



183694

February 12, 2010

Dear Commissioners,

Next Wednesday at 6 pm we are scheduled to hold a City Council hearing on the River Plan / North Reach. As you know, over the last eight months I have led in a process to work through several issues that remained unresolved after the Planning Commission voted on the River Plan. My intention was to bring to you a plan for the North Reach of the Willamette River that I believe will serve Portland well for at least the next 20 years. This is that plan.

During the eight months I convened stakeholder meetings, met with individual property owners and representatives of industry, the environment, and the community and had countless meetings with City staff. In December, Commissioner Amanda Fritz and I hosted a Town Hall Meeting to hear from an even broader range of the community. Thanks to those conversations, I now have a deeper understanding of the issues and perspectives that affect the North Reach and that have shaped the River Plan.

As a result of these important discussions and meetings, I am going to introduce a package of amendments that are aimed at addressing the unresolved issues. The amendments are attached to this letter and they include:

- A revised vegetation standard agreed upon by representatives from industry and the environment;
- Additional information about the City's interest below ordinary high water;
- Clarification of when on-site mitigation will be preferred and establishment of a temporary fee in lieu of mitigation;
- Clarification of the City's role in operating and certifying mitigation banks for the North Reach;
- A revised trail alignment on NW Front Avenue in Linnton;
- City Attorney recommended changes to the contamination related code;
- Establishment of development standards for City parks in the North Reach; and,
- Establishment of a North Reach Advisory Committee (NoRAC) to help the City evaluate the effectiveness of the plan.

The Working Waterfront Coalition has presented many recommendations over the past eight months, including a set of seven recommendations introduced on February 5. My response to their most recent set of recommendations is attached. I have incorporated several of their recommendations into the amendments package; a few of the more recent recommendations are promising, but need further conversation among staff and stakeholders—which we can and will do before the River Plan / North Reach is implemented. I anticipate that we will hear from the Coalition and many others on Wednesday evening.

Even if Council chooses to adopt the River Plan with my amendments, the work will not be done. Staff will continue to work on developing: the River Restoration Program; a mitigation bank for the

North Reach; and, the methodology for assessing a fee-in-lieu of on-site mitigation until there is a functioning mitigation bank in the North Reach. As outlined in another attachment I propose that staff come back to Council for a hearing on the fee-in-lieu methodology. I want all of us to be sure that the method used is clear and fair and the fees we charge compensate for the impacts of development and any temporary loss of function.

This is a comprehensive plan for a complex area. I believe that the River Plan / North Reach, with my proposed amendments, takes necessary steps toward enhancing the working harbor, supporting industrial jobs, increasing access, and improving environmental conditions. I look forward to hearing the testimony on Wednesday and your thoughts about the River Plan.

Sincerely,



Sam Adams
Mayor

Attachments:

River Plan / North Reach: Anticipated Milestones through 1/1/11
Mayor's Proposed Amendments
Response to The Working Waterfront Coalition's Table 1

River Plan / North Reach: Anticipated Milestones through 1/1/11

February 12, 2010 draft

The following is a list of anticipated milestones for the River Plan/ North Reach. Not all of the activities will be necessary and other milestones may be identified. This information is intended to give interested parties a general understanding of the River Plan / North Reach timeline.

February 17, 2010: Hearings on

1. Planning Commission's Recommended Draft and the Mayor's amendments
2. Siltronic MOU

February / March / April 2010

1. Work with stakeholders on amendments if directed by Council
2. Publish amendments
3. Hold 2nd hearing/vote
4. Hold 2nd reading/vote

April / May / June 2010

1. Convene science panel to review the proposed off-site mitigation calculation model (HEP/HEA)
2. Convene stakeholders to discuss the results of science panel review.
3. Submit greenway boundary notification request to LCDC
4. Submit request for Title 4 amendment to Metro for the McCormick/ Baxter property
5. Prepare a development agreement for the Siltronic property consistent with the Council Action on the MOU.
6. Hold City Council hearing on the Siltronic development agreement
7. Finalize Siltronic development agreement by July 1, 2010.

July / August / September 2010

1. Initiate the development of a coordinated City/state/federal application form
2. Prepare for the coordinated City/state/federal review
3. Conduct Natural Resource Inventory field verification (if requested at the hearing)
4. Draft administrative rules for the following: a) Vegetation Enhancement Standard In-Lieu-Fee; b) IG2 and EG2 Minimum Landscape Standard In-Lieu-Fee; c) Mitigation for a Replacement Bulkhead; d) Mitigation In-Lieu-Fee; and, e) Public Trails Rough Proportionality, and other rules as identified.
5. Convene meetings with stakeholders to discuss progress on the mitigation bank certification process and other items.

October 2010

1. Send public notice and publish draft materials for a City Council hearing on items in 2, below, consistent with Council direction.
2. Hold City Council Hearing on:
 - A. Ordinance: Zoning map changes resulting from the NRI site visits
 - B. Report or Resolution: HEP/HEA and costs/fee in lieu
 - C. Resolution: Rules related to certification of mitigation bank (if necessary)
3. Publish draft administrative rules and send hearing notice

November / December 2010

1. Hold administrative rule hearing (this hearing is convened by city planning staff)
2. Publish final river plan document and code
3. Publish final administrative rules
4. Train City staff

January 1, 2011

1. River Plan / North Reach goes into effect.
2. Conduct training session for consultants and others on River Plan
3. Convene the North Reach Advisory Committee

RIVER PLAN / NORTH REACH RECOMMENDED PLAN

MAYOR'S PROPOSED AMENDMENTS

February 12, 2010

Amendments to the River Plan / North Reach

This section serves as an annotated table of contents for this amendment package.

Part A: Amendments to Volume 1 A	
Page(s)	Description of Amendment
32-33	This section includes changes to the description of the river environmental overlay zone to indicate that access to the river is also a goal of the River Plan / North Reach. Other amendments indicate the City's desire to have one or more mitigation banks operating in the North Reach; and, the City's plan to certify mitigation banks that operate in the North Reach.
37-38	The section that describes the vegetation standard has been changed to reflect the proposed changes to 33.475.220.
56-57	Proposed amendments to this section more clearly articulate the need for the City to continue reviewing applications for development below the ordinary high water mark. Also included in this section is an updated description of the Early Project Review process and a new chart that shows how this process will integrate into the existing City, state and federal agency legal review framework.
61	This new section describes the process that the City proposes to use to evaluate the effectiveness of the River Plan / North Reach. It includes the establishment of the North Reach Advisory Committee.
90 Action Agenda	Economic prosperity action agenda. The Office of Healthy Working Rivers is added as an implementation agency for action items EP4, prepare a small shipper rail strategy, and EP5, investigate the feasibility of adding a regional rail yard.
96 Action Agenda	Five additional actions are included in the Watershed Health Action Agenda. These include actions related to public education about planting on steep slopes, mitigation banking and ecoroofs.
102 Action Agenda	Two additional actions are included in the Access Action Agenda related to adding signage along the greenway trail and exploring design options for pedestrian/bicycle connections in Linnton.
106 – 107 Action Agenda	One additional action is included to the Working with our Partners Action Agenda. This action calls for the formation of the North Reach Advisory Committee to evaluate the implementation of the River Plan / North Reach.
Map 2	Map 2 amendments include removing a trail segment in Linnton (due to the proposed reclassification as a potential greenway trail). Also see the zoning code map changes in Volume 1B.
Map 8	The Map 8 amendment reclassifies a trail segment in Linnton to a potential greenway trail. Also see the zoning code map changes in Volume 1B.
Map 9	The Map 9 amendment reclassifies a trail segment in Linnton to a potential greenway trail. Also, see the zoning code map changes in Volume 1B.

Part B: Amendments to Volume 1B		
Replacement Page #	Code Chapter/ Section	Description of Amendment
9	33.475 Table of Contents	The table of contents has been amended to reflect the change from Minimum Vegetated Area to Vegetation Enhancement Standard, and to reflect the change in numbering of the Removal and Remediation of Hazardous Substances section.
10	33.475.030 commentary	The commentary has been amended to eliminate language referring to the clean up action being conducted under the authority of the Oregon Department of Environmental Quality. The removal and remediation of hazardous substances section will be the substantive regulations that apply to all clean up actions not just those that are conducted under the authority of Oregon DEQ.
13	33.475.030	Subsection F has been amended to eliminate reference to ORS statutes, and to make it clear that Section 33.475.460 applies to all clean up actions not just those conducted under DEQ statutes.
18 and 19-19e; 28 and 29-29e; 36 and 37-37e	33.475.120; 33.475.220; 33.475.320	These sections have been amended to reflect revisions to the Minimum Vegetated Area standard. The standard is now based on the requirement to spend 1 percent of total project value on enhancing native vegetation on the site. The standard allows the applicant to pay a fee-in-lieu of on-site vegetation enhancement.
33	33.475.300.B	The general information about the River Setback has been amended to clarify the types of recreational development that should be considered river-dependent.
43	33.475.430.A.3.b	An exemption for pruning trees within 10 feet of a structure has been added. This is a standard exemption in the Environmental Conservation and Environmental Protection zones.
45	33.475.430.A.3.g and 3.h	The lettering has changed to reflect the inclusion of subparagraph b.
48	33.475.430.B.2 commentary	The reference to the tree removal standards (B.10) has been amended because the numbering of that paragraph has changed.
49	33.475.430.B.2.e and 2.f	The change on this page reflects renumbering of paragraphs that come later in this subsection.
51	33.475.430.B.3.a	The width of a corridor allowed for a rail right-of-way has been changed to 20 feet after discussion with the Port of Portland. 20 feet is generally required for installation of a track.

	33.475.430.B.3.c and 3.d, and 4.c and 4.d	Changes to these subparagraphs are due to renumbering of paragraphs that come later in this subsection.
51a	B.5.e and 5.f, and 6.b and 6.c	These changes reflect renumbering of paragraphs that come later in the subsection
53	33.475.430. 7.a.(5)	The change on this page reflects renumbering of a paragraph that come later in this subsection.
56 and 57	33.475.430.B.9 commentary and code	This paragraph is a new set of standards for development in a public park. The standards will allow Portland Parks and Recreation to install typical small scale amenities in the River Environmental overlay zone without going through a River Review. To off-set the impacts from the development, mitigation is required. Typical development could include the installation of benches, picnic tables, drinking fountains, and bioswales. The paragraph sets a limit on the amount of disturbance allowed through standards. Any development that disturbs more than 500 square feet will require River Review.
56a	33.475.430.B.10 commentary	The change on this page reflects re-lettering as a result of adding paragraph 9.
57a	33.475.430.B.10.a.(1)-bullet 8	The paragraph as been renumbered, and a reference has been added to reflect the addition of the development standards for city parks.
58	33.475.430.B.10 and B.11 commentary	The changes on this page reflect renumbering of the paragraphs as a result of adding paragraph 9.
59	33.475.430.B.10.b(2)	This change allows Portland Parks and Recreation to remove trees in conjunction with a resource enhancement project that restore native oak woodland. The existing proposal only allows Bureau of Environmental Services to undertake native oak woodland projects.
	33.475.430.B.10.c(3)	This change allows the City Forester to approve non-native non-nuisance trees as replacement street trees in the River Environmental overlay zone. The change is consistent with the Tree Policy project.
	33.475.430.B.11	This change reflects renumbering of paragraphs as a result of adding paragraph 9.
	33.475.430.B.11.a	Subparagraph B.11.a has been amended to eliminate the requirement that mitigation occur at a higher than 1.5:1 ratio when the mitigation will occur off-site, and when an existing mitigation area is being redeveloped with industrial development.

		The amendment reflects stakeholder concern that the costs for mitigation are too high and will negatively affect redevelopment opportunities in the North Reach.
61	33.475.430.B.11.d	The change on this page reflects renumbering of paragraphs as a result of adding paragraph 9.
62 and 63	33.475.430.B.11.j 33.475.430.B.11.k code and commentary	The amendment to this subparagraph reflects the changes in numbering due to the revised Vegetation Enhancement Standard. The change affects references only. This subparagraph allows applicants to choose to pay fee-in-lieu of mitigation, which the City will use for restoration purposes in the North Reach.
70-77		These pages have been intentionally left blank. The code language that was on them has been incorporated into the new Vegetation Enhancement Standard. In order to keep the page numbering consistent, these pages must be left blank. The zoning code will not have blank pages.
78-85, 87-88	33.475.460 code and commentary	The regulations for the removal and remediation of hazardous substances have been amended on the advice of the City Attorney's office. The changes are made to improve legal clarity and consistency with other sections of the Portland City Code, state law and federal law. The changes are not intended to be significant substantive changes to the requirements presented in the June 2009 draft of this code section.
96-97	33.248.090.D commentary and code	The change to this subsection ensures that invasive/nuisance plants are removed from mitigation areas in the River Environmental overlay zone.
107	33.430 Table of contents, and 33.430.020 33.430.080.D.1	The table of contents and the Environmental Reports sections of this chapter have been amended to include a map of and reference to the River Plan / North Reach reports, including the Natural Resources Inventory. Exemption D.1 has been amended to allow temporary drip irrigation of newly planted areas for up to 3 years. The change is intended to ensure that property owners don't have to hand water plants while they are establishing.
107a – 107d	33.430 maps 430-2, 430-3, 430-6, and 430-13	The protection plan area maps for the Columbia Corridor, East Buttes and Terraces, and Northwest Hills have been amended because some of the area that had been within their resource site boundaries is now within the River Plan / North Reach resource site boundary. A new map has been added to show the boundaries and resource sites for the River Plan

		/ North Reach.
187	33.865.030	The procedure type for a River Review has been changed to Type IIx in order to ensure that the applicant gets complete and timely information from the City.
195	33.865.040.B.1.b	The change to this subparagraph reflects the addition of a fee-in-lieu option for off-site mitigation, and correction of a typo.
197	33.865.040.B.5.a, 5.d and 5.e	The amendment to subparagraph B.5.a allows applicants to purchase credits from any mitigation bank that is certified by the City, not just the City's own mitigation bank. The addition of subparagraph B.5.d requires that the mitigation plan include an operations and long-term maintenance plan. The addition of subparagraph B.5.e requires that every mitigation plan include monitoring and evaluation procedures.
200-203	33.865.100.B.2.d commentary and code	The mitigation approval criterion for River Review has been revised to provide additional clarity on the factors that will influence the decision regarding whether the mitigation should be located on-site or off-site mitigation. The code language has also been amended to allow off-site mitigation to occur at one of the Willamette River restoration sites or through payment of a fee-in-lieu. The fee-in-lieu option will expire in two years when the City expects to have a mitigation bank up and running in the North Reach.
207	33.900.010 33.910.030	The terms Dredge Material and Ordinary High Water Mark have been added to the zoning code's List of Terms because a definition for each term has been added to the Zoning Code. The definition of drainageway has been amended to further clarify the types of open linear depressions that meet the definition of drainageway.
Quarter Sections 1918 and 1919	Zoning Maps	The location of the public trail stars has been amended in the Linnton area. The trail designation has moved from NW Front Avenue to NW St. Helens Road/Hwy. 30 in order to eliminate conflicts with existing industrial operations. The trail designation remains along NW 107 th Avenue and along the riverfront in Linnton. The NW Front Avenue alignment will shown as a potential greenway trail in the River Plan / North Reach reports.
Quarter Section 2324	Zoning Map	The environmental protection overlay zone has been changed to environmental conservation overlay zone on a portion of the bluff on the University of Portland campus in order to accommodate the development of a parking structure that will connect the upper and lower portions of the

	campus.
Part C: Amendment to Volume 3C	
Replacement Page	Description of Amendment
212	This amendment describes the reason for a change from environmental protection to environmental conservation zone on the University of Portland bluff.

Part A. Amendments to Volume 1A

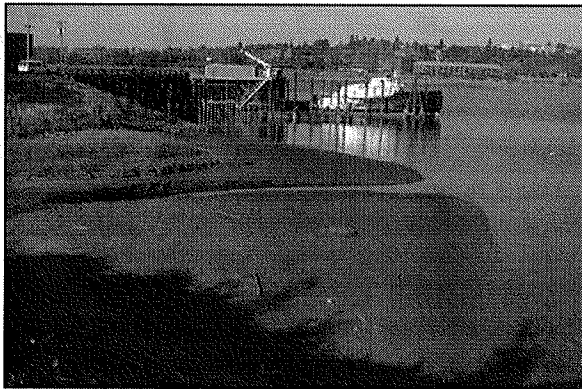
The following pages contain proposed amendments to Volume 1 A. These pages include text, maps and a flowchart. Language to be added is underlined. Language to be deleted is shown in ~~strike~~through.

Apply a river environmental overlay zone to high and medium ranked natural resources that exist within the boundaries of the river overlay zones.

The City has ~~dual~~ multiple goals for the riverfront in the North Reach: to support river-dependent and river-related uses, to provide access to the river and to protect and restore natural resource functions including fish and wildlife habitat.

Achieving natural resource protection within a heavily developed industrial area is no small endeavor, especially when development located on riverfront sites is required to use the river. Due to the importance of maritime shipping to the state and local economy, regulating development within natural areas must be done in a way that balances economic and environmental needs. In addition, much of the vacant land is contaminated and increasing development costs and process uncertainties can be a barrier to cleanup and redevelopment of those sites. This makes the environmental zoning approaches used elsewhere in the city more challenging to apply in the North Reach.

Given these circumstances, a new River Environmental overlay zone (e-overlay) is recommended as a way to maintain riparian and wildlife natural resources and habitat connectivity along the river. This will be critically important to avoid



Balch Cove is a candidate site for Portland's River Restoration Program. Enhancing shallow water habitat will provide an off-channel refuge for salmon.

significant natural resource values and functions as development occurs. The proposed regulations will require developers to avoid, minimize, and/or mitigate for impacts to natural resources.

Natural Resource Damage Assessment (NRDA)

According to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly referred to as "superfund", and the Oil Pollution Act of 1990, owners and operators of facilities that released hazardous substances are liable for the cleanup cost and compensation for injury to natural resources as a result of those releases.

The Portland Harbor Natural Resource Trustee Council (Trustees) is comprised of three agencies: NOAA Fisheries, US Fish & Wildlife Service, and the Oregon Department of Fish and Wildlife; and the Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Siletz Indians of Oregon and Nez Perce Tribe. The Trustees are authorized to conduct studies within the Portland Harbor Superfund Site to identify the extent of natural resource injuries, the best methods for restoring those resources, and the type and amount of restoration required.

This compensation process may take the form of a natural resource damage assessment (NRDA) in which the Trustees assess damages from pollutants to public trust resources since December 11, 1980.

According to the January 2007 Trustees report, *Preassessment Screen for the Portland Harbor Superfund Site*:

"... it is evident that the direction of the remedial investigation/feasibility study is not toward full restoration of likely injuries, and will not address lost services of resources which have been ongoing since the enactment of CERCLA. Thus, additional restoration, replacement, and rehabilitation of natural resources

further deterioration of watershed health, and to protect public health and safety as businesses continue to expand and redevelop in the North Reach. The new e-overlay regulations will apply generally to high and medium ranked resources identified in the WNRI. The high and medium ranked resources are primarily the river, streams, wetlands and adjacent woody vegetation, vegetated flood areas, vegetated riverbanks, steep slopes, and important wildlife habitats and corridors. (See Map 6: *Watershed Health – Proposed Overlay Zones and Action Items*).

The purpose of the e-overlay is to protect

The plan does not apply the e-overlay to portions of riverbank that are currently in river-dependent industrial use or that are hardened and without vegetation. These areas rank low in the WNRI. Additionally, the e-overlay is not applied to flood areas that are mostly developed and where the only existing natural resource function is water storage during flood events. The flood area will continue to be subject to balanced cut and fill regulations. Application of the e-overlay will encourage innovations in low impact development to expand both economic and natural resource functions as these sites develop.

Some development-related activities, such as normal repair and maintenance, will be exempt from the regulations. Development that is not exempt will either meet development standards or undergo a discretionary land use review. Standards for specific development activities are included in Volume 1B: *Code Amendments and Zoning Maps*. Mitigation will be required for most development in the e-overlay.

The approval criteria applied during discretionary land use reviews will focus on minimizing detrimental impacts to natural resources and functions within the e-overlay. An alternatives analysis will be mandatory and mitigation will be required to compensate for unavoidable impacts. During the course of a review, an applicant will have the opportunity to provide updated site assessment data pertaining to the natural features. This information may be used to supplement and update the City's inventory data and will be used to inform the review process and decision. Off-site mitigation through an approved mitigation bank may be allowed when there are inadequate on-site mitigation opportunities.

- **Establish a mitigation bank for the North Reach.**

In order to provide the flexibility to conduct compensatory mitigation at an off-site location, and to ensure that the off-site locations are restored, maintained and managed in perpetuity, the City (and perhaps private entities) will establish a mitigation bank that will sell credits to applicants who are allowed to mitigate off site.

The mitigation bank (s) will use a science-based crediting and debiting system that will ensure that mitigation fully compensates for impacts to natural resources caused by development. This will help to ensure that no further loss of natural resource function is sustained in the North Reach.



Large wood accumulates on the beach at McCarthy Park on Swan Island, creating pools, cover and an inviting riparian edge.

The mitigation bank will also be designed to accommodate mitigation required by state and federal agencies, and, if possible, accommodate restoration activities required by the Portland Harbor Natural Resource Trustees as compensation for past damages from contamination. Map #6: *Watershed Health – Proposed Overlay Zones and Action Items* identifies sites that can be included in the mitigation bank as off-site mitigation sites. However, Kelly Point Park and Cathedral Park can only be used for restoration by the City of Portland. Also see Appendix A: Action Agenda - Watershed Health for more information about these sites.

The City wants one or more mitigation banks to operate in the North Reach. A range of management options for mitigation banks ~~the bank are under consideration,~~ including sole City ownership and management, management by the City in partnership with a for-profit entity, and management by the City in

cooperation with a team of local and state agencies and non-profit entities and a private bank. Accounting methods under consideration follow accepted methods used by state and federal agencies to assess natural resource values and determine appropriate compensation for impacts to those values. The accounting system will track mitigation resulting from City requirements and separate from those required by others.

In Oregon and elsewhere in the country some mitigation sites include trails. The presence of a trail may reduce the natural resource function of the site and therefore result in fewer mitigation credits to sell but that should not prevent inclusion of a trail or viewpoints in mitigation sites in the North Reach. If an entity chooses to develop a mitigation bank in an area that is designated for a regional trail (depicted as stars on the zoning map), the mitigation bank must account for the trail. However, the trail design and alignment should reflect sensitivity to natural resources.

▪ **Develop a mitigation bank certification process**

Development of a mitigation bank is important to the implementation of the River Plan. The City will establish a certification process to ensure that banks operating in the North Reach can provide mitigation for the River Code. Any mitigation bank whether public or private will have to be certified by the City of Portland to provide credits for the River Plan.

OBJECTIVE #2. Enhance and restore watershed functionality within, and directly adjacent to the North Reach, in order to improve conditions for fish and wildlife, improve watershed health, and protect public health and safety.

Recommendations

▪ **Establish the River Restoration Program.**

A key component of the overall River Plan / North Reach is the establishment and implementation of a City program dedicated to natural resource restoration in the North Reach—the River Restoration Program. The mission of the program is to acquire, restore and manage in perpetuity, key sites for long term public benefits such as fish and wildlife habitat, water quality, and flood storage.

The key restoration sites that the program should focus on are shown on Map 6: *Watershed Health – Proposed Overlay Zones and Action Items*, and they are described in Appendix C: *Action Agenda*. The list of sites was developed during the River Plan process. North Reach stakeholders worked with River Plan staff to visualize a conceptual “landscape” plan for the North Reach, and as part of that work, the group identified restoration opportunity sites along the river and in the uplands. River Plan staff refined the list of sites in coordination with staff from the Bureau of Environmental Services and state and federal agencies.

River Plan staff have also developed rough cost estimates for site acquisition and restoration:

Acquisition:	\$39 - 103 million
Restoration:	<u>\$144 million</u>
Total:	\$183 - 247 million

Funding for the restoration program will come from numerous sources including fees in-lieu of meeting existing and proposed landscape and vegetation enhancement standards. Other revenue sources for program funding could include City investments in watershed health and grants from state and federal programs and foundations.

The restoration sites will be prioritized based on a number of factors once the restoration program is operational. The prioritization criteria include: the potential for ecological improvements; the cost of restoration; the extent of contamination; the cost and complexity of cleanup; and the willingness of the property owner to participate in the program. Restoration sites located on private property will be acquired from willing sellers as opportunities and funding become available. The list of sites shown in this plan should not be considered exhaustive. The River Restoration Program will evaluate additional opportunities for restoration where appropriate, and the program will be evaluated over time on its progress toward fulfillment of its mission.



A wetland in the Rivergate district provides habitat for sensitive species such as the western pond turtle.

- **Ensure enhancement of natural resource functionality through the application of a development standard aimed at increasing native vegetation in the North Reach.**

Enhancement and restoration of the natural conditions in the North Reach are goals of the River Plan, the River Concept, the River Renaissance Strategy, and Statewide Planning Goal 15. Enhancement of natural conditions is adopted City policy as part of the Willamette Greenway Plan, the Portland Watershed Management Plan, the Urban Forestry Management Plan and the Climate Action Plan. In response to these goals and policies, the City will apply a development standard that over time will result in 15 percent of the area in the River Overlay Zones being covered with native vegetation. This recommended development standard is similar to the greenway landscape standard that has been in place since 1987, however, it is more broadly applied to address concerns about the lack of adequate habitat in the North Reach.

This recommended development standard requires an applicant for a building or development permit to increase the amount of vegetative cover on their site or in the North Reach by choosing from among several options. These options include spending one percent of project value, or \$200,000, which ever is less, on planting vegetation, an ecoroofs or paying the City to plant vegetation on one of its river restoration sites.

The recommended vegetation standard is more flexible than the existing landscape standard because applicants for development permits will be able to comply with the requirement in a variety of ways:

- applicants will be able to count existing vegetation toward meeting the standard;
- new vegetation can be planted anywhere on the site rather than just within the greenway setback;
- ~~vegetation planted along the river bank or adjacent to existing natural resource area can reduce the total requirement to 10 percent or 5 percent;~~ and
- the applicant will have the option to meet the standard by paying a fee-in-lieu of planting vegetation on-site. The payment will be directed to the River Restoration Program.

The code also provides incentives for planting on the riverbank or in an environmental overlay zone.

OBJECTIVE 1. Improve regulatory efficiency for all activities below the OHWM.

Ordinary High Water Mark

The U.S. Army Corps of Engineers (Corps) generally relies on one or more physical indicators to determine the OHWM at a given location, described as *"that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area."*

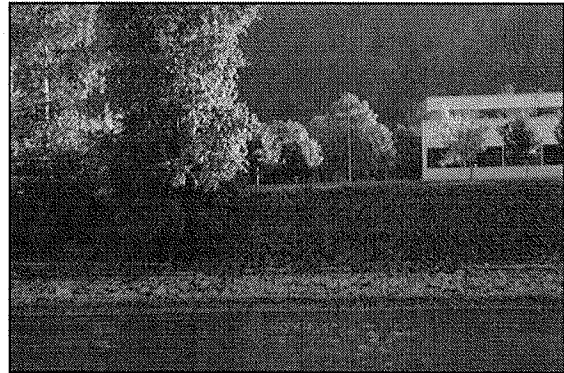
Oregon Statute defines the Ordinary High Water Line as *"that line on the bank or shore to which the high water ordinarily rises annually in season"* and includes a list of field indicators similar to the Corps'.

The riverbank and water below the OHWM is regulated by the City, state and federal government. Throughout the planning process, industrial stakeholders have suggested that the City's review of development below the OHWM is duplicative of state and federal evaluations, leading to differing determinations, lengthening the overall permitting process, and resulting in costly project redesign. In fact, the City's goals in reviewing development are broader than the regulatory mandate of the state and federal government.

Stakeholders from the environmental community and staff from several City bureaus believe that eliminating City review of development proposals below the OHWM would limit the City's ability to influence project design and minimize impacts to all affected fish and wildlife, and would not allow the City to address environmental interests and overall watershed health goals adopted by City Council that go above and beyond state and federal agency mandates.

These City goals include:

- Protecting properly functioning habitat conditions. To this end, the City limits detrimental impacts to watershed functions identified in the City's adopted natural resource inventories and Portland Watershed Management Plan
- Protecting riparian and aquatic habitats and species beyond those that the state and federal agencies protect (e.g. non-listed species)
- Assisting in the recovery of threatened and endangered species
- Ensuring that adequate mitigation is provided to compensate for unavoidable impacts to resource functions
- Ensuring that approved in-water development is consistent with City land use plans and zoning and does not affect the desired use of the upland portion of the site
- Protecting and improving groundwater and surface water quality
- Supporting river-dependent industrial uses in the North Reach



The Ordinary High Water Mark is a regulatory reference line that is frequently used to determine whether a project will be regulated by State and Federal agencies.

The City is interested in ensuring that development activities that occur below ordinary high water are reviewed in the context of City land use plans and the complete ecology of the area around the development site. City review ensures that the development will have the least detrimental impact on natural resources and functional values among all of the practicable alternatives, and that when development activities do occur, there is no net loss of resource function in the North Reach and that any lost resource function is fully replaced on the site or somewhere else in the North Reach.

The resources that the City cares about that occur below ordinary high water include open water, shallow water (0-20 feet), beaches, floodplain and flood areas, wetlands and ponds, and riparian vegetation.

- These resources: provide microclimate and shade function (regulate the temperature); provide stream flow moderation and water storage function; protect the river bank; control sediment, nutrients and pollution; keep the channel dynamic; provide food and organic inputs to the river; provide fish and wildlife habitat and habitat connectivity.
- While Federal and state regulations may nominally cover many of these resources, in practice their reviews only apply to discrete resources not all resources, and in limited circumstances. For example, state and federal regulators do not impose restrictions on floodplains that may be associated with an area below ordinary high water. These regulatory powers are delegated to the City. Only the City can connect those rules to impacts on fish, wildlife, overall watershed health and regional public safety, and represent the full suite of ecological interests. In addition, federal and state regulations and reviews are not proactive in preventing future threats or declines in watershed health, nor do they attempt to improve conditions. Rather they focus on preventing further degradation from existing conditions, usually for a limited site and for limited biological conditions.

Development can reduce the functionality of any facet of an area's natural resources (its ecology). A reduction in resource function will mean further loss of fish and wildlife species in the North Reach, and additional threats from natural hazards such as flooding and landslides. The City is interested in making sure that existing functionality remains in place as much as practicable and that lost resource function is fully replaced somewhere else on the site or somewhere else in the North Reach.

State and federal agencies focus more closely on biological systems, particularly listed species, and on jurisdictional habitats such as wetlands, and on navigation. All of these are evaluated against the development proposed at that time, but not the full context including the surrounding conditions, potential future development in the surrounding area or an applicant's future development plans. It is site and project specific and not integrated or based on an ecological perspective. Like the City, they also require that development avoid impacts, minimize impacts when avoidance isn't possible, and mitigate for lost resources. However, the extent to which the state or federal agencies will require an alternative design or an alternative location for the development can be limited by the species on which they focus. In the same way, mitigation will be limited to those features that the species use—which may not cover the full spectrum of resource functions and values listed above.

For example, an applicant may be able to make the case to the state and federal agencies that a particular dock and bank stabilization design does not affect salmon habitat, or that the impacts can be mitigated by improving salmon habitat somewhere else, even though the bank design includes rip rap (rocks) as stabilization, thereby eliminating an existing riparian area with significant habitat value. In this case, the City would want to see alternative locations that have less impact on the riparian area evaluated and that the mitigation plan includes mitigation for the lost riparian resources. In addition, the proposal may impact flood storage or channel dynamics, but the state and federal agencies may not ask for mitigation for those functions. The City will ensure that all functions are replaced in the North Reach.

In another example, the state and federal agencies may permit a development activity that reduces river access on a site. The state and federal agencies do not look at the impact a development may have on future use of the site for river-dependent or river-related activities. The City has an interest in ensuring that alternative locations or designs that preserve river access are evaluated and used if practicable.

The following table compares the interests of the state and federal agencies with the City interests in key areas of ecological function as it relates to permitting below the ordinary high water mark.

In addition, development that occurs below the OHWM usually has impacts, or is physically attached to,

<u>Ecological Function</u>	<u>State</u>	<u>Federal</u>	<u>City of Portland</u>
<u>fish/wildlife habitat</u>	<u>Focuses on wetlands and waters of the state with stronger focus on designated "essential fish habitat," water quality, and contamination. Must provide for fish passage at all times.</u>	<u>Focuses on listed species and their specific habitat requirements, generally limited to designated "critical habitat." Also looks at dredging in navigable waters and significant contamination issues.</u>	<u>Considers all native fish and wildlife species and their habitat requirements</u>
<u>bank functions</u>	<u>Considers removal and fill in a wetland or water of the state that may be connected to a stream/river bank, and in the context of contamination and clean up.</u>	<u>Addresses bank functions in context of designated critical habitat</u>	<u>Addresses bank functions in relation to a diversity of fish and wildlife species as well as other city goals such as flood protection, access.</u>
<u>riparian vegetation</u>	<u>Considers riparian vegetation only if there are state listed species (birds, mammals) on state lands, or as it relates to contamination containment.</u>	<u>Considers in-water impacts; the relationship between in-water and riparian areas is only considered relative to listed species in non-binding recovery plans.</u>	<u>Considers the relationship of impacts to riparian vegetation and in-water conditions/ how impacts in-water may affect riparian habitat, hydrologic function and wildlife connectivity</u>

development above the OHWM. It would be extraordinarily difficult to limit the City's review to only the portion of the development that occurs above the OHWM. Additionally, City development review staff have extensive knowledge of local conditions and circumstances that state and federal agencies may not have or do not consider.

For all of these reasons, the River Plan recommends that the City continue to review development proposals that have impacts below the OHWM, but also suggests process improvements to improve regulatory efficiency for such proposals.

Recommendations

- **Create an optional Willamette River Early Project Review process** for projects in the Portland Harbor that require approval from city, state and federal resource agencies. This would involve a City/State/Federal coordination process that provides private applicants with the option of participating in a facilitated multi-jurisdictional pre-application meeting and permit coordination process. This voluntary pilot process is being created to provide a venue for early information sharing and collaborative problem-solving between the applicant and regulatory agencies.

Flowchart 1 shows the legal timeframes for the City/state federal permit review processes. It also identifies potential interagency coordination points.

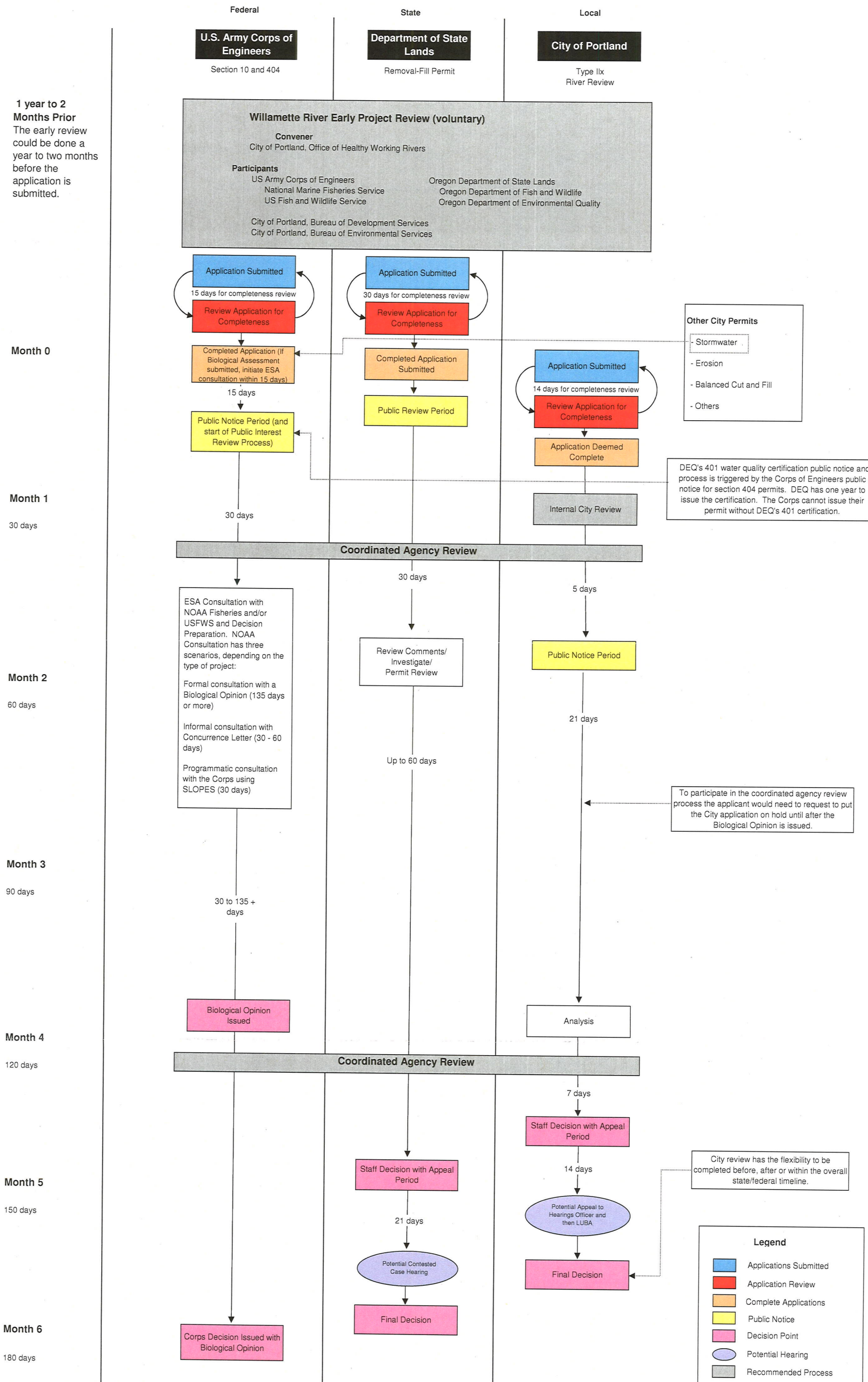
- **Train BDS planners** assigned to Willamette River permitting to consider industrial issues, interjurisdictional permitting and clean-up of contaminated sites.

- **Assign and fund a BES staff person to act as a scientific consultant to BDS as needed during the City river review process.** This will be especially important for reviews below ordinary high water. This service could be formalized through an inter-bureau agreement as needed.
- **Ensure that the City's River Review land use decisions and conditions of approval do not conflict with or duplicate decisions made by the Department of State Lands, National Oceanic and Atmospheric Administration's National Marine Fisheries Service, or the U.S. Army Corps of Engineers.** See Volume 1B: *Code Amendments and Zoning Maps* for specific language.

Flowchart 1

River Plan / North Reach Recommended Draft: Proposed Coordinated Review Process for Projects Below the Ordinary High Water Mark

Note: The timelines listed are legal maximums and are not meant to represent the time it would take to process any given permit application.



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OBJECTIVE 5: Evaluate the implementation of the River Plan / North Reach

To help ensure the effective long-term implementation of the River Plan / North Reach, the City plans to proactively evaluate its implementation with assistance from a multi interest stakeholder group. Each year the Office of Healthy Working Rivers will deliver a written report to the Planning Commission and City Council that will include feedback on aspects of the plan that are ambiguous or unintended, and on the overall effectiveness of the plan in achieving its goals. The report may inform future code or program amendments.

Recommendations

- Establish a multi interest North Reach Advisory Committee to help the City evaluate implementation of the River Plan / North Reach, including progress on developing a mitigation bank. Provide an annual report to Planning Commission and City Council.

1. ECONOMIC PROSPERITY

B: Additional Studies and Projects				
Project ID	Project	Lead Org	Timeline	Ranking
EP1	Conduct a hydraulic/ hydrologic analysis evaluating implications of eliminating balanced cut and fill requirements.	BPS and BES	Start within 2 years	Priority
EP2	Develop a strategy to improve freight rail funding and service.	tbd	tbd	Priority
EP3	Implement the Harbor ReDI (Harbor Redevelopment Initiative) and develop strategies to address brownfield issues citywide.	PDC	Complete within 1 – 5 years	Priority
EP4	Prepare a small shipper rail strategy	lead org tbd, OHWR	tbd	Priority
EP5	Investigate the feasibility of adding a regional rail yard	lead org tbd, OHWR	tbd	Priority
EP6	Secure long-term transportation funding for upgrades, modifications, improvements to street, rail, shipping facilities.	PBOT	tbd	Priority
EP7	Develop a funding source for small projects that address freight deficiencies or improve site access and circulation.	PBOT	tbd	Priority
EP8	Evaluate alternatives and recommend a stormwater rate structure for large-site industrial areas	BES	tbd	Priority
EP9	North Willamette Crossing Study (2004 RTP#4016) - Increase priority in Regional Transportation Plan to study need for new US 30 to Rivergate bridge.	Metro	tbd	Priority

C: Potential Funding Sources			
	SOURCE	USE OF SOURCE	OPPORTUNITIES/ LIMITATIONS
LOCAL	General Fund Funds collected from property taxes.	Planning, capital and restoration projects	General funds are discretionary and allocated by the City Council among competing needs.
	Utility Rates Funds collected from sewer and water bills.	Sanitary sewer, Stormwater, environmental restoration and pollution control services.	Funds generated from rates can only be used for actions that are directly related to the utility service. Limited public support for increasing Portland's sanitary/stormwater rates, which are already among the highest in the country. Voluntary rounding up on utility bills has been identified as a funding strategy for the Grey to Green program.

2. WATERSHED HEALTH

The following Watershed Health action items implement the objectives found in the main part of Volume 1A. The first section lists capital improvement projects that could be implemented by the City or another entity. The projects are shown on Map 6. The second section lists additional studies and projects that the City will undertake and, finally, the third section lists potential funding sources to accomplish the actions.

Ranking

The City ranked the projects in the following table based on the ranking criteria below. All of the projects have high ecological value for either aquatic or terrestrial species and will provide significant ecological improvements to the Lower Willamette when completed. Some of the project sites have existing habitat that needs protection and enhancement, while other projects such as river confluence areas, are degraded but provide the most important aquatic habitat for fish recovery. These rankings do not distinguish between those different ecological benefits. It is anticipated that lead organizations will try to act on the higher ranked action items first, but they will also take advantage of implementation opportunities as they arise, regardless of the ranking listed in this action agenda.

High

- can be done with existing funding or funding likely to be secured,
- there is a constituency and a lot of momentum behind the project, or
- contamination ranks 1 or 2

Medium

- funding not yet secured,
- there is a constituency and some momentum behind the project, or
- contamination ranks 2 or 3

Low

- funding not secured,
- there may or may not be momentum behind the project,
- lead organization is not yet identified, or
- contamination rank 4

Additional Studies and Projects			
Project	Lead Org	Timeline	Ranking
Develop strategies to help increase tree canopy in the North Reach.	BPS, BES, Parks	Ongoing	High-Medium
Develop a River Restoration Program for the North Reach funded by development fees, the City's general fund and other sources.	BES, BPS	Complete within 1 year	High
Submit River Plan to advance compliance with Metro Title 3 and 13, as well as State and Federal mandates.	BPS	Upon plan adoption	High
Inspire <u>Establish guidelines for low impact and eco industrial design through development of designs suitable for the North Reach.</u>	BPS, OHWR	Start within 2 years	Medium
Develop regulations for the application of pesticides and herbicides in the river overlay zones.	BPS	Start within 2 years	Medium
<u>Develop a certified mitigation bank to accept mitigation resulting from the River Plan / North Reach. This includes development of the mitigation banking instrument and restoration of site that can generate mitigation credits.</u>	<u>OHWR, BES, BPS</u>	<u>Provide a progress report to City Council within 2 years.</u>	<u>High-Medium</u>
<u>Develop a mitigation bank certification process.</u>	<u>BES, OHWR, BPS</u>	<u>Complete within 1 year</u>	<u>High</u>
<u>Direct BES and OMF to establish an effective low interest loan financing program for ecoroofs.</u>	<u>OMF, BES</u>	<u>Complete within 2 years</u>	<u>Medium</u>
<u>Direct BES to develop ecoroof designs that provide habitat function in addition to stormwater function.</u>	<u>BES</u>	<u>Complete within 2 years</u>	<u>Medium</u>
<u>The Bureau of Environmental Services should convene a meeting with property owners who live along the bluff in N. Portland to provide information about how to safely plant and maintain vegetation on steep slopes.</u>	<u>BES</u>	<u>Complete within 2 years</u>	<u>High</u>

3. ACCESS

B. Additional Studies and Projects				
Project ID	Area	Project	Lead Organization	Ranking
A12	Cathedral Park	Implement the City Council endorsed Cathedral Park Master Plan.	Portland Parks	Medium
A13	Mocks Crest Trail	Study the feasibility of when and how to design and build a bicycle/pedestrian trail connecting N. Willamette Blvd. and N. Basin on Swan Island.	Portland Parks	Low
A14	Between N. Port Center Way on Swan Island and N. River Street in Lower Albina	Complete the North Portland Greenway Master Plan. Include a bicycle/pedestrian connection between Swan Island and the Lower Albina industrial area in the planning. Build on the right-of-way design alternatives identified in the Swan Island/Lower Albina Transportation Feasibility Study conducted for the River Plan by Alta Planning and Design.	Portland Parks	High
A15	Railroad Bridge	Conduct a study to evaluate the feasibility of building a bicycle/pedestrian facility adjacent to the BNSF Railroad Bridge (design similar to the Esplanade Trail adjacent to the Steel Bridge).	PBOT	Low
A16	Between the Railroad Bridge and the City Limits North of Linnton	Conduct a study to evaluate the feasibility of building an off-street bicycle/pedestrian trail between the BNSF railroad bridge and the city limits north of Linnton. Options to explore include building a bicycle/pedestrian rail-with-trail within or adjacent to the Portland and Western rail corridor and cantilevering a separated bicycle/pedestrian path adjacent to NW. St. Helens Rd.	Portland Parks	Low
A17	Willamette River North Reach	Work with Metro to include all segments of the near-term and long-term Willamette Greenway Trail alignment in the Regional Trail Plan.	Portland Parks	High
A18	<u>Willamette River North Reach</u>	<u>Provide signage along the greenway trail with a distinctive graphic framework to inform the public about the Willamette River, the greenway trail, restoration activities and Portland's working harbor.</u>	<u>OHWR, Portland Parks</u>	<u>Medium-High</u>
A19	<u>Linnton</u>	<u>Conduct study exploring alternative designs for community access in Linnton along the NW 107th Ave right of way from Highway 30/St. Helens Road to the riverbank. The connection should be compatible with rail and industrial operations, and the study should include evaluation of an elevated connection.</u>	<u>Portland Parks, PBOT</u>	<u>Medium</u>

5. WORKING WITH OUR PARTNERS

The following Working with our Partners action items implement the objectives found in the main part of Volume 1A. The first section lists studies and projects that the City will undertake. The second section lists potential funding sources to accomplish the actions.

Ranking

The City ranked the projects based on the following ranking criteria. It is anticipated that lead organizations will try to act on the higher ranked action items first, but they will also take advantage of implementation opportunities as they arise, regardless of the ranking listed in this action agenda.

High

- Can be done with existing funding or funding likely to be secured, or
- there is a constituency and a lot of momentum behind the project

Medium

- funding not yet secured, or
- there is a constituency and some momentum behind the project

Low

- funding not secured,
- there may or may not be momentum behind the project, or
- Lead organization is not yet identified

B: Additional Studies and Projects				
Project ID	Recommendation	Lead Org	Timeline	Ranking
WP1	Create an optional Willamette River Early Project Review pilot process for projects in the Portland Harbor that require approval from city, state and federal resource agencies.	OHWR, BDS	Start within 1 year upon plan implementation	High
WP2	Train BDS planners who are assigned to Willamette River permitting in industrial issues, interjurisdictional permitting and clean-up of contaminated sites.	OHWR, BPS, BDS	Start within 1 year	High
WP3	Assign and fund a staff person at BES to act as a scientific consultant to BDS as needed during the City river review process. This service could be formalized through an inter-bureau agreement.	BES, BDS	Start within 1 year	High
WP4	Create a guidance document that clearly states the City's substantive requirements for cleanup activities. Work with DEQ to distribute the document.	BPS, OHWR, BDS	Complete within 1 year	High
WP5	Work with DEQ to identify a clearly defined role for City involvement in clean-ups that implement the River Plan / North Reach's substantive requirements.	BDS, OHWR, BES	Complete prior to code implementation	High
WP6	Continue to comment on DEQ and EPA cleanup activities. Allocate additional funding as needed.	BDS, BES, OHWR	Ongoing	High











B: Additional Studies and Projects (cont.)				
Project ID	Recommendation	Lead Org	Timeline	Ranking
WP7	Provide the River Plan / North Reach and other city policy and code documents to the EPA and DEQ to inform them of City goals and standards for the Willamette River during preparation for the Superfund clean-up.	BPS, BES, OHWR, City Attorney	Upon plan adoption	High
WP8	Continue soliciting and coordinating City comments on the Portland Harbor Superfund cleanup activities.	BES	Ongoing	High
WP9	Increase the frequency and depth of communication with Tribal governments.	Mayor's Office, OHWR	Ongoing	High
WP10	Evaluate alternatives to improve Ensure communication and collaboration among river-related local governments, agencies, organizations, industries and citizens in the Lower Willamette River.	OHWR, BES	Start within 2 years	Medium
WP11	Work with the Office of Neighborhood Involvement, the Office of Human Relations and other agencies and organizations to establish and maintain <u>engagement</u> an education initiative focused on the North Reach Neighborhoods.	OHWR, other city agencies	Start within 2 years	Medium
<u>WP 12</u>	<u>Develop a North Reach Advisory Committee to evaluate implementation of the River Plan / North Reach</u>	<u>OHWR</u>	<u>Start within 1 year</u>	<u>High</u>

River Plan / North Reach

Map #2:
Proposed Overlay Zones

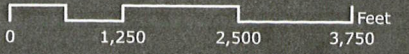
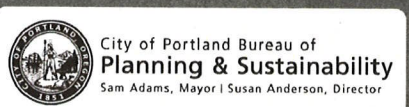
Sheet #1 of 2

Legend

-  areas not evaluated for overlay zone changes
-  north reach boundary
-  trail alignment
-  Portland city boundary
- river overlay zones
-  river environmental (e)
-  river industrial (i)
-  river recreational (r)
-  river general (g)
- environmental overlay zones
-  environmental conservation (c)
-  environmental protection (p)

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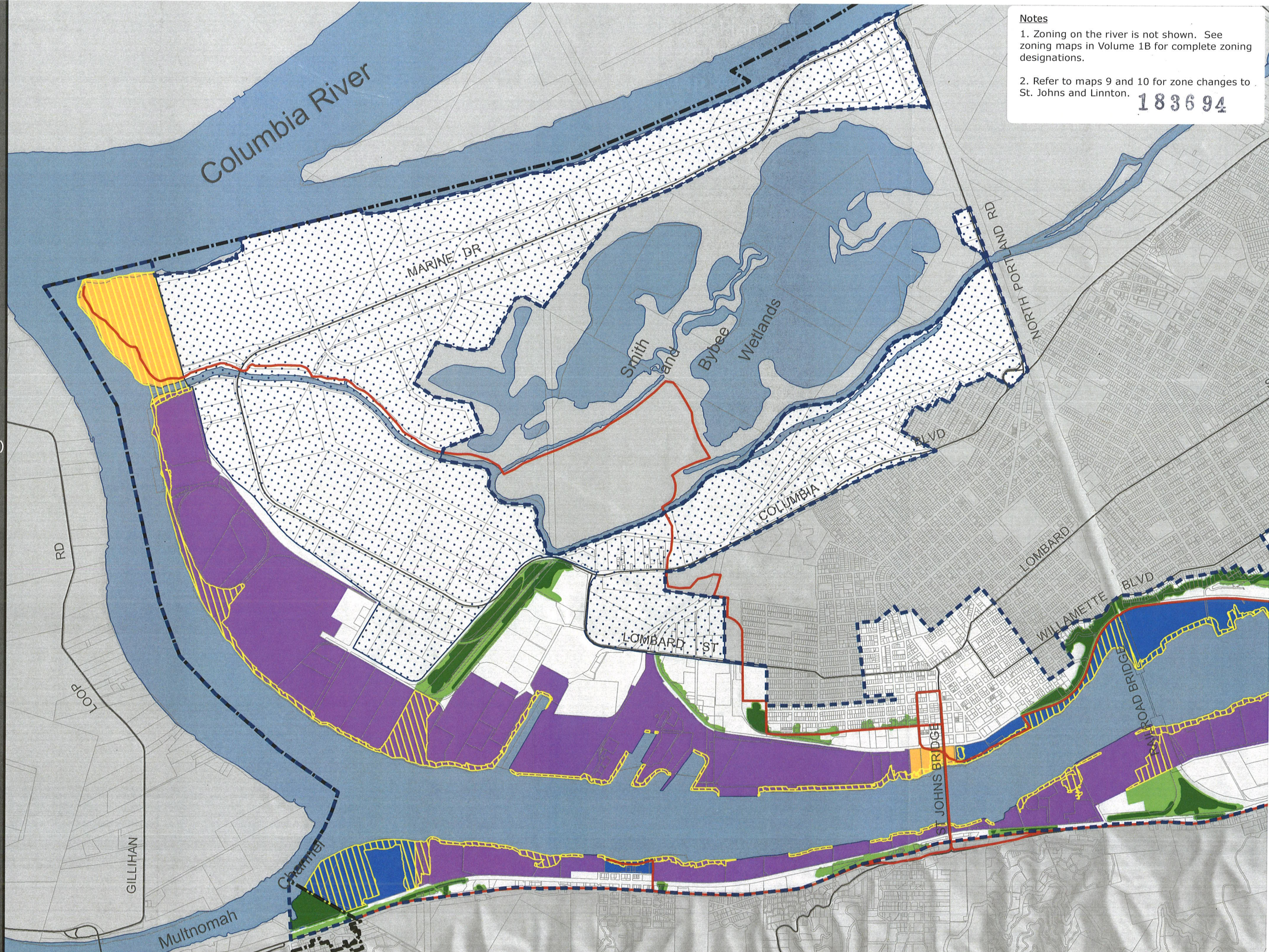
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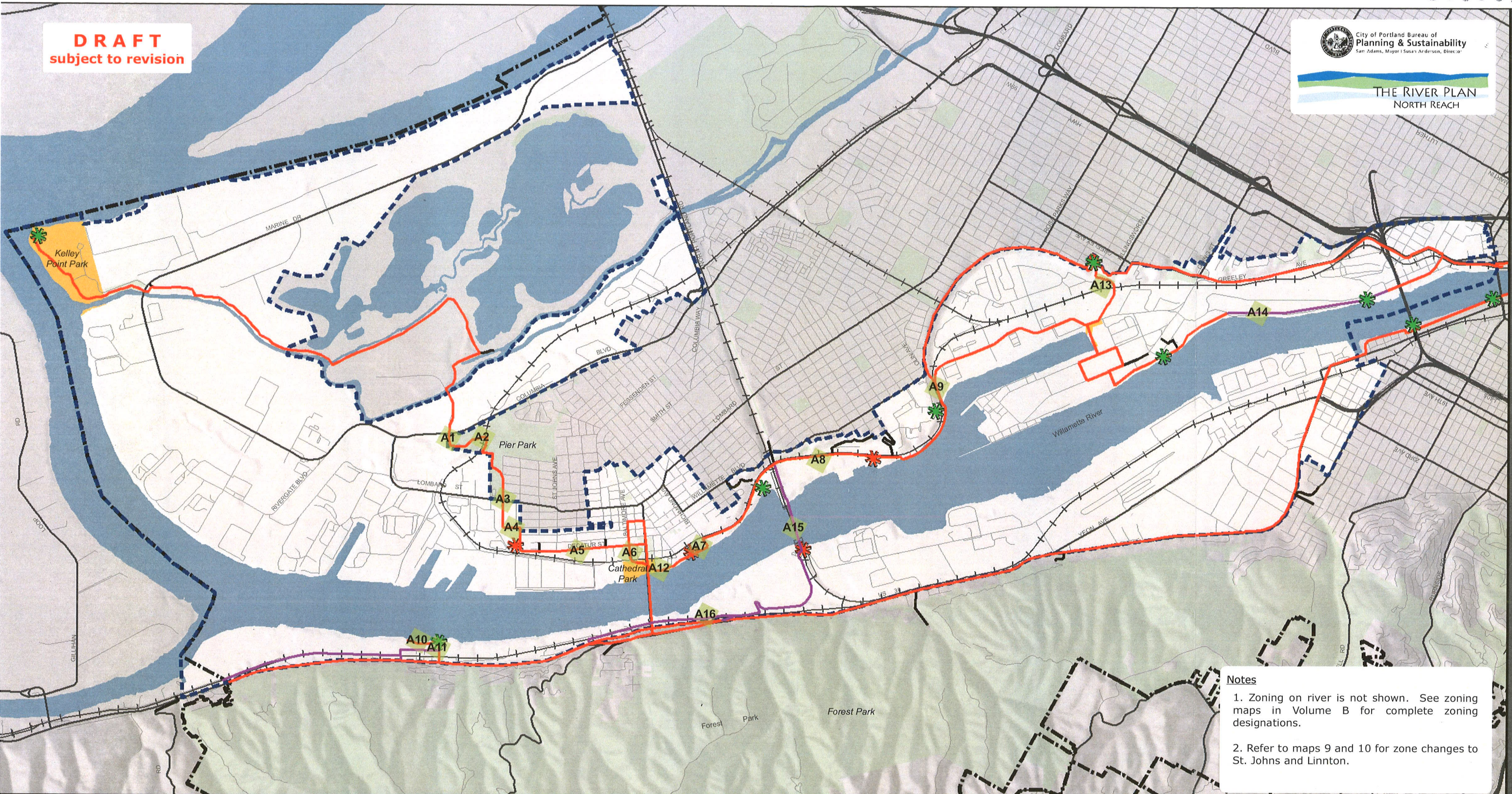
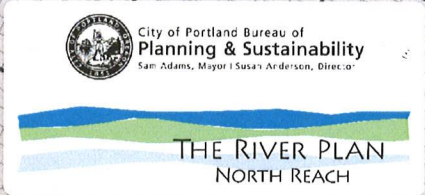
Notes

1. Zoning on the river is not shown. See zoning maps in Volume 1B for complete zoning designations.
2. Refer to maps 9 and 10 for zone changes to St. Johns and Linnton.

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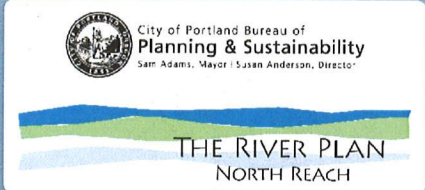
Notes

1. Zoning on river is not shown. See zoning maps in Volume B for complete zoning designations.
2. Refer to maps 9 and 10 for zone changes to St. Johns and Linnton.

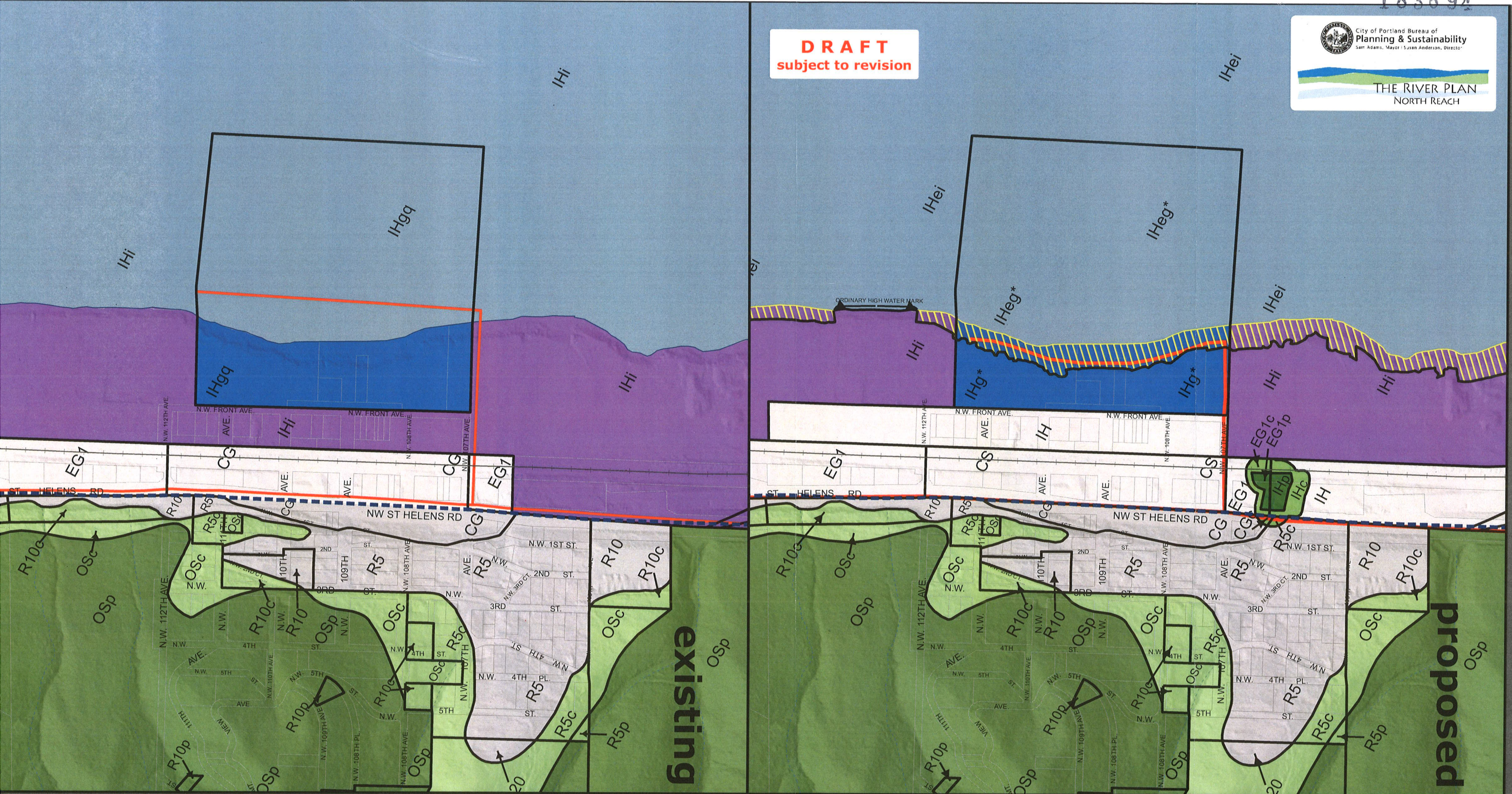
- legend**
- north reach boundary
 - Portland city boundary
 - recommended greenway viewpoints
 - existing greenway viewpoints to remain
 - river recreational overlay zone (r)
 - trail access locations
 - access action items
 - greenway trail alignment**
 - recommended greenway trail
 - potential greenway trail (needs further feasibility study)

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Map #8: Access - Proposed Greenway Trail, Viewpoints & Action Items



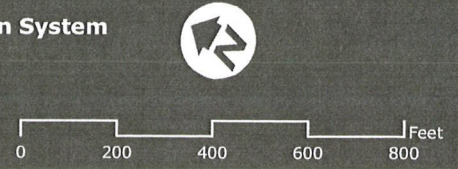
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<ul style="list-style-type: none"> greenway/river overlay zones river environmental (e) river industrial (i) river recreational (r) river general (g) 	<ul style="list-style-type: none"> environmental conservation (c) environmental protection (p) IHeg* zoning designations 	<ul style="list-style-type: none"> surface stream greenway trail north reach boundary
<ul style="list-style-type: none"> zoning boundaries 		

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existing
proposed

Part B. Amendments to Volume 1B

The following pages are replacement pages for Volume 1B. The code and commentary language that has been amended is shaded.

**CHAPTER 33.475
RIVER OVERLAY ZONES**

Sections:

- 33.475.010 Purpose
- 33.475.020 River Overlay Zones
- 33.475.030 Where These Regulations Apply
- 33.475.040 Relationship to Other City, State and Federal Reviews
- 33.475.060 Supplemental Permit Application Requirement

River Industrial Overlay Zone

- 33.475.100 Use Regulation
- 33.475.110 Nonconforming Uses
- 33.475.120 Vegetation Enhancement Standard
- 33.475.130 IG2 Minimum Landscape Area
- 33.475.140 Land Divisions and Property Line Adjustments

River General Overlay Zone

- 33.475.200 Use Regulations
- 33.475.210 River Setback
- 33.475.220 Vegetation Enhancement Standard
- 33.475.230 IG2 Minimum Landscape Area
- 33.475.240 Property Line Adjustments

River Recreational Overlay Zone

- 33.475.300 Use Regulation
- 33.475.310 River Setback
- 33.475.320 Vegetation Enhancement Standard
- 33.475.330 IG2 Minimum Landscape Area
- 33.475.340 Property Line Adjustments

River Environmental Overlay Zone

- 33.475.400 Use Regulations
- 33.475.405 Environmental Report
- 33.475.420 Review Procedure
- 33.475.430 Exemptions and Development Standards
- 33.475.450 Corrections to Violations of River Environmental Overlay Zone Development Standards

Clean Up of Contaminated Sites

- 33.475.460 Removal or Remediation of Hazardous Substances

33.475.010 Purpose

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

Commentary

33.475.020 River Overlay Zones

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

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

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

33.475.030 Where These Regulations Apply

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

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

33.475.040 Relationship to other City, State and Federal Reviews

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

33.475.060 Supplemental Permit Application Requirement

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

Commentary

33.475.120 Vegetation Enhancement Standard

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

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

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

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

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

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

33.475.120 Vegetation Enhancement Standard

A. Purpose. The vegetation enhancement standard is intended to increase the quality and quantity of vegetative cover in the North Reach. Enhancing vegetation in the North Reach will improve the natural qualities of lands along the Willamette River Greenway, increase the quality and quantity of riparian and wildlife natural resources and functional values, increase wildlife habitat connectivity, and improve water quality and other watershed health conditions. This standard is not intended to provide mitigation for impacts to the natural qualities of the Willamette River Greenway from development, but rather improve natural conditions overall.

B. When the standard applies. The vegetation enhancement standard applies to new development and exterior alteration within the River Overlay zones.

C. Vegetation enhancement standard. The applicant must meet one of the following options.

1. Option 1. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on planting vegetation on an area of the site that is within the River Overlay zones. The vegetated area must meet the planting area standards of Subsection E, below. Project value is determined based on Subsection F, below;
2. Option 2. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on an ecoroof. The ecoroof must meet the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria*. Project value is determined based on Subsection F, below; or
3. Option 3. Make a payment to the City equal to one percent of project value, or \$200,000, which ever is less. The payment will be directed to the River Restoration Fund and will be spent on planting vegetation on a City-owned site in the North Reach. Project value is determined based on Subsection F, below.

D. Cap. The following caps apply. The vegetation enhancement standard will be met when one of the caps is met:

1. On-site vegetation cap.
 - a. The amount of on-site vegetation required to be planted is capped at 15 percent of the total site area that is within the River Overlay zones. Once 15 percent of the total site area within the River Overlay zones is vegetated, the applicant is no longer required to spend one percent of project value coming into compliance with the vegetation enhancement standard;

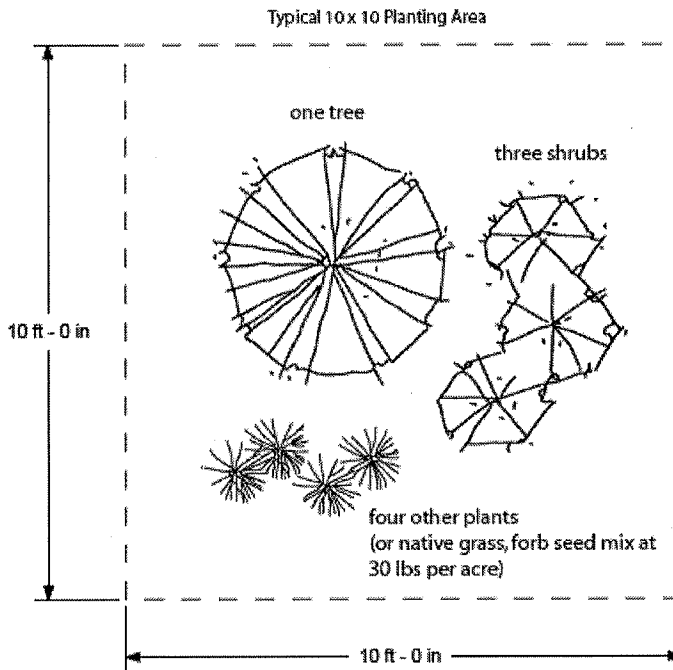
- b. Each square foot of vegetation planted within or adjacent to the river environmental overlay zone counts as 1.5 square feet toward the cap when the vegetated area meets the planting area standards of Subsection E, below;
 - c. Each square foot of vegetation planted riverward of the top of bank counts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

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

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

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

**Figure 475-6
Example Planting Plan**



4. Installation and maintenance. The following installation and maintenance requirements apply:
 - a. Installation. Plant materials must be supported when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires or other measures must be removed as soon as the plant can support itself.
 - b. Maintenance. Maintenance of vegetated areas is the ongoing responsibility of the property owner. Required vegetation must be continuously maintained in a healthy manner. Plants that die must be replaced in kind.
 - c. Irrigation. The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering. All vegetated areas must provide a temporary irrigation system, as stated in option 1 or 2.
 - (1) Option 1. A temporary irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established.
 - (2) Option 2. Irrigation by hand. If the applicant chooses this option, an inspection will be required one year after final inspection to ensure that the vegetation has become established. An inspection fee, paid at the time of permit application, will be required.
 - d. Protection. All required vegetated areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas.
 - e. Monitoring and Reporting. Monitoring of vegetated areas is the ongoing responsibility of the property owner. Written proof that all specifications of this section have been met must be provided one year after the planting is completed. The property owner must provide this documentation to BDS.
5. Exception. Where an area has been deemed in compliance with subparagraph 33.475.480.D.2.a(1), the same area can be counted toward meeting the minimum vegetated area standard and will be deemed in conformance with the standards of this subsection.

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

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

Commentary

33.475.220 Vegetation Enhancement Standard

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

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

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

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

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

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

33.475.220 Vegetation Enhancement Standard

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B. When the standard applies. The vegetation enhancement standard applies to new development and exterior alteration within the River Overlay zones.

C. Vegetation enhancement standard. The applicant must meet one of the following options.

1. Option 1. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on planting vegetation on an area of the site that is within the River Overlay zones. The vegetated area must meet the planting area standards of Subsection E, below. Project value is determined based on Subsection F, below;
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 - a. The amount of on-site vegetation required to be planted is capped at 15 percent of the total site area that is within the River Overlay zones. Once 15 percent of the total site area within the River Overlay zones is vegetated, the applicant is no longer required to spend one percent of project value coming into compliance with the vegetation enhancement standard;

- b. Each square foot of vegetation planted within or adjacent to the river environmental overlay zone counts as 1.5 square feet toward the cap when the vegetated area meets the planting area standards of Subsection E, below;
- c. Each square foot of vegetation planted riverward of the top of bank counts as three square feet toward the cap when:
 - (1) The average slope of the river bank is not greater than 20 percent (1:5). Slopes greater than 20 percent may be retained within the root zones of existing trees over 10 inches in diameter, or as necessary to make a stable 1:2 transition at boundary of the vegetated area. The river bank is the area between the ordinary high water mark and the top of bank; and
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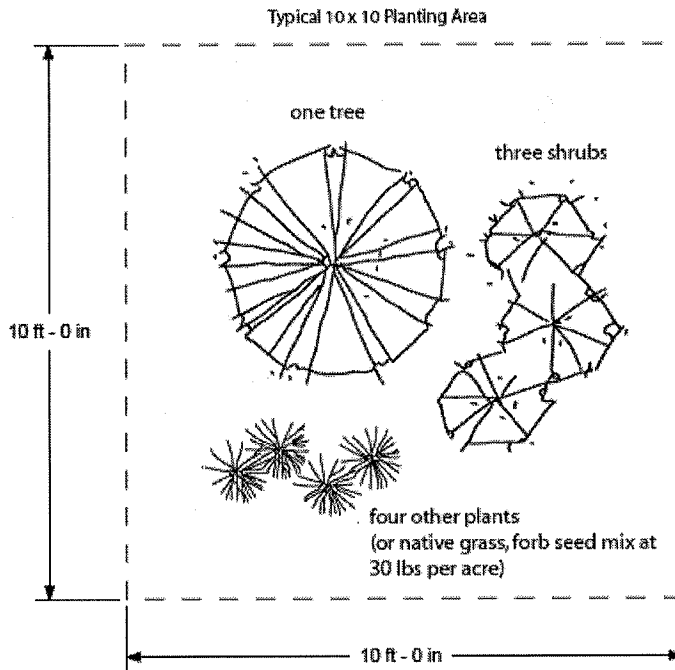
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- b. For nonvegetated areas that will be revegetated to meet the minimum vegetated area standard, the soil must be amended as follows:
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**Figure 475-6
Example Planting Plan**



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 - a. Installation. Plant materials must be supported when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires or other measures must be removed as soon as the plant can support itself.
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 - d. Protection. All required vegetated areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas.
 - e. Monitoring and Reporting. Monitoring of vegetated areas is the ongoing responsibility of the property owner. Written proof that all specifications of this section have been met must be provided one year after the planting is completed. The property owner must provide this documentation to BDS.
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F. Determining project value. Project value is determined based on the entire project, not individual building permits. For purposes of this standard, project value includes:

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 - a. Normal maintenance and repair;
 - b. Nonconforming development upgrades required by this title;
 - c. Stormwater management system installation or upgrades;
 - d. Pollution control equipment;
 - c. Approved on-site mitigation for development within the River Environmental overlay zone, or resource enhancement that occurs within the River Environmental overlay zone;
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 - h. Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;
 - i. Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings; and
 - j. Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements.

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River Recreational Overlay Zone

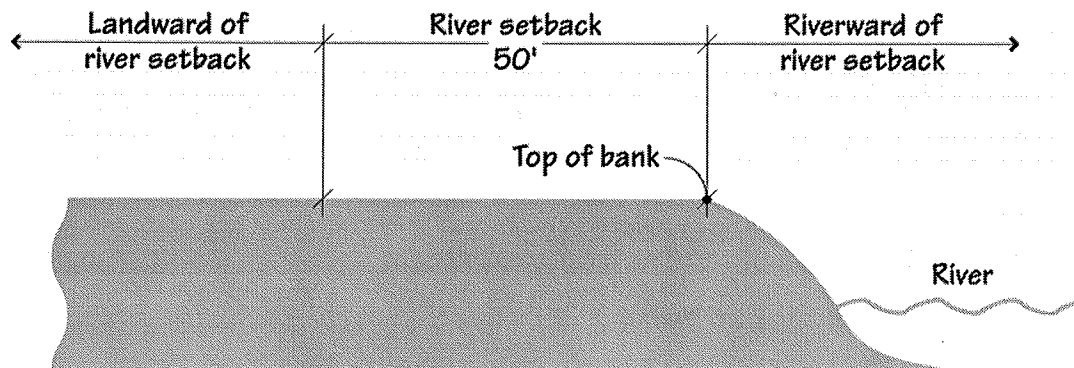
33.475.300 Use Regulation

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

33.475.310 River Setback

- A. Purpose.** The purpose of the river setback is to keep structures separated from the river in areas where the land is not being reserved for river-dependent and river-related industrial uses. Separating structures from the river facilitates protection, maintenance, restoration, preservation and enhancement of the natural, scenic, historic and recreational qualities of the Willamette River in the North Reach by reserving space for the conservation and enhancement of natural vegetation and the opportunity for public access. In addition, OAR 660-015-0005 requires the establishment of a setback line.
- B. General.** The requirements of this section focus on whether the development is **river-dependent** or **river-related**. The focus is not on the primary use of the land. For example, a riverfront park is a river-dependent recreational primary use, but not all development associated with the park is river-dependent. The boat launch, dock, benches, picnic tables, bicycle racks, drinking fountains, trash receptacles, grills, and bioswales are river-dependent, but the parking lot, bathrooms, playgrounds, gazebos, storage areas, water fountains, shelters and sport fields are not.
- C. The river setback area.** The location of the setback is measured from the top of bank. (See Chapter 33.910, Definitions and 33.930, Measurements). The river setback extends from the top of the bank to a point 50 feet landward of the top of the bank. See Figure 475-3. Where river bank restoration carried out to meet section 33.475.460.B.2.a results in the top of bank shifting landward, the applicant may choose to measure the setback from the original top of bank. When this occurs, a survey of the original top of bank line and new top of bank line must be submitted for verification that the top of bank has been measured according to the standard in 33.930.150, Measuring Top of Bank and then recorded with the County recorder. In all cases the setback line must be at least 5 feet landward of the new top of bank line.

**Figure 475-3
River Setback**



33.475.320 Vegetation Enhancement Standard

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

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

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

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

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

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

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33.475.320 Vegetation Enhancement Standard

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- B. When the standard applies.** The vegetation enhancement standard applies to new development and exterior alteration within the River Overlay zones.
- C. Vegetation enhancement standard.** The applicant must meet one of the following options.
1. Option 1. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on planting vegetation on an area of the site that is within the River Overlay zones. The vegetated area must meet the planting area standards of Subsection E, below. Project value is determined based on Subsection F, below;
 2. Option 2. Spend an amount equal to one percent of project value, or \$200,000, which ever is less, on an ecoroof. The ecoroof must meet the Stormwater Management Manual's *Ecoroof and Rain Garden Facility Design Criteria*. Project value is determined based on Subsection F, below; or
 3. Option 3. Make a payment to the City equal to one percent of project value, or \$200,000, which ever is less. The payment will be directed to the River Restoration Fund and will be spent on planting vegetation on a City-owned site in the North Reach. Project value is determined based on Subsection F, below.
- D. Cap.** The following caps apply. The vegetation enhancement standard will be met when one of the caps is met:
1. On-site vegetation cap.
 - a. The amount of on-site vegetation required to be planted is capped at 15 percent of the total site area that is within the River Overlay zones. Once 15 percent of the total site area within the River Overlay zones is vegetated, the applicant is no longer required to spend one percent of project value coming into compliance with the vegetation enhancement standard;

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

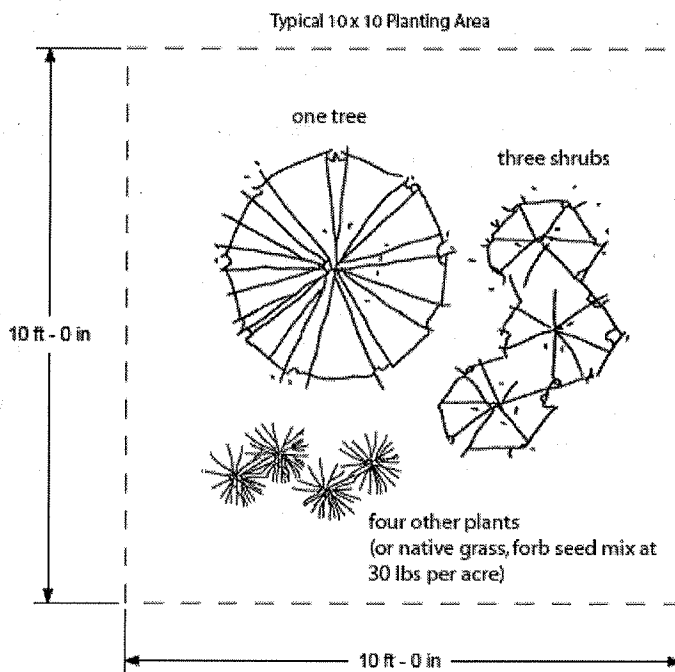
E. On-site vegetation planting standards. An on-site vegetation planting area must meet the following standards. Adjustments or modifications to the standards are prohibited:

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

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

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

**Figure 475-6
Example Planting Plan**



4. Installation and maintenance. The following installation and maintenance requirements apply:
 - a. Installation. Plant materials must be supported when necessary due to extreme winds at the planting site. Where support is necessary, stakes, guy wires or other measures must be removed as soon as the plant can support itself.
 - b. Maintenance. Maintenance of vegetated areas is the ongoing responsibility of the property owner. Required vegetation must be continuously maintained in a healthy manner. Plants that die must be replaced in kind.
 - c. Irrigation. The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering. All vegetated areas must provide a temporary irrigation system, as stated in option 1 or 2.
 - (1) Option 1. A temporary irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established.
 - (2) Option 2. Irrigation by hand. If the applicant chooses this option, an inspection will be required one year after final inspection to ensure that the vegetation has become established. An inspection fee, paid at the time of permit application, will be required.
 - d. Protection. All required vegetated areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas.
 - e. Monitoring and Reporting. Monitoring of vegetated areas is the ongoing responsibility of the property owner. Written proof that all specifications of this section have been met must be provided one year after the planting is completed. The property owner must provide this documentation to BDS.
5. Exception. Where an area has been deemed in compliance with subsubparagraph 33.475.480.D.2.a(1), the same area can be counted toward meeting the minimum vegetated area standard and will be deemed in conformance with the standards of this subsection.

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

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

33.475.430 Exemptions and Development Standards

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

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

1. Change of ownership;
2. Temporary emergency procedures necessary for the protection of life, health, safety, or property;
3. Existing development, operations, and improvements including the following:
 - a. Operation, maintenance, repair, and replacement of existing structures, exterior improvements, roads, public trails and paths, public viewpoints, public interpretive facilities, and utilities. Replacement is not exempt whenever coverage or utility size is increased;
 - b. Pruning of trees and shrubs within 10 feet of a structure;
 - c. Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;
 - d. Accessory structures that are located on existing paved surfaces or a dock, wharf or bulkhead, if the dimensions of the new accessory structure do not exceed 24 feet by 24 feet;
 - e. Operation, maintenance, repair and replacement of irrigation systems, stormwater facilities, non-potable water systems, and erosion control measures. Replacement is not exempt whenever coverage or utility size is increased;
 - f. Dredging, channel maintenance, and the removal of materials as follows:
 - (1) Dredging, channel maintenance, and the removal of materials within the federal navigation channel.
 - (2) Dredging, channel maintenance, and the removal of materials outside of the federal navigation channel as follows:
 - Dredging and the removal of material in areas in waters that are 35 feet deep or deeper; or
 - Channel, slip and berth maintenance that has been approved by the U.S. Army Corps of Engineers.
 - (3) The placement of dredged materials within the River Environmental Overlay zone is not exempt.

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

Commentary

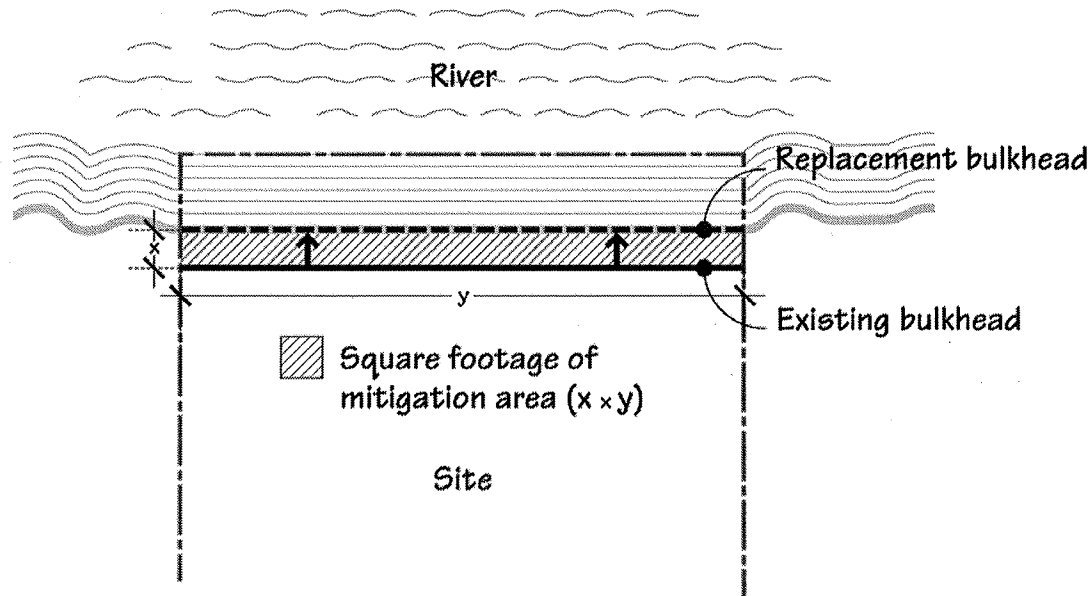
33.475.430.B.2 Standards for Cargo Conveyors

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

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

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



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

3. Standards for rail right-of-way. The following standards apply to rail rights-of-way within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review:
 - a. Disturbance associated with the construction of a rail right-of-way may occur within a corridor that is up to 20 feet wide. No disturbance is allowed outside of the 15 foot wide corridor;
 - b. Disturbance associated with the rail corridor or installation of the rail corridor may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland or other water body;
 - c. Tree removal as allowed by paragraph B.10, below; and
 - d. Mitigation is required as specified in paragraph B.11, below.
4. Standards for utility lines. The following standards apply to new utility lines, private connections to existing or new utility lines, and upgrades of existing utility lines within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with the installation of a utility line, including utility trenching, may occur within a corridor that is no greater than 10 feet wide. Disturbance may not occur outside of the 10 foot corridor;
 - b. Disturbance associated with the installation of a utility line may not occur riverward of the top of bank of the Willamette River, within the river channel, or within 30 feet of the top of bank of a stream, wetland, or other water body;
 - c. Tree removal as allowed by paragraph B.10, below; and
 - d. Mitigation is required as specified in paragraph B.11, below.
5. Standards for stormwater outfalls. The following standards apply to the installation of stormwater outfalls. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with the installation of a stormwater outfall may occur within an area that is up to 10 feet wide;
 - d. When constructed open channels or vegetated swales are proposed, the slope between the stormwater source and the water body does not exceed 15 percent at any point;
 - c. Only one outfall pipe may be used on a site;

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- d. 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*;
 - e. Tree removal as allowed by paragraph B.10, below; and
 - f. Mitigation is required as specified in paragraph B.11, below.
6. Standards for trails. The following standards apply to trails. All of the standards must be met. Modification of these standards requires approval through a River Review.
- a. Disturbance associated with the construction of a trail must be set back at least 25 feet from the top of bank of the Willamette River, and 30 feet from the top of bank of a stream, wetland or other water body.
 - b. Tree removal as allowed by paragraph B.10, below; and
 - c. Mitigation is required as specified in paragraph B.11, below.

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

7. Standards for resource enhancement. The following standards apply to resource enhancement projects within the River Environmental overlay zone. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. The following standards apply to river bank restoration and enhancement projects located riverward of the top of bank of the Willamette River including projects that relocate the top of bank of the Willamette River:
 - (1) The bank may be re-graded if the slope after grading is shallower than the slope prior to grading. In no case can the final slope be greater than 20 percent (20 percent slope represents a rise to run ratio equal to 1:5);
 - (2) Rock armoring must not be used on the surface between the top of bank and the ordinary high water mark except as required surrounding outfalls;
 - (3) The placement of large wood and bioengineered structures on the bank is allowed to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials or soil cells wrapped in geotextile fabrics;
 - (4) The area between the top of bank and the ordinary high water mark must be planted with one tree, three shrubs, and four other plants for every 100 square feet of area. Trees may be clustered. Plants must be selected from the *Portland Plant List*; and
 - (5) Tree removal as allowed by subsection B.10, below.

Commentary

33.475.430.B.8 Site investigative work

This set of standards will allow site investigative work, including the installation of monitoring wells, when the work is done with mechanical equipment. An exemption allows this type of work when the work is done exclusively with hand-held equipment. The standards require that all disturbed areas are mitigated using the mitigation standards in paragraph B.11.

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

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

8. Standards for site investigative work. The following standards apply to site investigative work within the River Environmental overlay zone. Site investigative work includes soil tests, land surveys, groundwater and water quality monitoring stations. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with site investigative work may not occur riverward of the ordinary high water mark.
 - b. Disturbance associated with site investigative work is temporary;
 - c. No native trees are removed; and
 - d. Mitigation is required as specified in paragraph B.11, below.
9. Standards for other development in a City of Portland park. The following standards apply to development in a City of Portland park that is not subject to other standards in this subsection. All of the applicable standards must be met. Modification of any of these standards requires approval through River Review.
 - a. Disturbance associated with development in a City of Portland park must be set back at least 25 feet from the top of bank of the Willamette River, and 30 feet from a stream, wetland or other water body;
 - b. Disturbance associated with development in a City of Portland park may not exceed the following:
 - (1) 500 square feet within the river setback; or
 - (2) 1,800 square feet landward of the river setback.
 - c. Tree removal as allowed by paragraph B.10, below; and
 - d. Mitigation is required as specified in paragraph B.11, below.

Commentary

33.475.430.B.10 Removal of trees

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

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

10. Standards for tree removal. The following standards apply to the removal of trees 4 inches or greater in diameter from within the River Environmental overlay zone. All of the standards must be met. Modification of these standards requires River Review:

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

Commentary

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33.475.430.B.10.c This standard refers to canopy factor and the *Tree and Landscaping Manual*. The *Tree and Landscaping Manual* is administered by the Bureau of Development Services and it describes how to landscape areas that are required by the Zoning Code to have trees and other landscaping. The manual prescribes a methodology for determining canopy factors for specific tree species. Canopy factor reflects canopy area, tree height, and growing rate. The manual does not currently contain a complete canopy factor table. Planning Commission recommends including a complete table in the manual prior to the effective date of this regulation.

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

The requirement that the replacement trees have a canopy factor equal to or greater than the tree removed is a policy direction proposed by the Citywide Tree Project, and is intended to reduce the overall loss of tree canopy in the City.

33.475.430.B.11 Mitigation

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

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

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- (2) Resource enhancement project. Native trees up to 10 inches in diameter may be removed in conjunction with the following:
 - a project that is located riverward of the top or bank;
 - a project being undertaken by the Bureau of Environmental Services or Portland Parks and Recreation to restore native oak woodland;
 - a project that relocates the top of bank; or
 - a public viewing area that meets all of the standards in B.7.b(4), above; and
 - c. Trees that are over 4 inches in diameter that are removed must be replaced as follows:
 - (1) one diameter inch of tree must replace every one diameter inch of tree removed. Every inch of evergreen tree removed must be replaced with an equal number of inches of evergreen tree;
 - (2) the replacement trees must be a minimum ½-inch in diameter;
 - (3) the replacement trees must be native trees selected from the *Portland Plant List* unless the trees are street trees planted between the sidewalk and the curb. In this case, trees may be non-native non-nuisance tree species as determined by the City Forester;
 - (4) the replacement trees must have a canopy factor equal to or greater than the canopy factor of the tree species removed, as prescribed in the Tree and Landscaping Manual;
 - (5) all replacement trees must be planted within the River Environmental overlay zone, within 50 feet of the River Environmental overlay zone, or within 50 feet of the top of bank of the Willamette River in the North Reach. If the trees are not planted on the applicant's site, then the applicant must own the property or have an easement or deed that ensures the area where the trees are planted will not be developed;
 - (6) all replacement trees must be planted 10 feet on center; and
 - (7) The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

11. Mitigation. The following standards apply to mitigation required by paragraphs B.2 through B.6, and B.8 through B.9. All of the standards must be met. Modification of these standards requires approval through a River Review.

- a. Mitigation must occur at a 1.5:1 ratio of mitigation area to project impact area. Project impact area is the total area within the River Environmental overlay zone where structures will be built, vegetation will be removed, or ground disturbance will occur as a result of the proposal. Mitigation area is not counted as part of the project impact area;

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- b. Mitigation must occur within the River Environmental overlay zone, within 50 feet of the River Environmental overlay zone, or within 50 feet of the top of bank of the Willamette River in the North Reach. If the mitigation area is not on the site where the project occurs, then the applicant must own the property or have an easement or deed restriction sufficient to ensure the right to carry out, monitor, and maintain the mitigation for 3 years;
- c. The mitigation must be conducted at the same time as, or in advance of, the proposed development or alteration;
- d. Nuisance and prohibited plants identified on the *Portland Plant List* must be removed within the area to be replanted. Trees removed to meet this subparagraph must be replaced as specified in subparagraph B.10.c, above;
- e. Existing native plants can be used to meet the standards of this paragraph if the vegetation is protected and maintained as specified in Section 33.248.065;
- f. Required plants and planting densities:
 - (1) One tree, three shrubs, and four other plants are required to be planted for every 100 square feet of replanting area. Trees may be clustered. Plants must be selected from the *Portland Plant List* and must be compatible with the conditions of the site; or
 - (2) One tree and three shrubs are required for every 100 square feet of replanting area, and the planting area must be seeded with a native grass and forb seed mix at a ratio of 30 pounds per acre. Trees may be clustered. Plants and seeds must be selected from the *Portland Plant List* and must be compatible with the conditions of the site;

Commentary

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

33.475.430.B.11.k Instead of conducting mitigation by meeting the mitigation planting standards, the applicant will be able to choose to make a mitigation payment to the City. The City will use the payment to planting native vegetation on a restoration site in the North Reach. The amount of payment will be calculated based on same 1.5:1 ratio that the planting standard is measured on.

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

33.475.450 Corrections To Violations of River Environmental Overlay Zone Development Standards

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

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- g. If more than 10 trees, shrubs or groundcover plants are used to meet the above standard, then no more than 50 percent of the trees, shrubs or groundcover plants may be of the same genus. If more than 40 trees, shrubs or groundcover plants are used, then no more than 25 percent of the plants may be of the same genus;
- h. Trees must be a minimum ½-inch caliper or bareroot unless they are oak or madrone, which may be one gallon size. No more than ten percent of the trees may be oak or madrone. Shrubs must be a minimum of one gallon size or bareroot. All other species must be a minimum of four-inch pots or equivalent;
- i. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met; and
- j. Mitigation carried out to meet these standards may be installed in conjunction with planting carried out to meet the Vegetation Enhancement Standard of 33.475.120, 220, or 320, but plantings installed as mitigation will be in addition to what the vegetation standard requires, and will not be subject to the cost limitations described in 33.475.120.D, 33.475.220.D, or 33.475.320.D.
- k. In lieu of meeting the mitigation standards of this paragraph, the applicant may chose to make a payment to the City. The payment will be directed to the River Restoration Program and will be spent on planting vegetation on a City-owned site in the North Reach. The Bureau of Development Services shall adopt and maintain the mitigation fee-in-lieu payment schedule.

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 and remediation of natural resources and functional values that have been degraded due to a violation of the River Environmental overlay zone standards.

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

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

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33.475.460 Removal or Remediation of Hazardous Substances

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

Oregon State Law (ORS 465.315(3)) and federal law (42 U.S.C. 9621 (e)(1)) exempt the onsite portion of a state or federally approved cleanup from the procedural requirements to obtain state and local permits. This exemption applies only to EPA or DEQ approved remedial actions. What constitutes the on-site portion of the remedial action is generally identified in the record of decision or other cleanup approval or selection documents. Cleanup conducted under state law in a public right of way is not exempted and therefore must comply with all applicable City requirements.

While the activity is exempt from local procedures, the person conducting the cleanup is required to ensure that the local government's substantive requirements are met. Federal cleanup law requires that cleanup actions either meet or waive the substantive provisions of permitting regulations that are identified by EPA as applicable or relevant and appropriate. State law requires that a person conducting a cleanup action must comply with all substantive requirement of state and local law applicable to the cleanup.

The Bureau of Development Services implements what it calls an "exempt process" for evaluating hazardous substance removal or remediation plans compliance with the City's substantive regulations. The regulations in this section are the City's substantive requirements for clean ups that are applied through the exempt permit process or the standard permit process if the cleanup project is not exempt. The requirements are intended to refine the cleanup design to be in conformance with City requirements and the Oregon Statewide Planning Goals particularly Goal 15: the Willamette Greenway. Goal 15 includes requires protection of significant fish and wildlife habitats, protection of natural vegetative fringe along the river, and setbacks from the river for non-water related or non-water dependent uses. The regulations have been written in a way that will provide the person conducting the cleanup and the regulating agency with the flexibility required to design the most appropriate removal or remediation action.

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

Clean Up of Contaminated Sites

33.475.460 Removal or Remediation of Hazardous Substances

- A. General.** The following regulations are substantive requirements that apply to actions taken to remove or remediate hazardous substances. All of the regulations must be met unless it demonstrated to be impracticable pursuant to subsection G, below.
- B. Where these regulations apply.** The regulations of this section apply to the portion of the site located within the boundaries of the removal or remediation action.
- C. Review procedure.** The regulations of this section are not necessarily implemented through a permit as are other regulations in this Title. Oregon State Statute and United States Code waive the procedural requirement that entities performing removal or remediation actions obtain permits or other authorizations from a local government. However, the exemptions do not waive or exempt compliance with a local governments substantive requirements. For those cleanup actions that are exempt from the permit process, the following regulations are incorporated into the removal or remediation process administered by the Oregon Department of Environmental Quality or the Environmental Protection Agency, rather than administered through the City's land use process.
- D. Relationship to other regulations in this chapter.** Actions to remove or remediate hazardous substances that are approved or selected under Oregon or Federal cleanup law are exempt from the procedural requirements of this chapter. When development is occurring in conjunction with actions taken to remove or remediate hazardous substances, but which is not in itself a remediation or removal action, then that development must meet all other applicable regulations and procedural requirements of this chapter. Remedial actions within City rights of way or not approved or selected by state or federal cleanup authorities must meet all other applicable regulations and procedural requirements of this chapter. A person conducting a cleanup otherwise exempted from the procedural requirements may choose to obtain a permit.
- E. Regulations that apply to all actions to remove or remediate hazardous substances.** The following regulations apply to all proposals for the removal or remediation of hazardous substances:

 - 1. The removal or remedial actions and the final remedy must not preclude the use of the site consistent with the uses allowed by the base zone or an approved conditional use. If the site is within the River Industrial overlay zone, the final remedy must allow the use of the site for river-dependent or river-related industrial activities unless the site is found to be unsuitable for river-dependent or river-related uses. Generally, this means that the final remedy must allow dredging necessary to establish or maintain navigation to and from riverfront sites, the placement of piles or dolphins, or the development of a marine industrial facility, dock, or wharf or other river-dependent or river-related structure; and

Commentary

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

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

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

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

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

33.475.460.F.1.c This regulation refers to canopy factor and the *Tree and Landscaping Manual*. The *Tree and Landscaping Manual* is administered by the Bureau of Development Services and it describes how to landscape areas that are required by the Zoning Code to have trees and other landscaping. The manual will be amended to prescribe a methodology for determining canopy factors for specific tree species. Canopy factor reflects canopy area, tree height, and growing rate. The manual does not currently contain a complete canopy factor table. Staff proposes to create the table and have it included in the manual prior to the effective date of this regulation.

The requirement that the replacement trees have a canopy factor equal to or greater than the tree removed is a policy direction proposed by the Citywide Tree Project staff and is intended to reduce the overall loss of tree canopy in the City.

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

Commentary

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33.475.460.F.2.a If the river bank will be altered significantly as a result of the removal or remediation of hazardous substances, the City requires that the bank be restored using soil bioengineering instead of engineered inert materials to the extent practicable. The City's priority is a natural bank that can sustain vegetation for soil stabilization, improve ecological values and provide riparian functionality. However, the City recognizes that there will be cases when bioengineering will not be practicable. If rock armoring is used on the bank, the City requires regrading 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.

2. The following regulations apply to the area between the top of bank and the ordinary high water mark:

a. When there is significant alteration of the area between the top of bank and the ordinary high water mark the regulations of this subparagraph must be met. A significant alteration is an alteration that affects a substantial portion of the bank, includes more than 50 cubic yards of excavation or fill, changes the ground contours, results in the removal of buildings, or requires significant engineering or in-water work. Minor bank alterations such as installation of monitoring wells, sampling cores, installation of extraction systems, repair and maintenance of storm water systems, removal of debris, temporary road access to the shoreline, relatively small amounts of grading and fill, and installation of temporary erosion control measures do not constitute significant alteration.

(1) The area between the top of bank and the ordinary high water mark where the alteration occurs must be designed using biotechnical techniques including soil bioengineering. Figures 475-8 and 475-9 show examples of biotechnical techniques. If the person conducting the cleanup stabilizes the river bank using biotechnical techniques, additional development on the site will be exempt from meeting the Vegetation Enhancement Standard in 33.475.120, .220, or .320. In addition to using biotechnical techniques, the following requirements apply:

- Rock armoring or other hard surface armoring methods must not be used in substantial amounts on the surface between the top of bank and the Ordinary High Water Mark. This is not intended to preclude using rock or other hard surface stabilization methods below the surface if necessary to contain hazardous substances or to preclude the use of rocks or gravel as part of the biotechnical technique;
- The bank must be sloped or terraced in a way that allows the establishment and maintenance of vegetation as the primary soil stabilization method;
- Large wood, including root wads, tree boles and logs, must be used to reduce localized erosion, improve bank stabilization, and improve ecological values; and
- At least eighty percent of the area between the top of bank and the ordinary high water mark that is being altered as a result of the remedy must be planted with shrubs. At least one tree must be planted for every 400 square feet of altered area. All of the area that is not planted with shrubs or trees must be fully covered with ground cover plants. All plants must be selected from the Portland Plant List and should be appropriate for the conditions on the site. The requirements of Section 33.248.090, Mitigation and Restoration Planting must be met.

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

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

Commentary

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

33.248.090.D Landscape Area Preparation

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

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

What is nonconforming development?

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

What are upgrades to nonconforming development?

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

When are such upgrades required?

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

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

33.248.090 Mitigation and Restoration Plantings

A.-C. No change

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

E.-G. No change

33.258.070 Nonconforming Development

A.-C. No change

D. Development that must be brought into conformance.

1. No change

2. Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below. When alterations are made that are over the threshold of Subparagraph D.2.a., below, the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits.

a. Thresholds triggering compliance. The standards of Subparagraph D.2.b., below, must be met when the value of the proposed alterations on the site, as determined by BDS, is more than \$124,100. The following alterations and improvements do not count toward the threshold:

(1) Alterations required by approved fire/life safety agreements;

(2) Alterations related to the removal of existing architectural barriers, as required by the Americans with Disabilities Act, or as specified in Section 1113 of the Oregon Structural Specialty Code;

(3) Alterations required by Chapter 24.85, Interim Seismic Design Requirements for Existing Buildings;

(4) Improvements to on-site stormwater management facilities in conformance with Chapter 17.38, Drainage and Water Quality, and the Stormwater Management Manual; ~~and~~

(5) Improvements made to sites in order to comply with Chapter 21.35, Wellfield Protection Program, requirements; and

(6) Removal or remediation of hazardous substances conducted under ORS 465.200 through 465.545 and 465.900.

**CHAPTER 33.430
ENVIRONMENTAL ZONES**

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

33.430.020 Environmental Reports

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

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

33.430.080 Items Exempt From These Regulations

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

A.-C. No change

D. The following new development and improvements:

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

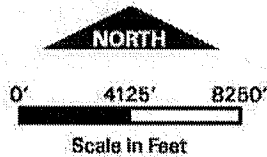
33.430.250 Approval Criteria

A. - D. No change

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

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

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

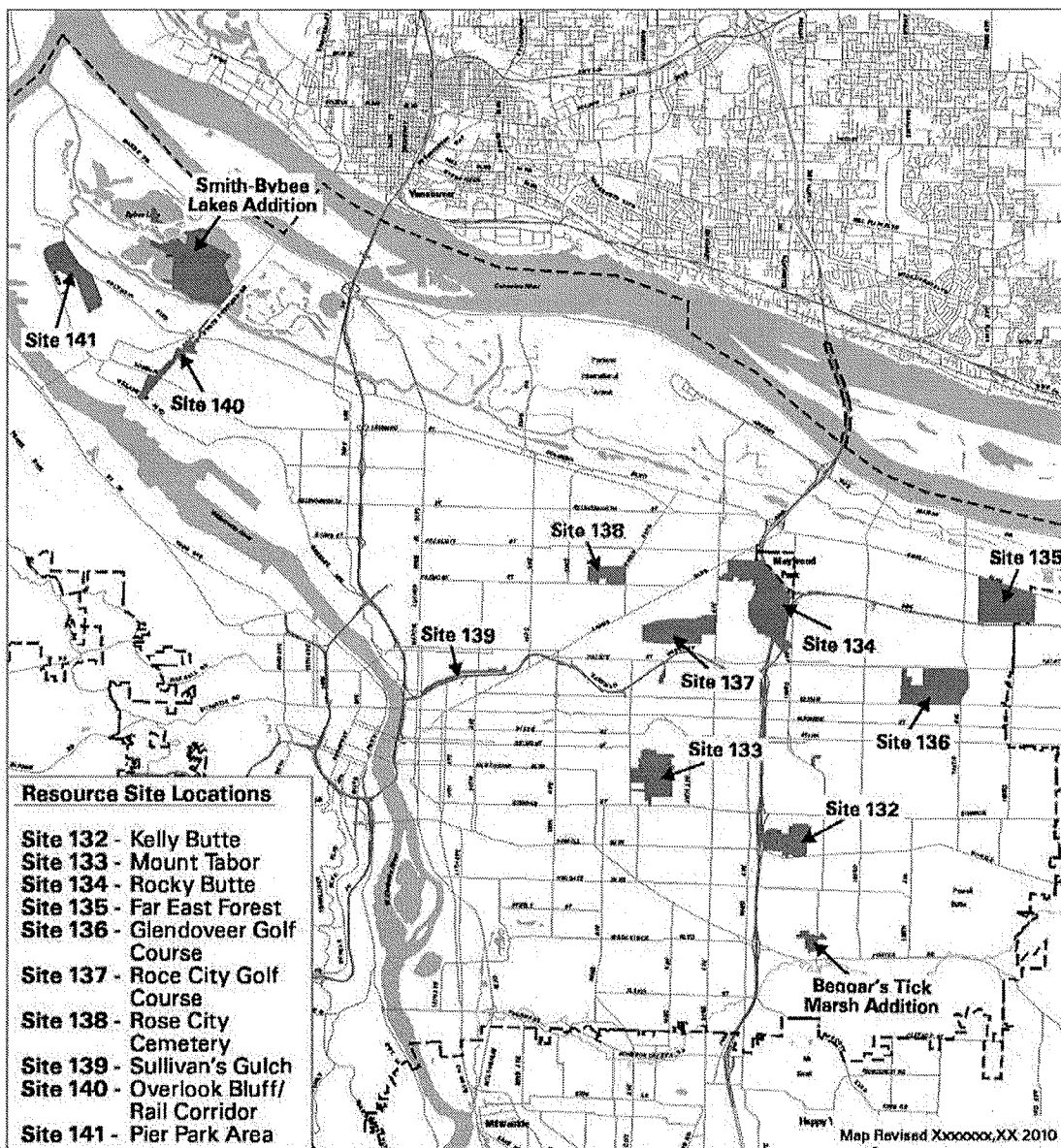


MAP NOTES: Small numbers within boxes represent quarter-sections

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

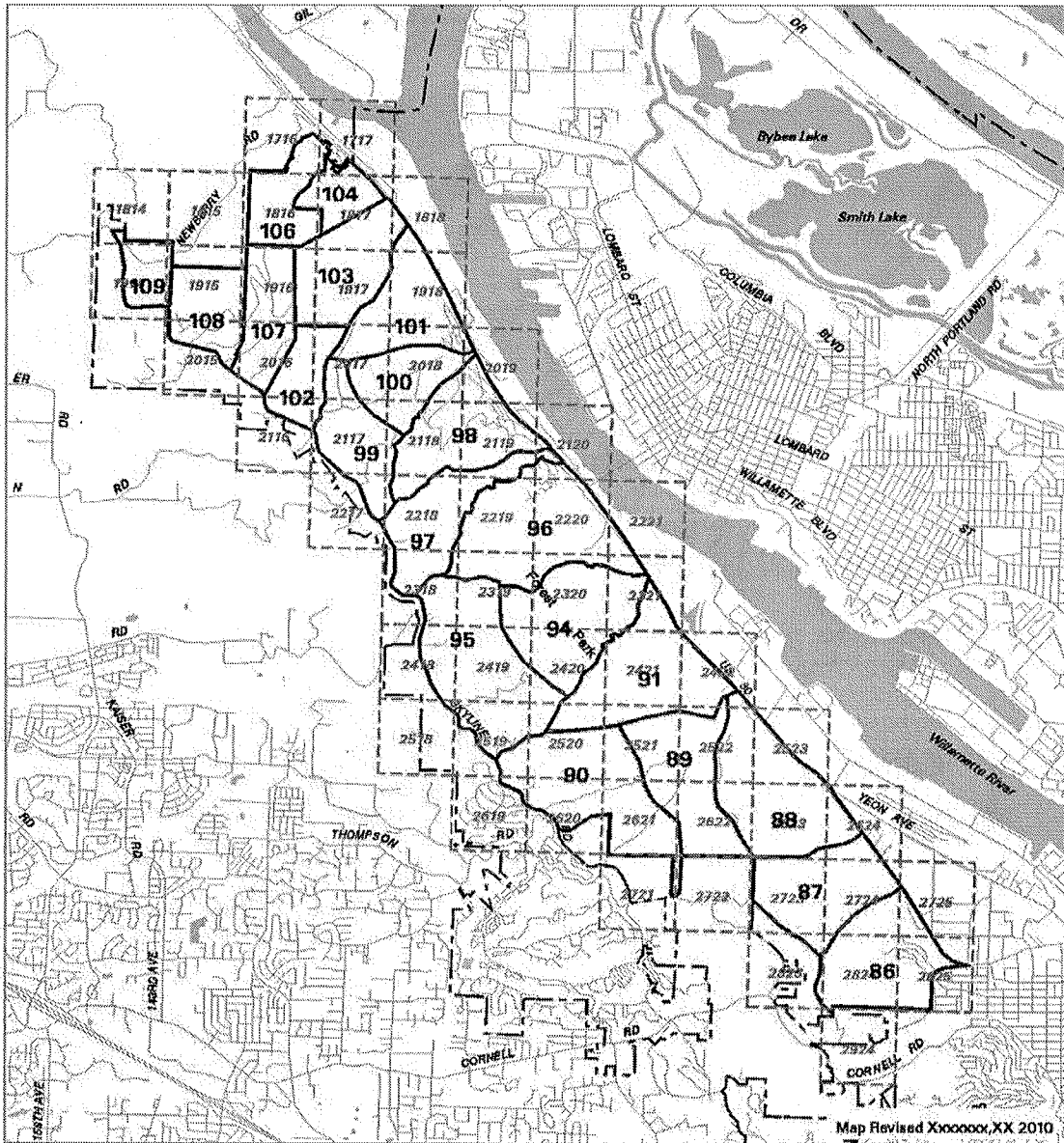
Map 1 of 2

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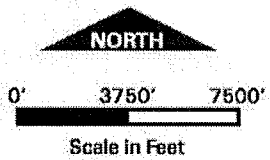


Map 430-3
East Buttes, Terraces and
Wetlands Conservation Area

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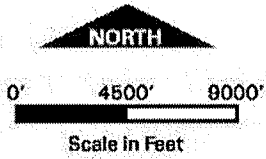
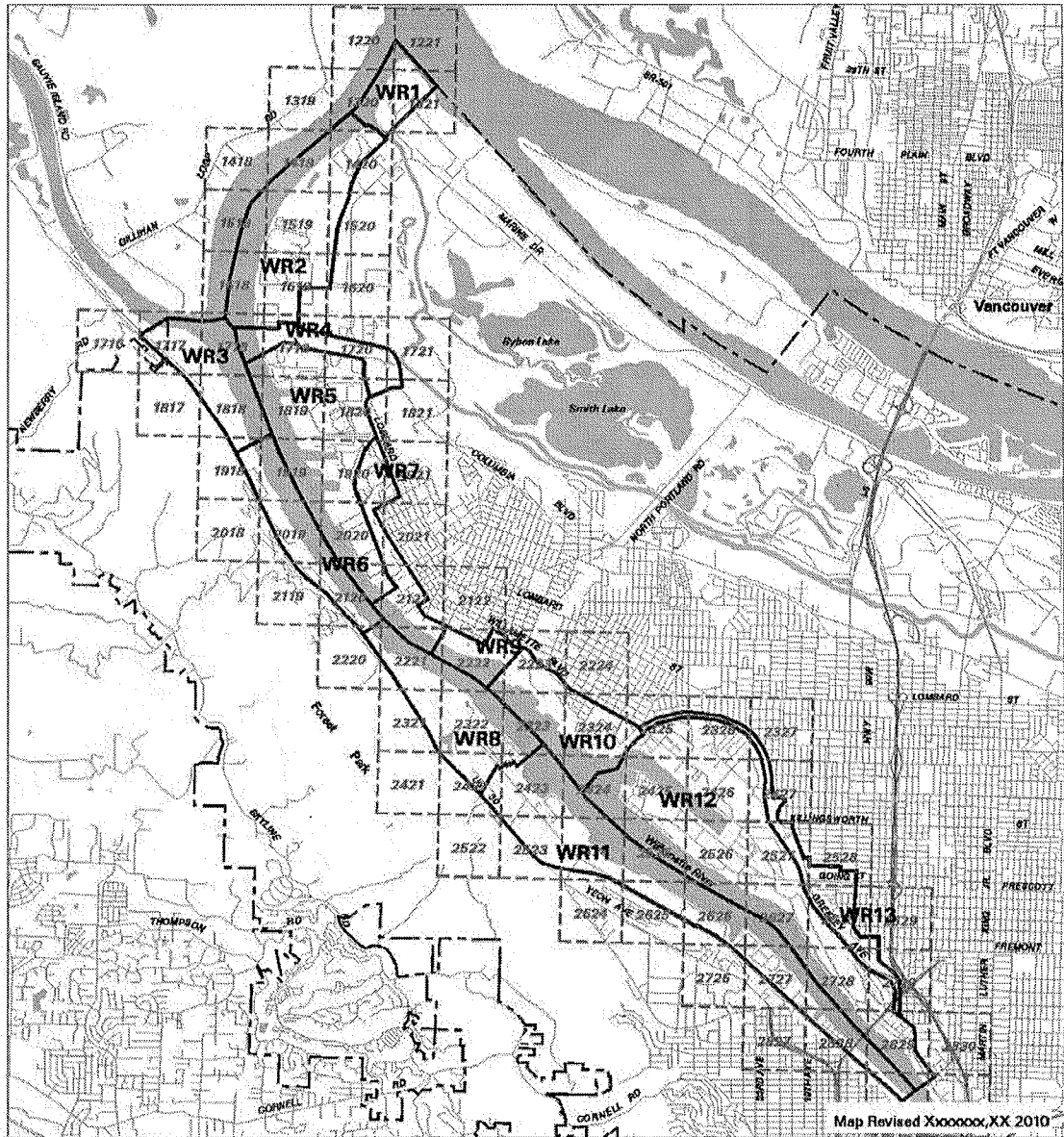


Map 430-6 Northwest Hills Natural Areas Protection Plan Area



MAP NOTES: Small numbers within boxes represent quarter-sections

Bureau of Planning & Sustainability • City of Portland, Oregon



MAP NOTES: Small numbers within boxes represent quarter-sections

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

Bureau of Planning & Sustainability • City of Portland, Oregon

33.865.020 When River Review is Required

River Review is required in the following situations:

- A. When an applicant proposes a non river-dependent or non river-related primary use in the River Industrial Overlay Zone;
- B. When a development or regulated activity in the River Environmental overlay zone is not exempt from the River Environmental overlay zone regulations and either does not meet the standards of subsection 33.475.430.B or there are no development standards applicable to the proposal;
- C. When River Review is required to correct a violation of the River Environmental overlay zone regulations, as described in subsection 33.475.450.B.4; or
- D. When an applicant wishes to modify the boundary of the River Environmental overlay zone based on a detailed environmental study. The City Council, Planning Commission, or Director of BDS may initiate a River Review for amendments to the boundary of River Environmental overlay zone that reflect permitted changes in the location or quality of resources or functional values. Removal of River Environmental overlay zone boundaries are processed as a change of an overlay zone, as stated in Chapter 33.855, Zoning Map Amendments. The zone boundary change procedure does not apply to changes caused by violations of subsection 33.475.430.B.

33.865.030 Procedure

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

33.865.040 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, the following information is required when the River Review application is for development in the River Environmental overlay zone or 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 whenever the proposed development will result in unavoidable significant detrimental impact on the identified resources and functional values. A remediation site plan is required whenever significant detrimental impacts occur in violation of the Code and no permit was applied for. The Director of BDS may waive items listed in this subsection if they are not applicable to the specific review; otherwise they must be included. Additional information such as wetland characteristics or soil type may be requested through the review process.

The inventory also 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 inventory also provides information on special status species, which include wildlife or plants identified by Oregon Department of Fish and Wildlife, Oregon Natural Heritage Information Center, US Fish and Wildlife Service, or NOAA National Marine Fisheries Service that are known or reasonably expected to occur within or use a site. The application must contain current information regarding any special status species known or reasonably expected to occur on the site;

- (2) Identification of significant detrimental impacts that are unavoidable. Actions that could cause detrimental impacts and should be identified include:

- excavation and fill both in the water and above the ordinary high water mark. The quality and source of fill material is an important factor to be considered;
- clearing and grading;
- construction;
- vegetation removal;
- altering bathymetry;
- altering a vegetated riparian corridor or upland vegetated area;
- altering the floodplain;
- altering the temperature of the river especially the altering of existing cold water sources;

- (3) Evaluation of alternative locations, design modifications, or alternative methods of development to determine which options reduce the significant detrimental impacts on the identified resources and functional values of the site; and

- (4) Determination of the alternative that best meets the applicable approval criteria.

- b. If proposal includes off-site mitigation through the City's mitigation fee-in-lieu option or the purchase of credits from a City certified mitigation bank then the impact evaluation must include the Habitat Evaluation Procedure and Habitat Equivalency Assessment scores and all of the data that was produced in order to obtain the scores.

- c. An impact evaluation for a violation includes:
 - (1) Description, by characteristics and quantity, of the resources and functional values on the site prior to the violation; and
 - (2) Determination of the impact of the violation on the resources and functional values.
2. Biological assessment. A biological assessment developed for the purposes of a federal or state permit may be submitted in place of some or all of the impact evaluation if the biological assessment includes the information described in subparagraph B.1.a, 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. Additional site assessment. The applicant may choose to provide a site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the location, type, extent, and quality of the City designated natural resources on the site. This assessment may verify or challenge the site feature information in the City's inventory, for the purpose of informing the impact evaluation and identifying mitigation obligations. Site features include, for example, physical aspects of the site such as streams, wetlands, seeps and springs, topography, floodplains, vegetation, special habitat areas, or use of the site by plant/animal species of interest;
4. Construction management plan. Identify measures that will be taken during construction or remediation to protect the remaining resources and functional values at and near the construction site and provide a description of how areas that are not affected by the construction will be protected. For example, describe how trees will be protected, erosion controlled, construction equipment controlled, and the timing of construction; and
5. Mitigation or remediation plan. The purpose of a mitigation or remediation plan is to compensate for unavoidable significant detrimental impacts that result from the chosen development alternative or violation as identified in the impact evaluation. A mitigation or remediation plan includes:
 - a. Resources and functional values to be restored, created, or enhanced on the mitigation or remediation site. If credits will be purchased from a City certified mitigation bank, the mitigation plan must identify the total number and the type of credits being purchased;
 - b. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;
 - c. Construction timetables;
 - d. Operations and a long-term maintenance plan that includes monetary assurances that the maintenance is performed over time. Assurance can include a bond or designated maintenance endowment;
 - e. Monitoring and evaluation procedures that include periodic reporting;

33.865.100.B.2.d Mitigation

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

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

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

There are three options for off-site mitigation:

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

d. Mitigation:

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

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

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

33.865.100.B.2.e Other Regulatory Approvals

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

33.865.100.C Modifications to zone boundaries

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

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

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

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

33.900.010 List of Terms

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

Dredge Material

Ordinary High Water Mark

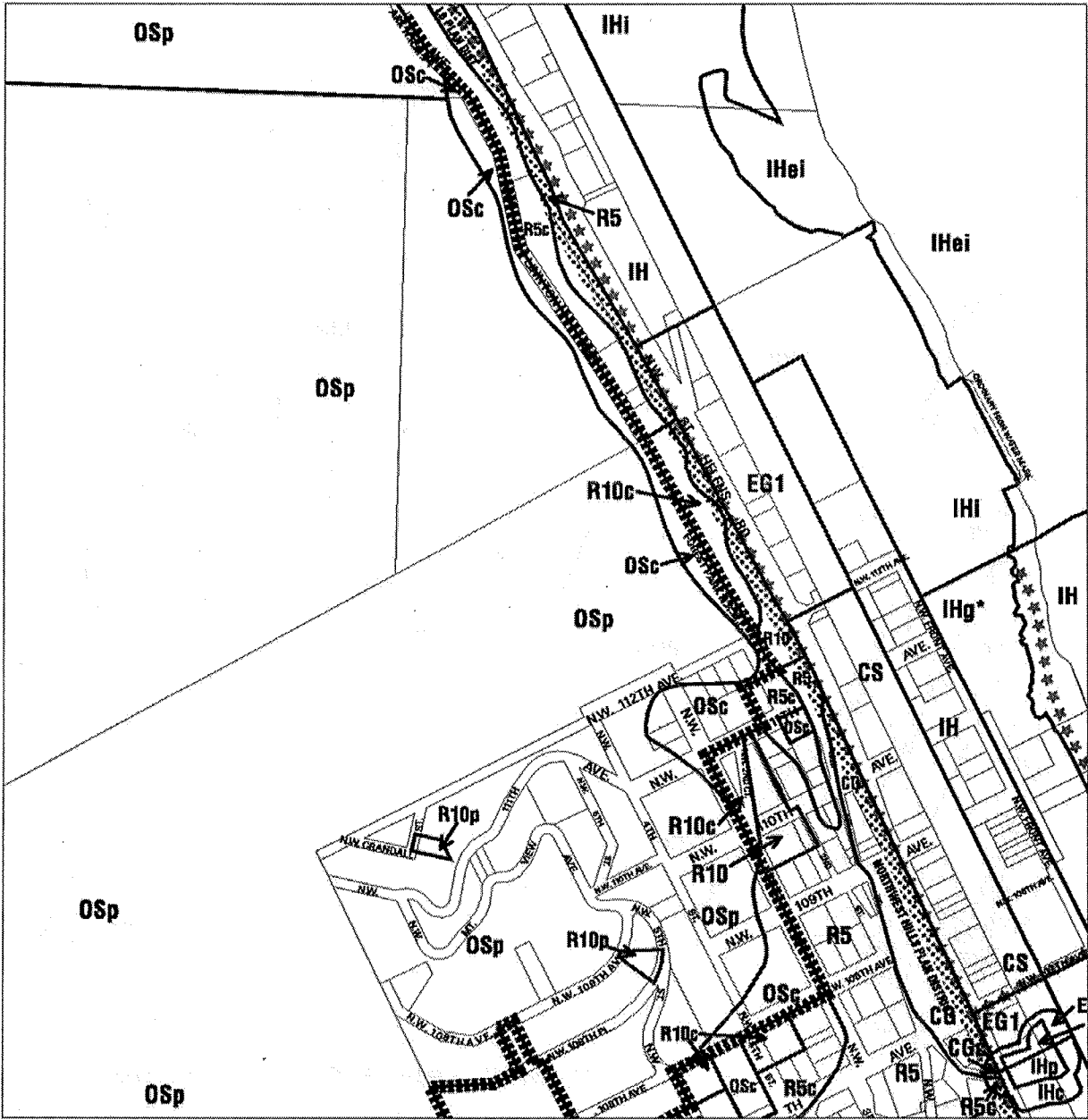
33.910.030 Definitions

Bulkhead. A retaining wall along a waterfront.

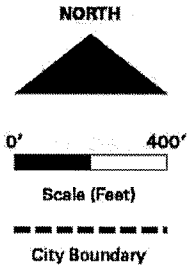
Cargo conveyor. A cargo conveyor is an elevated conveyance system that is supported by one or more footings on the ground and is used to transfer material to and from a vessel in the river.

Environment-Related Definitions

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



River Plan/North Reach Proposed Zoning
 Bureau of Planning - City of Portland, Oregon

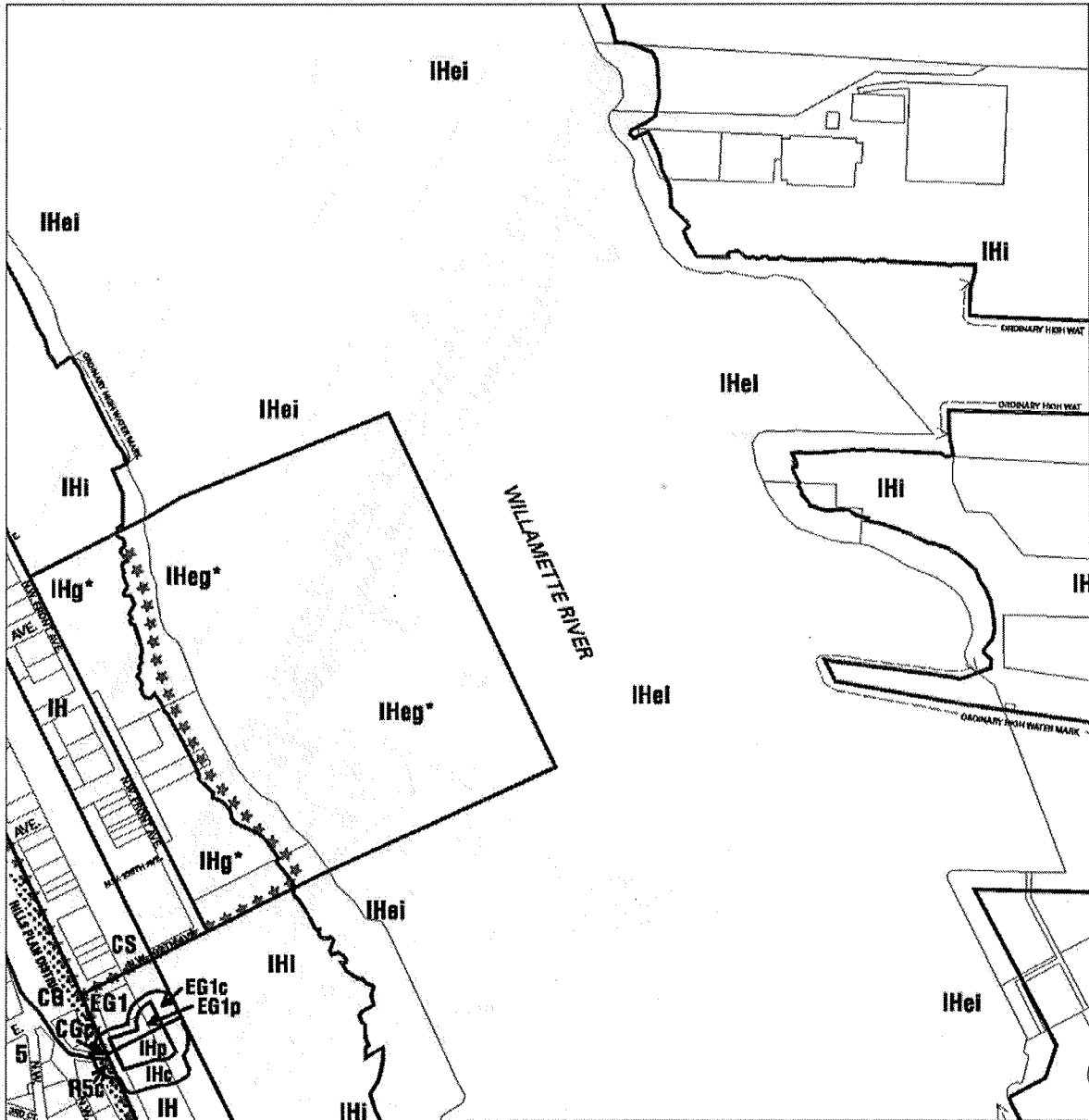


- i = River Industrial Zone
- g* = River General Zone
- r* = River Recreational Zone
- e = River Environmental Zone

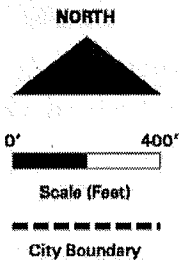
- c = Environmental Conservation Overlay
- p = Environmental Protection Overlay
- *** Public Trail
- ← → Ordinary High Water Mark (O.H.W.M.) = area between arrows

February, 2010

Map 1/4 Section 1918



River Plan/North Reach Proposed Zoning
 Bureau of Planning - City of Portland, Oregon

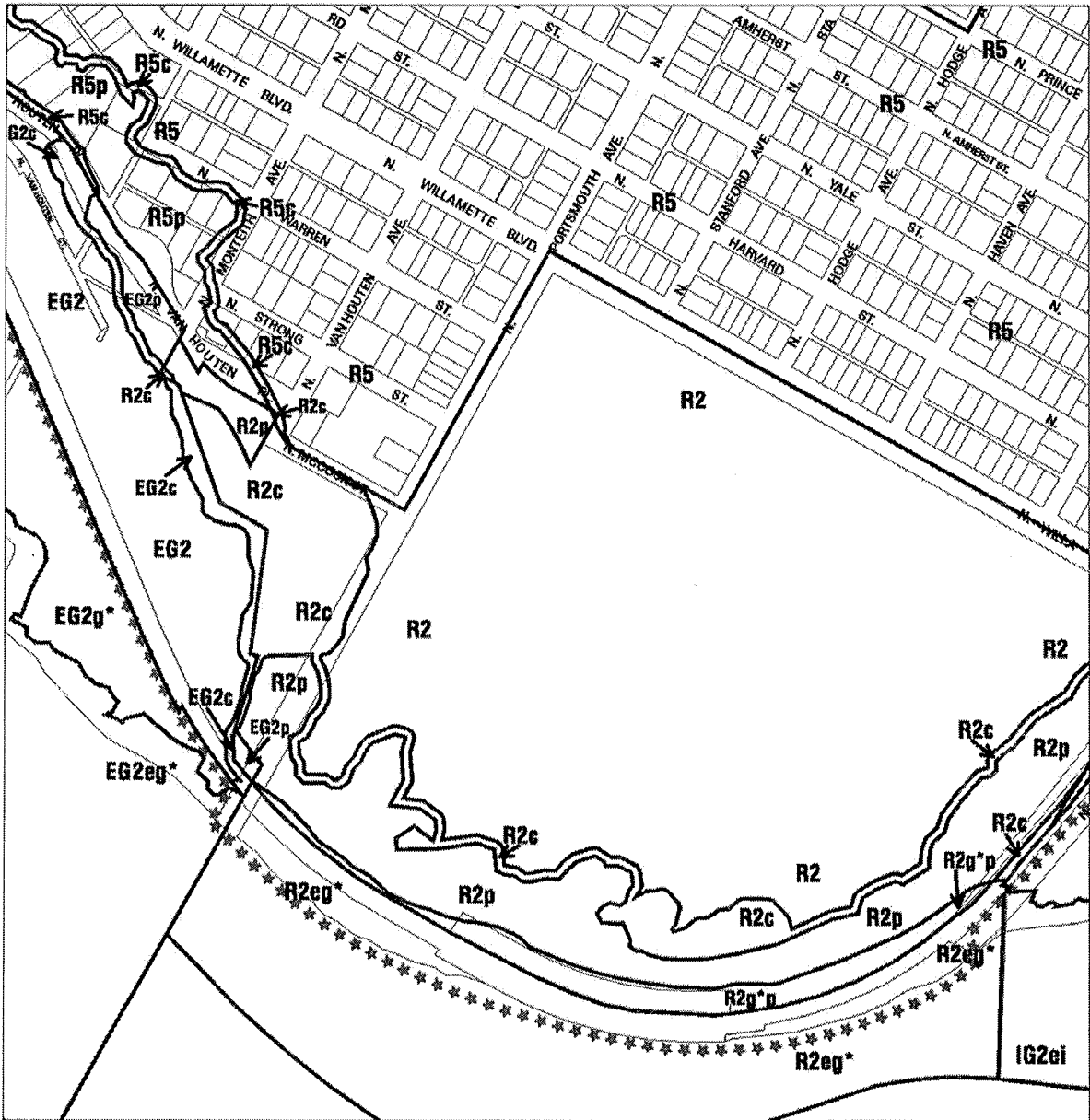


- i = River Industrial Zone
- g* = River General Zone
- r* = River Recreational Zone
- e = River Environmental Zone

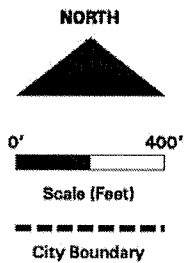
- c = Environmental Conservation Overlay
- p = Environmental Protection Overlay
- *** Public Trail
- ←→ Ordinary High Water Mark (O.H.W.M.) = area between arrows

February, 2010

Map 1/4 Section 1919



River Plan/North Reach Proposed Zoning
 Bureau of Planning - City of Portland, Oregon



- i = River Industrial Zone
- g* = River General Zone
- r* = River Recreational Zone
- e = River Environmental Zone

- c = Environmental Conservation Overlay
- p = Environmental Protection Overlay
- *** = Public Trail
- ← → = Ordinary High Water Mark (O.H.W.M.)
= area between arrows

February, 2010

Map 1/4 Section 2324

Part C. Amendments to Volume 3C

The following page is a replacement page for Volume 3 C. The amendments are shown in strikethrough and underline for the site-specific ESEE recommendation for the portion of Willamette Bluff located on University of Portland's campus near N McCosh Street. The full site-specific ESEE analysis can be found in River Plan North Reach Volume 3C: Economic, Social, Environmental and Energy Analysis, page 202-216.

Feature	Bluff near <u>N McCosh Street, between intersection of N Portsmouth Avenue and N Van Houten Avenue</u> <u>N McCosh Street</u>
WRNRI/ North Reach Relative Rank	High, Special Habitat Area
Characteristics	<ul style="list-style-type: none"> • Residential base zone • Bigleaf maple, Alder and Himalayan Blackberry provides upland habitat and wildlife connectivity along and to the Willamette River • Provides views of Willamette River and Forest Park and views looking eastward across the river as well • Wildfire and landslide hazards • University of Portland Conditional Use Master Plan (1994) designated a building footprint at the base of the slope • University of Portland is acquiring the Triangle Park property below the bluff and plans to expand the campus; an existing unnamed street provides access to the Triangle Park property at the base of the bluff
Willamette River North Reach General ESEE Decision	Strictly limit conflicting uses in high ranking resources areas and Special Habitat Areas in residential base zones
ESEE Implications	<p>The University of Portland campus is located above the bluff and owns portions of the bluff. The 1994 Conditional Use Master Plan approved a building/parking lot at the base of the bluff. The University intends to purchase and build facilities below bluff at the Triangle Park property. The social and transportation consequences of strictly limiting development in this area <u>are would be negative</u>. <u>A strictly limit decision could prevent or reduce due to</u> the potential educational, cultural, recreation and access opportunities of an improved link between the upper and future lower campus and the Willamette River. The potential environmental impacts of conflicting uses, while negative, are <u>relatively small minimized</u> due to the <u>disturbance associated with the existing unnamed street</u> that fragments the bluff vegetation and contributes to slope instability.</p> <p><u>A limit decision on the bluff below N McCosh Street between N. Van Houten Avenue and N Portsmouth Avenue would provide options to link the upper campus to the future lower campus, and to utilize existing public roads for safe access and egress.</u> A limit decision would require impacts on the natural resources to be avoided where practicable or mitigated.</p>
Site-Specific ESEE Decision	Limit conflicting within the bluff surrounding the unnamed street connecting the campus to the Triangle Park property near the intersection of N Portsmouth Ave and N McCosh Street

Response to the Working Waterfront Coalition's Table 1: Specific Recommendations to Improve River Review
 February 12, 2010

WWC Issue /Concern	City Response
<p>1. Inaccurate Mapping and Unnecessary Process for Simple Redevelopment projects</p>	<p>It will be the City's responsibility to correct zoning map errors at the request of a property owner. This work can be done before or after the River Plan is implemented.</p> <p>The example listed in the WWC table needs some clarification. Docks and piers that are located above the water do not provide natural resource functions per the City's NRI, however the water under the dock or pier does provide multiple riparian functions and wildlife habitat. The construction of accessory structures (no larger than 24 feet by 24 feet) is allowed on a dock or pier without being subject to river environmental zone standards or river review. If there will be impacts below ordinary high water, then river review would be required.</p> <p>Zoning Map Corrections before adoption/effective date of River Plan. Property owners can request site visits at the City Council hearing on the River Plan. In their testimony the property owners should indicate why they believe the resource features in the NRI are incorrectly mapped. Staff will conduct site visits prior to September 30, 2010 and, if a revision is warranted, bring back revised zoning maps for an additional council hearing prior to implementation of the River Plan.</p> <p>Zoning Map Corrections after adoption. After the River Plan is implemented map corrections can occur through the existing zoning code process for correcting the official zoning maps. The process is a Type II review and it is initiated and paid for by the Bureau of Development Services. Through this process an error can be corrected when a map line that was intended to follow a topographical feature does not do so. Topographical features include the tops and bottoms of hillsides, the banks of water bodies, and center lines of creeks or drainage ditches.</p> <p>A new service the City plans to offer after adoption. Five years from the date of implementation of the River Plan a property owner can request an NRI accuracy check paid for by the Bureau of Planning and Sustainability. While property owners will not be required to provide the City with a reason for requesting the accuracy check, information about why they think the NRI is inaccurate will be helpful.</p> <p>Ground truth NRI during river review. During the course of a river review applicants may submit a site specific environmental assessment prepared by a qualified consultant to more precisely determine the location, type, extent and quality of the natural resources on the site. This assessment may verify or challenge the site feature information in the NRI for the purpose of informing the impact evaluation and identifying the mitigation obligations. (Also see Volume 1B, page 197, item 3.)</p> <p>Background on the NRI process. The Willamette River Natural Resource Inventory for the North Reach is an update to the City's adopted natural resource inventory for the Willamette Greenway, which was adopted more than 20 years ago. The new natural resource inventory was developed using a consistent, science-based, replicable methodology to map the riparian corridors and wildlife habitat areas in Portland and assess their relative quantity and functionality. The NRI project is based on the science and approach Metro used to develop an inventory of regionally significant riparian corridors and wildlife habitat.</p>

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WWC Issue /Concern	City Response
	<p>Metro's regional inventory was produced and reviewed by experts in various ecological science fields and the public. It was adopted in 2005 as part of the Title 13 Nature in Neighborhoods program. The City has, in consultation with technical experts, updated and refined the natural resource data and model criteria that Metro used to reflect more current information, scientific studies, and targeted field visits. The City conducted additional research and site visits, and further refined the inventory models and special habitat information in preparation of the Willamette River Natural Resources Inventory.</p> <p>The process of developing the North Reach NRI had multiple steps each of which included site visits to ground truth and correct mapping information. Beginning in 2003, BPS staff conducted site visits in the North Reach as part of a stream mapping project. This project refined the City's existing stream data; additional refinements have been made as appropriate, the most recent occurring summer 2009. Aerial photographs were used to map and classify vegetation in the city. Vegetation mapping began in 2004, and the data is updated at least yearly based on new aerals. Some site visits were conducted as part of the original 2004 mapping, and over the years additional site visits have been performed to verify new data. Specifically in the North Reach, staff conducted site visits to refine the protocol for mapping grasslands.</p> <p>When BPS started the River Plan/North Reach NRI, staff (BPS, BES and Parks) conducted a series of site visits to verify data and develop narratives. Staff filled out forms for each site visit, and the forms are included as an appendix to the NRI report. Over the past 3 years staff have continued to go into the field and collect information. While on boat tours of the North Reach, staff have verified bank conditions. Staff have also visited specific sites including the University of Portland, Schnitzer Steel, Siltronic, the south rivergate corridor, the Linnton Community Center, PGE/Harborton, and other sites.</p> <p>When the formal notice regarding the first Planning Commission hearing was sent out several property owners contacted River Plan staff to request a site visit. Staff conducted six site visits in response to these requests. Staff also conducted additional site visits along the Willamette Bluff to refine data during the Planning Commission process. The site visits resulted in either a verification of existing mapping, or changes to the data and/or the narratives contained in the NRI.</p> <p>Overall, staff have visited industrial, residential, open space and commercial sites in the North Reach.</p> <p><i>See attachment 1: Environmental Overlay Zone Map Error Corrections Summary</i></p>
2.Complex and Costly City Application	<p>The City is going to pursue a combined application form for projects that require approval from City/State/Federal governments.</p> <p>The City does not generally require more information than the state and federal agencies require, however the City does require a written narrative explaining how the application meets the City approval criteria. The narrative is the applicants opportunity to present their case as to why they believe the application meets the City's approval criteria. All City land use reviews require a similar narrative.</p> <p><i>See attachment 2: A Comparison of Federal, State and City application Submittal Requirements</i></p> <p><i>See attachment 3: LUR Application Form</i></p>

WWC Issue /Concern	City Response
3. Uncertain and Potentially High City Mitigation Costs	<p>The City Council will hold a hearing prior to the implementation date of the code to receive comments on the mitigation in lieu fee and HEP/HEA the model used to calculate the mitigation fee.</p> <p>In addition, staff will continue to hold meetings over the next year to brief interested parties about the results of the science review panel, and to keep stakeholders up to date on the development of the mitigation in-lieu-fee.</p>
4. Expensive Process with little to no Environmental Gain Need Flexibility to encourage business to redevelop	<p>The City is exploring thresholds under which an applicant could mitigate off site without using the HEP/HEA model. The applicant would still need to show that, to the extent practicable, they have avoided and minimized impacts to the resources. Avoid and minimize is in keeping with River Plan policy.</p> <p>FYI, the case study examples used at the meeting on 1/28/10 were paper exercises conducted without the benefit of a field visit. The method used at the meeting has not been reviewed by the science panel. The science panel may refine the methodology.</p>
5. Predictability for Business to Encourage Redevelopment	<p>The Mayor is recommending an amendment that will allow payment of a fee in-lieu of meeting the river environmental overlay zone development standard that requires mitigation planting.</p> <p>We understand that the Port is going to send us some revised standards and we will review them.</p>
6. Uncertain Process and Potential Delay	<p>The City continues to be committed to improving the administrative process and avoiding any unnecessary delays.</p> <p>The WWC suggests several ways to improve the administrative process. These include:</p> <p>A. Imposing a time limit on City review. Response: State law and City Zoning Code limit the time within which the City must make a decision on a land use case. In a Type IIx process, the City must make a final decision on the case within 42 of the day the application is deemed complete, and the City can not make a final decision until at least 30 days after the application is complete. If an applicant chooses to participate in the Early Review Process (see attachment 4), they may want to put the application on hold by extending the review period (see attachment 5). This will offer the opportunity for more coordination with other agencies, and allow for the final decision to be informed by the Biological Opinion. The applicant is required to set the amount of time that the application is on hold, however it can not be on hold for more than 245 days. Once the applicant submits the Biological Opinion to the City and takes the City review off hold, the maximum amount of time before a final decision is rendered will be 42 days. As part of the Early Review procedures, City staff will commit to processing the review and rendering a final decision as fast as possible within the bounds of City code.</p> <p>B. Require applicant to opt for enhanced permit review process. Response: Not all applicants would benefit from the enhanced process; therefore we prefer to leave the process voluntary at this time.</p> <p>C. Provide option for a Type III appeal. Response: Staff does not think that it would be appropriate for river review cases to be decided by the City Council. Type III cases are those that require a substantial amount of discretion and that have a high</p>

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WWC Issue /Concern	City Response
	<p>impact on the overall city (e.g. a zone change or land division that will impact lots of people) where discussions such as carrying capacity would be necessary. While a river review is significant for that property owner, the impacts to the broader community are not as significant.</p> <p>Mayor's proposed amendment: The Mayor recommends that River Review be a Type IIx process to try to ensure that the applicant gets complete and timely information from the City. The Type IIx process requires notification and information from bureaus before the letter of completeness goes out. The Bureau comments are then included in the incomplete letter. (see <i>attachment 6</i>)</p> <p>Existing process will continue: If an applicant feels like they are being asked for too much information or staff is not responding in a timely way, they can demand that the City issue a decision. If the City denies the application due to the lack of information the applicant can appeal to the hearings officer. The hearings office could find that the City did not have good reason to ask for the information and reverse staff's decision.</p> <p>If the City Council or the North Reach Advisory Committee believes that provisions in the River Plan are leading to frivolous land use appeals, City Council will request that the Bureau of Planning and Sustainability address the concerns.</p> <p><i>See attachment 4: Proposed Coordinated Review Process for Projects below the Ordinary High Water Mark</i></p> <p><i>See attachment 5: Request for Extension of 120 Day Review Period</i></p> <p><i>See attachment 6: Type IIx process</i></p>
7. Code Places Limits on Mitigation bank Opportunities (e.g. Demands Use of a HEP/HEA combo)	<p>The City will not require that any particular model be used by a mitigation bank. However, the City wants to be sure that whatever model is used is scientifically based and accounts for the loss of resources over time. In addition, the City wants a model that the state and federal agencies can agree to use collectively to determine the required mitigation requirements for a project. This is what we have called "one-stop shopping".</p>
8. Accountability	<p>The funds from in-lieu-fees will be deposited into a BES sub account. The City will restrict the use of the funds to activities directly associated with restoration (e.g., land acquisition, design, construction, and long-term maintenance).</p>

Attachment 1: Environmental Overlay Zone Map Error Corrections Summary

Attachment 2: A Comparison of Federal, State and City application Submittal Requirements

Attachment 3: LUR Application Form

Attachment 4: Flowchart 1: Proposed Coordinated Review Process for Projects below the Ordinary High Water Mark

Attachment 5: Request for Extension of 120 Day Review Period

Attachment 6: Type IIx process

Attachment 1
River Plan / North Reach
Environmental Overlay Zone Map Error Corrections
February 8, 2010

The zoning code includes a process for correcting the official zoning maps. The process is a Type II review, and it is initiated and paid for by the Bureau of Development Services. The types of map errors that can be corrected this way are:

1. A map line that was intended to follow a topographical feature does not do so. Topographical features include the tops and bottoms of hillsides, the banks of water bodies, and center lines of creeks or drainage ditches;
2. When there is a discrepancy between maps and there is clear legislative intent for where the line should be located.

Corrections to the environmental overlay zone lines are typically made based on the first criterion.

The environmental overlay zone lines correspond with physical features on the ground that serve as proxies for natural resource functions. For example, woodland vegetation in the floodplain adjacent to a stream, wetland, or the river is identified as significant natural resource area, and subsequently mapped as an environmental zone, because the area is presumed to provide all of the riparian functions that the inventory is intending to map. If the physical features on the ground, which singly or in combination provide natural resource functions, are not accurately located in the inventory, and therefore on the zoning maps, the zoning maps can be corrected to accurately align with the features. In the same way, if the feature doesn't exist, then the map can be correct to reflect that as well.

The property owner does not have to pay for this type of correction. If a property owner believes that the physical features that represent natural resource function are incorrectly mapped on their site, they can request in writing or over the phone that the City investigate the error and make a correction if one is found. The Bureau of Development Services asks the property owner to provide a reason why they believe the map is incorrect. It is typically not acceptable to simply say there is an error; the property owner would need to provide a survey, photo or other documentation to support the claim.

Once a map error request is filed, staff from the Bureau of Planning and Sustainability review the request, and review the legislative history of the project that placed the zoning on the site including inventory and all the maps of physical features that were the basis for the zoning. Staff then determines whether the line on the zoning map correctly or incorrectly follows the physical features that City Council intended to include in an environmental zone.

A map error correction can not be used to re-evaluate the scientific justifications that are the basis for the inventory mapping methodology. For example, using the same scenario described above, while a property owner can question where exactly the wooded floodplain is located on their site, they can not argue that an error exists because they do not believe that this particular wooded floodplain provides functions because there are blackberries growing within it.

If a natural resource feature located within an environmental overlay zone is removed without the necessary permits, it would be treated as a violation of the zoning code.

Attachment 2: A Comparison of Federal, State and City Application Submittal Requirements

February 8, 2010 draft

The Corps and DSL utilize a joint application form, but issue decisions individually. Both the Corps/DSL and the City application requirements consist of three main components: Application form, written analysis of project and site plans. The requirements of the two application submittals are detailed below.

The information submitted for the Joint Permit Application form may include most of the information that will be needed to prepare the written findings for the River Review approval criteria. The River Review approval criteria require evaluation of the impacts only to the resources and functional values identified as significant in the City's Willamette River Natural Resources Inventory. The information provided in the joint application form may need to be modified to address the impacts to the City-identified resources and functional values.

Corps/DSL Joint Application	City of Portland – River Review
<p>Application Form: A detailed 8-page form with a combination of check boxes for specific project information and space for written descriptions required to describe project impacts. Form Includes:</p> <ul style="list-style-type: none"> • Applicant/property owner information • Project location information • Specific questions to describe proposed project 	<p>Application Form: A standardized 2-page form used for all land use review types and proposals. Detailed project information is provided through submittal of site plans and written narrative information. Form includes:</p> <ul style="list-style-type: none"> • Applicant/property owner information • Site location • Brief project description
<p>Required Written Analysis:</p> <ul style="list-style-type: none"> • Project Purpose and Need • Description of Project, including: <ul style="list-style-type: none"> • Volumes and acreages of all fill and removal activities in waterway or wetland separately • Permanent and temporary impacts • Types of materials (e.g., gravel, silt, clay, etc.) • How the project will be accomplished (i.e., describe construction methods, equipment, site access) • Describe any changes that the project may make to the hydraulic and hydrologic characteristics (e.g., general direction of stream and surface water flow, estimated winter and summer flow volumes.) of the waters of the state, and an explanation of measures taken to avoid or minimize any adverse effects of those changes. • Alternatives analysis – alternative sites and designs evaluation, description of how selected design avoids or minimizes impacts • Minimizing impacts – identify measures to minimize impacts during and after construction • Project site resource description – description of physical and biological characteristics specific to wetlands and waterways • Site Restoration/rehabilitation – for temporary disturbance, restoration of area after construction • Mitigation – describe reasonably expected adverse effects of the development project and how the effects will be mitigated. 	<p>Required Written Analysis:</p> <ul style="list-style-type: none"> • Description of the project and site • Supplemental narrative and Written findings for each applicable approval criterion (approval criteria for each review type are located within the Zoning Code), including: <ul style="list-style-type: none"> • Resource site identified from City of Portland Natural Resource Inventory, and description of resources and functional values present on the property • Evaluation of alternatives to the proposal considered to minimize impacts (project locations and designs) • Potential development impacts identified • Mitigation proposed for unavoidable impacts • Monitoring plan for mitigation plantings

Corps/DSL Joint Application	City of Portland – River Review
<p>Required Site Plans:</p> <ul style="list-style-type: none"> • Location map (with project site indicated) • Project site and activity areas • Existing and proposed contours • Identification of temporary and permanent project impact areas • Location of construction staging and access • Mitigation area, if applicable – work site restoration plan, compensatory mitigation plan (varies depending on whether impacts are to wetland, waterway or riparian areas, or estuarine resources) • Cross section drawings • Recent aerial photo 	<p>Required Site Plans:</p> <ul style="list-style-type: none"> • Existing Conditions • Proposed Development • Construction Management • Mitigation
<p>Supplemental Information Required in Certain Situations:</p> <p>When ESA listed species are in the area, the Corps must determine whether a project will affect the listed species. Section 7 ESA requires consultation with NOAA (informal or formal) if the Corps determines that listed species may be affected. The application must include sufficient project information to evaluate the impacts to listed species. Supplemental materials such as a Biological Assessment or other supporting documents may be necessary for adequate analysis.</p>	<p>Supplemental Information Required in Certain Situations:</p> <p>If the proposal includes off-site mitigation through the City's mitigation fee-in-lieu option or the purchase of credits from a City certified mitigation bank then the impact evaluation must include the Habitat Evaluation Procedure (HEP) and Habitat Equivalency Assessment (HEA) scores and all of the data that was produced in order to obtain the scores.</p>



CITY OF PORTLAND, OREGON - BUREAU OF DEVELOPMENT SERVICES

1900 SW Fourth Avenue • Portland, Oregon 97201 • 503-823-7526 • www.portlandonline.com/bds



Land Use Review Application

File Number:

FOR INTAKE, STAFF USE ONLY

Date Rec _____ by _____

Type I Type II Type Iix Type III Type IV

LU Reviews _____

[Y] [N] Unincorporated MC

[Y] [N] Flood Hazard Area (LD & PD only)

[Y] [N] Potential Landslide Hazard Area (LD & PD only)

Qtr Sec Map(s) _____ Zoning _____

Plan District _____

Neighborhood _____

District Coalition _____

Business Assoc _____

Related File # _____

APPLICANT: Complete all sections below that apply to the proposal. Please print legibly.

Development Site Address or Location _____

Cross Street _____ Sq. ft./Acreage _____

Site tax account number(s)

R _____ R _____ R _____
R _____ R _____ R _____

Adjacent property (in same ownership) tax account number(s)

R _____ R _____ R _____

Describe project

[Empty box for project description]

Describe proposed stormwater disposal methods

[Empty line for stormwater disposal methods]

Identify requested land use reviews

[Empty box for requested land use reviews]

• Design Review - For new development, provide project valuation. \$ _____
For renovation, provide exterior alteration value.

• Land Divisions - Identify number of lots (include lots for existing development). _____
New street (public or private)? yes no

continued / over 1

Applicant Information

- Identify the primary contact person, applicant, property owner and contract purchaser. Include any person that has an interest in your property or anyone you want to be notified.
- For all reviews, the applicant must sign the Responsibility Statement.
- For land divisions, all property owners must sign the application.

PRIMARY CONTACT, check all that apply Applicant Owner Other _____

Name _____ Signature _____

Company/Organization _____

Mailing Address _____

City _____ State _____ Zip Code _____

Day Phone _____ FAX _____ email _____

Check all that apply Applicant Owner Other _____

Name _____ Signature _____

Company/Organization _____

Mailing Address _____

City _____ State _____ Zip Code _____

Day Phone _____ FAX _____ email _____

Check all that apply Applicant Owner Other _____

Name _____ Signature _____

Company/Organization _____

Mailing Address _____

City _____ State _____ Zip Code _____

Day Phone _____ FAX _____ email _____

Check all that apply Applicant Owner Other _____

Name _____ Signature _____

Company/Organization _____

Mailing Address _____

City _____ State _____ Zip Code _____

Day Phone _____ FAX _____ email _____

Responsibility Statement As the applicant submitting this application for a land use review, I am responsible for the accuracy of the information submitted. The information being submitted includes a description of the site conditions. I am also responsible for gaining the permission of the owner(s) of the property listed above in order to apply for this review and for reviewing the responsibility statement with them. If the proposal is approved, the decision and any conditions of the approval must be recorded in the County Deed Records for the property. The City of Portland is not liable if any of these actions are taken without the consent of the owner(s) of the property. In order to process this review, City staff may visit the site, photograph the property, or otherwise document the site as part of the review. I understand that the completeness of this application is determined by the Director. By my signature, I indicate my understanding and agreement to the Responsibility Statement.

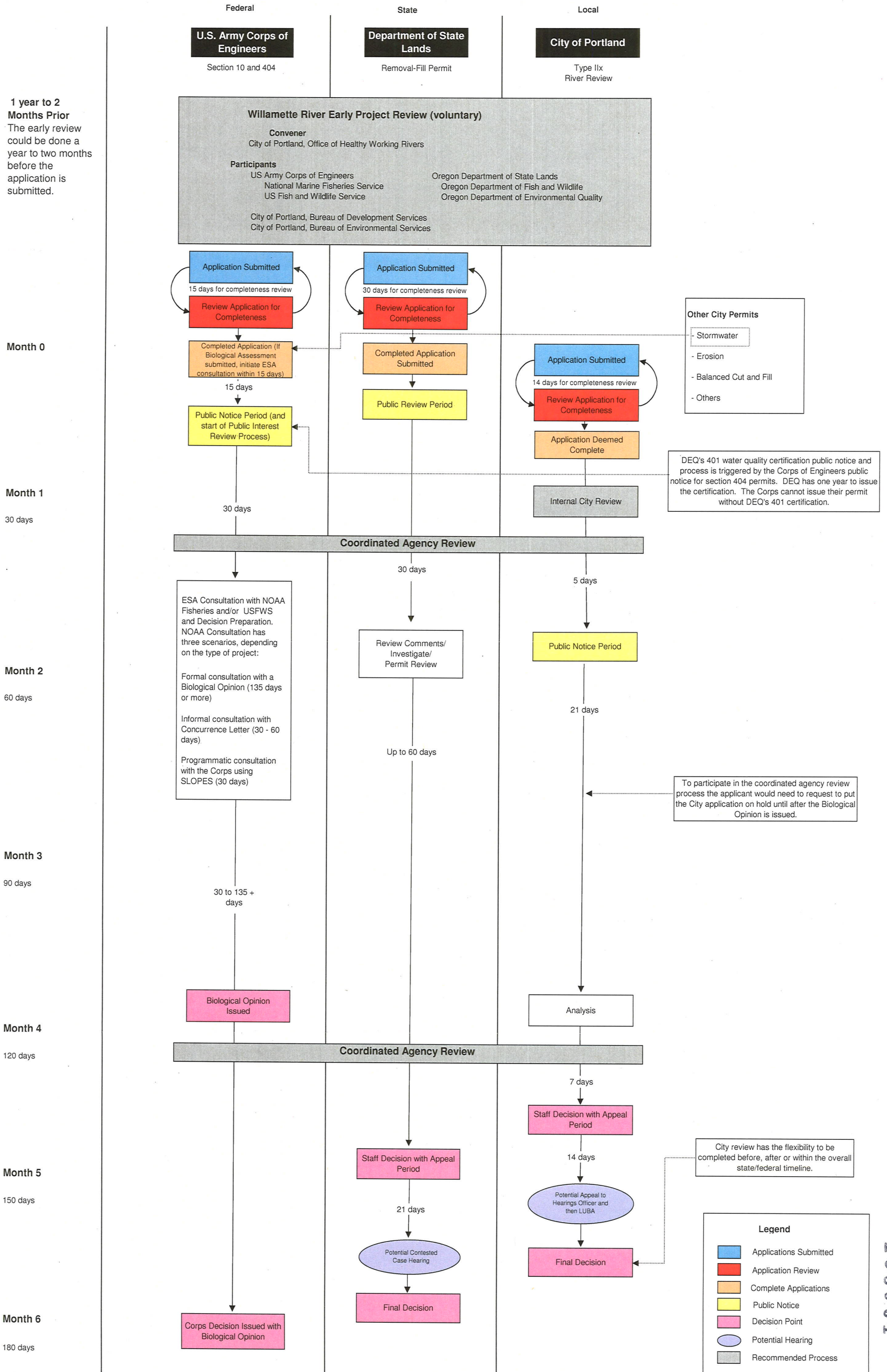
Print name of person submitting this application _____

Signature _____

Phone number _____ Date _____

River Plan / North Reach Recommended Draft: Proposed Coordinated Review Process for Projects Below the Ordinary High Water Mark

Note: The timelines listed are legal maximums and are not meant to represent the time it would take to process any given permit application.



183694



City of Portland
Bureau of Development Services
Land Use Services Division

183694
1900 SW Fourth Avenue, Suite 5000
Portland, Oregon 97201
Telephone: 503-823-7300
TDD: 503-823-6868
FAX: 503-823-5630
www.portlandonline.com/bds

Request for Extension of 120-Day Review Period

State law requires the City to issue a final decision on land use reviews within 120 days of receiving a complete application. State law also allows the applicant to request in writing an extension of the 120-day review period for up to an additional 245 days. When extensions are requested, it is important to ensure that there is adequate time to accommodate the required public review, drafting the decision, and any required hearings (including appeals) within the extended review period. Generally, a final decision must be rendered approximately 60 days prior to the end of the review period in order to accommodate appeals.

If requesting an extension of the 120-day review period, please sign this form and return it to the Bureau of Development Services (BDS) planner assigned to your case.

Case Information

1. Applicant Name: _____
2. Land Use Case Number: LU # _____
3. BDS Planner Name: _____

Extension Request

Please check one of the following:

- Extend the 120-day review period for an additional _____ (insert number) days, to _____ (insert new date).

OR

- Full Extension, to _____ (insert date).

The total number of extensions requested cannot exceed 245 days.

By signing this form, I acknowledge that the 120-day review period for my land use review application will be extended for the number of days specified.

Applicant Signature: _____ Date _____

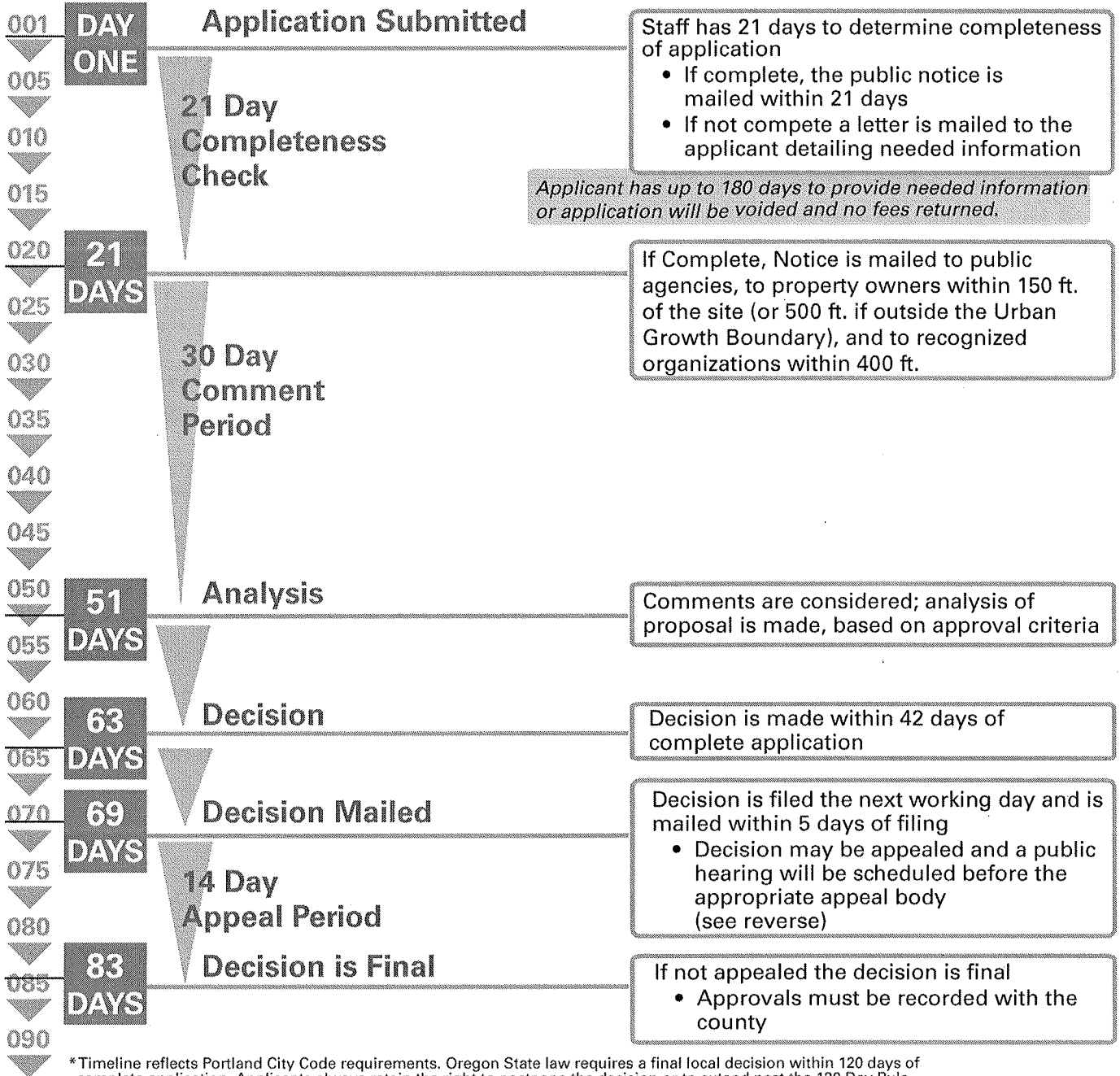


Type IIx Land Use Review Procedure

183694



• Neighborhood contact and contact documentation is required for Type IIx Land Divisions



If the decision is appealed

If the decision is appealed, a public hearing is scheduled. A notice of this hearing is mailed to the public within five working days of the appeal being filed. The hearing is scheduled approximately three weeks after the appeal notice is mailed.

The appeal fee charged is \$250.00. The fee is refundable if the appellant prevails at the hearing (if the original proposal is modified, no refund is applicable). No fee is charged to ONI recognized organizations appealing a land use decision for property within the organization's boundaries. The vote to appeal must be in accordance with the organization's bylaws.

The appeal hearing and decision

The type of appeal hearing we hold depends on the type of land use review that applies to your application. Reviews may be held before the following review bodies:

- The Adjustment Committee
- The Hearing Officer
- The Design Commission
- The Landmark Commission

The Hearings Officer may make a decision at the time of the hearing, or issue a written decision within 17 days of the hearing. The Design Commission, Landmarks Commissions, and the Adjustment Committee make their decision at the end of the hearing. The decision of these review bodies is final, and cannot be appealed to the City Council. Any further appeal is to the State Land Use Board of Appeals (LUBA).

Recording the decision with the County Recorder

If your proposal is not appealed, it is final the day after the last day to appeal. An appealed decision is final on the day that the review body issues its decision. You must record the decision with the County Recorder's Office; you may record it in person or by mail. Refer to the recording sheet that you will receive prior to the recording date for exact details. If you have a building permit pending, it can be issued only after you have recorded the land use review and all conditions of the decision are met.

For more information visit or call the Planning and Zoning staff at the
Development Services Center at 1900 SW 4th Avenue, Suite 1500, 503-823-7526
For current Portland Zoning Code visit www.portlandonline.com/zoningcode

Information is subject to change, recent code changes and requirements may not be reflected on this document.