

Decision Table G. Willamette River - Environment

Many pieces of testimony focused on:

- The width of the river setback including requests to retain the existing 25 ft setback be retained, support for the proposed expansion of the setback to 50 ft and requests for an even wider setback.
- Landscaping standards and tree replacement requirements.
- Development standards within the river environmental overlay zone including the location and size of the trail, size of public viewing areas and mitigation requirements.

Contents of Decision Packet G:

- Decision Table G
- Memo G

Items Marked for PSC Discussion:

- G1: Four requests related to landscaping in the setback.

Ref #	Comment	Commenter(s)	Proposed draft	Request(s)	Staff recommendation	Staff rationale	Discuss?	PSC decision
G1 and Memo G Page 2	20428 20481 20558 20580 20688 20846 20901 20924 20940 20973 20361 20464 20375 20901 21041 20689 21036	Robin Cody Jeanne Galick Bruce Stephenson Jeffrey Lang Bob Sallinger, on behalf of the Audubon Society of Portland Mike Abbate, PPR Scott Fogarty, on behalf of Friends of Trees Mary Volgel Jeffrey Lang Jeanne Galick Elaine Birkett Dana Coffee Emily Hitchcock Jeffrey Lang Jeffrey Lang Dana Coffee Jeanne Galick Commissioner Houck	Zoning code 33.475.220 establishes a new landscaping standard for the river setback area. The setback must be landscaped based on Table 475-1. See Volume 2A, Part 2 pages 24-30.	Most comments were generally in support of landscaping in the setback. Three specific requests were made: 1. Do not require landscaping on public beaches. 2. Allow more flexibility in the landscaping requirements for Subarea 1. Plants installed in river banks previously armored with rip rap are unlikely to survive. Requiring retroactively adding planting wells, as currently proposed, to an armored bank could be costly and could undermine the integrity of the armoring. 3. Be clear that vegetation planted within resource enhancement areas, mitigation areas or clean-up sites can be counted towards meeting the landscaping standards. 4. Require a specific timeframe within which landscaping must be installed.	1. Proposed amendment to exempt the Eastbank Crescent beach area from the landscaping requirement. 2. Proposed amendment to allow landscaping requirements for Subarea 1 to be planted anywhere on site if Subarea 1 is 30% slope or greater and is armored with rip rap. A new fee-in-lieu option is also added. 3. Proposed amendment to clarify that vegetation planted within resources enhancement area, mitigation areas or clean-up sites can be counted towards meeting the landscaping standard. 4. Retain the Proposed Draft version which includes no changes to the existing timeframes for installing landscaping.	1. There are two potential public swimming beach areas identified within the Central City – Hawthorne Bowl at Tom McCall Waterfront Park and Eastbank Crescent near Holman Dock. The code already exempts Waterfront Park from the landscaping standard. The exemption is expanded to include the public beach area, as mapped, at Eastbank Crescent. 2. Vegetation planted into existing steep and armored banks has a low survival rate. The amendment would allow that vegetation to be planted anywhere else on the site; would have to be the equivalent in size to the subarea 1; and would have to be planted to the same densities required by Table 475-1 for Subarea 1. Alternately, the applicant may choose to pay a fee-in-lieu to BES, which would plant off-site but within the same river reach. 3. The intent is to make sure the river setback is landscaped. If the area is landscaped to meet the enhancement standards, then it will also meet the landscaping standards. This is similar for mitigation plantings and planting of clean-up sites. With mitigation areas, the ratio of 1.5:1 may result additional required plantings outside of the setback. 4. Landscaping must be installed when the temporary disturbance is completed (in the case of an exemption or standard) or as specified in the conditions of land use approval or the building permit.	<input checked="" type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other

Ref #	Comment	Commenter(s)	Proposed draft	Request(s)	Staff recommendation	Staff rationale	Discuss?	PSC decision
G2	20333 20375 20481 20524 20558 20563 20580 20688 20701 20886 20940 20944 20973 20327 21033 20183 20375 20482 20497 20501 20506 20710 20857 20901 20949 21044 21036 21041 21037 20961	Dana Krawczuk, on behalf of Haitthem Toulan Emily Hitchcock Jeanne Galick William Savery Bruce Stephenson Mark Wilson Jeffery Land Bob Sallinger, on behalf of the Audubon Society of Portland Michael Jordan, BES Faye Brown, PDC Jeffery Lang Richard Allan, on behalf of American Waterways Jeanne Galick Tammi Harper Mike Lindberg McDonough Emily Hitchcock Dee Walsh Willie Levenson Saver/Meredith Peter Fry, on behalf of CEIC Merril Redish, on behalf of Urban Forestry Commission Steve Abel, on behalf of Albers Mill Scott Fogarty Jeanne Galick Lisa Abuaf, PDC Jeanne Galick Jeffery Lang Bob Sallinger, on behalf of the Audubon Society of Portland Dan Yates, on behalf of American Waterways Commissioner Houck	Zoning Code 33.475.210 expands the river setback from the existing 25 feet from top-of-bank to 50 feet from top-of-bank. River-dependent and river-related development (e.g., docks) is allowed within the setback. All other development (e.g., offices, parking) must be outside of the setback area or must get a Greenway Goal exception. *Note – This change does not apply to South Waterfront. The South Waterfront setback requirements are not proposed to change.	1. Widen the setback to 75 ft. Require that the first 40 ft. be dedicated to natural resource restoration and protection and the remaining 35 ft. be where the trail, viewpoints and other development is allowed. 2. Keep the setback at 25 ft. Sites are already constrained with other requirements and requiring more setback from the river will make some sites difficult to develop. 3. Don't set a precedent for the North or South Reach.	Retain the Proposed Draft version	As documented in Portland's Natural Resources Inventory, recently adopted with the Comprehensive Plan, a 50-foot setback is the absolute minimum width for a functioning riparian area, if the floodplain is less than 50 feet from top-of-bank. Ideally, the setback should be 100 feet or the floodplain, whichever is larger, to be protective of ESA-listed fish species. Most of the Central City is already developed based on the existing 25-foot setback. There are only five riverfront sites identified in the Comp Plan as BLI sites and expected to develop by 2035. Increasing the setback to 50 feet will result in development becoming non-conforming. Increasing the setback to 75 feet or wider would significantly increase the amount of non-conforming development. Although the develop is non-conforming, it could be maintained, repaired and replaced in its current footprint within the setback. The setback width should be considered in the context of each river reach. The Central City decision on the setback width does not a precedent for the North or South Reach. The commentary (Volume 2A, Park 2, page 19) includes language to that effect.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other

Ref #	Comment	Commenter(s)	Proposed draft	Request(s)	Staff recommendation	Staff rationale	Discuss?	PSC decision
G3	20949	Jeanne Galick Commissioner Houck	Zoning code 33.475.210.E allows no more than 5 feet of encroachment into the setback provided an additional area is provided to offset the encroachment.	Do not allow any encroachment into the setback because a 50-foot setback is already the absolute minimum needed for riparian function.	Retain the Proposed Draft version	This is needed to allow flexibility for development on narrow, small or irregularly shaped sites. The encroachment standard will maintain the same total area of setback on any given site by requiring an offset to the encroachment area.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other
G4 and Memo G Page 8	20481 20482 20524 20688 20701 21036	Jeanne Galick Jeanne Galick William Savery Bob Sallinger, on behalf of the Audubon Society of Portland Michael Jordan, BES Jeanne Galick Commissioner Houck	Zoning code 33.475.440.B.2 proposes an exemption for removal and pruning of vegetation in the river environmental overlay zone under specific circumstances (e.g., nuisance, dead, dying or dangerous plants). Temporary disturbance areas must be landscaped per 33.475.220. See Volume 2A, Part 2, page 12. Zoning code 33.475.440.J proposes a standard for tree removal that is not exempted by 33.475.040.B.2. Trees over 6 inches in diameter must be replaced. See Volume 2A, Part 2, page 46.	1. Move the exemption for vegetation removal and pruning to a standard because a plan check is needed to ensure the conditions for removal/pruning are met. 2. Reduce the size of tree allowed to be removed from 6 inches in diameter to 1.5 inches in diameter.	1. Proposed amendment to combine the vegetation removal and pruning exemption and the tree removal standard. See Attachment G4. 2. Proposed amendment to require replacement of trees >1.5” in diameter that are removed. Any trees planted as part of meeting the landscaping standard may be counted towards meeting the tree replacement requirements.	It is a goal of the CC2035 Plan and the Comprehensive Plan to increase tree canopy throughout Portland and especially along riparian areas to support recovery of ESA-listed species, as well as supporting other goals including managing stormwater, reducing heat island and providing wildlife habitat. 1. The vegetation pruning and removal exemption was complicated and had a requirement that should be checked by BDS. It is appropriate to require a plan check to ensure that the standards are being met. Plan checks are nondiscretionary. 2. In the rest of the city within environmental overlay zones, trees less than 6 inches in diameter may be removed through an exemption. This change in the Central City will require that any tree 1.5 inches in diameter or larger located in the river e-zone that is removed will need to be replaced.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other
G5 and Memo G Page 11	20324	Staci Monroe, BDS Commissioner Houck	Zoning code 33.430.080.C. exemptions from the environmental overlay zones throughout the city was updated to clarify that that the exemption applies to pruning of vegetation and to clarify how the exemption applies to view corridors with special height restrictions. 33.430.195 is a proposed a new standard to allow tree removal within scenic overlay zones. See Volume 2A, Part 2, pages 87-93.	1. Require that temporary disturbance be replanted. 2. Clarify the difference between view corridors with special height restrictions and view corridors within the scenic overlay zone. 3. Require that all trees that are removed be replaced.	1. Proposed amendment to require the temporary disturbance be replanted. 2. Proposed amendment to clarify code regarding view corridors. 3. Retain Proposed Draft version.	1. This citywide code requires permanent erosion control, such as replanting areas of bare soil. The amendment would require that areas of bare soil be replanted. 2. The Proposed Draft incorrectly references the view corridor maps. Map 480-2 shows view corridors with special height restrictions. Removal of trees that exceed the special height restrictions is exempt from the environmental zoning code. 3. Zoning code 33.430.080 applies citywide. Staff recommend considering updates to the tree replacement standards as part of a city wide project.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other

Ref #	Comment	Commenter(s)	Proposed draft	Request(s)	Staff recommendation	Staff rationale	Discuss?	PSC decision
G6	20846	Mike Abbate, PPR	Zoning code 33.475.440, Development Standards , does not require mitigation for development of public viewing areas or major public trails but does require mitigation for other development in a park.	1. In 33.475 clarify and make consistent when mitigation is required and when it is not. 2. Do not require mitigation for development within a park.	Retain the Proposed Draft version	1. Designated viewpoints (shown on map 480-1) and the Greenway Trail are public goods required within the Greenway Boundary and the preferred location is along the Willamette River within the river setback and thus within the river environmental overlay zone. Because the City requires that the viewing areas be developed and the trail be dedicated or constructed, mitigation for the resulting impacts is not required. Tree replacement is required. 2. Other impacts within the Greenway Boundary may be able to avoid the river environmental overlay zone and thus avoid any mitigation requirements. If impacts within the river environmental overlay zone cannot be avoided, then mitigation is required. For example, if a property owner wants to develop a restroom facility, that structure could be located outside of the river e-zone and mitigation would not be required.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other
G7 and Memo G Page 12	20846	Mike Abbate, PPR	Zoning code 33.475.440.E is a standard for public viewing areas within the river e-zone. The standard allows for 500 square feet of disturbance. If the viewing area cannot meet the standard, then river review is required.	Increase the size allowed by standard to allow larger viewing areas.	Retain the Proposed Draft version	The crux of the issue is the threshold between what is allowed through a standard and what should be reviewed through River Review. A standard only requires a plan check at the BDS counter. There is no public notice and no opportunity for bureaus, agencies or the public to weight in. The proposed standard allows for a paved 20x25 foot viewing area with amenities like a bench or signs. This is a sufficient size for most viewing areas along the Greenway Trail. (For reference, see Memo page G-12 with examples of two viewpoints in the Central City.) If a developed viewing area larger than 500 sq ft is desired or needed, then it can be approved through River Review.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other
G8 and Memo G Page 13	20324	Staci Monroe, BDS	Zoning code 33.475.440.G includes standards for resource enhancement projects. The standard requires improvement of at least one functional value and limits the amount of impacts to the resources.	1. Add that standards for tree removal must be met. 2. Revise commentary related to native vegetation.	Proposed amendments to 1. Require the replacement of trees removed within enhancement areas. 2. Remove commentary regarding staff evaluating removal of native vegetation.	1. Adding the requirement to replace trees is consistent with other standards in river environmental overlay zone. 2. The commentary is incorrect. Because this is a standard, not a discretionary review, staff will not be <i>evaluating</i> the removal of native vegetation. If the standard is met, then the proposal is approved. Evaluation of removal of native vegetation would only occur if the standard is not met and river review is required.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other

Ref #	Comment	Commenter(s)	Proposed draft	Request(s)	Staff recommendation	Staff rationale	Discuss?	PSC decision
G9	20324	Staci Monroe, BDS	The Proposed Draft includes a few revisions to the existing 33.430, Environmental Overlay Zones chapter. One of those revisions was to limit tree removal associated with construction of a public trail to equipment with a surface-to-ground pressure of no more than 7.5 psi.	Remove the limitation on tree removal with equipment with a surface-to-ground pressure of no more than 7.5 psi.	Proposed amendment to revise 33.430.190.E.1 to read “Native trees up to 12 inches in diameter and non-native trees may be removed. with handheld equipment or equipment with a wheel/surface to ground pressure of no more than 7.5psi.””	When constructing public trails, equipment larger than that with a surface-to-ground pressure of no more than 7.5 psi is typically necessary. The Proposed Draft edit was not intended to prohibit larger equipment from being used to construct public trails. The rest of the standard for major public trails will be retained, including that trees must be replaced per Table 430-3.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other
G10	20324	Staci Monroe, BDS	The Proposed Draft does not include amendments to Title 11.	The Proposed Draft proposes a new River Overlay chapter. This overlay zone is not currently identified in Title 11 and should be added.	Proposed amendment to add the new requirements of River Overlay zones, e and g*, to Table 40-1, Tree Removal in Overlay Zones and Plan Districts, in Title 11.	Table 40-1, Tree Removal in Overlay Zones and Plan Districts, lists tree permit requirements in other overlay zones and plan districts. The Proposed Draft calls for the establishment of a new River Overlay zones that should be added to the table in Title 11, once the Title 33 provisions are adopted.	<input type="checkbox"/>	<input type="checkbox"/> Support staff rec. <input type="checkbox"/> Other



Bureau of Planning and Sustainability

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MEMO

DATE: **October 31, 2016**

TO: **Planning and Sustainability Commission**

FROM: **Mindy Brooks, City Planner II**

COPY: **Susan Anderson, Director; Joe Zehnder, Chief Planner; Sallie Edmunds,
Central City Planning Manager**

SUBJECT: **Attachment for Decision Table G: Willamette River - Environment**

This memorandum contains BPS staff-recommended revisions to portions of Zoning Code sections 33.475 and 33.430 in the Proposed Draft Central City 2035 Plan. Specific changes include the following items described in Decision Packet G:

Discussion Item

G1: 33.475.220.B and 33.475.220.C (page 2 – 7)

- Adding Eastbank Crescent to the list of beaches exempt from the landscaping standard.
- Clarifying that planting done as part of resource enhancement, mitigation or contamination clean-up can be counted toward meeting the landscaping standard.
- Adding flexibility for steep banks armored with rip rap.

Other Items

G4: 33.475.040.B.2 and 33.475.440.J (page 8 – 10)

- Updating the exemption for minor removal of vegetation with hand held equipment.
- Moving the remainder of the exemption to the standards for removal and pruning of vegetation and removing duplication within the standard.
- Requiring trees 1.5 inches in diameter or larger to be replaced.
- Adding that tree replacement is required for resource enhancement projects.
- Clarifying map references.

G5: 33.430.080.C (page 11)

- Requiring that areas of bare soil that result from vegetation removal are replanted.
- Correcting map references.

G7: No zoning code changes. Examples of developed viewing areas are provided to support retaining the Proposed Draft version. (page 12)

68: 33.475.440.G (page 13)

- Adding that public trails are allowed within resource enhancement areas.
- Adding that tree replacement is required within resource enhancement areas.
- Clarifying the commentary to match the standard.

Changes from text in the Proposed Draft are **highlighted**.

G1 – River Setback Landscaping Standards

33.475.220.B

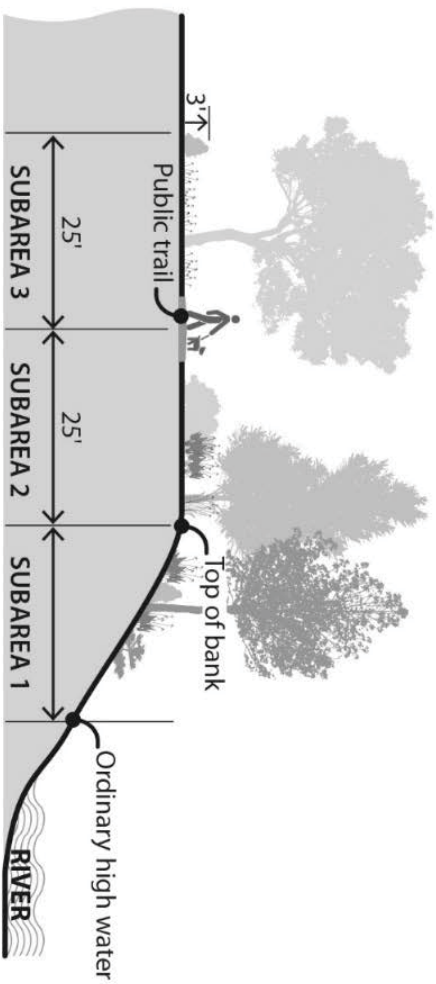
The following regulations apply in the River General overlay zone. Modifications and adjustments are prohibited.

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**, shown on Map 475-3, are exempt from this Section.
2. Required landscaping for all other areas. For 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. Subarea 1 extends from the ordinary high watermark to the top of bank of the Willamette River.
 - b. Subarea 2 extends from the top of bank to a point 25 feet landward of the top of bank of the Willamette River.
 - c. Subarea 3 extends from a point 25 feet landward of the top of bank and a point 50 feet landward of the top of bank of the Willamette River.

**Figure 475-3
Landscaping Area**



- d. Vegetation planted to meet the resource enhancement standards of 33.475.440.G, the mitigation standards of 33.475.440.K or the clean-up of contaminated sites requirements of 33.475.500 may be counted towards meeting the landscaping standard.

e. 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;
- (3) Landscaping is not required within portions of sites where contamination removal or remediation meet the standards of 33.475.500;
- (4) Within utility easements trees and shrubs are not required but the area must be seeded with a grass and forb seed mix at a ratio of 30 pounds per acre;
- (5) Trees and shrubs are not required within a scenic 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 view corridor; or
- (6) 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 thick, then the required subarea 1 landscaping may be planted on an area of the site that is outside of subarea 1 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. 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.

**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 groundcover 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	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. Option 1: Three 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.	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. Option 1: Six shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or Option 2: Six shrub and eight other groundcover plants.	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. Option 1: Three shrubs and seeded with a grass and forb seed mix at a ratio of 30 pounds per acre; or Option 2: Nine shrub and 12 other groundcover plants.
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.

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, 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 in subarea 1 has a **an average slope of 30 percent or less steep 20 percent of steeper slope (20/30)** percent slope represents a rise over run ratio of ~~4:5~~ **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, and four different groundcover species must be used.

Areas Exempt from Landscaping Requirements

Map 475-3

Map Revised Xxxxx X, 201X



- Legend**
- Proposed Central Reach River Overlay Boundary
 - Exempt Areas

Scale in Feet
0 1,800 3,600

Bureau of Planning and Sustainability
Portland, Oregon

G4 – Removal and Pruning of Vegetation in the Central City

33.475.040.B.2. Exemptions

k.

~~Removal or pruning of vegetation that is not listed as native on the *Portland Plant List* or trees 1.5 inches in diameter or smaller. The removal or pruning may not be done with equipment other than handheld equipment. Temporary disturbance located within the river setback must be replanted to meet the relevant subarea standards of Table 475-1, and temporary disturbance located outside the river setback must be replanted to meet the subarea 3 standard of Table 475-1.~~

~~Removal and pruning 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 pruning 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 pruning 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.~~~~

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.

- J. **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. Any temporary disturbance area must be planted to meet the landscaping standards of 33.475.220 within the greenway setback, and must be replanted to meet the subarea 3 standard in Table 475-1 in areas outside of the greenway setback;
 4. The vegetation that is removed or pruned must be 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 certificate arborist. All sections of wood more than 12 inches in diameter must be placed in the 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 shown on Map 480-2;
 - 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~~
 - e. Madrone, Gary Oak, or Pacific Yew less than 6 inches in diameter, or other native trees less than 12 inches in diameter 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 rail right-of-way and within 10 feet of the rail right-of-way;
 - b-(2) Within the utility line corridor;
 - e-(3) Within the disturbance area for installation or replacement of stormwater outfalls;
 - f-(4) Within a major public trail;
 - e-(5) Within a public viewing areas ~~associated with viewpoints shown on Map 480-1;~~
 - f-(6) Within a view corridor ~~shown on Map 480-1;~~
 - (7) Within a resource enhancement area; or

g- (8) Within the disturbance area associated with development in a City of Portland park.

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- (3) The planting must occur within the River Overlay Zones. Trees must not be planted within a 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

e- (4) 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.

**Table 475 – 2
Tree Replacement in River Environmental Overlay Zone**

Size of tree to be removed (inches in diameter)	Option A (no. of natives 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 tree and 6 shrubs
More than 25 and up to 30	7	5 tree and 9 shrubs
More than 30	10	7 tree and 12 shrubs

GS – Removal or Pruning of Vegetation Citywide

33.430.080.C. Exemptions

78. Removal ~~or pruning~~ 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 pruning~~ 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 replanted; must be installed.
 - b. The vegetation proposed for removal ~~or pruning~~ 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 area of the same ownership on which they are cut; or
 - Are removed, if the City Forester authorizes removal of diseased wood because it will threaten the health of other trees;
 - (3) Non-native non-nuisance trees and plants;
 - (4) Trees ~~or tree limbs~~ that are within 10 feet of an existing building and structures attached to buildings, such as decks, stairs and carports;
 - (5) Within view corridors shown on Map 480-2, ~~Trees that exceed the height restrictions of a City designated view corridor~~ may be removed or pruned to maintain the view ~~corridor~~; or
 - (6) Within view corridors shown on Map 480-1, tree limbs may be pruned to maintain a view. Tree removal with the Scenic overlay zone is not exempt.

G7 – Examples of developed viewing areas

1. This developed viewing area is located along the Greenway Trail just north of the Broadway Bridge. It is approximately 590 square feet in size and accommodates two benches and a large area for enjoying the view. This is slightly larger than the proposed viewing area standard and would have required review.



Viewpoint NW07

2. This viewing area is located along the Eastbank Esplanade just north of the Morrison Bridge. It is approximately 275 square feet in size. There are no amenities although there is sufficient space for a single bench to be added. This viewing area would have met the size requirements for the proposed standard; however, because it has impacts below the top-of-bank, that portion of the design would have to go through review.



Viewpoint SE03

G8 – Resource Enhancement Projects

33.475.440 Development Standards

G. **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;
 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** or viewing areas that meet the regulations of 33.475.440.E.F;
 6. All nuisance plants listed on the *Portland Plant List* must be removed;
 7. **Tree removal is allowed as specified in Subsection J;** and
- 7-8. Areas where ground disturbance has occurred must be planted to meet the landscaping planting standards of 33.475.220.

Commentary

33.475.4340.G 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 not a net increase in soil volume within the River Environmental overlay zone and the area disturbed is replanted with native vegetation. Resource enhancement projects, by definition, must result in a net increase in functional value and an improvement in the quantity or quality of resources. **Mature native vegetation in many cases provides high quality natural resource function. The removal of native vegetation is limited so that staff can evaluate whether or not the removal of vegetation will result in a net increase in functional value and an improvement in quantity or quality of resource.**