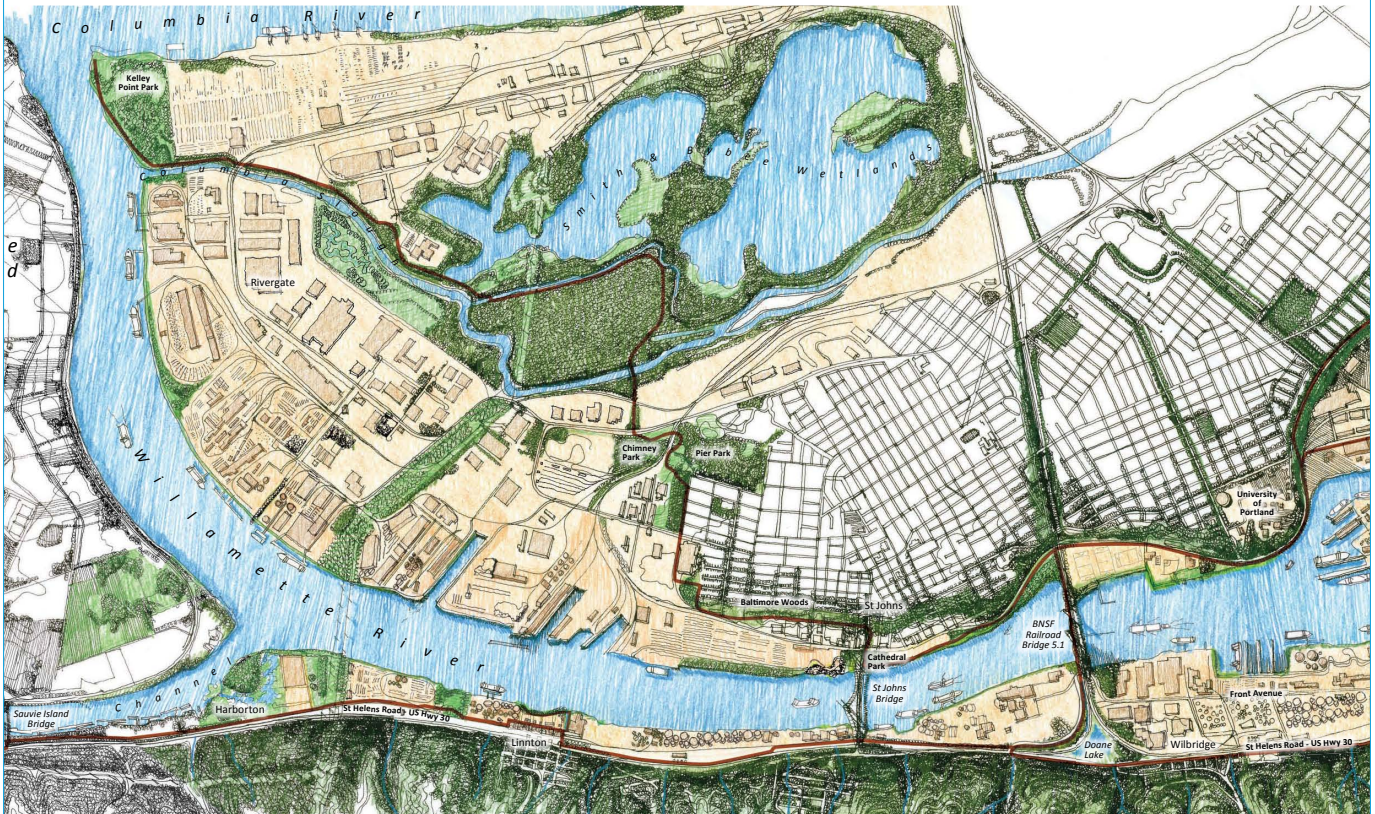


# THE RIVER PLAN NORTH REACH

NOVEMBER 2010



## HOW TO CALCULATE RIVER PLAN/NORTH REACH IN-LIEU FEES



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

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- B. *River Plan / North Reach Science Panel Report.* Memo from Kaitlin Lovell to Sallie Edmunds. November 1, 2010.
- C. *River Plan/ North Reach Willamette River Mitigation In-Lieu Fees. Technical Report.* Prepared for the Bureau of Planning and Sustainability by Tetra Tech. October 2010.

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# I. INTRODUCTION

On April 15, 2010, the Portland City Council unanimously adopted the River Plan / North Reach a comprehensive, multi-objective plan for the Willamette River and adjacent lands from the Fremont Bridge to the confluence of the Willamette and Columbia Rivers. The Plan addresses economic prosperity, watershed health, access, livable neighborhoods and partnerships with other agencies. This is first of three sections of the river to receive detailed planning.

The Plan contains several components that address watershed health. These include requirements to mitigate for impacts from development in the River Environmental Overlay Zone and a requirement to enhance vegetation in the North Reach. During the development of the Plan, industrial property owners asked for the option of paying the City of Portland to conduct mitigation/planting in lieu of meeting the requirements on site. The in lieu fees described in this report address that request. The mitigation in lieu fees will expire in two years when a mitigation bank is in place that serves the area.

This report describes under what circumstances the in-lieu fee options can be used and how fees are calculated for each of the following regulations:

1. Vegetation Enhancement Standard
2. Minimum Landscape Area Standard found in zones IG2 and EG2
3. River Environmental Overlay Zone Standards for Bulkheads
4. River Environmental Review Off-Site Mitigation Approval Criterion
5. Title 24 Balanced Cut and Fill Requirement (this in lieu fee is not available at this time)

## Determining the in lieu fees

There are different methods for determining the in lieu fee requirements for these various regulations. These methods are summarized below and described in detail in Section II and in the appendices.

The fee for the Vegetation Enhancement Standard is based on a percentage of project value. The Minimum Landscape Area Standard in IG2 and EG2 and the River Environmental Overlay Zone Standards for Bulkheads are based on a cost per square foot. Determining the cost for other types of off site mitigation is more complex. In response to feedback from stakeholders, City staff worked with a consultant to develop a clear, transparent and fair method to establish a fee for off site mitigation. The method is

called the Functional HEA model and is described in Appendix A. An early draft model was submitted to an independent science panel for review in June 2010. The scientists provided valuable feedback that led the City to revise the model. The City sent the revised model back to the scientists for a final review and comment. The model that is described in Appendix A is the result of that work. The Science Panel review process and results are described in Appendix B.



**Table 1. Summary of the In Lieu Fees**

	<b>Description</b>	<b>Cost Components</b>	<b>Total in lieu fee</b>	<b>Notes</b>
<p><b>1. Vegetation enhancement</b></p> <p>Applies in all river overlay zones</p>	<p>Requires that applicants spend up to 1% of project value on planting vegetation (in the ground or on an eco-roof).</p> <p>Applicant may choose to plant on site or pay an in lieu fee to the City.</p>	<p>Project value is an amount that is stated on the permit. It includes the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, etc.</p>	<p>1% of project value or \$200,000 per permit whichever is less.</p>	<p>The number of square feet of vegetation that the fee purchases will be calculated using the following cost components:  Hard: \$2.46/sq ft.  Soft: \$2.21 (90%)  Acquisition: \$2.75  Contingency: NA  Total: \$7.42/sq ft</p>
<p><b>2. Minimum Landscape Area Standard</b></p> <p>Applies in IG2 and EG2 zones only</p>	<p>Landscape 15% of the site</p> <p>Applicant may choose to plant on-site or pay an in lieu fee to the City.</p>	<p>Hard:\$2.46  Soft: \$2.21 (90%)  Acquisition: \$2.75  Contingency: NA</p>	<p>\$7.42/sq ft</p>	<p>Not a new standard. The River Plan / North Reach added the option to pay an in lieu fee to an existing zoning code standard in the IG1 (General Industrial) and EG1 (General Employment) base zones.</p>
<p><b>3. Bulkhead Mitigation Standard</b></p> <p>Applies in the River environmental overlay zones only</p>	<p>Requires that the applicant pay a fee to compensate for the impact to natural resources from installing a new bulkhead riverward of an existing bulkhead. The payment is based on the square footage of area filled in between the existing and new bulkhead.</p> <p>Applicant must pay an in lieu fee to the City. On site mitigation is not allowed when meeting this standard.</p>	<p>Restoration: \$66.44  Acquisition: \$5.50</p>	<p>\$71.90/sq ft (rounded)</p>	<p>See Appendix C, Table 25.</p>
<p><b>4. Mitigation</b></p> <p>Applies in the River environmental overlay zones only</p>	<p>River Review allows for a payment in-lieu of on-site mitigation when development will have a significant impact on natural resources. The mitigation in lieu fee is determined through use of the Functional HEA model.</p> <p>If on-site options are not practicable or ecologically beneficial, City staff will require off site mitigation. Applicants can pay the City a fee in lieu of mitigation.</p>	<p>Hard: varies by habitat type  Soft: 90%  Acquisition: \$5.50  Contingency: 75% of hard costs</p>	<p>The fee is based on the quality of the habitat types before and after development.</p>	<p>See Appendix A, and C.</p>
<p><b>5. Balanced Cut and Fill</b></p> <p>Applies in all river overlay zones</p>	<p>Allows a payment in-lieu of balancing floodplain fill with an equal amount of excavation.</p> <p>Off-site excavation is not available at this time.</p>	<p>NA</p>	<p>NA</p>	<p>An in lieu fee for balance cut and fill is not available at this time. All fill must be balanced per Title 24.</p>

The Functional HEA model may be refined between the time it is adopted as part of the interim administrative rule and when it is adopted as part of the final rule to factor in best management practices/good design such as light penetrating dock designs. The addition of these factors could decrease the cost of mitigation on a case by case basis.



### **Components of cost recovery pricing**

The in lieu fees are based on a combination of cost factors and are set at a rate that will recover the cost of the vegetation planting and restoration the City will conduct.

The in lieu fees for the vegetation enhancement standard and the minimum landscape standards include the costs to purchase and plant materials and maintain them over time. The 2010 cost estimate was derived from information provided by staff in the Bureau of Environmental Services, Watershed Revegetation Program. The BES Watershed Revegetation Program regularly purchases, and installs vegetation on City-owned and private property throughout the city. More details are provided in Section II.A.

As described in Appendix C, the costs for the River Environmental Overlay Zone Standards for Bulkheads and the River Environmental Review Off-Site Mitigation Approval Criterion were developed by Tetra Tech, in coordination with the City's Bureau of Environmental Services. The in lieu fees are comprised of hard costs, soft costs, contingency costs and acquisition costs. Some of the costs are factored into some of the in lieu fees and not to others. These costs and their derivations are described below.

Hard costs include the cost of materials, labor, equipment and contractor overhead. These costs are based on actual costs incurred by the US Army Corps of Engineers, Bureau of Environmental Services, Bureau of Transportation, 2010 local landfill disposal fees and trucking company and construction contractor quotes.

Soft costs include existing conditions surveys, engineering design and permitting and project management. BES estimates the soft costs at 90% of the hard costs based on their experience. (These are described in Appendix C)

A 75% contingency cost was applied to the estimates due to the low level of certainty of what the work will actually entail. This is the practice used by the City of Portland Capital Improvement process.

Acquisition costs are estimated to range from \$3 - \$8 per square foot for clean buildable industrial land. The average is \$5.50. The mitigation in lieu fees charge the full average acquisition cost because the mitigation will likely require an equal amount of land. The vegetation in lieu fees only charge half of the acquisition cost because that vegetation may be planted on existing City property or will be planted in an existing river environmental zone area that does not need to be acquired.

## River Restoration Fund

The funds collected through the in lieu fees will be deposited into BES's River Restoration Fund. This money can only be spent on restoration activities at the sites identified in the River Plan / North Reach and shown on Map 1 or other sites that are acquired over time. These restoration sites are sometimes called "pearls". The details about eligible expenses will be described in the BES administrative rule.

## Implementation of the In Lieu Fees

The Bureau of Development Services (BDS) is the City's land use permitting agency. Applicants for a land use review in the North Reach file an application with the Bureau of Development Services. If the decision allows for an in lieu fee payment for vegetation enhancement, landscaping or for bulkhead mitigation, BDS will assess and collect the fee. If the decision allows for off site mitigation, the condition of approval will indicate that the applicant must pay the City in accordance with the administrative rules of the Bureau of Environmental Services. BES will determine how much the applicant owes but BDS will collect the funds.

The in-lieu fees will be discussed at Council on November 17th. BES will request an amendment to Title 17 to grant them the authority to collect in lieu fees and BDS will request amendments to their fee schedule to address the other in lieu fees. The interim rules and fee schedules will be in place by the effective date of the plan. BES will then develop a final rules package and bring it back to Council for adoption in mid 2011. See Table 2 for more information.

**Table 2: Establishing the In Lieu Fees**

	<b>Adoption Schedule</b>
<b>1. Vegetation enhancement</b>	BDS will propose amendments to their fee schedule to address these items at a City Council hearing on November 17th.
<b>2. Minimum Landscape Area Standard</b>	In 2011, BPS will submit a package of amendments to Council that will include amending the code to transfer this responsibility for updating the in lieu fee from BDS to BES.
<b>3. Bulkhead Mitigation Standard</b>	
<b>4. Interim Mitigation In Lieu Fee</b>	BES will propose amendments to Title 17 to give them the authority accept in lieu at a City Council hearing on November 17th.  BES will then adopt interim administrative rules by the effective date of the plan and final administrative rules in mid 2011. The final administrative rule may also include mitigation banking rules.
<b>5. Balanced Cut and Fill</b>	NA



# River Plan / North Reach

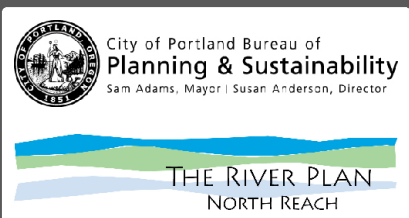
## Map #1: Adopted Overlay Zones and Restoration Sites

Sheet #1 of 2

### legend

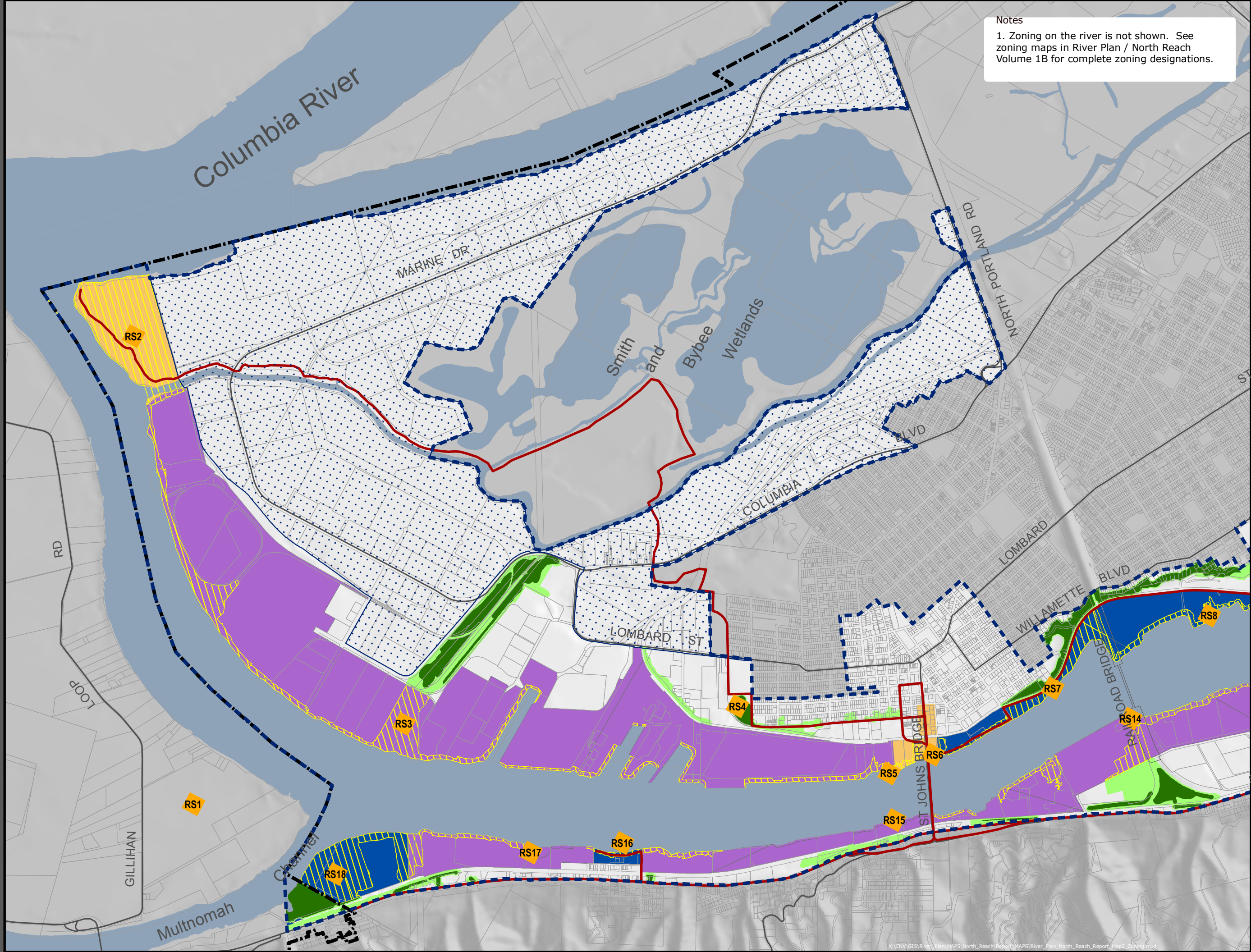
- areas not evaluated for overlay zone changes
- north reach boundary
- trail alignment
- Portland city boundary
- river overlay zones
  - environmental overlay (e)
  - river industrial (i)
  - river recreational (r)
  - river general (g)
- environmental overlay zones
  - environmental conservation (c)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

November 2010  
City of Portland | Bureau of Planning and Sustainability  
Geographic Information System  
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0 1,250 2,500 3,750 Feet  
**DRAFT**  
subject to revision

Notes  
1. Zoning on the river is not shown. See zoning maps in River Plan / North Reach Volume 1B for complete zoning designations.



# Map #1: Adopted Overlay Zones and Restoration Sites

Sheet #2 of 2

### legend

- areas not evaluated for overlay zone changes
- north reach boundary
- trail alignment
- Portland city boundary
- river overlay zones
  - environmental overlay (e)
  - river industrial (i)
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November 2010

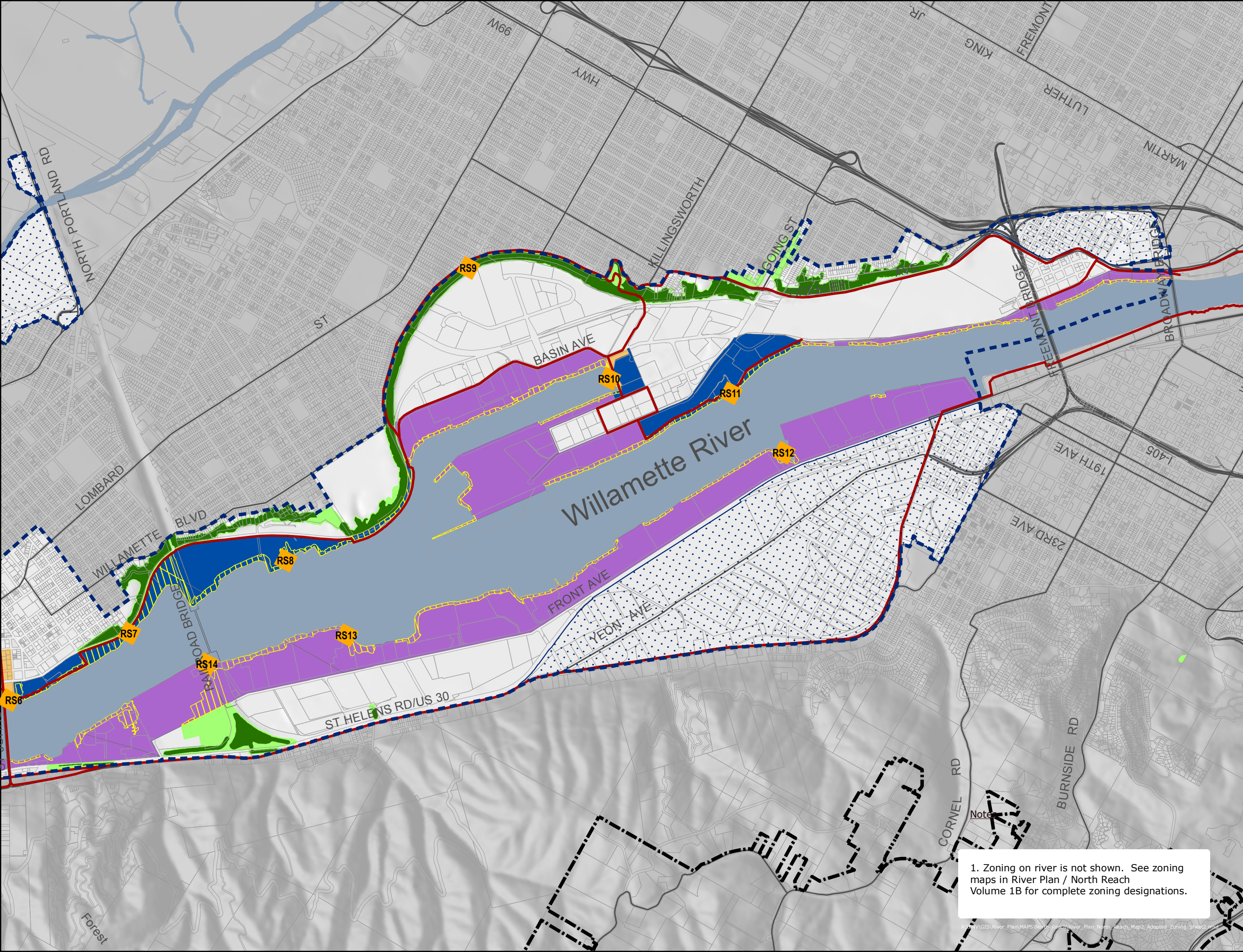
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1. Zoning on river is not shown. See zoning maps in River Plan / North Reach Volume 1B for complete zoning designations.



## II. DESCRIPTION OF THE IN LIEU FEES

This section describes the five in-lieu fees that are called for in the River Plan / North Reach.

### A. Vegetation Enhancement Standard In-Lieu Fee

The vegetation enhancement standard (33.475.120, .220, .320) requires that applicants spend up to 1% of project value or \$200,000, whichever is less, on planting vegetation in the North Reach if their project includes development within the river overlay zones. The applicant has the choice to spend the 1% on planting vegetation on their site (in the ground or on an eco-roof), or pay the City an in-lieu fee that will be used to plant vegetation off-site. The standard requires the applicant to spend 1% each time they obtain a building permit until 15% of their site is vegetated, or they have paid the City the cost for planting an area equal in size to 15% of their total site area. (The 15% can be reduced to 10% or 5%)

The in-lieu fee for the vegetation enhancement standard is 1% of project value. The in-lieu fee calculation will look like this:

$$\text{Project Value} \times .01 = \text{In Lieu Fee (capped at \$200,000)}$$

For example, the in-lieu fee for a project that is valued at \$500,000 will be \$5,000 if the applicant chooses to pay the in-lieu fee rather than spend \$5,000 on planting vegetation on their site. The zoning code specifies how to determine project value (33.475.120.F, .220.F, .320.F)

When the applicant pays the City the in-lieu fee, they will be credited with the number of square feet of vegetation that the fee purchases. The number of square feet that the fee purchases will depend on the cost to purchase, plant, and maintain over the long-term 1 tree, 3 shrubs, and 4 other ground cover plants per 100 square feet, plus ½ the estimated cost of land acquisition. The City will plant and maintain the vegetation on City-owned or controlled property in the North Reach. The cost to purchase and plant the vegetation will be estimated yearly by the Bureau of Environmental Services. A 90% long-term maintenance and management fee, and the cost of acquisition will be added to reach the final cost estimate.

The 2010 cost estimate for the City to plant vegetation in the North Reach is **\$7.42 per square foot**. This estimate was derived with information provided by staff in the Bureau of Environmental Services, Watershed Revegetation Program. The BES Watershed Revegetation Program regularly purchases, and installs vegetation on City-owned and private property throughout the city. Watershed Services provided the following estimates for the cost of plants and installation:

2" deciduous tree	\$200
5' tall conifer tree	\$180
1 gallon shrub	\$10
4" pot groundcover	\$4



Bureau of Planning and Sustainability staff used the estimates from BES to determine the cost for purchasing and installing 1 tree, 3 shrubs and 4 other groundcover plants per 100 square feet as required by the vegetation enhancement standard:

1 tree	\$200 (1 x \$200)
3 shrubs	\$30 (3 x \$10)
4 groundcover	\$16 (4 x \$4)
<u>total</u>	\$246 per 100 square feet OR \$2.46 per square foot

The total cost for the City also includes the cost of long-term maintenance and management (soft costs), plus ½ the cost for land acquisition. Soft costs are estimated by BES to be 90% of the cost to purchase and install the plants. Ninety percent of \$2.46 is \$2.21. Land acquisition in the North Reach is estimated to be \$3-\$8 per square foot. The average is \$5.50 per square foot, and ½ of that average is \$2.75 per square foot.

The total cost estimate to be used this fiscal year for converting the applicant's payment into a number of square feet of vegetation purchased is the sum of  $\$2.46 + \$2.21 + \$2.75 = \$7.42$ .

The following is an example of how the fee payment will be converted into square feet purchased. The calculation is based on a fictitious site and project:

Site Size:	58 acre site
Vegetated Area:	378,972 square feet (15% of 58 acres)
Project Value:	\$500,000
In-Lieu Fee:	\$5000 (\$500,000 x .01)

**Square footage credited with this payment: 674 square feet (\$5000 / \$7.42)**

Square footage remaining 378,298 (378,972 – 674)



## B. IG2/EG2 Minimum Landscape Area Standard In-lieu-fee

The IG2 and EG2 Minimum Landscape Area Standard applies citywide. Since meeting this standard was sometimes problematic in the North Reach, the River Plan zoning code allows properties zoned IG2 and EG2 in the North Reach to pay a fee in-lieu of meeting the base zone minimum landscape area standard. The base zone requires that 15% of each site be landscaped.

Applicants for building permits in the North Reach will have the choice to landscape according to the standard, or pay the City for the cost to purchase, install, and maintain over the long-term 1 tree, 3 shrubs and 4 other groundcover plants per 100 square feet, plus ½ the cost for land acquisition.

As described in Part 1, the cost estimate for the City to plant vegetation in the North Reach is **\$7.42 per square foot**.

The in-lieu fee for the landscape area standard will be calculated as follows:

$$\text{(Square footage to be landscaped)} \times \$7.42 = \text{In Lieu Fee}$$

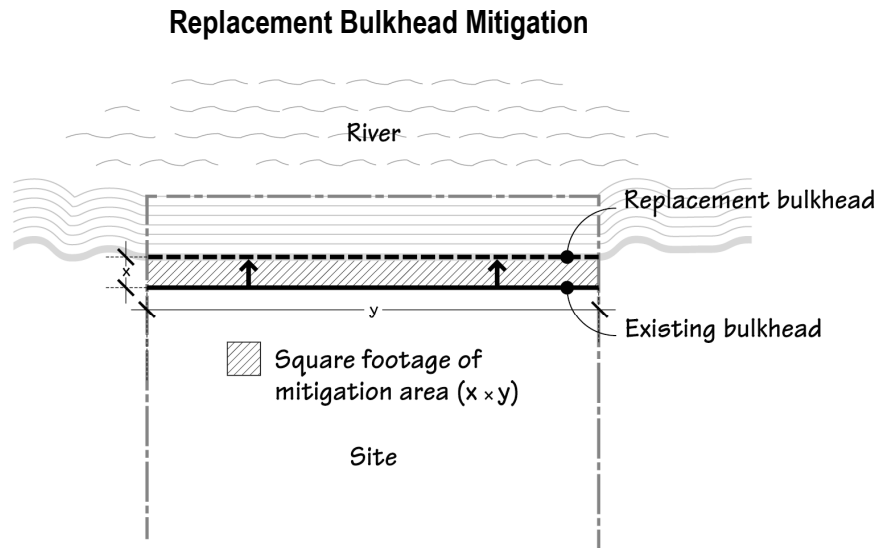
The following is an example of how the fee payment will be calculated. The calculation is based on a fictitious site and project:

Site Size:	10 acres
Minimum landscape area:	65,340 square feet (15% of 10 acres)
On-site area already landscaped:	30,000 square feet (e.g. the parking lot is landscaped, and some of the perimeter is landscaped)
Remaining to be landscaped:	35,340 square feet
In-Lieu Fee:	<b>\$262,222.80</b> (35,340 x \$7.42)



## C. River Environmental Overlay Zone Bulkhead Replacement Mitigation Fee

The development standards for bulkhead replacement in the River Environmental zone require that the applicant pay a fee to compensate for the impact to natural resources from installing a new bulkhead riverward of an existing bulkhead. The payment is based on the square footage of area filled in between the existing and new bulkhead.



The in lieu fee for bulkhead replacement will be calculated as follows:

$$\text{(Square footage of mitigation area) x (mitigation cost per square foot) = In Lieu Fee}$$

The cost per square foot for mitigation is: \$71.90

*(\$71.90 per square foot is the average cost of riverine restoration + the average cost of acquisition which is \$5.50/sq ft.)*

The following is an example of how the fee payment will be calculated. The calculation is based on the details of a sheet pile wall replacement project that was approved in 2004. In that case, the replacement wall was approximately 900 feet long, and it was placed approximately 3.5 feet in front of the existing wall:

In-Lieu Fee:  $(900 \times 3.5) \times \$71.90 = \mathbf{\$226,485}$

\* See Appendix C: Willamette River Mitigation In-Lieu Fees, Table 25

## D. River Environmental Overlay Zone Off-Site Mitigation In-Lieu Fee

The adopted zoning code for the River Environmental overlay zone allows for a payment in-lieu of on-site mitigation (33.865.100.B.2.d (3)). The zoning code also gives the Bureau of Development Services the authority to adopt a mitigation fee-in-lieu payment schedule.

The mitigation payment calculation system is intended to be user-friendly and transparent. The system will quantify the impact to natural resources from a development proposal, and then convert that impact into a dollar value.

The off site cost to compensate for impacts to riverine, riparian, stream, and upland forest habitat types will be calculated through the use of a model called the Functional Habitat Equivalency Analysis (Functional HEA). HEA was developed by the National Oceanic and Atmospheric Administration, and is an analytical framework for determining the amount of mitigation needed to compensate for the interim loss of a resource (temporal loss).

The Functional HEA model will be supported by an assessment of the condition of the habitat areas both before and after the development occurs.

The habitat assessment will be done using riparian and wildlife habitat function based suitability indices, and for wetlands, through the use of the Oregon Rapid Wetlands

Assessment Protocol (ORWAP).



What follows is a step-by-step explanation of how the off-site mitigation fee will be calculated.

### Step 1: Before and after assessment of the condition of the riverine, riparian, stream, upland forest, and wetland habitat areas

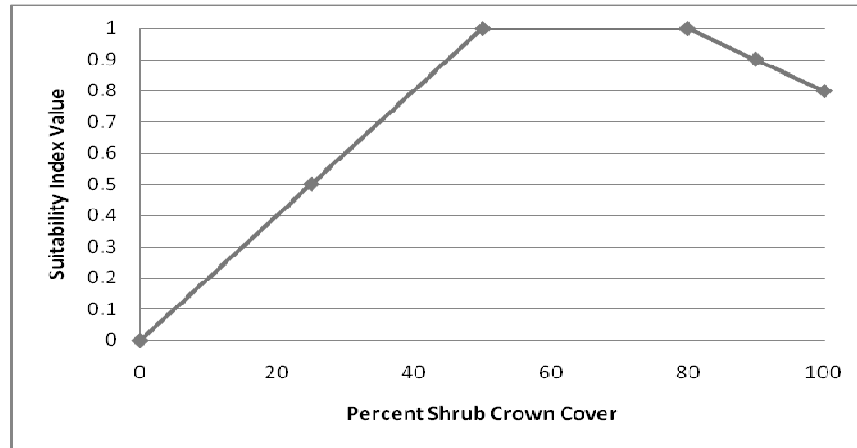
The first step toward calculating the mitigation fee will be to use the suitability indices to score the condition of any riverine, riparian, stream, or upland forest habitat affected by the proposed development. Step 2 of the fee calculation system requires that the habitat areas on the site be given a pre- and post-development score. The *Habitat Valuation Methodology Report*, attached as Appendix A, identifies the suitability indices for the riverine, riparian, upland forest, stream habitat types. ORWAP will be used to assess the condition of any wetland affected by the development. The technical details of how to use ORWAP can be found in Appendix A.

The condition of the habitat area must be assessed twice—once for the condition of the area before the development, and once to assess the projected condition of the area after the development occurs. Two scores must be provided for each type of habitat affected by the proposed development. For example, a project that proposes development in the River Environmental zone on the banks of the Willamette River in the 100-year floodplain above ordinary high water, and in an upland forest area outside of the 100-year

floodplain affects both riparian and upland forest habitats. In this case the applicant will use the riparian indices to score the condition of the riparian area, and the upland forest indices to score the upland area.

There are 12 variables used to measure the condition of the riparian zone. One of the variables is the percent shrub crown cover. The following graph illustrates how to identify a suitability index for this one variable. The percent of shrub crown cover is defined as the percent of the ground surface that is shaded by a vertical projection of the canopies of woody vegetation <5 m (16.5 ft) in height. For example, if 25% shrub crown cover is identified, the suitability index is .5.

**Figure 1: Percent Shrub Crown Cover Curve**



Step 2: Habitat Equivalency Analysis for riverine, riparian, stream, upland forest, and wetlands habitats

The HEA component of the model will be run with an Excel spreadsheet. The output of the model is a number called Discounted Service Acre Years (DSAY). The final payment value is calculated by multiplying the DSAY output from HEA by a cost per DSAY. Each habitat type will have a separate cost per DSAY.

The HEA model must be run for each of the habitat types that are affected by the development proposal and scored using the suitability indices (riverine, riparian, stream, upland, wetland). For example, if a proposed development impacts riparian and upland habitat on a site, then the HEA model will be run once for the riparian habitat, and again for the upland habitat.

The applicant enters numbers into the HEA spreadsheet in the highlighted cells. The before and after scores calculated by using the suitability indices or ORWAP are entered into the HEA cells identified as “initial value of habitat”, and “value of restored or degraded habitat”. The number .1 is always be entered into the cell identified as “years to a fully functioning habitat” to reflect that the impact to the habitat loss is almost instantaneous when development occurs. The applicant also enters the acres of habitat affected (impact area). A detailed explanation of the Functional HEA model and the numbers in the model that remain static can be found in Appendix A.

Once the numbers are entered, the spreadsheet automatically calculates the DSAYs. With the example given above the applicant will have two DSAY numbers—one for the riparian impact, and another for the upland impact. Below is an example of the HEA spreadsheet with values entered and a DSAY outcome. In the example, the riparian resource area has a pre-development score of .65. The habitat score after



development is .5. The impact from the development quantified in DSAYs is -3.155 DSAYs. The negative number reflects that the impact from the development is lowering the habitat value, and that the output is a debit rather than a credit. If the number was positive, the impact would reflect an improvement in the habitat value.

**Table 3: Example Functional HEA Calculation**

**To use model, only enter values in highlighted areas.**

Initial Value of Habitat:	0.65
Years to a Fully Functioning Habitat:	0.1
Base Year:	0
Discount Rate	0.03
# Years Project Exists:	300
Value of Restored or Degraded Habitat:	0.5
Total Beneficial Increase from Restoration or Decrease from Other Action:	-0.15
Acres of Habitat:	0.5

<b>TOTAL DSAYs</b>	<b>-3.155</b>
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Step 4: Final Calculation of the Payment

The final step is to convert the DSAY number into a payment amount. The final payment value is calculated by multiplying the DSAY output by a cost per DSAY. The calculation looks like this:

$$\text{(DSAY amount from HEA) x (Cost Per DSAY) = In-Lieu Fee Payment}$$

The following is the cost per DSAY that will be used for each habitat type:

Habitat Type	Cost per DSAY
Riverine	\$235,100
Riparian	\$168,000
Upland	\$59,000
Stream	\$220,7000
Wetland	\$25,400

The costs per DSAY were derived by estimating the average cost for acquisition and restoration on three example sites in the North Reach. The details of calculating the cost per DSAY are attached in Appendix C: *Willamette River Mitigation In-Lieu Fees*.

An example calculation looks like this:

$$3.155 \times \$168,000 = \$530,040$$

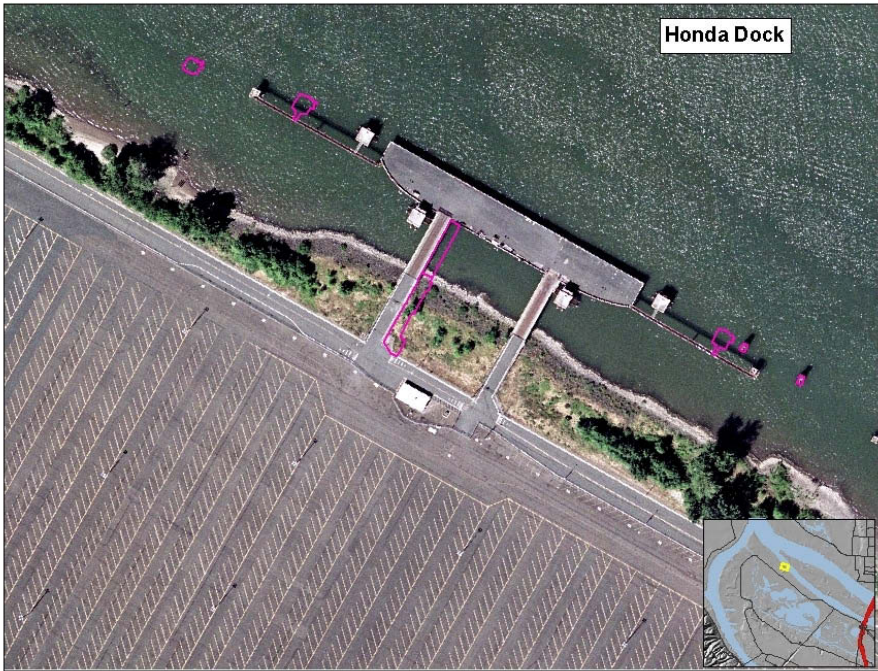
The project may impact more than one habitat type, in which case the various fees for each habitat type are combined for a total. For example, if the project impacts riverine and riparian habitats the total fee payment will consist of mitigation fee for riverine habitat + mitigation fee for riparian habitat.



## CASE EXAMPLE RESULTS USING FUNCTIONAL HEA

The following case examples were prepared by the City in collaboration with Tetra Tech. Both of the cases were approved by the City in the last 10 years. The Port example is on the Columbia River, the Fire Bureau example is on the Willamette. The City assessed the condition of the area and determined the suitability indices using information from the land use reviews, aerial photographs, City-maintained data sets and staff understanding of the examples sites. A summary of the details of the case and the Functional HEA results are shown in Table 4. An aerial photograph showing the case example site areas are shown in Figures 2 and 3.

**Table 4: In Lieu Fees for Example Cases**

Land Use Review Information	Functional HEA Estimate
<b>Port of Portland's Terminal 6: Honda Dock expansion</b>	
<ul style="list-style-type: none"> <li>▪ Location: Columbia River near the mouth of the Willamette River</li> <li>▪ Land Use Review: 2006</li> <li>▪ Permit Value: \$2 million</li> <li>▪ Development impact area: approximately 3400 sq ft.</li> <li>▪ Description: Widening of access ramp from 24 feet to 40 feet in width and installation of new pilings</li> </ul>	<p><b>Riverine and Riparian habitat impacts scored</b></p> <p><b>HEA output (DSAY)</b>            Riverine: -.383            Riparian: -.585</p> <p><b>City's fee-in-lieu of on-site mitigation:</b>            Riverine: \$90,043.30            Riparian: \$98,280.00            Total = \$188,323.30</p>
	

## Portland Fire Bureau's Boat House and Dock

- Location: West side of the Willamette River near the mouth of Balch Creek.
- Land Use Review: 2004
- Permit Value: \$68,000 (does not reflect the cost of the boathouse which was towed to the site).
- Development impact area: approximately 5680 sq ft.
- Description: The project replaced an existing dock with a smaller, reconfigured dock and added a 4,000 square foot boat house. Therefore the existing conditions were lower value.

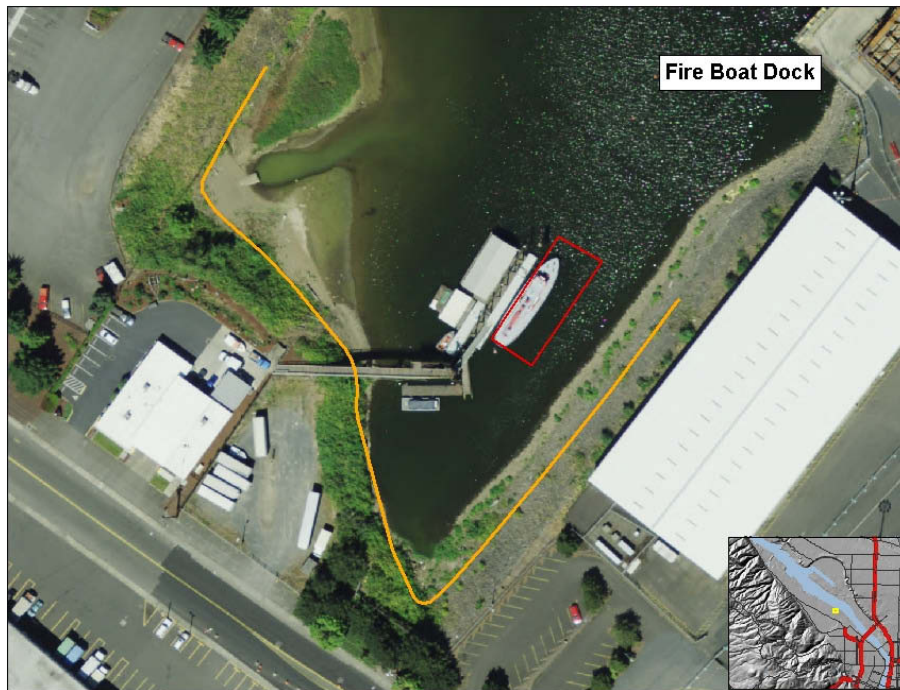
### Riverine habitat impacts scored

#### HEA output (DSAY)

Riverine: -.055

#### City's fee-in-lieu of on-site mitigation:

Total Riverine= \$12,930.50



## E. Balanced Cut and Fill In-lieu-fee (not available at this time)

The River Plan amended the Title 24 provisions for flood hazard reduction to allow a payment in-lieu of balancing a fill with an equal amount of excavation. The payment will facilitate off-site cutting at one of the City's River Restoration sites.

The fee calculation will look like this:

$$\text{(Cubic Feet of Fill)} \times \text{(Cost Per Cubic Foot)} = \text{In Lieu Fee}$$

The cost per cubic foot will be calculated by the Bureau of Environmental Services on a case by case basis. Because the cut must occur close in time to the fill, the availability of the fee in lieu option will be based on the availability of sites where the City can conduct the excavation. No such sites are available at this time.



# III. NEXT STEPS

A number of actions need to be taken to adopt the in lieu fees described in the report. These include the following (also see Table 2):

## **BDS Fee Schedules**

The Bureau of Development Services needs to establish fee schedules to implement the in lieu fees for the Vegetation Enhancement Standard, the Minimum Landscape Area Standard found in zones IG2 and EG2 and the River Environmental Overlay Zone Standards for Bulkheads. BDS will also establish a fee schedule for the costs per DSAY that BES will use to determine the in lieu fees resulting from River Review. BDS will bring the draft fees schedules to City Council for a vote on November 17, 2010.

## **Title 17 Code Change**

The Bureau of Environmental Services needs to amend Title 17 to establish their authority to collect the River Plan in lieu fees. The fees will be directed into the River Restoration Fund that BES will manage. This code change will be heard at City Council on November 17, 2010.

## **BES Administrative Rules**

The Bureau of Environmental Services also needs to adopt an administrative rule to describe the process for calculating the River e-zone off-site mitigation in lieu fee. The administrative rule will outline the process that BES will follow including use of the model that appears in Appendix A. The administrative rule will cross reference the associated costs per DSAY that will be listed on the BDS fee schedule.

BES is working on interim administrative rules that will be used to implement the off-site mitigation fee-in-lieu option. BES will then develop a final rules package that is expected to be adopted in mid 2011. The final rule development process will include stakeholder outreach and a public comment period.

# APPENDICIES

**Appendix A:** *Habitat Valuation Methodology*. Prepared for the Bureau of Planning and Sustainability by Tetra Tech. October 29, 2010. ....

**Appendix B:** *River Plan / North Reach Science Panel Summary*. Memo from Kaitlin Lovell to Sallie Edmunds. November 1, 2010. ....

**Appendix C:** *Willamette River Mitigation In-Lieu Fees*. Prepared for the Bureau of Planning and Sustainability by Tetra Tech. October 29, 2010. ....