maximum heights and allow vegetation removal within view corridors to protect significant views from specific designated viewpoints.
 2. Standard Maximum height standards. All development within the designated view corridors, shown on Map 480-2, are subject to the height limits of the base zone, overlay zone or plan district, except when a more restrictive height limit is established by the view corridor. In those instances When the view corridor height limit is more restrictive than the base zone, the view corridor height limit applies to both development and vegetation. Removal of trees or limbs necessary to maintain the view corridor is allowed. When no development is proposed, tree removal is subject to the requirements of Title 11, Trees. Public safety facilities are exempt from this standard.
 3. Vegetation removal standard. The following standards apply to vegetation trimming and removal within designated view corridors, shown on map 480-1:
 - a. Removing trees or tree limbs within an environmental overlay zone is subject to the requirements of 33.430, Environmental Overlay Zones.
 - b. Removing or trimming vegetation within a river environmental overlay zone is subject to the requirements of 33.475, River Overlay Zones.
 - c. Removing trees or tree limbs in a view corridor outside of the environmental or river overlay zones is subject to the requirements of Title 11, Trees.
- B. Scenic Corridors.** All development and vegetation within a scenic corridor designation in the *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*, shown on Map 480-3, are subject to the regulations of this Subsection.

Commentary

1. Purpose. The scenic corridor designation is intended to preserve and enhance the scenic character along corridors, and where possible, scenic vistas from corridors. This is accomplished by limiting the length of buildings, preserving existing trees, providing additional landscaping, preventing development in side setbacks, screening mechanical equipment, and restricting signs. Property owners and others are encouraged to make every effort to locate buildings, easements, parking strips, sidewalks, and vehicle areas to preserve the maximum number of trees.
2. Standards.
 - a. Scenic Corridor Setback. A scenic corridor setback per Table 480-1 applies along street lot lines that abut the Scenic Corridor identified in the Scenic Resources Protection Plan.

Table 480-1 Scenic Corridor Setback [1]	
Zone	Minimum Setback from Street Lot Line
IR	1' per 2' of building height, not less than 10'
R1	3'
EG1, IH	5'
EG2, IG2	25'
All other base zones	20'

- [1] Larger minimum setbacks in overlay zone and plan district supersede this setback
- b. Side building setbacks. Buildings, garages, and covered accessory structures are not allowed within the side building setbacks within the first 100 feet from the designated resource.
 - c. Limiting structure length. No more than 80 percent of the length of any site can be occupied by structures, excluding fences, as measured parallel to the scenic corridor. This standard applies to an entire attached housing project rather than to individual units.
 - d. Limiting blank facades. Long, blank facades create uninteresting elements along a scenic corridor. This standard applies to all portions of buildings within 100 feet of the designated resource. Residential structures are exempt from this standard. Blank facades must be mitigated for in at least one of the following ways:
 - (1) The maximum length of any building facade is 100 feet.
 - (2) Two rows of trees, one deciduous and one evergreen, must be planted on 30-foot centers along the length of the building between the structure and the protected resource.
 - (3) Facades facing the scenic corridor must have a minimum of 40 percent of surface area in glass. Mirrored glass with a reflectance greater than 20 percent is prohibited.

Commentary

- e. Landscaping. The entire required scenic corridor setback must be landscaped to at least the L1 level unless the more stringent standards below or in other chapters of this Title apply. Up to 25 percent of the entire area of the scenic corridor setback may be used for vehicle and pedestrian areas except that each lot is allowed at least a 9-foot wide driveway or parking area and a 6-foot wide pedestrian area. Additionally, areas within the adjacent right of way must be landscaped to standards approved by the City engineer. The required landscaping in the setback and adjacent right of way must be provided at the time of development, except as allowed in B.2.e(1) below.
 - (1) When alterations are made to a site with an existing nonconforming use, allowed use, limited use, or conditional use, and the alterations are over the threshold stated in 33.258.070.D.2.a, the site must be brought into conformance with the landscape standards above. The value of the alterations is based on the entire project, not individual building permits. The cost of the upgrades required by this chapter may be counted toward the cost of upgrades required by Subsection 33.258.070.D. However, the upgrades required by this chapter must be completed first.
 - (2) Area of required improvements. Except as provided in 33.258.070.D.2.c(2), Exception for Sites With Ground Leases, required improvements must be made to the entire site and adjacent right of way. If the ground lease is adjacent to a right of way within the scenic corridor, the upgrades required by this chapter also apply to the right of way adjacent to the ground lease.
 - (3) Timing and cost of required improvements. The timing and cost of the required improvements is specified in 33.258.070.D.2.d. However, where 33.258.070.D.2.d refers to the standards listed in 33.258.070.D.2.b, the landscape standards above, are also included.
- f. Screening. All exterior garbage cans, garbage and recycling collection areas, and mechanical equipment (including heat pumps, air conditioners, emergency generators, and water pumps) must be screened from view or not visible from the designated scenic corridor. Small rooftop mechanical equipment, including vents, need not be screened if the total area of such equipment does not exceed 10 square feet per structure.
- g. Fences and hedges. The total maximum height of fences, hedges, and berms within the scenic corridor setback, and when allowed in the adjacent right of way is 3-1/2 feet. This provision does not apply to any required screening and buffering.
- h. Preservation of trees. This provision does not apply if the property is regulated by state statutes for forest management practices. All trees 6 or more inches in diameter that are within the scenic corridor setback and right of way must be retained unless removal conforms to one or more of the following standards.

Commentary

- ~~(1)~~ The tree is located within a view corridor ~~shown on Map 480-1 designated in the *Scenic Resources Protection Plan (1991)* or the *Central City Scenic Resources Protection Plan (2017)*;~~
- ~~(2)~~ The tree is located within the footprint or within 10 feet of existing or proposed buildings and structures attached to buildings, such as decks, stairs, and carports, or within 10 feet of a proposed driveway;
- ~~(3)~~ The tree is determined by an arborist to be dead, dying or dangerous;
- ~~(34)~~ The tree is on the *Nuisance Plants List*;
- ~~(45)~~ The tree must be removed due to installation, repair, or maintenance of water, sewer, or stormwater services. For new installation of services, tree removal allowed under this provision is limited to a single 10 foot wide utility corridor on each site;
- ~~(56)~~ The tree is within a proposed roadway or City-required construction easement, including areas devoted to curbs, parking strips or sidewalks, or vehicle areas;
- ~~(67)~~ The tree is within 20 feet of a Radio Frequency Transmission Facility antenna that is a public safety facility. The distance to the antenna is measured vertically and horizontally from the edge of the antenna. See Figure 480-1.; or ~~(78)~~
- ~~(78)~~ The tree is at least 6 and up to 12 inches in diameter and does not meet any of the other standards of this subparagraph, but is replaced within the scenic corridor setback or adjacent right of way according to Table 480-2. Replacement plantings must meet Section 33.248.030, Plant Materials.

~~3. Tree removal review. Trees that do not qualify for removal under Subparagraph 33.480.050.B.2.h may be removed if approved through tree review as provided in Chapter 33.853, Tree Review. However, where the tree removal would require environmental review, only environmental review is required.~~

33.480.050 Tree Removal Review.

- A.** Tree removal without development. When no development is proposed, tree removal allowed by the standards of Subparagraph 33.480.040.B.2.h is subject to the tree permit requirements of Title 11, Trees.
- B.** Tree removal in development situations. When tree removal is proposed as part of development, the standards of Subparagraph 33.480.040.B.2.h apply in addition to the tree preservation standards of Title 11, Trees.
- C.** Trees that do not qualify for removal under Subparagraph 33.480.040.B.2.h may be removed if approved through tree review as provided in Chapter 33.853, Tree Review. However, where the tree removal would require environmental review, only environmental review is required.

Commentary

Figure 480-1
Measuring from an RF Transmission Facility Antenna

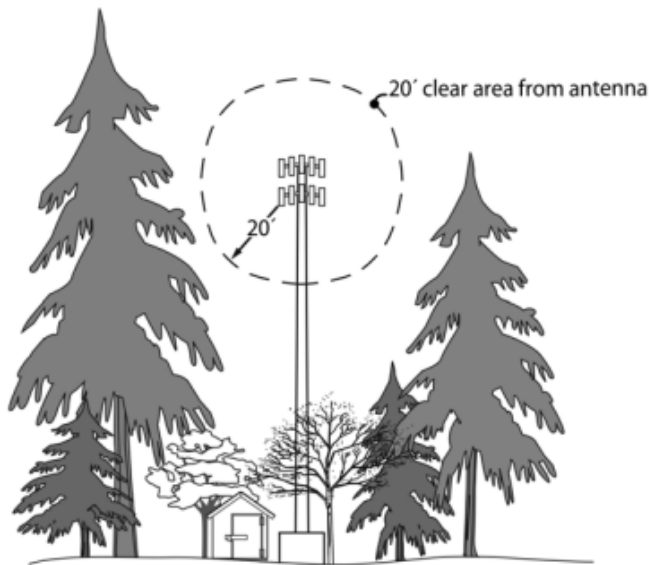


Table 480-2 Tree Replacement Requirements In Scenic Overlay Zone		
Applicants may choose either Option A or Option B [1]		
Size of tree to be removed (inches in diameter)	Option A (no. of trees to be planted)	Option B (combination of trees and shrubs)
Up to 9	1 tree	Not applicable
More than 9 and up to 12	3 trees	2 trees and 2 shrubs
More than 12	Tree Review Required (see 33.480.050 below)	

[1] Trees and Shrubs must be species listed in the Scenic Resources Protection Plan

33.480.060 Relationship to Environmental Overlay Zones

When an environmental zone has been applied at the location of a designated scenic resource, the regulations of 33.430, Environmental Overlay Zones must be met. Environmental review must include consideration of the scenic qualities of the resource as identified in the ESEE Analysis for *Scenic Resources Protection Plan* or the *Central City Scenic Resources Protection Plan*. The development standards of this Chapter must be considered as part of that review.

Commentary

Chapter 33.865 is a new chapter and the text is not underlined for ease of reading.

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 Central Reach.

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:

- 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 Review is required in the following situations:

- A. When an applicant proposes non river-dependent or river-related primary uses within or riverward of the River Setback;
- 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 33.475.440 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;
- 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 modification of River Environmental overlay zone procedure does not apply to changes caused by violations of subsection 33.475.440.

33.865.030 Procedure

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

Commentary

33.865.040 Supplemental Application Requirements

The supplemental application requirements are substantively the same as those required for the Environmental Overlay Zones.

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 resources and functional values ranked high or medium in the *Willamette River Natural Resource Inventory* or when mitigation is proposed in order to meet River Review approval criteria. A remediation action site plan is required when significant detrimental impacts occur in violation of the Code and no permit was applied for. Five copies of each required site plan must be submitted. The site plans must show the entire site, must be drawn accurately to a scale that is between 1 inch to 50 feet and 1 inch to 10 feet, and must show all property lines with dimensions, a north arrow and a date. Additional site plans that show only a portion of the site may be submitted. All copies of site plans must be suitable for reproduction on paper no smaller than 8.5 x 11 inches and no larger than 36 x 48 inches. 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.~~

1. Existing conditions site plan. The existing conditions site plan must show the following:
 - a. ~~For the entire site:~~
 - a.(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, **including structures and topographic contours referenced to determine top of bank**, centerline of stream, ordinary high water, or wetland boundary as appropriate. See Section 33.910.030, Environmental-Related Definitions, Top of Bank. In the case of a violation, also identify the location of the wetland or water body prior to alteration;
 - b.(2) 100-year floodplain and floodway boundaries. In the case of a violation, also identify the location of the 100-year floodplain and floodway prior to alteration;
 - c. Drainage patterns, using arrows to indicate the direction of major drainage flow;

Commentary

~~(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. In the case of a violation, also identify the location of the wetland or water body prior to alteration;~~

~~d.(4) Boundaries of the River Environmental overlay zone. These boundaries may be scaled in relation to property lines from the Official City Zoning Maps;~~

~~e. 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 1.5 inches in diameter identified by species and size, including the location and size of the trunk, **canopy crown diameter** and the root protection zone. In the case of a violation, also identify the trees that were cut or damaged by showing a stump diameter and species;~~

~~f. Outside of the River Environmental overlay zone, trees over 3 inches in diameter, including the location of the trunk and canopy crown cover, identified by species and size;~~

~~g.(5) Location and boundaries of designated scenic resources. The location of viewpoints, view corridors and scenic corridors must be show in relation to the property lines, existing and proposed public trails and boundaries of the River Environmental overlay zone;~~

~~h.(6) 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. In the case of a violation, also identify the topography prior to alteration; and~~

~~(7) Drainage patterns, using arrows to indicate the direction of major drainage flow; and~~

~~i.(8) Existing improvements such as structures, buildings, utility lines, stormwater systems, septic or sewer facilities, 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~~

Commentary

~~(2) Trees over 3 inches in diameter identified by species and size, including the location of the trunk and the root protection zone or canopy drip line. In the case of a violation, also identify the trees that were cut or damaged by showing stump diameter and species.~~

2. Proposed development site plan. A-The proposed development site plan must show the following:
 - a. Location of the River Environmental overlay zone, the top of bank and river setback areas, and the landscaping area subareas;
 - b. Location of all proposed development including buildings, structures, decks, retaining walls, bridges, trails/pathways;
 - c. Location of proposed utility lines and connections, stormwater systems and septic or sewer facilities;
 - d. Location of protected scenic resources;
 - e. Delineation and total square footage of temporary and permanent disturbance areas including equipment maneuvering areas;
 - f. Delineated areas of vegetation removal and identification of trees to be removed using a bold X;
 - ~~g.e.~~ Proposed final contour lines at 2 foot vertical intervals in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater;
 - ~~f.~~ Delineated areas of ground disturbance and vegetation removal;
 - ~~h.g.~~ Location of excavation and fill and total quantities of each, including bBalanced cut and fill calculation for any grading in the 100-year floodplain; and
 - ~~i.h.~~ Delineated areas to be left undisturbed; and
 - j. Location and species of existing trees, shrubs, and ground covers to remain including the required root protection zone per Title 11;
3. Construction management site plan. A-The construction management site plan must show the following:
 - a. Location of the River Environmental overlay zone;
 - b. ~~Delineated areas~~Delineation and total square footage of temporary and permanent ground disturbance areas and vegetation removal including equipment maneuvering areas;

Commentary

- c. 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;
 - d. Location of excavation and fill and total quantities of each, including balanced cut and fill calculation for any grading in the 100-year floodplain;
 - e. Location of all proposed development;
 - f. Delineated areas of vegetation removal and identification of trees to be removed using a bold X;
 - ~~g.e.~~ Areas where existing topography and vegetation will not be affected by the development proposal;
 - ~~h.f.~~ Identification of trees to be removed using a bold X and the L Location of trees to remain including the required root protection zone per Title 11;
 - ~~i.g.~~ Location of site access and egress;
 - ~~i.h.~~ Equipment and Mmaterial staging and stockpile areas; and
 - ~~k.i.~~ Erosion control measures; ~~and~~
 - ~~j.~~ Measures to protect trees and vegetation in accordance with Title 11.
4. Mitigation or remediation site plan. A mitigation site plan is required when the proposed development will result in unavoidable significant detrimental impact on the resources and functional values ranked high or medium in the Willamette River Natural Resources Protection Plan or when mitigation is proposed in order to meet River Review approval criteria. A remediation site plan is required when significant detrimental impacts occur in violation of the Zoning Code and no permit was applied for. AnThe on-site or off-site mitigation or remediation site plan must show the following:
- a. Location of the River Environmental overlay zone in relation to the mitigation site;
 - b. Distribution outline, species composition, and percent cover of ground covers to be seeded or planted using standard landscape graphics;
 - c. Location, species, and size of each individual tree to be planted;
 - d. A planting table listing the size, number, and species (common and scientific) of 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 in relation to the project impact area;

Commentary

- h. Location of protected viewpoints and view corridors;
- f. The location of the mitigation site in relation to existing, proposed or anticipated future development on the site;
- g. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;
- i. Water bodies to be created, including centerline, top of bank, wetland boundary and depth;
- j. Water sources to be used, including volumes;
- k. Location of excavation and fill and total quantities of each including balanced cut and fill calculation for any grading in the 100-year floodplain; and
- l.k. 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)~~ Willamette River Central Reach Natural Resources Protection Plan (2016), 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 natural resources and their functional values found on the site. The ~~Willamette River North Reach Natural Resources Inventory: Riparian Corridors and Wildlife Habitat (2008)~~ Willamette River Central Reach Natural Resources Protection Plan (2016) 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

(2) Scenic resources are mapped with a scenic (s) overlay zone. The adopted *Central City Scenic Resources Protection Plan* describes the specific resources to be protected. Chapter 33.480, *Scenic Resources*, says that adjustments and modifications to the standards can be made through Environmental or River Review. Scenic resources should be considered in context of the natural resources features and functions. In the case where resource values will be diminished in order to protect the scenic resources, mitigation is required to compensate for the loss of function.

The ~~Willamette River/Central Reach Natural Resources Inventory (2015)~~
Willamette River Central Reach Natural Resources Protection Plan (2016)

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/Central Reach Natural Resources Inventory (2015)~~
Willamette River Central Reach Natural Resources Protection Plan (2016)

also provides information on wildlife and plant special status species 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 and description of the scenic resources on the site. Scenic resources are mapped on the official zoning maps with the Scenic (s) overlay zone and are described in ~~the Central City Scenic Resources Protection Plan (2015)~~ provides site-specific information on the scenic resources. The application must contain current information regarding the scenic resources.
- (3) Identification of significant unavoidable detrimental impacts on identified natural and scenic resources and functional values. 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;
 - tree planting;
 - 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 natural and scenic resources and functional values; and

Commentary

- (4) Determination of the practicable alternative that best meets the applicable approval criteria.
 - b. An impact evaluation for a violation includes:
 - (1) Description, by characteristics and quantity, of the natural and scenic resources and functional values on the site prior to the violation; and
 - (2) Determination of the impact of the violation on the natural and scenic 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 natural and scenic 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 natural and scenic resources and functional values that result from the chosen development alternative or violation. A mitigation or remediation plan includes:
 - a. Natural or scenic 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;

Commentary

33.865.100.A. 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.

33.865.100.A.1 Resource Enhancement Projects

Resource enhancement projects should result in an overall increase in natural resource functions. That could result from an increase in natural resource area; for example, removing impervious surface and landscaping with native plants. Or it could result from keeping the area the same but removing invasive plants and landscaping with native plants. No net loss of functional value does not mean that no trees or native vegetation can be removed. For example, if older mature trees are dying out and becoming hazardous; removing those trees and replacing the trees with new native trees should be considered no net loss of functional value.

- c. Construction timetables;
- d. Operation and a long-term maintenance plan;
- e. Monitoring and evaluation procedures that include periodic reporting;
- 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. Development within the River Environmental overlay zone. The applicant's supplemental narrative must demonstrate that all of the following are met:

- 1. Resource enhancement projects:
 - a. There will be no net loss of total resource area;
 - b. There will be no net loss of functional values; and
 - ~~b.c.~~ 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 natural or scenic 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 review;
 - b. Proposed development locations, designs, and construction methods are less detrimental to identified natural and scenic resources and functional values than practicable and significantly different alternatives, including alternatives on the same site but outside of the River Environmental overlay zone;

Commentary

33.865.100.A.2.d Mitigation

Mitigation for unavoidable impacts from development will be required for every River Review.

(3) 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.

Through previous mitigation projects, staff determined a mitigation ratio of 1.2:1 is the absolute minimum to account for time lag between impacts and mitigation establishment and that ratio is associated with mitigation for grassland habitat. Shrublands, woodlands and forests will have a longer time lag between impacts and establishment of mitigation. Therefore, a 1.5:1 ratio of project impact area to mitigation area is the least amount of mitigation that may be proposed. This is also the mitigation ratio required by the standard 33.475.440.L, Mitigation.

During review it is possible that a higher mitigation ratio will be required due to the factors listed in 3. The applicant's response to the first bullet, uniqueness of the features and functions, should include consideration of how rare the habitat or fish/wildlife are in the local area or region and if any species listed in the Natural Resources Inventory as *at-risk* are impacted, including Endangered Species Act listed species. The applicant's response to distance between the impact area and mitigation area should address the species being impacted and how well the mitigation area will serve those species that will have to relocate.

Responses to the last bullet under 3 should address the time for plants to grow and fully replace the lost functions. The City or applicant may propose a different mitigation ratio that better accounts for the time lag between impacts and a fully functioning mitigation site. Time lag is dependent on the plant and fish/wildlife species impacted and the time it takes for those functions to be replaced. An old growth bottomland hardwood forest can take more than 50 years to be replaced, where a grassland may take only a few years.

(5) On-site mitigation opportunities must be explored before off-site mitigation can be approved. On-site mitigation is a priority in cases where there is adequate space to mitigate based on the mitigation ratio, 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.

- 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 Central Reach, or other sites in the Central Reach where environmental restoration is in progress or complete;
- d. Mitigation:
- (1) The mitigation plan ~~must~~ demonstrates that all significant detrimental impacts on identified scenic and natural resources and functional values, and the interim loss of functional value will be compensated for;
 - (2) To the extent practicable, the natural and scenic resources and functional values restored or enhanced as mitigation ~~must~~ be the same kind of resource, performing the same functions ~~and value~~ as the lost resource;
 - (3) The amount of natural resource mitigation due as compensation ~~must will~~ be based on the amount and relative condition of the resources and functional values impacted by the proposal. The amount of natural resource mitigation required will be at a ratio of no less than 1.5:1 of mitigation area to project impact area, but may be more to address the following:
 - the uniqueness of the resources and functional values impacted;
 - the relative condition of the mitigation area;
 - the distance between the impact area and mitigation area; 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 functions;
 - (4) Mitigation must occur within the River Environmental overlay zone or in an area that is contiguous to the River Environmental overlay zone. The applicant must own the mitigation site, possess a legal instrument that is approved by the City as sufficient to ensure the right to carry out, monitor, and maintain the mitigation (such as an easement or deed restriction);
 - (45) 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;

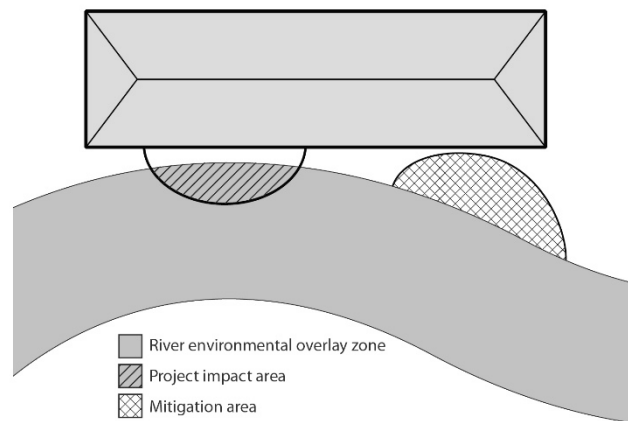
Commentary

33.865.100.A.2.d.6 Mitigation

A higher ratio of mitigation to impacts is applied to off-site mitigation because there are natural resource functions lost permanently when resources are removed at one location and mitigated for at a different location. The approval criteria of 33.865.100.A.2.d.3 allows the mitigation ratio to be higher than 1.5:1 depending on the distance between the impact area and the mitigation area. The minimum ratio of 3:1 for off-site mitigation ensures that compensation for moving the resources to a different site is accounted for. Staff may propose an even higher ratio if the mitigation area is located far from the impact area or if the species that use the resources impacted are not benefitting from the mitigation. Best available science includes ratios of 7:1 or higher if there is a large distance between the impact area and mitigation area and the species in the impact area cannot easily transplant to the mitigation area.

- (56) If on-site mitigation is not practicable or ecologically beneficial, the applicant may perform mitigation off-site. The off-site mitigation must meet 33.865.100.A.2.d.1-4 all other approval criteria in this Subparagraph and the following:
- Mitigation must occur at a minimum 3:1 ratio of mitigation area to project impact area; and
 - The mitigation area must be located within the Willamette River Central Reach, shown on Map 475-1; and
 - Mitigation must occur in the River Environmental overlay zone or in an area that is contiguous to the River Environmental overlay zone; and
- (7) The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met.

Figure 865-1
Mitigation Area Contiguous to River Environmental Overlay Zone



Commentary

33.865.100.B Modifications to zone boundaries

The intent of this section is to ensure that the River Environmental overlay zone is applied to the existing natural resources that are intended to be protected. In the situation where an applicant receives approval to remove some of the natural resources within the overlay zone and mitigate for the impacts, the overlay zone can be modified to remove the approved development and include the successful mitigation area.

Another way the overlay zone may be modified is by the applicant providing additional, more detailed data showing that the River Environmental overlay zone should be remapped on a site. For example, a survey of the top of bank of a river, stream or drainageway may be provided. The City may need to perform a site visit to verify the data.

Modifications to the location of the River Environmental overlay zone based on more site specific data should be reviewed to determine if any natural resource features or functions have been altered in a way that constitutes a violation to 33.475. Natural resource features and functions change naturally over time due to weather changes, growth of new plants, flooding, etc. Natural changes can result in the features and functions moving on the site and thus the River Environmental overlay zone may need to change accordingly. However, if natural resource features or functions are altered by humans in a way that does not meet the exemptions or standards of 33.475, and have not been reviewed and approved through 33.865, then the location of the River Environmental overlay zone should not be changed.

The applicant may use the more detailed feature data (e.g., location of top of bank, flood area, tree canopy, etc.) and apply the adopted methodology of the Natural Resources Inventory to determine the revised location of high and medium ranked resources. This should be verified by the City using the Natural Resources Inventory GIS models.

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.

B. 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 B.1 or B.2 are met. ~~For A~~ modification of environmental zone boundaries based on a more detailed site specific environmental study, that confirms the location of natural resource features identified in the adopted Natural Resources Inventory, the applicant's impact evaluation must demonstrate that Paragraph B.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.
3. 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. All of the following must be met:
 - a. The modified River Environmental overlay zone boundary must include all natural resource features that receive a high or medium rank using the methodology ~~adopted within in~~ the adopted Natural Resources Inventory; and
 - b. The modified River Environmental overlay zone boundary must be located no closer than 50 feet from the top of bank of a river, stream, drainageway, wetland or other water body.

33.865.110 Modifications of Site-Related Development Standards

The review body may consider modifications to site-related development standards that are not otherwise prohibited from being adjusted 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.

Commentary

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.BA, 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

33.900.010 List of Terms and 33.910.030 Definitions

Beach: The ordinary low water mark is defined by the US Army Corps of Engineers.

Ordinary High Water Mark: 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.

River-dependent and river-related definitions originated from Oregon State Statutes definitions in order to implement Statewide Planning Goal 15, Willamette River. The definition is clarified to provide examples of river-dependent and river-related uses and development.

33.900s General Terms

900s

33. 900.010 List of Terms

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

Beach

Bulkhead

Dredge Material

Ordinary High Water Mark

Shallow Water Habitat

33. 910.030 Definitions

Beach. Land located between the ordinary low water mark and the top of bank of a river, stream or lake with a substrate predominately composed of sand, pebbles or small cobblestone and covered with less than 25% vegetation.

Bulkhead. A retaining wall along a waterfront

Dredge Material. Rock, gravel, sand, silt and other inorganic substances removed from waters of the state.

Ordinary High Water Mark. The 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.

River-Dependent. A use which can be carried out only on, in, or adjacent to a river because it requires access to the river for waterborne transportation or recreation. River-dependent also includes development, which by its nature, can be built only on, in, or over a river such as a dock or gangway. Bridges supported by piers or pillars, as opposed to fill, are river-dependent development.

Commentary

River-Related:

The definition is expanded to state that resource enhancement projects adjacent to the river are river-related. These projects directly relate to improving fish and wildlife habitat within the Willamette River Greenway.

Another addition to the river-related code definition is the inclusion of specific uses/development associated with a marine passenger terminal and its passenger vessels. The river-related uses and development proposed in this definition are directly related to a marine passenger terminal that's primary purpose is to load and unload passengers from marine vessels. The dock and gangway for the marine vessels are river-dependent. Passenger waiting and queuing areas, security checkpoints, and machine shops associated with marine passenger docks and marine passenger terminals can locate in the river setback. A machine shop that serves the ongoing in-water maintenance and operations of the terminal facility or out-of-water vessel maintenance are not considered river-related. Other uses and development associated with a marine passenger terminal like a restaurant, or other food services like a café or concession stand, restrooms, business offices, restrooms and supply storage areas are not river-related. Such uses and development can locate outside the river setback. Overall, this facility, adjacent to the river, supports state and local goals for activating the riverfront, river transportation, recreation and economy.

Shallow Water Habitat:

Shallow water habitat is a feature of the Willamette and Columbia River that is critical for Endangered Species Act-listed fish species. This definition reflects the current best available science. The extent of shallow water habitat has been vetted by NOAA Fisheries, Oregon Department of Fish and Wildlife Service and City of Portland Bureau of Environmental Services.

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 apply to water bodies throughout the city. The change from degrees to percent slope makes this language more consistent with other code chapters, which refer to percent slope.

The definition is intended to identify the plateau of the river/stream bank. If the slope of the bank decreases by 10% and then decreases by 15%, where it stays steady, then the location at which the slope decreased by 15% is the top of bank. If the slope of the bank decreases by 5% and then by 10%, where it stays steady, then the location at which the slope decreases by 10% is the top of bank. If there is no decrease in slope 10% or greater within 50 feet of the ordinary high water mark, then a default top of bank is applied.

Please also review minor amendments to 33.930 Measurements.

Other existing terms and definitions are not shown.

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. 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. ~~Recreational trails and viewpoints 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. The following are considered river-related development:~~

- ~~Recreational Major public T~~ trails and viewpoints adjacent to the river; ~~are river-related development.~~
- Resource enhancement projects;
- Passenger waiting and queuing areas, security checkpoints, ~~cold food storage,~~ and machine shops associated with marine passenger docks for subregional travel and marine passenger terminals for regional travel;
- ~~Bridge exit and entrance ramps supported by piers or pillars, as opposed to fill; and, 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.

Top of Bank. ~~The largest decrease in slope that is 10 percent or greater~~first major change in the slope of the incline from~~between the ordinary high water mark~~level of a water body and a point 50 feet landward from the ordinary high water mark. See Section 33.930.150, Measuring Top of Bank. A major change is a change of ten degrees or more. If there is no decrease in slope that is 10 percent or greater~~major change~~within a distance of 50 feet 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~~elevation 2 feet above the ordinary high water level.

Shallow Water Habitat. Land and riverbed located between the ordinary high water mark and to an elevation 20 feet below the ordinary low water mark of the Willamette or Columbia Rivers.

Commentary

33.920.200 Commercial Outdoor Recreation

The Examples subsection under the Commercial Outdoor Recreation use category is updated to include subregional cruise ships that provide passenger excursions on the Columbia and Willamette rivers. These uses provide recreation and entertainment. Marinas are an existing example of a river-based outdoor recreation use.

33.920.200 Commercial Outdoor Recreation

- A. Characteristics.** Commercial Outdoor Recreation uses are large, generally commercial uses that provide continuous recreation or entertainment oriented activities. They generally take place outdoors. They may take place in a number of structures which are arranged together in an outdoor setting.
- B. Accessory Uses.** Accessory uses may include concessions, restaurants, parking, caretaker's quarters, food membership distribution, and maintenance facilities.
- C. Examples.** Examples include amusement parks, theme parks, golf driving ranges, miniature golf facilities, zoos, ~~and~~ marinas, and marine passenger docks for subregional cruise ships such as Willamette and Columbia River cruises.
- D. Exceptions.**
 - 1. Golf courses are classified as Parks And Open SpaceAreas.
 - 2. Uses which that draw large numbers of people to periodic events, rather than on a continuous basis, are classified as Major Event Entertainment.

33. 920.510 Aviation and Surface Passenger Terminals

- A. Characteristics.** Aviation And Surface Passenger Terminals includes facilities for the landing and takeoff of flying vehicles, including loading and unloading areas. Aviation facilities may be improved or unimproved. Aviation facilities may be for commercial carriers or for shared use by private aircraft. Aviation And Surface Passenger Terminals also includes passenger terminals for aircraft, regional bus service, regional rail service, and regional marine transportation.
- B. Accessory uses.** Accessory uses include freight handling areas, concessions, offices, parking, maintenance and fueling facilities, and aircraft sales areas, rental car facilities, food membership distribution, and Basic Utilities.
- C. Examples.** Examples include airports, bus passenger terminals for regional bus service, railroad passenger stations for regional rail service, passenger docks for regional marine travel such as ocean-going cruise ships, air strips, seaplane facilities, and helicopter landing facilities.

Commentary

33.920.510.D.2 Exceptions

This use category is transportation-oriented. Subregional river transportation for the purposes of this use category includes water taxis, water buses and water ferries. Subregional river cruise ships are recreational in nature, and are being added as examples under the Commercial Outdoor Recreation use category.

D. Exceptions.

1. Bus and rail passenger stations for subregional service such as mass transit stops are classified as Basic Utilities. Park-and-ride facilities are classified as Community Service.
2. Marine passenger docks for subregional marine ~~travel transportation~~ such as ~~Columbia River cruise ships~~, water taxis, water buses and ferries ~~or recreational boating~~; and other marine tie ups (such as the seawall between the Broadway bridge and the Hawthorne bridge) are not included in this category and are classified as accessory to their adjacent ~~facilities~~uses. Marine passenger terminals that are accessory to marine freight terminals are classified as accessory facilities in the Warehouse And Freight Movement category.
3. Private helicopter landing facilities which are accessory to another use, are considered accessory uses. However, they are subject to all the regulations and approval criteria for helicopter landing facilities.

Commentary

Overlay Zones

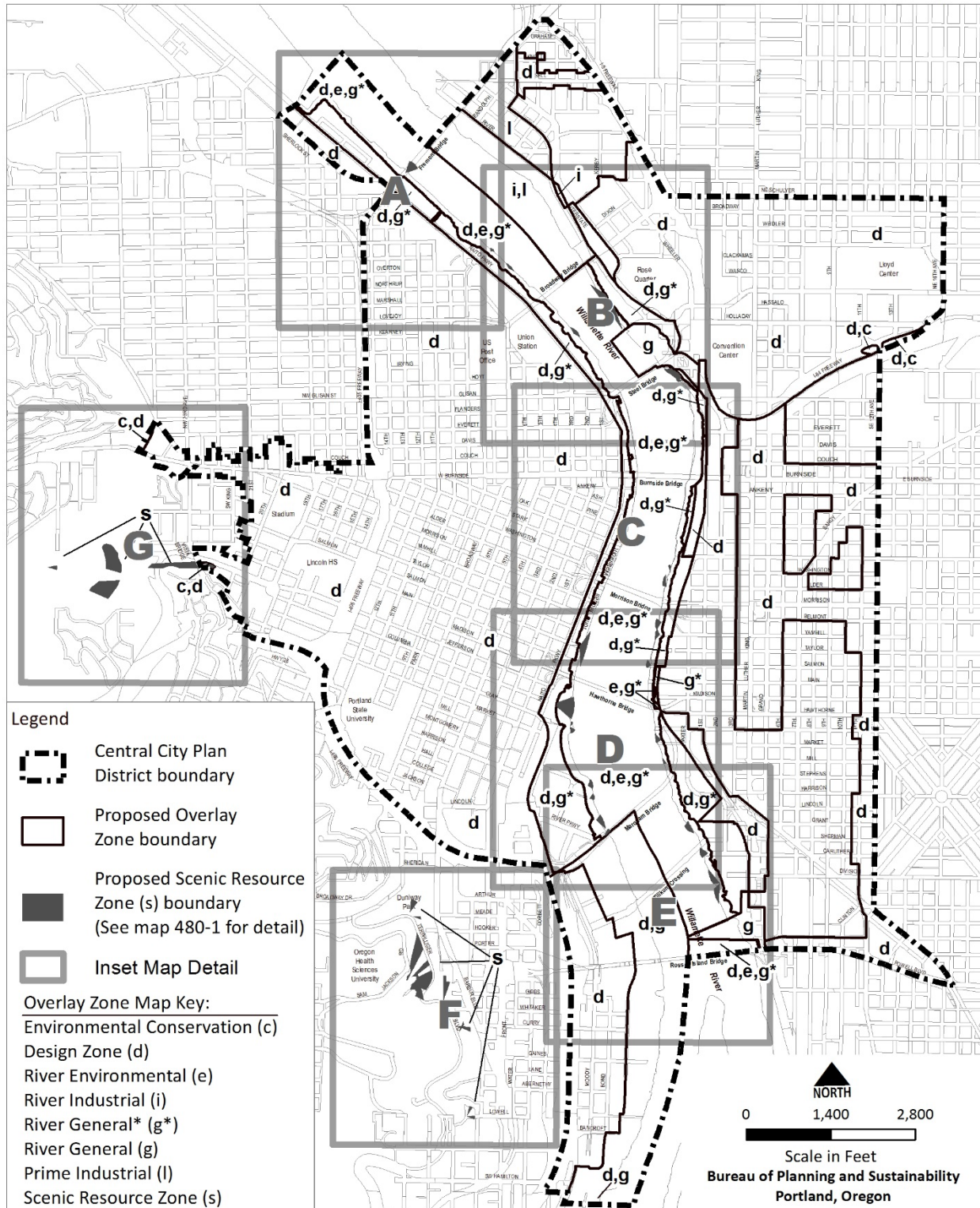
The following overlay zones are being added to or removed from properties as part of the Central City 2035 Plan:

- **Design overlay (d):** This overlay promotes conservation, enhancement and vitality of areas with special scenic, architectural or cultural value by requiring design review. This overlay is applied to all non-industrial sites in the Central City, and therefore is being added to properties where new non-industrial zones are proposed.
- **River overlays (e, g):** A new River Environmental overlay (e) is proposed for natural resources, including the Willamette River, riverbank and riparian areas, to maintain fish and wildlife habitat. This overlay and a new River Review process replaces the existing Greenway overlay and Greenway Review for the Central City. The River General overlay (g*) zone is being added to Governor Tom McCall Waterfront Park to allow for greater public use and enjoyment of the riverfront. Properties in the Central City with the Water Quality overlay (q) are being rezoned to River General (g*). All existing River General overlay zoned property identified within the River Overlay Zones Boundary on Map 475-1 are proposed as River g*.
- **Scenic overlay (s):** The Central City Scenic Resources Protection Plan, updated in conjunction with the Central City 2035 Plan, recommends protecting public views of nearby mountains, the Willamette River and bridges, or the city skyline. The plan is implemented by the Scenic (s) overlay for some view corridors and regulating building heights in others. Properties that are in the Scenic (s) overlay and in an environmental conservation or protection overlay zone have a new standard that allows pruning, removal and replacement of existing trees that obstruct views. Properties along the river within the Scenic (s) overlay have special landscaping regulations. Height limits are described on the back of this insert.

A series of inset maps follow the Overlay Zones Map, showing in greater detail proposed overlay zones along the Willamette River.

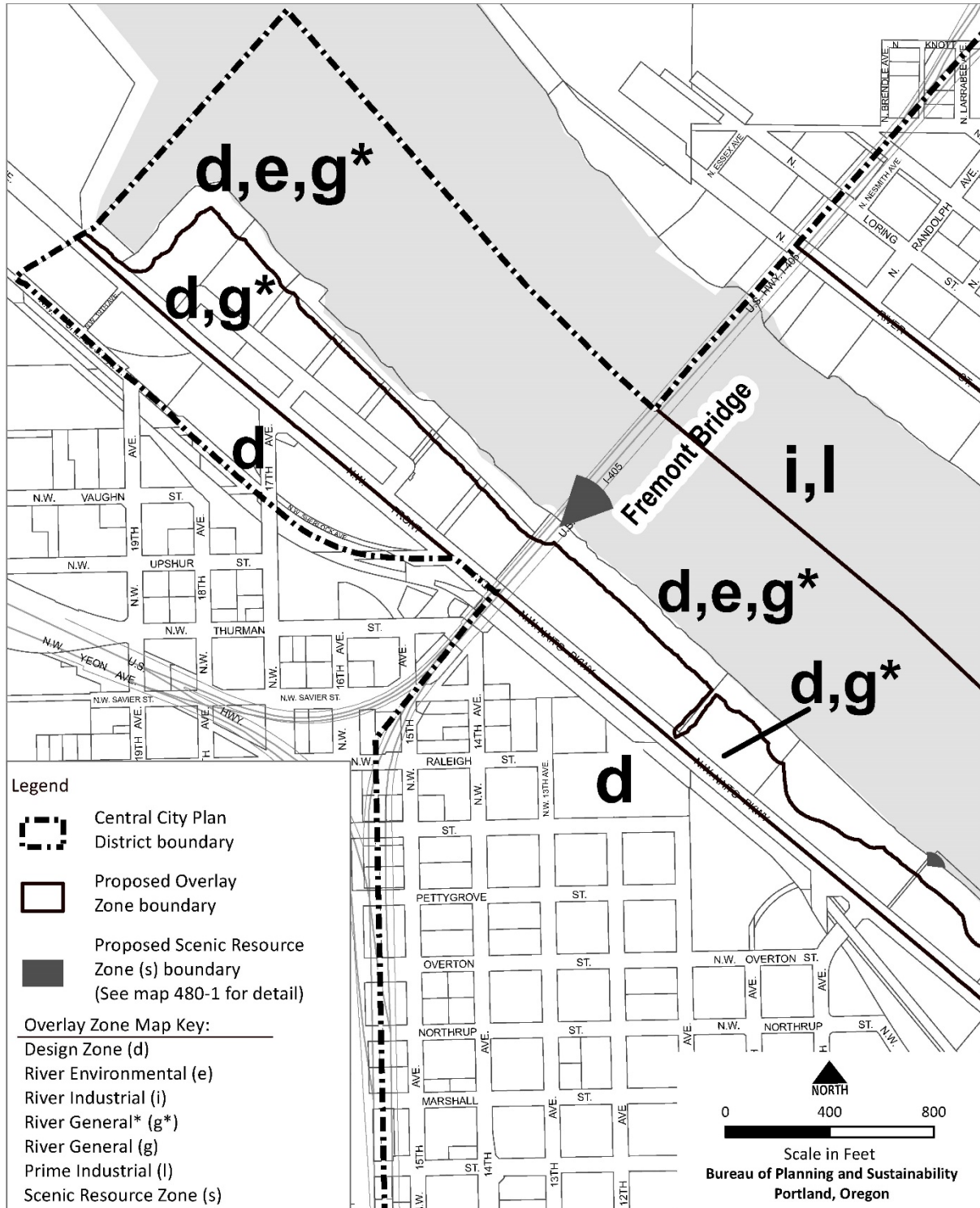
Central City Revised Proposed Overlay Zones

March 10, 2017



Commentary

March 10, 2017

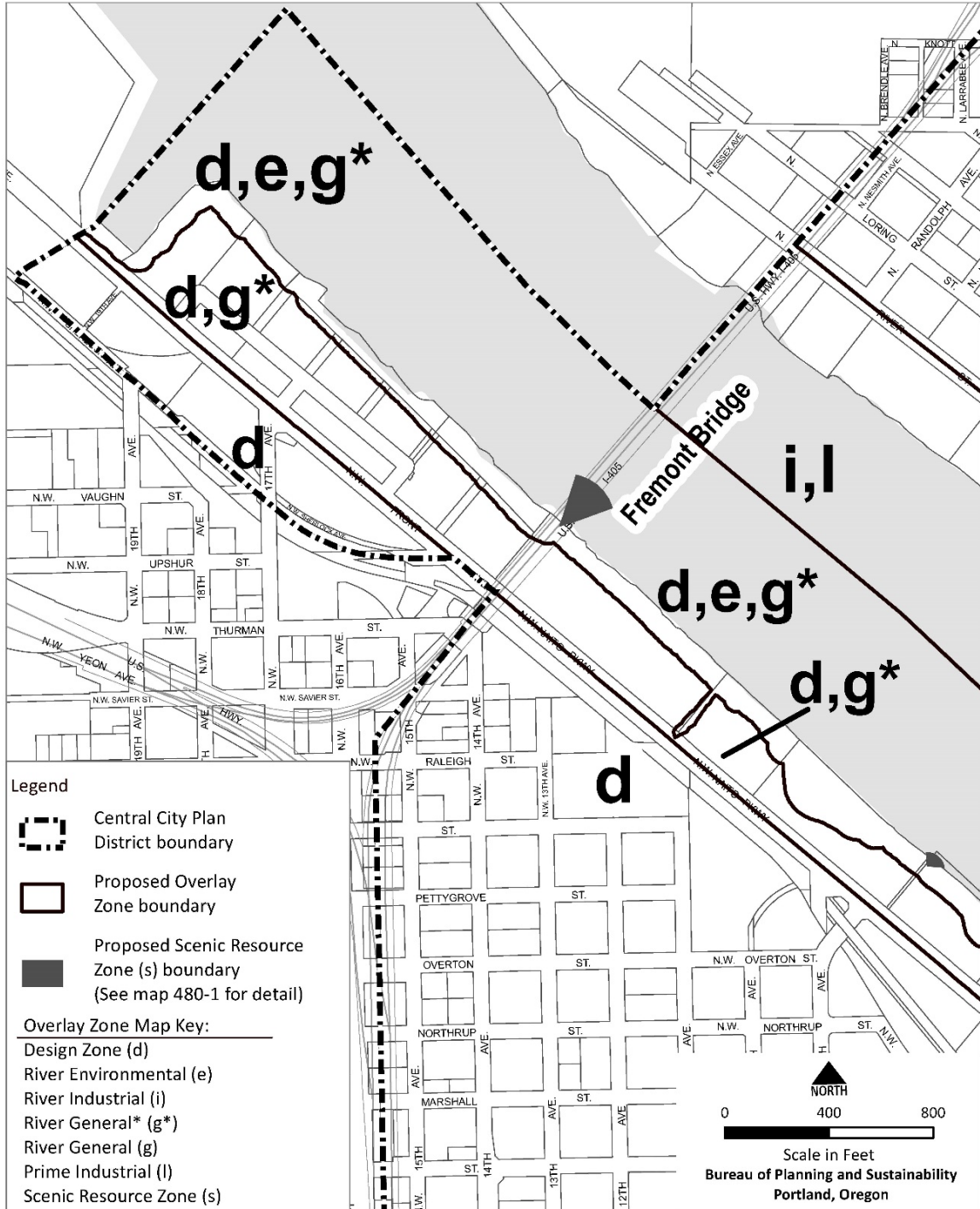


Commentary

Central City Revised Proposed Overlay Zones

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March 10, 2017

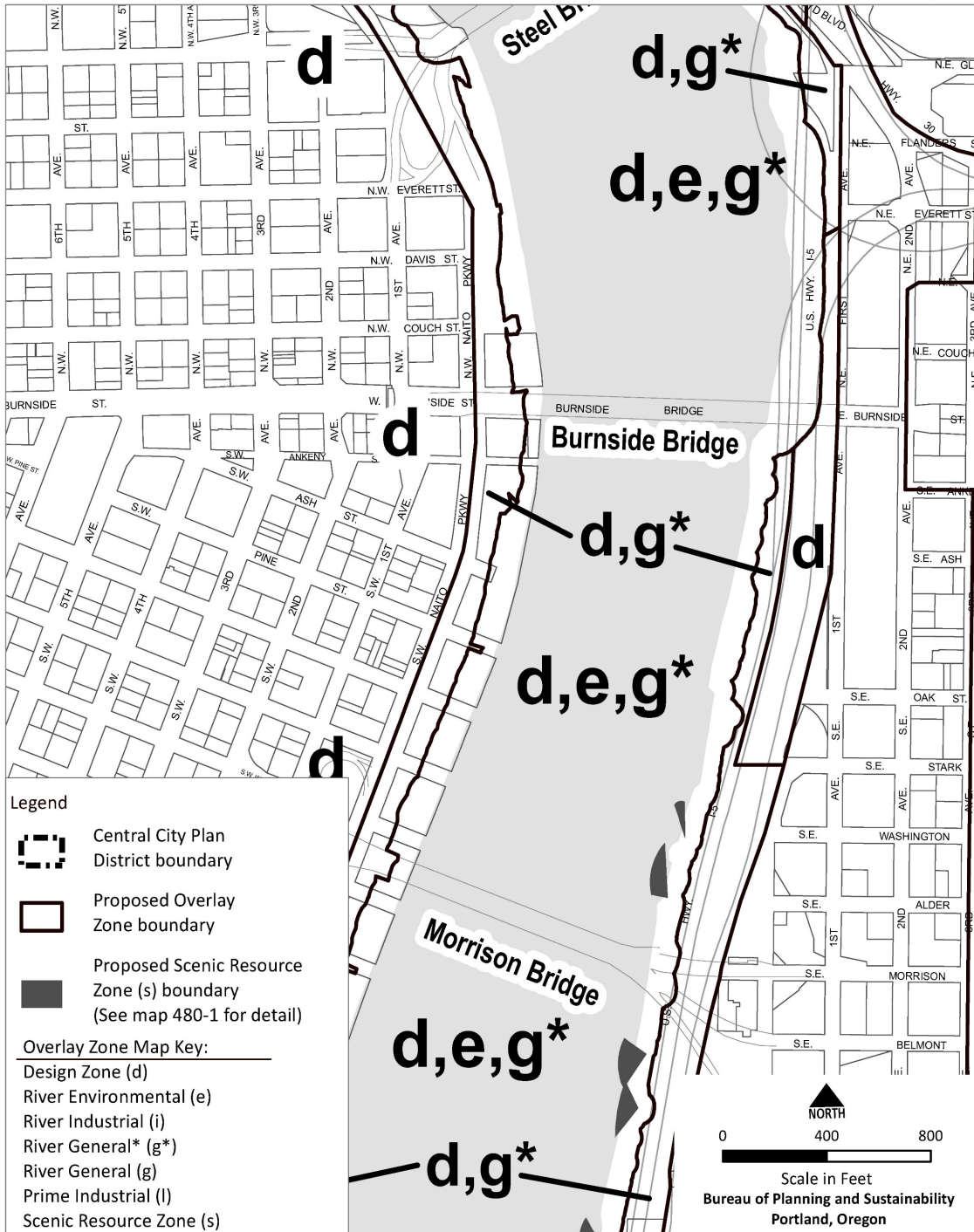


Commentary

Central City Revised Proposed Overlay Zones

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March 10, 2017

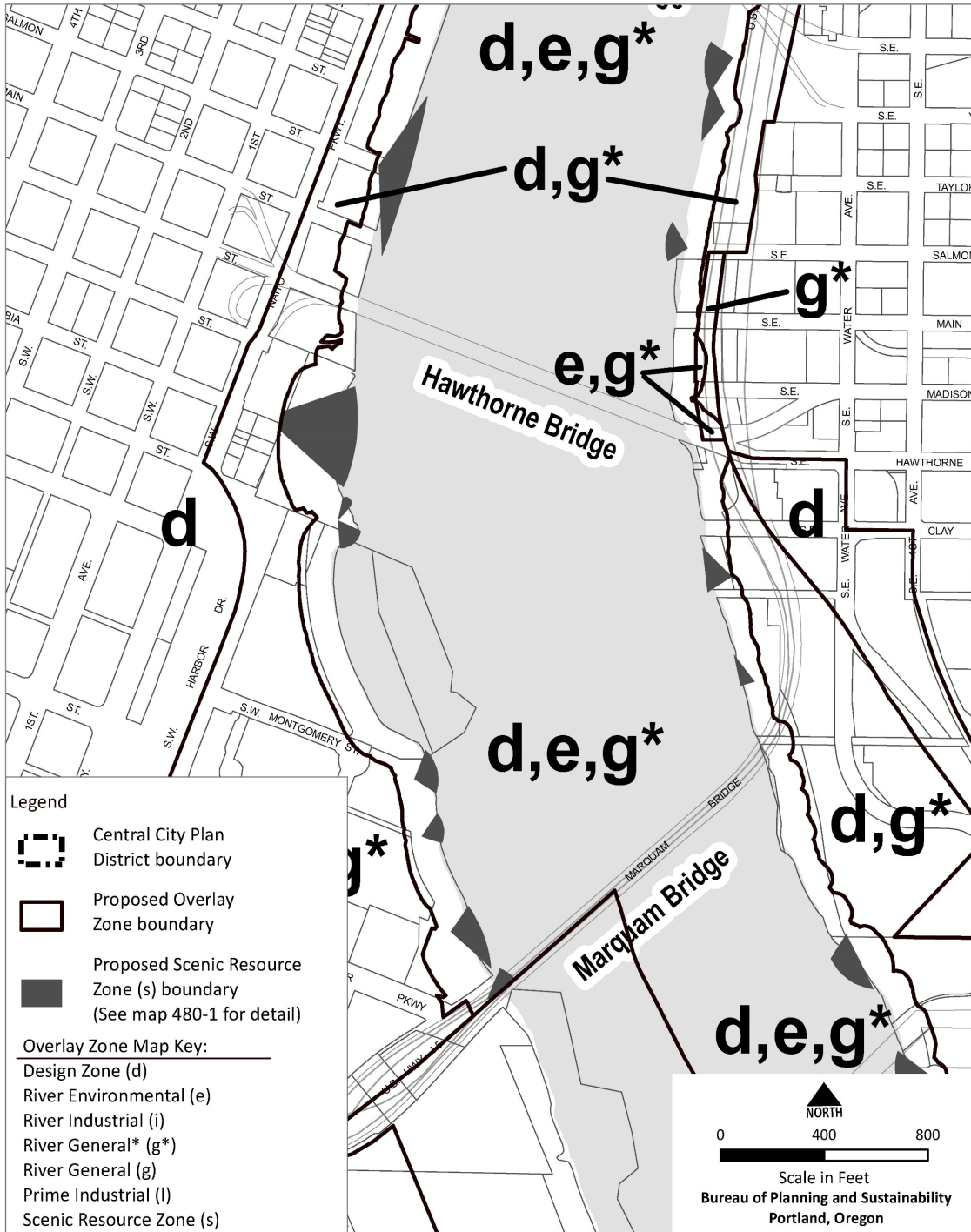


Commentary

Central City Revised Proposed Overlay Zones

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June 1, 2016

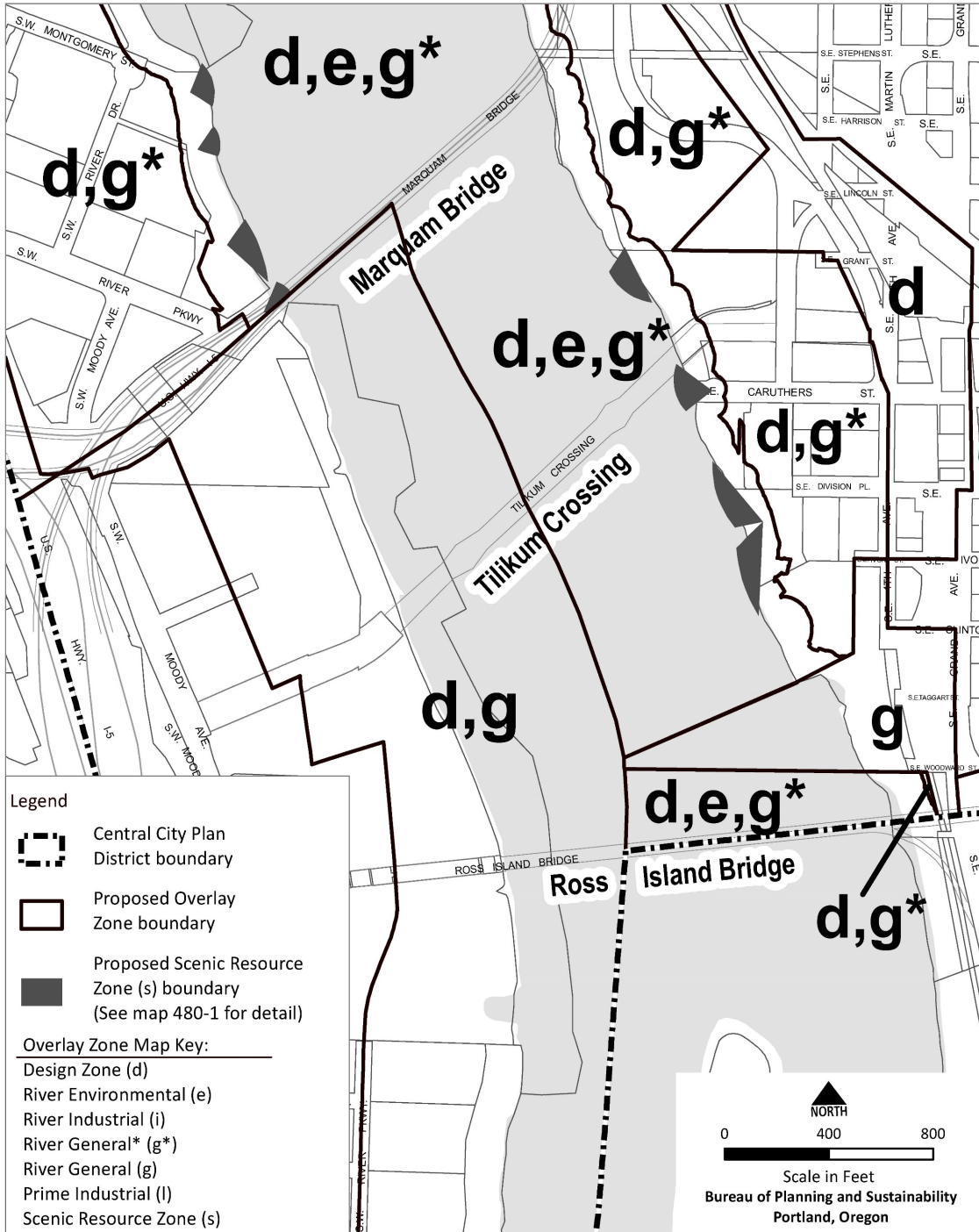


Commentary

Central City Revised Proposed Overlay Zones

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March 10, 2017

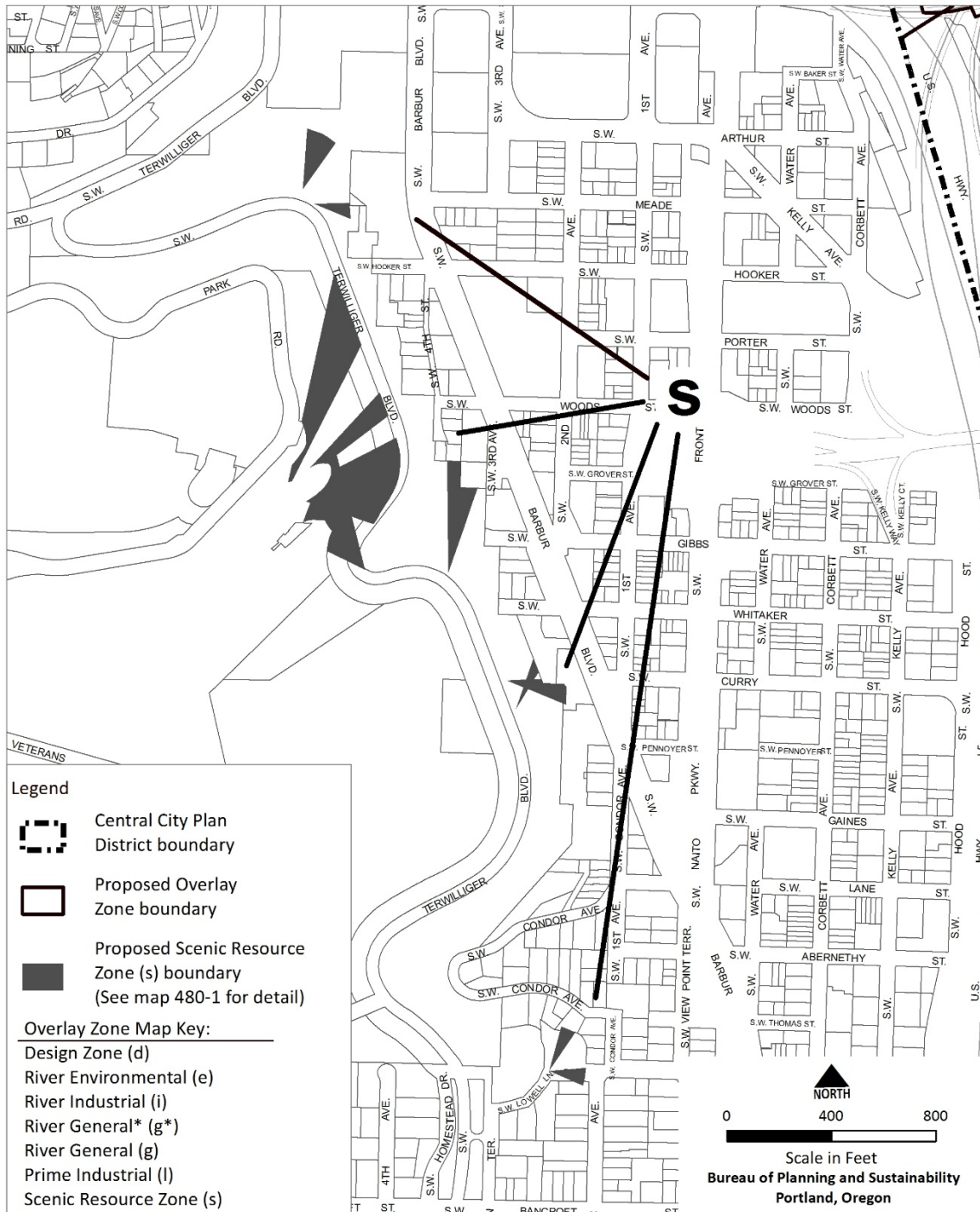


Commentary

Central City Revised Proposed Overlay Zones

Inset Map F

March 10, 2017



Commentary

Central City Revised Proposed Overlay Zones

Inset Map F

March 10, 2017

