West Hayden Island Project

June 2013 Amended Proposed Draft

June 18~~April 9~~, 2013

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A digital copy of this report can be found at:
www.portlandoregon.gov/bps/whi

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This document is a revised staff proposal for the West Hayden Island (WHI) to the Planning and Sustainability Commission. The project proposal includes the following elements:

(1) amendments to Comprehensive Plan and Transportation System Plan.
(2) amendments to the Zoning Code.
(3) an Intergovernmental Agreement (IGA) between the Port of Portland (the Port) and the City of Portland (the City).

The purpose of the Comprehensive Plan and Transportation System Plan amendments is to state the proposed comprehensive plan designations for West Hayden Island once it is annexed, and to clarify the city's transportation policies as they relate to development on WHI and its access.

The purpose of the Zoning Code provisions is to describe the allowed land uses on West Hayden Island and the limits of the physical development — consistent with the Concept Plan and the project's/Community Working Group's guiding principles. The Zoning Code includes specific requirements related to transportation, recreation and natural resource conservation.

The purpose of the Intergovernmental agreement is to describe transportation improvements, community and recreational investments, best management practices and natural resource mitigation measures that the Port and the City agree to undertake if West Hayden Island is annexed to the City and developed with a port facility.

~~**How to Comment**~~

~~**A public hearing is scheduled with the Planning and Sustainability Commission on May 7, 2013 at 5 p.m. The hearing will be at 1900 SW 4th Ave, Portland, Room 2500.**~~

~~The Planning and Sustainability Commission will be taking testimony on the entire West Hayden Island Proposed Draft, including amendments to the Comprehensive Plan, Transportation System Plan, Zoning Code and Port/City IGA. Public testimony may be submitted in writing or email prior to the hearing or in person during the hearing. Mail comments to the Planning and Sustainability Commission, 1900 SW 4th Ave, Portland, OR, 97201, Suite 7100. Comments may also be emailed to psc@portlandoregon.gov.~~

The changes made to this document are the result of continued discussion between staff and the Planning and Sustainability Commission resulting from the hearing on May 7, 2013, and work session on May 28, 2013. The changes are shown in the strikethrough/underline form to indicate differences from the draft release April 9, 2013.

For more information check the project website at: www.portlandoregon.gov/bps/whi.

Join the project email list with a message to: Rachael.hoy@portlandoregon.gov.

I. Summary of Proposal

In July 2010 the Portland City Council passed a resolution directing the Bureau of Planning and Sustainability to develop a legislative proposal for the annexation of West Hayden Island to the City. Because the island is valuable for both its marine industrial potential as well as wildlife habitat, Council specified that the proposal should designate at least 500 acres as open space and no more than 300 acres for future deep water marine terminal development. Since then, the City has been conducting research, engaging the public and working with the project Advisory Committee to prepare a Concept Plan and legislative package for City Council consideration. This proposal accommodates a mix of natural resource areas, industrial development and recreation on WHI.

This following staff proposal for the annexation of West Hayden Island is the fourth~~third~~ draft of a proposal that was first released in August, 2012, and discussed with the Planning and Sustainability Commission (PSC) at public hearings in November, 2012. After a series of work sessions with the PSC, an amended proposal was released in April 2013. This June 2013 amended ~~staff~~ proposal incorporates regulations and agreements to govern development in accordance with Council's Resolution 36805, including:

- Additions and amendments to the City's Comprehensive Plan and Transportation Systems Plan and related maps.
- Additions to the City's Zoning Code and Zoning Map.
- A draft Intergovernmental Agreement (IGA) between the Port of Portland and the City of Portland.

The proposal contains three attachments including the Council Resolution, a summary of the public involvement process, and a summary of background technical studies. Also included as separate appendices are the Hayden Island Natural Resource Inventory (April, 2013) and the Economic, Social, Environmental, and Energy (April, 2013) report; both reports are part of the Zoning Code and Zoning Map proposal. The many background technical studies such as the Health Analysis, Cost/Benefit Analysis, Harbor Lands Inventory, and Concept Plan report will be made available to members of the Planning and Sustainability Commission and City Council on request. These background reports are posted on the project website under the Phase II technical studies.

The June 2013 amended proposed draft is being~~will be~~ submitted to the Planning and Sustainability Commission (Commission) for review and a final recommendation to City Council~~public hearings~~. The final r~~R~~ecommendation~~s~~ from the Commission will be incorporated into a Recommended Draft that will be presented to City Council later in 2013.

II. Project Context

West Hayden Island (WHI) is located nine miles north of downtown Portland at the confluence of the Columbia and Willamette Rivers. WHI is an important natural area in the Columbia River ecosystem as well as an important site for future expansion of Portland's Harbor. Approximately 800 acres in size, WHI comprises the western half of Hayden Island. The site is situated in unincorporated Multnomah County but within the regional Urban Growth Boundary (UGB).

As part of the annexation process, the City of Portland must consider Oregon Statewide Planning Goals, the Metro Urban Growth Management Functional Plan (UGMFP), and the City's Comprehensive Plan Goals and Policies. In 1983, WHI was brought into the UGB for marine industrial land use purposes. It is designated as Marine Industrial Land on the Metro 2040 Growth Concept Map and as a Regionally Significant Industrial Area on Metro's Title 4 map. WHI is also identified by Metro as a high value riparian area and a Habitat of Concern in the regional natural resources inventory. It is identified as a Moderate Habitat Conservation Area (HCA) in Title13, which requires the City to develop a district plan in cooperation with the Port to address the moderate HCA designation.

This legislative proposal considers annexation, Comprehensive Plan designations, zoning and WHI Plan District designations for WHI, consistent with statewide planning goals, statutes, and state, regional and local regulations. The City uses a "plan district" framework, as defined in the Portland Zoning Code, to implement specific local area plans. The WHI Plan District will establish the zoning for the property and allowed uses if approved by City Council. The plan district will also provide a decision-making framework for future review of specific proposals.

Island History

Hayden Island probably originated as a mid-channel bar in a shallow portion of the Columbia River at the confluence with the Willamette River — a dynamic area with islands, shoals and channels that changed with flooding and variations in river flow. Installation of dams on the Columbia River significantly altered river flows and flooding. On the island, development of dikes, placement of fill, dredging of areas for boat moorage, and construction of groins to stabilize the banks have formed the single land mass we see today.

The western part of the island is 800+ acres of relatively undeveloped land. Much of WHI is vegetated with black cottonwood and Oregon Ash trees with an understory of native shrubs and groundcover. Himalayan blackberry and other non-native plants are found around the forest's edges and in more open areas. The island also contains meadows, wetlands, open sandy fill areas, beaches and shallow water areas. Nearly all of WHI is within the 100-year floodplain and much of the forests and wetlands are engaged with the river during more frequent flooding. Existing development on WHI includes electrical power lines, transmission towers, the Columbia Wastewater Treatment Plan pump house and de-chlorination facility, and federal dredge deposit management area.

Acquisition History and Previous Planning Projects

Most of WHI was owned by Portland General Electric (PGE) for many years. In 1983, while under PGE's ownership, the island was included in Metro's Urban Growth Boundary "to satisfy a long term regional need for water-dependent deep water marine terminal and industrial facilities" (Metro Ordinance No. 83-151).

- In 1987, PGE completed an Environmental Impact Statement (EIS) and received the appropriate permitting to develop on WHI. The proposed development was to provide access for deep-draft vessels and included construction of a bridge, extension of utilities to the site and construction of onsite land transportation facilities. The plan was never implemented.
- The Port of Portland purchased the PGE properties in 1994 for marine industrial development.

- In the late 1990s the Port began both an annexation process and an Environmental Impact Statement (EIS) for prospective development. The project was abandoned due to changing economic, environmental and political conditions. The Port has since held the property in reserve for future potential marine development.
- In 2004, as part of a regional process to distinguish industrial lands, Metro identified WHI as a Regionally Significant Industrial Area with characteristics that lend themselves to industrial uses.
- When Metro designated WHI a Moderate Habitat Conservation Area in 2005, it made the designation based on the high value of the natural resources and high value of development potential. Metro, therefore, directed the City of Portland, in cooperation with the Port of Portland, to create a district plan for WHI.
- The Port was approached by the City to pursue the current planning process in order to take advantage of other planning processes currently underway. The City has coordinated this effort with planning work being done on the Columbia River Crossing (CRC) bridge project and East Hayden Island.

Natural Resources on West Hayden Island

West Hayden Island is one of the largest intact island habitats in the Lower Columbia and Willamette Rivers, third to Sauvie and Government Islands. As part of a network of habitats that includes Smith and Bybee Wetlands, Sauvie Island, Vancouver Lake Lowlands, Shillapoo Wildlife Area, Ridgefield Wildlife Refuge, the Sandy River Delta and the Lower Columbia River Estuary, WHI provides a regional nexus for migrating fish, birds and other species.

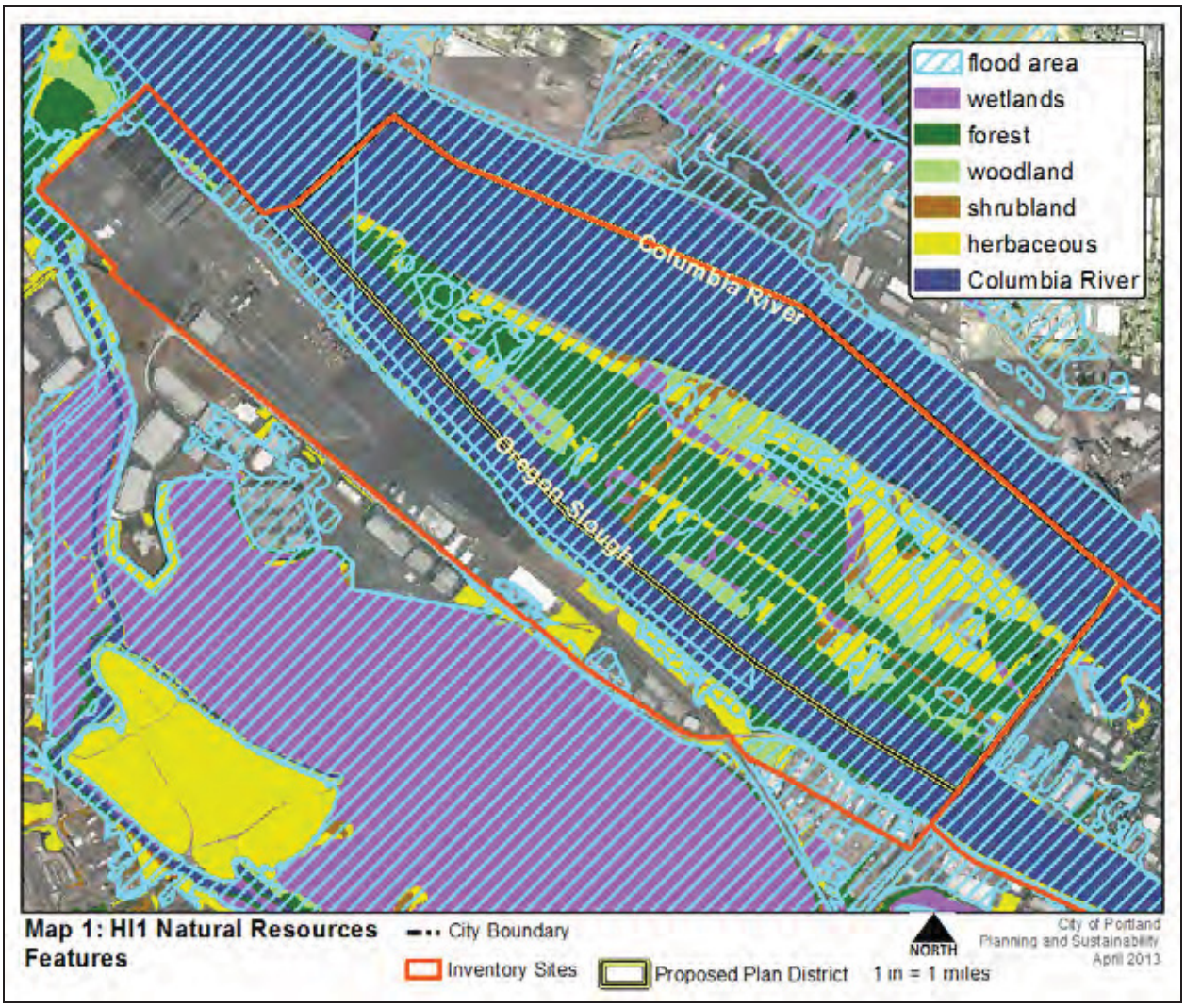
The island mosaic of habitat features include wetlands, forests, shrubland, grasslands, open sandy areas — most of which is within the 100-year floodplain — and shallow water. These distinctive habitats have a synergistic relationship. More than 180 native and non-native plant species occur on WHI, including an at-risk plant species called hair water fern. WHI also has one of the few large contiguous areas of bottomland hardwood forests in the region; a total of 435 acres (4 percent) of the total bottomland hardwood forests between the Bonneville Dam and the mouth of the Columbia River.

More than 200 wildlife species have been documented to use WHI. Thirteen at-risk bird species use WHI including bald eagle, Western meadowlark, pileated woodpecker, willow flycatcher and American Kestrel. They use WHI for roosting, perching, nesting and foraging. The shallow water surrounding WHI is used by 11 federally listed ESA species, such as Chinook salmon, chum salmon, Coho salmon, eulachon, steelhead trout and cutthroat trout. The Fish and Wildlife Service has designated critical habitat for bull trout throughout the Lower Columbia River. Other at-risk species use WHI, including red-legged frog and five bat species.

The island's existing natural resources are documented in the *Hayden Island Natural Resources Inventory* (2012), which was conducted for the entire island as well as the south bank of the Oregon Slough. However, only the West Hayden Island information is used for this legislative proposal. The inventory for East Hayden Island and the south bank will be used in the event that future environmental regulatory changes are proposed in those areas.

Other agencies have recognized the ecological significance of WHI:
- Metro designated as a Class 1 Riparian/Wildlife Habitat.
- Metro identified as a Habitat of Concern.
- NOAA designated shallow water as Critical Habitat for endangered fish.
- Oregon Department of Fish and Wildlife identified as a Conservation Opportunity Area.

- Oregon Department of Fish and Wildlife designated the forests as Category 2 habitat ("essential and limited").



West Hayden Island as a Regionally Significant Industrial Area

Since incorporating WHI into the UGB in 1983, Metro has anticipated future industrial development to occur on the island. In 2004 Metro designated West Hayden Island as a Regionally Significant Industrial Area "with site characteristics that are relatively rare in the region that render them especially suitable for industrial use" (Metro Ordinance 04-104B; MC 3.07.130). Metro's land designations are intended to guide future growth within the region. Designating an area as "regionally significant" implies that the area has special characteristics that make it appropriate for future industrial development. In the case of West Hayden Island, the area is in close proximity to the region's transportation infrastructure, including rail and marine routes, highways and the Portland Airport.

The City is in the process of updating its Comprehensive Plan. A component of that update is complying with Statewide Planning Goal 9 (Economic Development) and the mandate in its implementing rules that the City complete an inventory and analysis of the supply of land

available for future employment growth (the Economic Opportunities Analysis or EOA). The EOA concludes that the City of Portland may need an additional 580 acres of land for traded sector transportation facilities, such as airport facilities, rail yards and marine terminals. Region-wide, including Vancouver, the marine terminal need alone is projected at 570 acres. City inventories suggest that there is an effective supply of about 100 acres of available vacant industrial land in the harbor area (in Oregon, not including WHI). The Bureau of Planning and Sustainability estimates that the Port of Vancouver has about 350 acres of vacant land in reserve for future marine terminal growth.

The lack of available marine industrial land over the long-term may create a constraint on the City's economy within the foreseeable future. The effective supply of riverfront land along the Willamette could potentially be increased to as much as 200 to 300 acres with aggressive clean up of contaminated sites and a land assembly program. That said, sites along the Willamette do not have access to the 43-ft deep navigation channel of the Columbia River ~~Slough~~, which allows access for a greater variety of ocean-going vessels used in international trade. None of the potential marine terminal sites along the Willamette River meet the dimensional requirements for modern "unit train" rail access, and much of the potential acreage consists of smaller sites that cannot be assembled into a sufficiently sized parcel for a marine terminal.

Traded sector industries are a significant component of the city's job base. Overall, traded sector activity accounted for an estimated 61% of the transportation sector and 43% of the wholesale trade sector in the Portland metropolitan regions. Studies of proposed WHI terminal development estimate that the development could generate between 900-1200 direct jobs and between 2,300 and 3,600 total jobs. Allowing opportunities for future growth of these facilities contributes to the health of harbor and transportation industries and provides incentives into the maintenance of the infrastructure serving those industries.

III. West Hayden Island Planning Process

The present planning process for WHI has occurred in two phases. Phase I covered the initial background research up to the summer of 2010 and culminated in the adoption of City Council resolution 36805 (Attachment A). Staff are now completing Phase II, which included additional technical studies, and the development of a concept plan and a legislative proposal for City Council to consider.

This legislative proposal includes draft Comprehensive Plan changes, Zoning Code amendments, maps and a draft IGA — all requirements for annexing WHI into the City. City Council will ultimately vote on the complete package, which will include the recommendations made by the Planning and Sustainability Commission. The table below provides a brief summary, and the phases are described in greater detail below.

Project Timeline

Timeframe	Milestones	Public Events
Winter 2008 – Summer 2010	Environmental and Economic Foundation Studies / City Council Resolution	Community Working Group Meetings / Open House City Council Hearing
Fall 2010 – Winter 2012	Concept Plan / Technical Studies	Advisory Committee Open Houses / Office Hours City Council Work Session
Spring - Fall 2012	Staff Proposal for annexation and zoning	Advisory Committee Open Houses / Office Hours/public work sessions
Fall 2012 – Winter 2013	Planning and Sustainability Commission	Public Hearings and Work Session
Spring 2013	Staff Amended Proposal for annexation and zoning	Public Hearings
Spring – Fall~~Summer~~ 2013	Planning and Sustainability Commission and City Council deliberation on annexation and zoning	Public Hearings

Phase I: WHI project begun; Mayor Sam Adams convened Community Working Group (Late 2008 – Summer 2010)

In late 2008, a City-initiated planning effort for WHI began to build on the planning work already being done on the Columbia River Crossing (CRC) project and the East Hayden Island Neighborhood Plan. Then-Mayor Sam Adams created a Community Working Group (CWG) and directed staff to hire consultants to provide key economic and environmental studies.

These studies were intended to help determine whether WHI could be developed for multiple uses, including marine industrial, habitat and recreational. The studies were also intended to help determine whether the land could accommodate these uses while retaining its natural resource qualities and provide economic value to the region.

In early 2009, the CWG was tasked with providing City Council with a recommendation based upon the studies' findings. To help the CWG evaluate the data and develop a recommendation, the City hired ENTRIX to perform additional research and create the set of foundation studies, including:

- Economic Foundation Study
- Environmental Foundation Study
- Recreation Analysis of West Hayden Island
- Integrated Report of Findings

The CWG met for 17 months during more than 76 hours meeting time. In June 2010, the CWG produced a report that articulated members' areas of commonality and the most critical differences, to help City Council decide how to proceed (the full report is included in Attachment B under Public Involvement Process). But the CWG could not reach agreement on a recommendation. On July 29, 2010, after considering the CWG's input and hearing extensive public testimony, City Council passed a resolution directing the Bureau of Planning and Sustainability to continue planning efforts. Resolution 36805 directed BPS to prepare a proposal with at least 500 acres of open space and no more than 300 acres for future deep water marine terminal development.

Through the resolution, Council directed staff to produce and coordinate several additional studies to help inform any future planning decision, including:

- Analyze the costs and benefits of developing part of the island.
- Review the feasibility of other lands in the Portland Harbor for terminal development.
- Consider nature-based recreational opportunities.
- Expand upon a local impacts report produced by the City to assess impacts, such as traffic, noise, dust and light on neighboring properties.

Phase II: Concept Planning and Legislative Process (Fall 2010 – Fall 2012)

With adoption of Resolution 36805, Phase II of the WHI planning process began. Council directed staff to propose a Concept Plan and Legislative Proposal for zoning and annexation. During the fall of 2010 and winter of 2011, staff began the additional background research, hiring the consultants to work on the technical reports. They also set up a new project WHI Advisory Committee (WHIAC) consisting of members of business and environmental groups, community members and regional agency interests. In November 2010 staff also hosted a community involvement summit meeting to develop public involvement strategies for the project moving forward. The WHIAC met a total of 23 times over 2 years to develop the Concept Plan and review and deliberate on a number of additional technical reports. Staff hosted several open houses in June and July of 2012 to provide additional opportunity for community input on the Concept Plan

Several additional technical reports and studies have been completed, both by outside consultants and City staff (see Attachment C for a full description and list of studies), focusing on:

- Rail configuration
- Harbor lands inventory
- Terminal operational efficiencies

- Cost/benefit analyses
- Regulatory requirements
- Natural area land management options
- Local impacts.

Staff has completed a draft update to the City's Environmental Zoning Program for WHI, including the Hayden Island Natural Resource Inventory (HINRI), which documents the existing features and functions provided by WHI habitats, and the Economic, Social, Environmental and Energy (ESEE) Analysis to evaluate the trade-offs associated with different levels of natural resource protection and management. Both the HINRI and ESEE were reviewed by technical experts and the public. The studies are posted on the project's website.

Some of this work helped to inform a Concept Plan that was developed by the project consultant, Worley Parsons, with guidance from the project WHI Advisory Committee (WHIAC). The Concept Plan was intended to help determine whether economically viable marine terminals could be built within the 300 acres area defined by City Council, while also providing opportunities for natural resource protection and enhancement and passive recreation on the remainder. Staff and WHIAC members hosted Concept Plan open houses in October of 2011 (See Attachment B for the full public involvement report).

Using the Concept Plan as a reference point, staff worked with the WHIAC to develop a draft proposal in accordance with City Council resolution of 2010. The first proposed draft was released in August 2012.

During the fall of 2012, staff held additional work sessions with the Advisory Committee to discuss key issues such as transportation, natural resources, and financing. During this time, staff also partnered with the Multnomah County Health Department, Upstream Public Health and Oregon Public Health Institute to complete a Health Analysis on health impacts of WHI development. This study was also reviewed through a work session with the WHI AC and made available to the Planning and Sustainability Commission. Two open houses were held for the public on September 12, 2012 and November 7, 2012, to go over the draft and the updated issues

On November 15, 2012, the Planning and Sustainability Commission (PSC) heard public testimony on the draft proposal. On November 21, 2012, then-Mayor Sam Adams released a second draft of the proposal to capture results of the Health Analysis and provide some updated environmental mitigation and transportation information. During this time the Advisory Committee held their final meeting and released their report, including comments on the Mayor's proposal. This proposal was further discussed at a continued hearing on November 28, 2012, and during a work session on December 11, 2012.

Although the PSC accepted the second draft as the starting point for discussion, they decided to postpone a decision on whether to recommend the annexation to City Council for adoption until after a series of work sessions to discuss key issues. These included community health, natural resource mitigation, transportation and economic/financial feasibility. The commission provided direction to staff on these topics, which resulted in the amended ~~current~~ (third draft) proposal.

The PSC held a public hearing on the amended proposal on May 7, 2013, and held a work session to discuss the remaining issues on May 28, 2013. This June 2013 Amended Proposal incorporates the changes that were requested by the PSC. A final discussion session and recommendation by the PSC is expected on July 9, 2013. Their recommendation will be part of the package submitted to City Council for adoption. The proposed IGA is also subject to Port Commission review and approval.

The HINRI and the ESEE are part of the Zoning Code decision and will be included as appendices to the final recommended proposal given to the City Council. The technical studies will also be made available to decision-makers as background reports to help with their deliberations. Brief summaries of all of these reports are contained in this document as Attachment C. The full reports are available for download and located within the project website under the Phase II Technical Studies.

~~The PSC will hold a public hearing on the proposal on May 7, 2013. Taking into consideration public testimony, the Commission will make recommendations on the land use provisions within the proposal. Their recommendation will be part of the package submitted to City Council for adoption. The proposed IGA is also subject to Port Commission review and approval.~~

Staff Recommendation
The Bureau of Planning and Sustainability is seeking the Commission's recommendation on approval of the Comprehensive Plan and Zoning Amendments within this proposal. The IGA does not need a PSC recommendation because it is not a land use decision; however, the IGA is included with the package to provide context and information. The Commission will make recommendations to City Council whether or not to approve annexation and the proposal elements, including adoption of the:

- Comprehensive Plan Maps and Amendments;
- Zoning Map and Code Amendments, including the HINRI and ESEE;
- IGA between the City and Port; and
- Direct staff to continue to develop findings, create an adopting ordinance and refine the language as necessary.

IV. Amendments to the City's Comprehensive Plan and Transportation System Plan

West Hayden Island is currently outside of the city limits and is subject to Multnomah County Zoning. In order to bring this land within the city limits, the city's Comprehensive Plan must be amended. Portions of the Transportation System Plan (TSP) overseen by the Portland Bureau of Transportation (PBOT) are part of the Comprehensive Plan. The TSP must be compatible with the land use plan being proposed for adoption through the West Hayden Island Plan process

The following amendments are proposed by staff. Staff commentary of the proposed changes is provided on the left-handed pages of the document with proposed map and language changes presented on the right-handed pages.

Note the strike-through / underline text represents the overall staff proposal. There were no changes made to this section as part of the Draft Amendments made between the April and June versions of the draft.

Background

As part of the West Hayden Island planning process, several background studies have been produced to consider the transportation impacts of terminal development on Hayden Island and the surrounding area, as well as a Cost/Benefit analysis of the development envisioned in the concept plan. In many cases, these studies updated work that was originally done in 1998 and 1999 during a previous attempt to annex West Hayden Island.

The transportation studies completed at that time envisioned a potential container terminal in conjunction with a bulk terminal. Responding to these technical findings a new West Hayden Island bridge was incorporated in to the City's TSP and designated as a Priority Truck Street connecting to North Marine Drive, also a Priority Truck Street. However, the current concept plan and annexation process envisions a terminal focused on transshipments between rail or barge and ocean-going vessels. As a result, automobile and truck traffic is expected to be less than what was planned in 1999, with traffic counts between 26 and 40 percent of the previous estimate. These traffic counts may not warrant the investment in a West Hayden Island Bridge.

An alternative access route serving the West Hayden Island industrial area is North Hayden Island Drive, given the practical limitations of constructing a new West Hayden Island Bridge. This arterial street connects to I-5 via the interchange facility on Hayden Island. North Hayden Island Drive also currently provides the primary access route for regional commercial uses on the island and existing industrial uses adjacent to the Burlington Northern Santa Fe railroad. To move forward with this alternative, several amendments are needed to the transportation classifications of North Hayden Island Drive. These amendments are described in the following pages. As a part of project development activities for improvements to North Hayden Island Drive it will be necessary to respond to all of the modal designations and land uses adjacent to the street.

In the event that North Hayden Island Drive can not be improved as envisioned consistent with these street designations, or that updated information finds that the costs and impacts of a new West Hayden island bridge are less than currently determined through the West Hayden Island Plan, it is recommended that TSP amendments be considered that include statements identifying the West Hayden Island bridge as a replacement industrial access facility to North Hayden Island Drive.

The Major Transportation Improvements List, often referred to as the TSP "project list" will be amended to remove the West Hayden Island bridge and instead include North Hayden Island Drive,

The following should be considered as amendments to the Comprehensive Plan and the TSP. These amendments secure the land use plan for the proposed annexed area, and secure the flexibility for future transportation improvements if a bridge to West Hayden Island is not proposed.

Comprehensive Plan Map Amendments

The Comprehensive Plan Map must be amended to include West Hayden Island as part of the City annexation. The amended map shows the land use designations for the island and the water surrounding the island, and will be consistent with the zone mapping. The two applicable Comprehensive Plan designations are "Industrial Sanctuary" which will apply in areas zoned IH, and "Open Space", which will apply in areas zoned OS.


West Hayden Island - Proposed Comprehensive Plan Designations
DRAFT
Proposed Comprehensive Plan
Open Space
Industrial Sanctuary
Taxlots
Official State Boundary Line
City Boundary
BNSF Railroad
OS
IS
N PORTLAND RD
N MARINE DR
N COMBARD ST
Bureau of Planning and Sustainability
NORTH
0
500
1,000
2,000
Feet
November 26, 2012
City of Portland, Oregon // Bureau of Planning & Sustainability // Geographic Information System

Comprehensive Plan Goal Amendments

Goal 5 Economic Development
Policy 5.4 Transportation System

The Federal and State Governments, in conjunction with the Ports of the Lower Columbia River have invested public funds over the past several years to deepen the Columbia River shipping channel between the Pacific Ocean and Portland/Vancouver to a depth of 43 feet. This allows the ports throughout this river system to accommodate the vast majority of ocean-going ships to stay competitive in global trade and transportation. Recent expansions at the Ports of Longview and Vancouver can be traced back to this investment.

The City's Comprehensive Plan Goals do not acknowledge the value of this public project, and do not include any objectives that ensure that the city utilize this investment as part of its multi-modal transportation network. This amendment adds an objective to the City's Economic Development Policy on the Transportation System to ensure that the City take advantage of opportunities to link its transportation system to the Columbia River channel.

Goal 5: Economic Development
Add Objective I to Policy 5.4 of Goal 5 as underlined below:

5.4 Transportation System
Promote a multi-modal regional transportation system that stimulates and supports long term economic development and business investment.

Objectives:

- **A.** Support multimodal freight transportation improvements to provide competitive regional access to global markets and facilitate the efficient movement of goods and services in and out of Portland's major industrial and commercial districts. Ensure access to intermodal terminals and related distribution facilities to facilitate the local, national, and international distribution of goods and services.
- **B.** Use transportation system improvements as a catalyst for attracting industrial and employment development.
- **C.** Work closely with public agencies, such as Tri-Met, and the private sector to deliver an efficient and effective transportation system and network. Improve transit connections between residential communities and work sites.
- **D.** Support transit-supportive development and redevelopment along designated transit streets and in the vicinity of transit stations.
- **E.** Promote safe and pleasant bicycle and pedestrian access to and circulation within commercial areas. Provide convenient, secure bicycle parking for employees and shoppers.
- **F.** Encourage a wide range of goods and services in each commercial area in order to promote air quality and energy conservation.
- **G.** Pursue special opportunities for alternative modes of transportation to serve as attractors themselves. Such projects include water taxis, streetcars and bicycle/pedestrian facilities and amenities.
- **H.** Pursue transportation and parking improvements that reinforce commercial, industrial and residential districts and promote development of new districts.
- **I.** Encourage opportunities to provide multimodal access to the publicly maintained Columbia River Shipping Channel to maintain Portland's role as a maritime and multimodal hub for sustainable global and regional freight movement.

Policy 6.35 North Transportation District.

District Objectives:

Objectives T & U: In conjunction with the changes to the street designations illustrated on the following pages, Policy Objective T is added to guide the necessary improvements that will be needed to North Hayden Island Drive. In the event that North Hayden Island Drive can not be improved as envisioned consistent with the street designations, or if that updated information finds that the costs and impacts of a new West Hayden island bridge are less than currently determined through the West Hayden Island Plan, it is recommended that TSP amendments be considered that include a new district objective identifying the West Hayden Island bridge as a potential replacement industrial access facility to North Hayden Island Drive

Policy 6.36 North Portland District

Amend the North Transportation District Policy Objective as follows to add the following new objectives T and U.

Add Objective T as follows:

T. Identify appropriate improvements to implement North Hayden Island Drive as an industrial access facility to the West Hayden Island while responding to other modal functions consistent with street classifications.

Add Objective U as follows:

U. A new bridge connecting the West Hayden Island industrial area to North Marine Drive shall be considered as a potential replacement industrial access facility alternative in the event that North Hayden Island Drive is not improved for this purpose.

Policy 6.35 North Transportation District

North Transportation District Maps

All Maps:
As a result of the previous transportation studies which considered a container terminal on West Hayden Island, the maps of the North District all included a WHI bridge from Marine Drive. With the current proposal, and restrictions being made to development through the Zoning Code and Intergovernmental Agreement (IGA), staff is recommending to make investments to North Hayden Island Drive instead of planning for a new bridge. To be consistent with this policy decision, Maps 6.35.1, 6.35.2, 6.35.3 6.35.4, 6.35.5, 6.35.6, 6.35.7 are being amended to remove the bridge between West Hayden Island and Marine Drive from the maps, and to include West Hayden Island within the City Limits and the boundaries of the North Portland Transportation District within the maps.

The following additional amendments are needed to specific maps within the district. It should be noted that with the new or remaining designations, it will be necessary to respond to all of the modal designations and land uses adjacent to the street, as a part of project development activities for improvements to North Hayden Island Drive.

It should also be noted that some of these changes update and supersede the map and classification amendments that were made as part of the Hayden Island Plan.

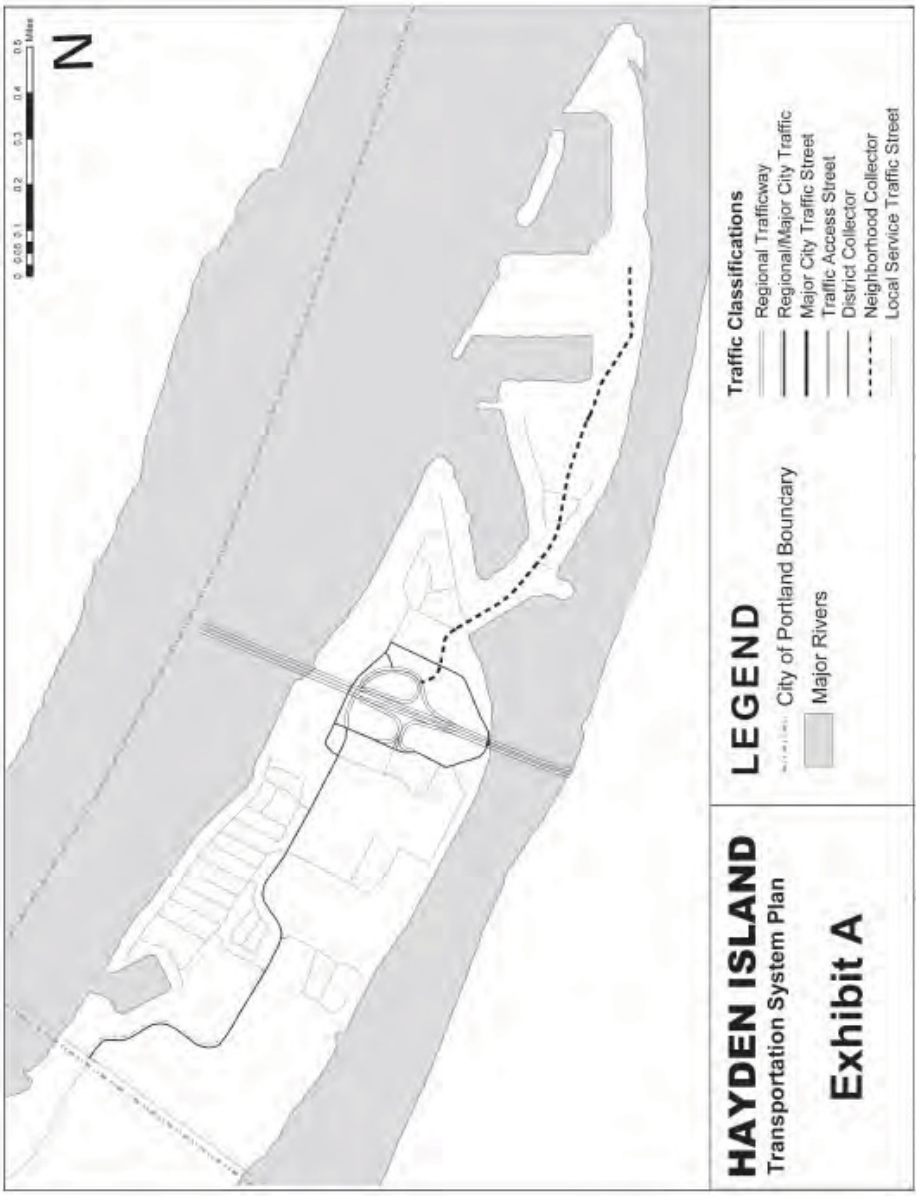
Traffic Classification: With the adoption of the Hayden Island Plan, the traffic classification for North Hayden Island Drive west of I-5 has two segments of traffic designations. Between I-5 and the southern entrance to the Manufactured Home Park (just west of the mall), the street is a District Collector. West of this spot up to the railroad tracks, the street is a Neighborhood Collector. The role of this portion of the street will change when it provides access from the terminal site. As a result, the entire length of the street west of I-5 should be designated as a District Collector.

All Maps for North Portland

Amend Maps 6.35.1, 6.35.2, 6.35.3 6.35.4, 6.35.5, 6.35.6, 6.35.7 to remove bridge between West Hayden Island and Marine Drive from the maps, to expand the City Boundary to include West Hayden Island per the annexation agreement, and to include West Hayden Island within the city limit boundary, transportation district boundary and remove the urban services shading indicating unincorporated area from West Hayden Island, .

Amendments related to specific maps

Amend Map 6.35.1 (traffic classification) to change North Hayden Island Drive from a Neighborhood Collector west of Jantzen Beach Center to a District Collector, as shown in Exhibit A *(originally from Hayden Island Plan)*.



Transit Classification: West of the mall, North Hayden Island Drive is a Community Transit Street. This classification is still appropriate, and no change is necessary.

Bicycle Classification: North Hayden Island Drive is a City Bikeway. Although increased freight traffic may use this street in the future, the classification is still appropriate for streets with a mix of traffic and modes. This route will provide bike access from a future light rail transit station to any future recreational amenities on WHI.

Pedestrian Classification: As part of the Hayden Island Plan, the area around the current Jantzen Beach Supercenter is designated a Pedestrian District. North Hayden Island Drive is also a City Walkway, a designation in effect prior to the Hayden Island Plan. These designations are still appropriate, even with proposed changes the Hayden Island Drive, as the focus of the pedestrian area will be around the light rail transit station and Tomahawk Island Drive.

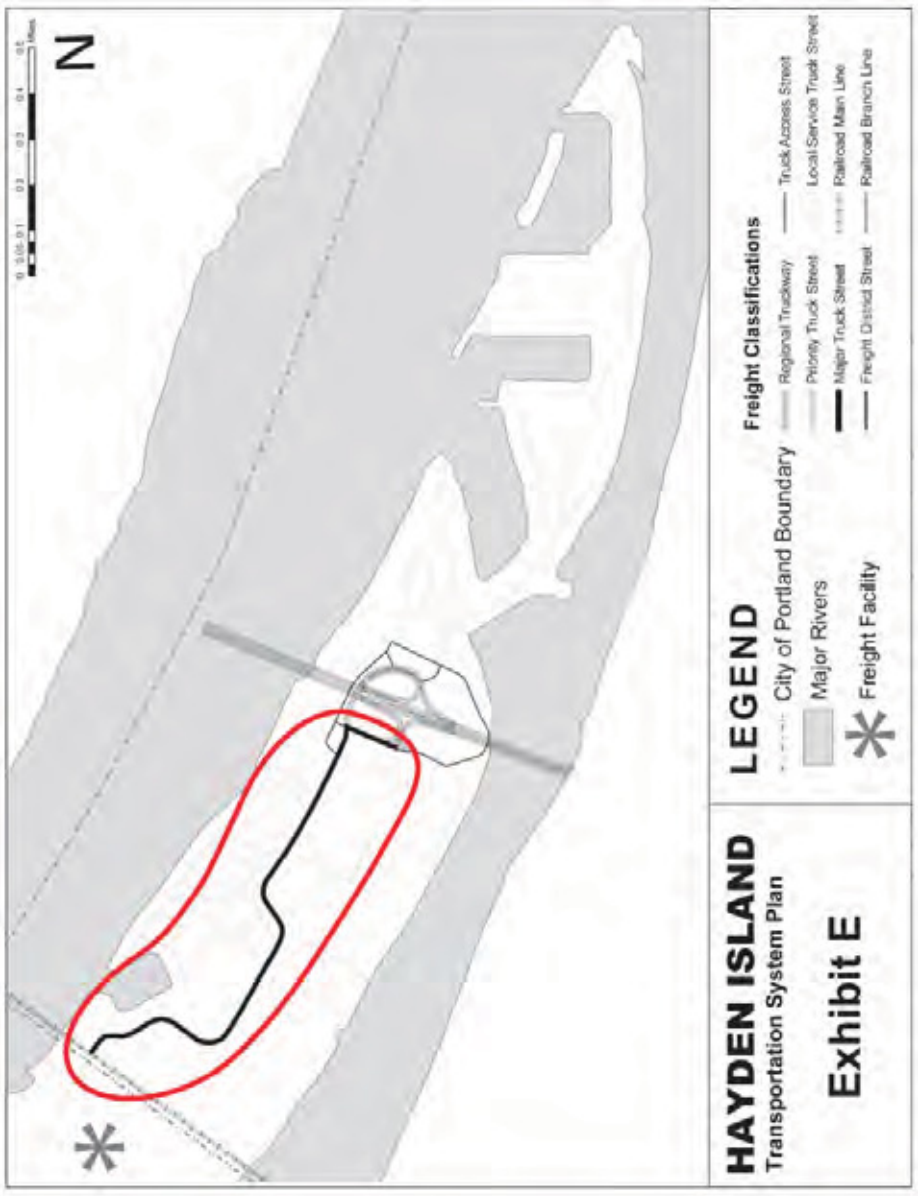
Freight Facilities and Freight Street Classification: Generally, any areas in the city where there are significant facilities for the movement and/or transshipment of freight are classified as Freight Facilities. These generally include marine and air terminals, rail yards, and other areas where two or more freight modes intersect at a hub. The proposed facility at West Hayden Island meets these criteria and should be shown as a Freight Facility. In addition, North Hayden Island Drive is currently designated a Truck Access Street, between Interstate 5 and the railroad bridge. Without a separate West Hayden Island bridge, this road is proposed to be the freight connector between the freight facility and I-5. As such, it warrants a designation of Major Truck Street for North Hayden Island Drive between I-5 and its western terminus as well as for North Center Street, to provide the connection between North Hayden Island Drive and the southbound on/off ramps at I-5.

Map 6.35.2 (transit classification): *no additional change*

Map 6.35.3 (bicycle classification): *no additional change*

Map 6.35.4 (pedestrian classification): *no additional change*

Amend Map 6.35.5 (freight classification) to add a freight facility symbol to West Hayden Island (labeled WHI Terminal) and change North Hayden Island Drive from a Truck Access Street to a Major Truck Street. Amend the portion of Center Avenue between North Hayden Island Drive and the Interstate 5 ramp from a Truck Access Street to a Major Truck Street. See Exhibit E *(originally from Hayden Island Plan)*.

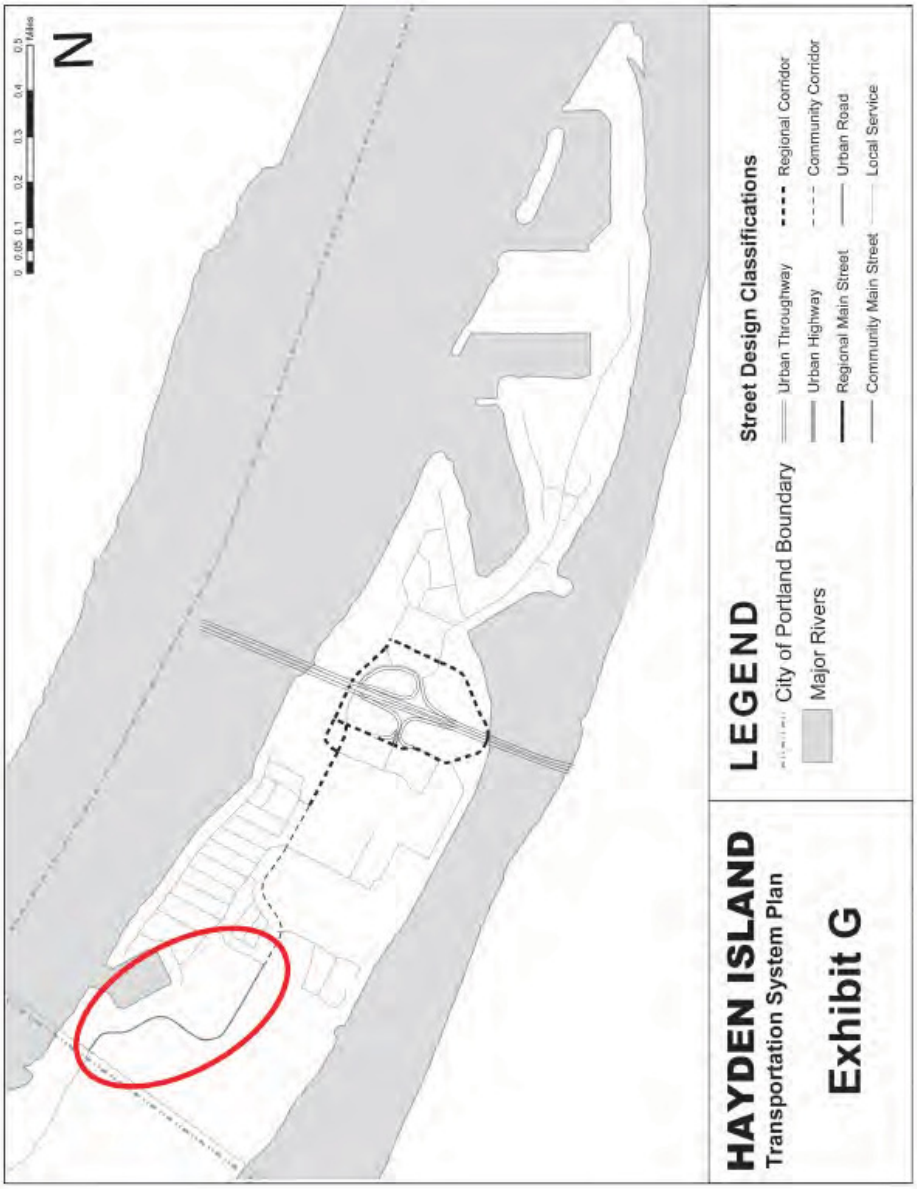


Emergency Access: North Hayden Island Drive is currently designated as a Major Emergency Response Street for the area west of I-5. This designation continues to be appropriate for future development.

Street Design: North Hayden Island Drive features three segments of different designations as part of the approval of the Hayden Island Plan. The street is a Regional Corridor between I-5 and the first northerly entrance to the Manufactured Home Park (just west of the new intersection with newly constructed street). Between this intersection and the furthest west intersection of the manufactured home park (often labeled N. Farr), North Hayden Island Drive is designated as a Community Corridor. Between N. Farr and the railroad, it is labeled as a Local Service Street. This is the area where the street bisects the island's industrial area before ending by the railroad tracks. Since this area, and the potential marine terminal, are industrial uses, the street's related street design, and current development pattern are more consistent with an Urban Road designation

Map 6.35.6 (emergency access): *no change*

Amend Map 6.35.7 (street design) to change the designation of North Hayden Island Drive from Local Service street to Urban Road in the area zoned for industrial uses, as shown in Exhibit G *(originally from Hayden Island Plan)*.



Goal 11: Public Facilities (and TSP Chapter 2, see below)
Goal 11B: Public Rights of Way Goals and Policies

The Hayden Island Plan created a street network for the expansion of public streets throughout the district. However, North Hayden Island Drive was shown to end at the railroad tracks where the city's jurisdiction ends. In order to provide access to the marine terminal site and to provide an opportunity for public recreation access, North Hayden Island Drive needs to be extended past the railroad into West Hayden Island. Map 11.11.20, which is the map associated with the Hayden Island street network is amended to extend North Hayden Island Drive past the Burlington Northern Santa Fe railroad tracks into West Hayden Island.

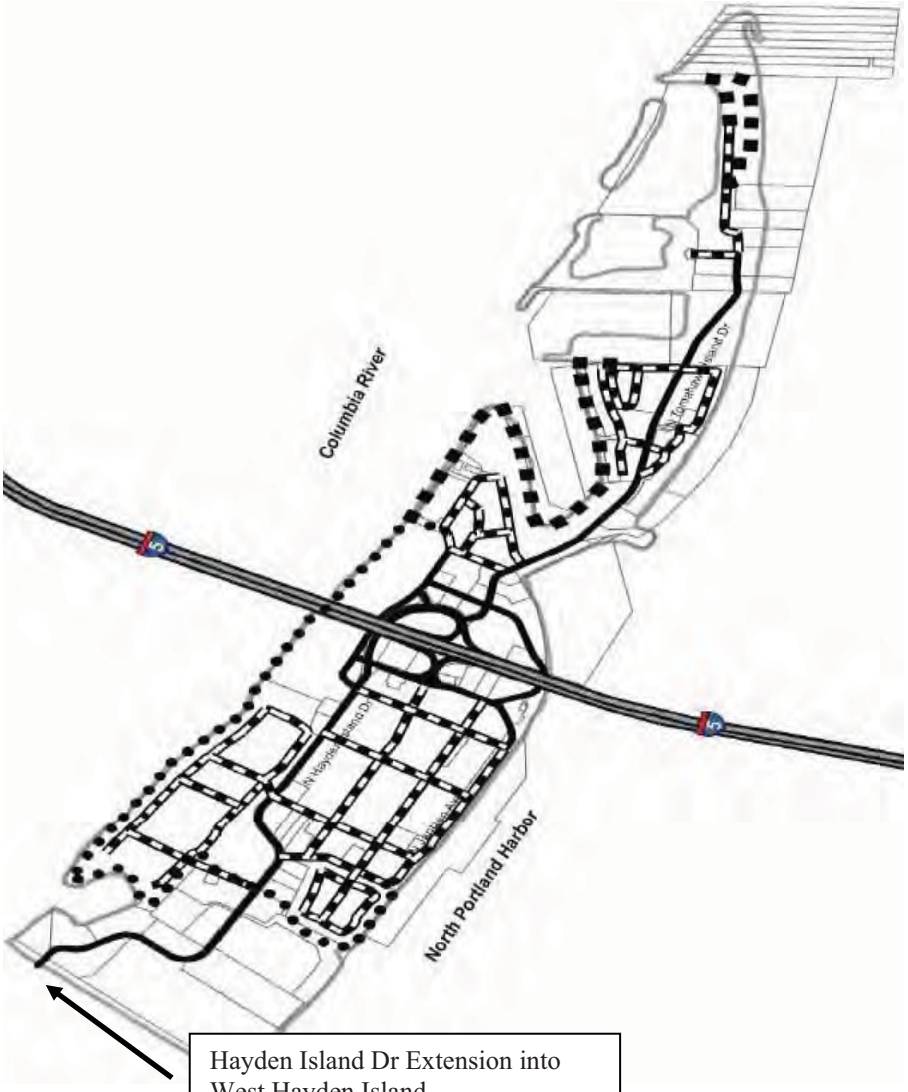
Goal 11: Public Facilities (and TSP Chapter 2, see below)
Goal 11B: Public Rights of Way Goals and Policies

Map 11.11.20 is amended to include an extension of North Hayden Island Drive into West Hayden Island.

11.11 Street Plans

Promote a logical, direct, and connected street system through the development of street plans.

R. Implement the Hayden Island Street Plan as site development occurs as shown on Map 11.11.20.



TSP Amendments

Chapter 2 *of the Transportation System Plan (TSP) contains Goal 6 and Goal 11B of the City's Comprehensive Plan. As a result, any amendments that are proposed to these goals need to be reflected in Chapter 2 of the TSP. The policy amendments use the Comp Plan Goal references within this chapter, and so are categorized by the numbers 6 and 11.*

In concurrence with the Comprehensive Plan Amendments above, the following amendments are required to these sections of the TSP:

Policy 6.29 is amended to include the new objectives added to the Comp Plan above,

Maps 6.35.1 through 6.35.7 are amended to remove WHI bridge and to make the street classifications stated above in the Comp Plan, and

Map 11.11.20 is amended to incorporate the expansion of North Hayden Island Drive into the West Hayden Island plan district.

Chapter 3: *Chapter 3 includes the list of Major Transportation Improvements anticipated to support the growth of Portland over the next 20 years. In conjunction with the amendments to the street designation maps, there are several amendments that are made to the project list.*

Current Project 30053
This is the project covering the construction of the West Hayden Island bridge from Marine Drive. The project was listed for Years 11-20 and had an estimated price tag of $49.8M, which was an estimate from the time it was added. The current estimate for a bridge ranges from $50M to $100M. Since this project is no longer being considered as necessary for development, it will be removed from the project list for North Portland

New Project 30084 (exact number to be determined by PBOT)
The North Portland Transportation District Maps have amendments to increase the traffic, freight and street design classifications for North Hayden Island Drive. These changes are separate from the planned work to help implement the Hayden Island Street network. In order to provide the ability to request funding for this project, a new project needs to be added to the project list.

An amendment is proposed to Projects 30018 and 30083 title, description and timeframe, to include the underlined items

TSP Amendments

Chapter 2 Amendments

Policy 6.35 of Chapter 2 of the TSP is amended to add Objective T & U (as stated above)

Maps 6.35.1 through 7 are amended as stated above.

Map 11.11.20 is amended to include North Hayden Island Drive extension as shown in above street network map.

Chapter 3 Amendments

Project 30053 is removed from the list:
~~West Hayden Island Crossing, N~~
~~*New four-lane bridge from Marine Dr to Hayden Island to serve as the primary access to marine terminals on the island*~~
~~Portland/Port $49,800,000 (Years 11-20)~~

Project 30084 is added as follows:
Hayden Island Drive, N: Street Improvements
Improve North Hayden Island Drive in accordance with its transportation classifications, from the limit of the Columbia River Crossing targeted Improvements to its terminus in the West Hayden Island plan district.
City of Portland $20,500,000 (Years 11-20)

TSP Chapters 5, 10 and 12

The following chapters of the TSP (Ch 5 - Modal Plans, Ch 10 Needs Assessment, and Ch 12 Area Studies) are not adopted as part of the Comprehensive Plan but are intended to provide a summary of policies, existing conditions and deficiencies and implementation measures. These amendments shall be considered draft and will not be adopted as part of the West Hayden Island plan. These are provided for informational purposes and may be revised as part of the next update of the TSP.

Chapter 5 (Modal Plans and Management Plans) *of the TSP contains information about WHI that considers the 1999 transportation analysis and recommends a bridge be provided. These amendments provide additional information within the text that includes the more recent traffic studies and terminal proposals. Previous studies assumed that West Hayden Island could be developed with a container terminal, and did not have any information on a Columbia River Crossing (CRC). As a result, these studies recommended a WHI bridge in the worse case scenario. More recent studies assumed a mixture of bulk and auto terminals, and considered the improvements to the CRC. Under the updated transportation studies, CRC and arterial bridge project, it is unlikely that a new WHI bridge would also be required. The zoning code and Intergovernmental Agreement provides opportunities to require further studies if development is more intense than currently envisioned. The intent of these amendments is to maintain the existing language while providing more updated information. It is anticipated that this Chapter will undergo a larger rewrite in the future that will update the entire section.*

References were made to West Hayden Island on Pages 5-121 & 122 (Recent Freight Studies), page 5-131 (Existing Conditions), 5-133 (Recent Studies and Plans) and 5-136 (Programs and Strategies). These areas are suggested for amendment on the following pages, with the amendments to occur at the time of the next Transportation System Plan update.

The proposed language is shown as underlined, while the removed language is shown as a strike-through.

Pages 5-121 & 122 are amended as follows:

Recent Freight Studies and Plans
Recently completed studies include (additional details can be found in Chapter 12, Area Studies, Volume II of the TSP):

West Hayden Island Marine Terminal Development
West Hayden Island is separated on the south from Portland by the Oregon Slough. The only automobile access to Hayden Island is via I-5 which connect the eastern end of the island to both Portland and Vancouver via the Interstate Bridge. Rail access is provided by a main line of the Burlington Northern Santa Fe Railroad which runs north/south across the center of the island. Through earlier studies, it was determined that a need for future marine industrial use would exist and West Hayden Island was the only major land parcel available to meet this need. More recent studies, completed in 2012 have confirmed the need for West Hayden Island to meet the City of Portland's future industrial land need requirements.

In order to transition the West Hayden Island area to marine terminal facilities and an intermodal rail yard in accordance with the West Hayden Island Development Plan, a transportation analysis was completed in 1999. The purpose of the analysis was to identify specific traffic impacts associated with development of the bulk terminal and the container terminal/intermodal rail yard. The analysis showed that the addition of bulk terminal traffic would have no adverse traffic impacts. The addition of a container terminal(s) and intermodal rail facilities would result in adverse impacts to traffic operation on Hayden Island and at the intersection of I-5 with Marine Drive. At the time a~~A~~ bridge linking West Hayden Island to Marine Drive was proposed in conjunction with development of the marine terminal facilities and the intermodal rail yard. More recent studies that considered a reasonable high impact scenario with a bulk facility, and two auto facilities with associated manufacturing found that this addition would not have an adverse impact on operations on Hayden Island, provided the improvements to the Columbia River Crossing are made to the intersection of I-5 at Hayden Island. ~~Development of West Hayden Island is not occurring immediately because of cost and other issues.~~

Page 5-131 is amended as follows:

Existing Conditions
Portland lies approximately 100 river miles from the Pacific Ocean and serves as the collection and distribution point for goods and produce as much as 360 miles upriver. The Port of Portland owns and operates four shipping terminals (Terminals 2, 4, 5, and 6) and one passenger ship boarding facility at Swan Island. Cascade General leases the Swan Island shipyard (dry dock/ship repair) from the Port. The Port is also planning to develop ~~and is initiating the acquisition of approximately~~ up to 3~~5~~00 acres on West Hayden Island for marine facilities, largely to accommodate growth in ~~container and~~ bulk shipping and car delivery and distribution. Development is not expected to begin sooner than 2020~~While this project is temporarily on hold, it is stilled slated for development in the future~~.

Amendments to 5-133 and 5-136. These amendments are suggested to update the study information provided in these sections.

Page 5-133 is amended as follows:

Recent Studies and Plans (From Modal Plan Development)

West Hayden Island Marine Terminal Development

West Hayden Island is separated on the south from Portland by the Oregon Slough. The only automobile access to Hayden Island is via I-5 which connect the eastern end of the island to both Portland and Vancouver via the Interstate Bridge. Rail access is provided by a main line of the Burlington Northern Santa Fe Railroad which runs north/south across the center of the island. Through earlier studies, it was determined that a need for future marine industrial use would exist and West Hayden Island was the only major land parcel available to meet this need. More recent studies, completed in 2012 have confirmed the need for West Hayden Island to meet the City of Portland's future land need requirements.

In order to transition the West Hayden Island area to marine terminal facilities and an intermodal rail yard in accordance with the West Hayden Island Development Plan, a transportation analysis was completed in 1999. The purpose of the analysis was to identify specific traffic impacts associated with development of the bulk terminal and the container terminal/intermodal rail yard. The analysis showed that the addition of bulk terminal traffic would have no adverse traffic impacts. The addition of a container terminal(s) and intermodal rail facilities would result in adverse impacts to traffic operation on Hayden Island and at the intersection of I-5 with Marine Drive. At the time a~~A~~ bridge linking West Hayden island to Marine drive was proposed in conjunction with development of the marine terminal facilities and the intermodal rail yard. More recent studies that considered a reasonable high impact scenario with one bulk facility, and two auto facilities with associated manufacturing found that this addition would not have an adverse impact on traffic operations on Hayden island, provided the improvements to the Columbia River Crossing are made to the intersection of I-5 at Hayden Island. ~~Development of West Hayden Island is not occurring immediately because of cost and other issues.~~

Page 5-136 is amended as follows:

Programs and Strategies (From Modal Plan Development)

Amend the 5th bullet as follows:

- Annexation of West Hayden Island, expected to provide ~~more than~~up to 3~~5~~00 additional acres for marine-related development for multimodal freight facilities (ship/train)

See Note from Chapter 5. These amendments shall be considered draft and will not be adopted as part of the West Hayden Island plan district. These are provided for informational purposes and may be revised as part of the next update of the TSP.

Chapter 10 (Needs Assessment) *of the TSP is the portion of the TSP that establishes a system of transportation facilities and services adequate to meet identified needs, in conformance with the State Planning Rule (TPR). This chapter includes information about WHI that considers the 1999 transportation analysis and recommends a bridge be provided. The WHI Marine Terminal Development is listed as a recent study. Similar to the change in Chapter 5, this amendment considers the more recent traffic studies and terminal proposals.*

Chapter 12 (Area Studies) *contains summaries of area studies as they relate to transportation infrastructure, which inform the TSP. Within the summary for the St Johns Truck Strategy, there are a few statements regarding future development on West Hayden Island. These are amended to address more recent information and findings.*

Page 10-35 is amended as follows:

West Hayden Island Marine Terminal Development

The West Hayden Island Development Plan calls for a transition of the West Hayden Island area to marine terminal facilities and an intermodal rail yard. In accordance with the plan, a transportation analysis was completed in 1999 to identify specific traffic impacts associated with development of the bulk terminal and the container terminal/intermodal rail yard. The analysis showed that the addition of bulk terminal traffic would have no adverse traffic impacts. The addition of a container terminal(s) and intermodal rail facilities would adversely affect traffic operation on Hayden Island and at the intersection of I-5 with Marine Drive. At the time, a~~A~~ bridge linking West Hayden Island to Marine Drive wa~~i~~s proposed in conjunction with development of the marine terminal facilities and intermodal rail yard. More recent studies that considered a reasonable high impact scenario with a bulk facility, and two auto facilities with associated manufacturing found that this addition would not have an adverse impact on traffic operations on Hayden island, provided the improvements to the Columbia River Crossing are made to the intersection of I-5 at Hayden Island. ~~Development of West Hayden Island is not occurring immediately because of cost and other issues.~~

Page 12-61-62 is amended as follows:

Demographics

Both employment and residential population are anticipated to increase throughout the Columbia Corridor, including the St. Johns Truck Strategy study area. Employment is predicted to increase from 21,344 positions in 1994 to 35,989 positions by 2020, with nonretail employment more than doubling. With one exception, employment increases will occur mostly through infill and expansion. The Port of Portland is expected to provide ~~approximately 4~~up to 300 acres of new industrial land on West Hayden Island for marine-related business. The number of households in the study area is expected to grow from 12,229 in 1994 to 14,984 by 2020.

Transportation

East-west travel in the corridor is accomplished via N/NE Marine Drive on the north edge and N/E Columbia Boulevard and Lombard Street on the south edge. Lombard Street is designated as US 30 Bypass, but passes through concentrations of commercial/retail activity with significant residential use. City street designations encourage the use of Columbia as the primary arterial for east-west truck trips and access to major employers. West of I-5, Marine Drive is expected to provide access to the Rivergate Industrial District, Terminal 6, and potentially ~~eventually~~West Hayden Island, if a bridge is needed to accommodate West Hayden Island traffic impacts.

V. Amendments to Zoning Maps and Code

The purpose of the proposed zoning code provisions is to describe uses to be allowed on West Hayden Island and to describe the limits of the physical development in a way that is consistent with the concept plan created in 2012, and with the City Council's Resolution #36805 adopted in July 2010.

The following includes Zoning Map and Code amendments and a new chapter to be inserted into the City's Zoning Code. These pages are organized as follows:

- Staff commentary explaining the proposed map amendment and code language is provided on the left-handed pages.

- Staff proposed code map/language is presented on the right-hand pages.

Note: Changes made since the April draft are shown as underlined for new text and strike-through for deleted text.

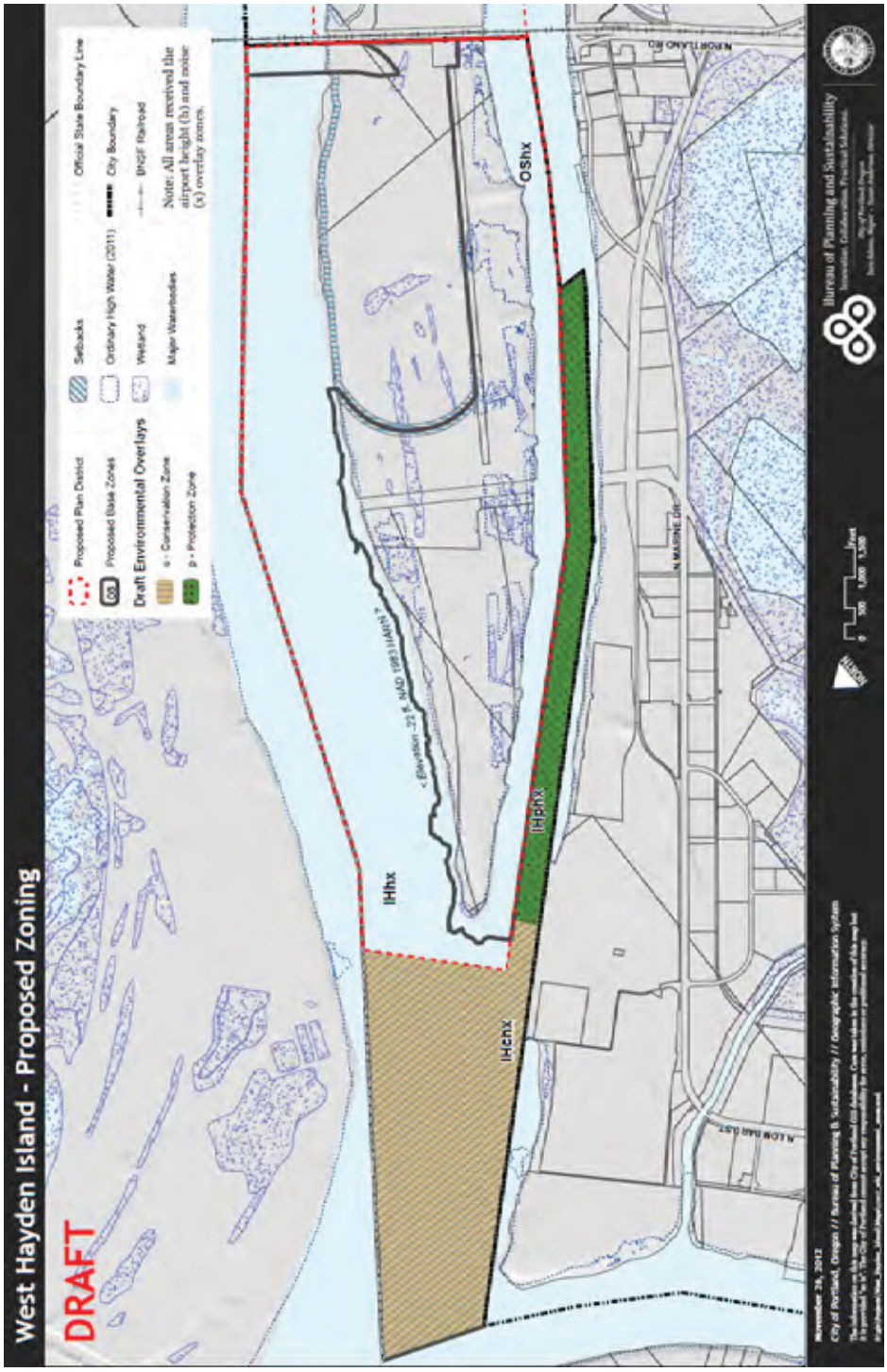
Update of City's Zoning Map

The following map establishes the zoning designations that will apply in the area around West Hayden Island. In addition to addressing the zoning on West Hayden Island, the map clarifies the applicable zoning that applies to the Columbia River around West Hayden Island and out to the Oregon/Washington State Line and the confluence of the Columbia and Willamette Rivers in front of Kelly Point Park.

In addition to the base zones, the airport noise and height overlay zones will also apply to the island. Since all of West Hayden Island and the surrounding waterways that are being annexed are located within either the 55 DNL, 65 DNL or 68 DNL noise contour, the 'x' overlay will apply to the entire area of new zoning. Since the entire area is also within the area subject to airport height restrictions, the newly zoned area will also include the 'h' airport landing overlay zone.

Although special natural resource code provisions will apply within the plan district, there are areas within the Columbia River and Oregon Slough that are being annexed that are not part of the plan district. For the areas outside of the proposed plan district, the completed Economic, Social, Environmental and Energy (ESEE) analysis recommends that an environmental conservation "c" overlay apply in the Columbia River, and an environmental protection "p" overlay to the Oregon Slough.

BASE and OVERLAY ZONING DESIGNATIONS

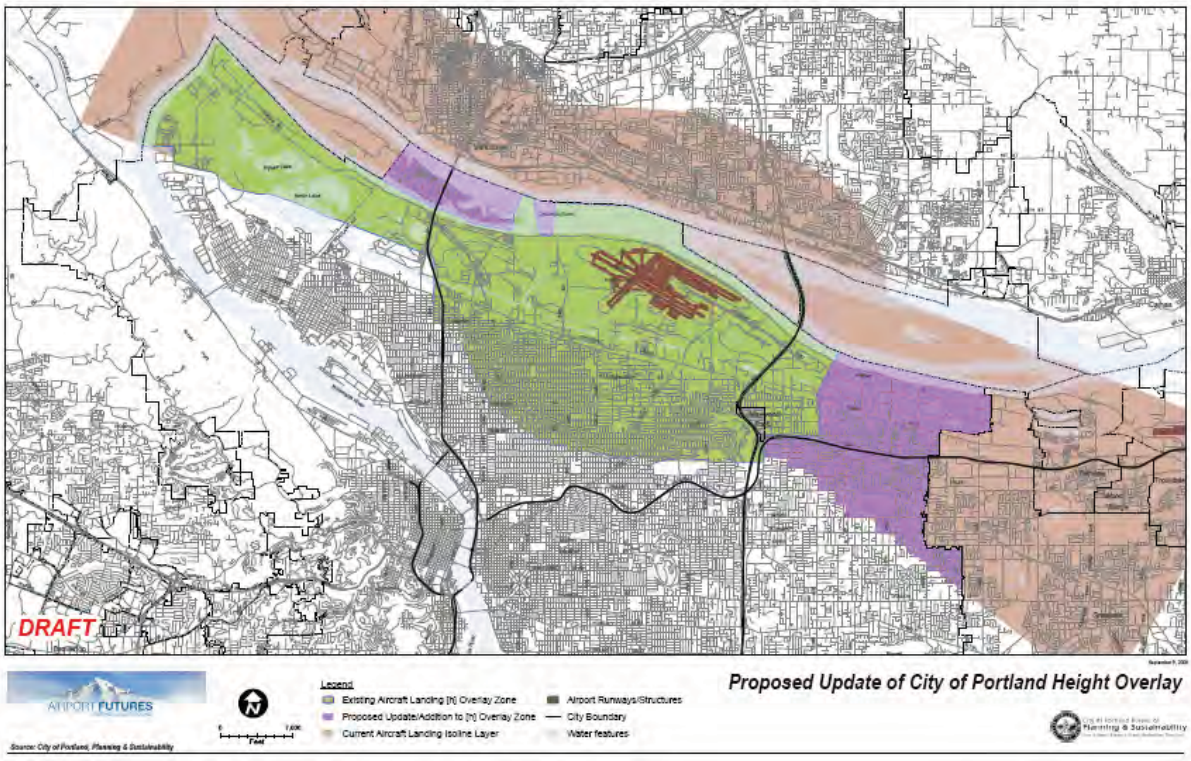


CHAPTER 33.400
AIRCRAFT LANDING OVERLAY ZONE

Map 400-1 Aircraft Landing Overlay Zone Boundary

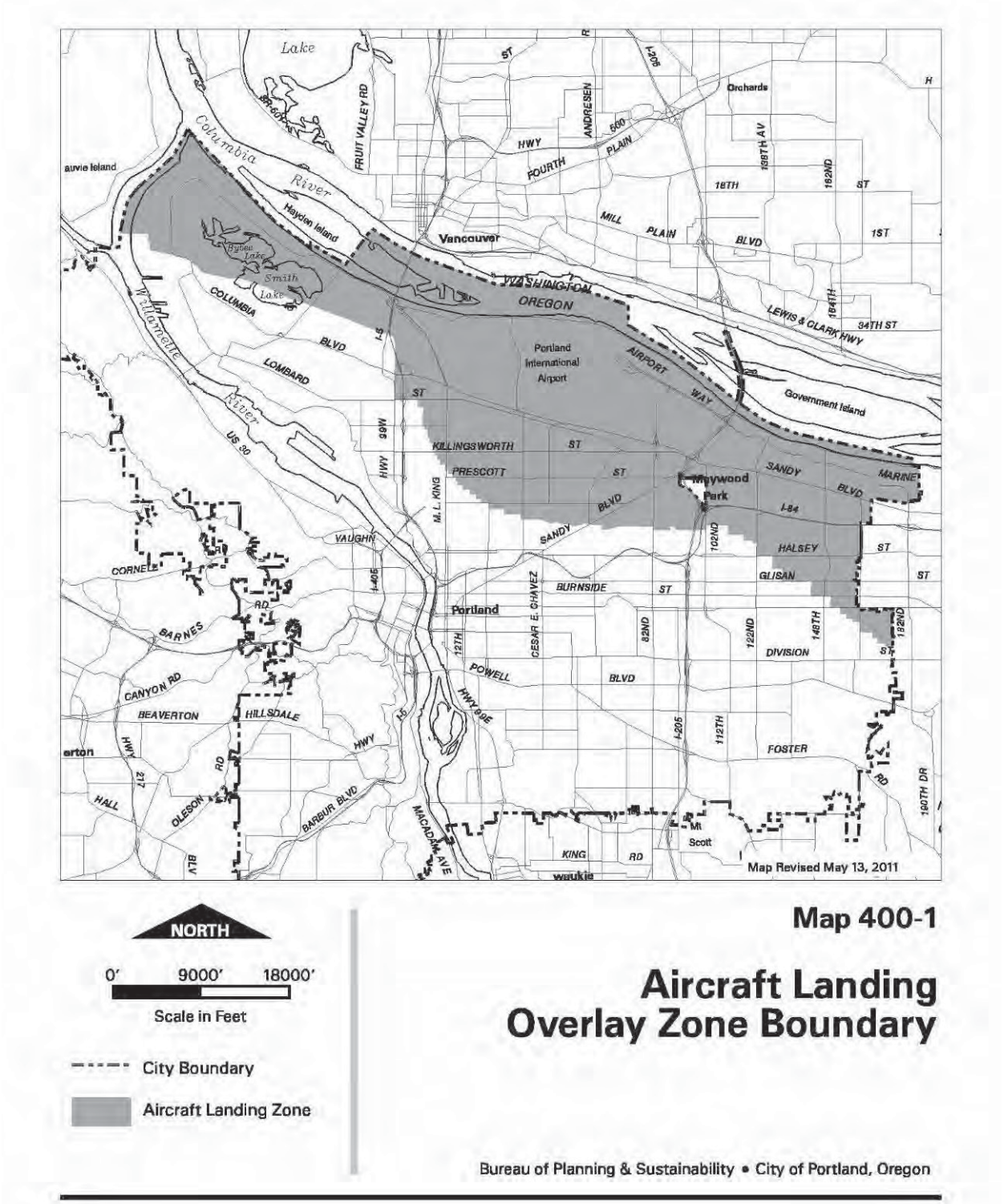
During the Airport Futures planning process, it was discovered that the regulations for the Aircraft Landing Overlay Zone had not been updated to include areas that had been annexed to the city (Hayden Island and East Portland) since the creation of the regulation. The Airport Futures added the 'h' overlay to these areas and generated a map (400-1) to include at the end of the overlay regulations, to clarify the applicable areas. The map was adopted as part of that project, but was omitted from the official Zoning Code in error.

West Hayden Island also lies within the area subject to these restrictions, so this map needs to be updated to include all the areas that are now being annexed into the city as part of this planning process. Map 400-1 is being updated to include these areas and will be inserted back within the plan district section of the zoning code.



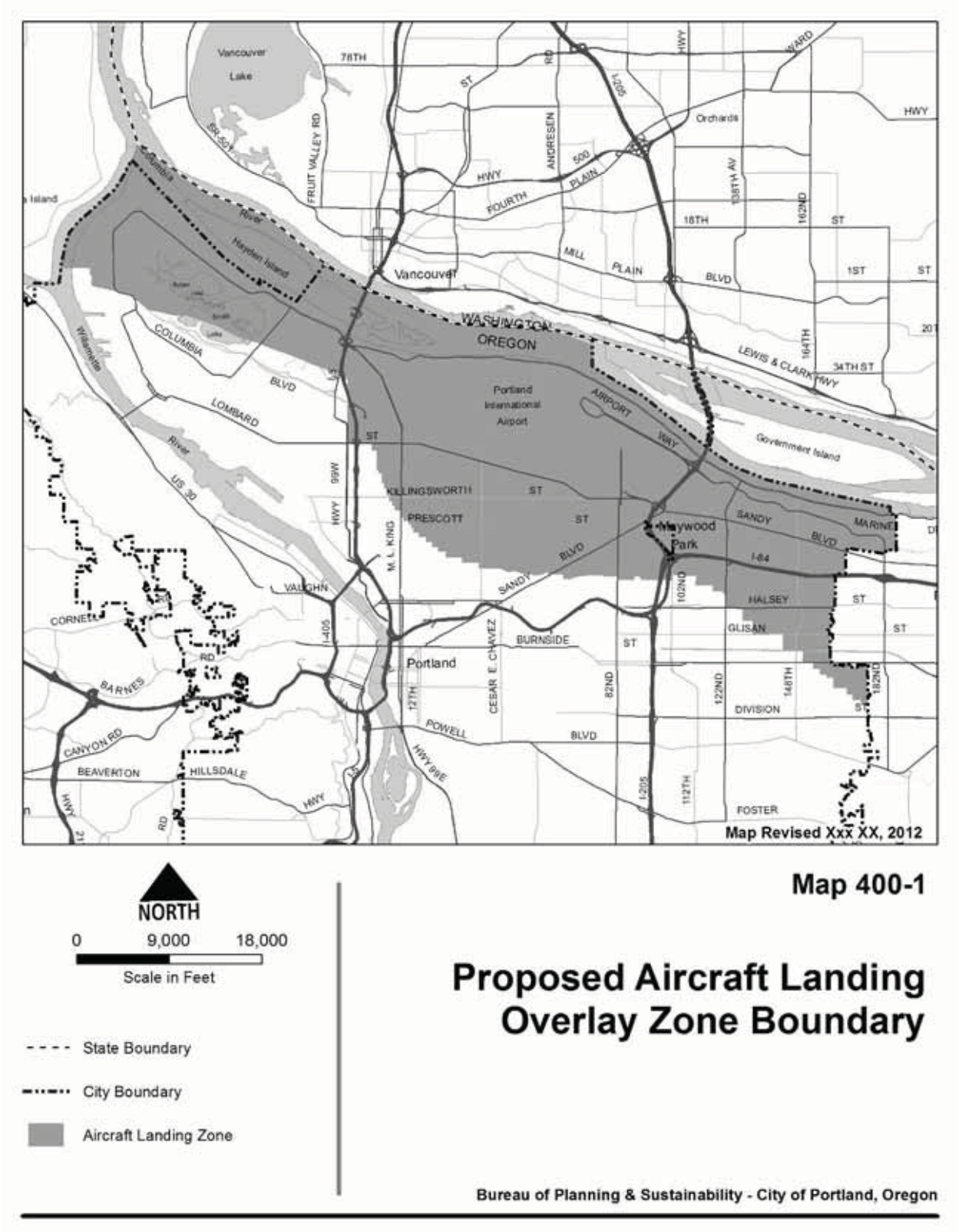
The following page shows the copy of the current map for the Overlay Zone.

This is the current Overlay Zone Map



The following page presents the replacement map.

This is the proposed Overlay Zone Map



CHAPTER 33.595
WEST HAYDEN ISLAND PLAN DISTRICT

33.595 West Hayden Island Plan District

This is a new chapter for the regulations that will apply in the West Hayden Island Plan District. The boundaries of the plan district are shown at the end of the chapter. The regulations of the plan district supersede the base zone regulations. The characteristics of the economic and environmental features of the island warrant the establishment of a separate plan district. The establishment of the specific regulations is intended to satisfy a requirement from Metro's Title 13 that the city adopt a district plan for West Hayden Island. A table of contents is provided at the beginning of the chapter. The plan district incorporates the newly annexed area of the island from the Burlington Northern / Santa Fe rail line on the east to the shallow water beyond the tip of the island on the west. It also includes a portion of the Columbia River, adjacent to the island.

CHAPTER 33.595
WEST HAYDEN ISLAND PLAN DISTRICT

33.595.010 Purpose

A purpose statement is required to explain the rationale for the regulations. The purpose statement provides a summary of the economic and natural resource features of the plan district and the need for the regulations to meet the multiple objectives of the plan district.

33.595.020 Where These Regulations Apply

This section clarifies the boundaries of the plan district which include the physical land and the surrounding water.

33.595.030 Relationship to Other Regulations

This section provides information on other regulations potentially applicable to the plan district, and clarifies the relationship between regulations under this title, other city titles and state and federal regulations. In some cases, proposals will need to incorporate all of these regulations to gain approval from the various agencies. Approval by one agency does not waive the need to meet the standards of a regulation from another agency, unless that waiver is specifically stated.

General

33.595.010 Purpose

The West Hayden Island plan district provides opportunities for the development of a new deep-water marine terminal while preserving the open space areas within the plan district for natural resource protection, environmental enhancement and mitigation uses, and low impact recreation. West Hayden Island is a significant economic, natural and public resource. West Hayden Island is located at the Columbia River's confluence with the Willamette River and is adjacent to a deep-water navigation channel. Interstate 5 and a mainline railroad cross Hayden Island providing transportation access to the plan district. West Hayden Island provides significant wildlife habitat for migratory and resident species.

33.595.020 Where these Regulations Apply

The regulations of this chapter apply to the West Hayden Island plan district. The boundaries of the plan district are shown on Map 595-1 at the end of this chapter, and on the Official Zoning Maps.

33.595.030 Relationship to other Regulations

This chapter contains only some of the City's regulations for the plan district. Other chapters of the Zoning Code may apply in the plan district, including the Noise Impact Overlay Zone, and the Aircraft Landing Overlay Zone. Activities the City regulates through the Zoning Code may also be regulated by other state and federal agencies~~ at the state and federal level~~, including the regulation of wetlands, areas below ordinary high water and the potential discovery of archeological resources. Applicants should be aware of any state and federal regulations that may apply to development in the plan district. City approval of uses or activities under 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.

33.595.040 Special Deep-water Marine Terminal Use Category

This is a new use category that will apply only within the West Hayden Island plan district. The use category describes the operations that are associated with marine terminals engaged in shipping products on ocean-going vessels either as exports or imports. This use category is referred to in the following sections on allowed and prohibited uses.

33.595.040 Special Deep-water Marine Terminal Use Category
Nothwithstanding any limitations in 33.140.100, Table 140-1, and 33.920-.300 – 33.920.350, t~~T~~his special use category applies only in the West Hayden Island plan district.

A. Characteristics. Deep-water Marine Terminals are intermodal facilities that provide access between the Columbia River shipping channel and land-based transportation modes. Goods and materials are loaded on or off ships and stored on site. Goods and materials may be transferred to other modes of transport such as rail or trucks, and they may also undergo additional processing, manufacturing or packaging before being transferred to the other transportation modes. Docks, conveyance systems and other facilities are used to transport the materials between the ships and the site. The goods are generally transported between local, regional and North American firms and firms located overseas. Few customers come to the site.

B. Accessory Uses. Accessory uses may include docking facilities including the moorage, loading and unloading of river barges, warehouses, outdoor storage yards, rail spur or lead lines, truck and auto fleet parking, vehicle or ship maintenance areas, offices, cafeterias and employee break areas, security areas, and parking.

C. Examples. Examples include grain terminals and grain elevators, terminals for the transfer and processing of dry bulk such as fertilizers or minerals, auto import or auto export terminals including post-processing facilities, and break-bulk terminals that transfer miscellaneous goods and container terminals.

Use Regulations

33.595.100 Uses in the IH zone

This section lists the allowed and prohibited uses in the IH zone in the plan district and supersedes the use table in the base zone. The section includes the Deep-water Marine Terminal Use Category under both the allowed and prohibited sections, depending on the types of materials being transported. Certain other existing and potential uses are listed, including the mooring of boats within waters controlled by Department of State Lands, but the intent of this section is to encourage a specific type of industrial development (i.e. a deep-water marine terminal), while limiting the types of uses allowed overall in the IH zone.

33.595.110 Uses in the OS Zone

This section supersedes the use table in the base OS zone. The section limits parks and open space uses and provides geographic limitations to those parks uses that it allows. The intent is to allow limited recreational development on the eastern portion of the island and preserve the western portion for existing and enhanced natural resources. The section also provides clarity that certain utilities that are already on the island can continue, and allows utilities ~~and small scale energy systems~~ that serve an allowed use on the site, which is similar to the base zone. The mooring of boats and ships in the water of OS zones is also allowed to continue.

Use Regulations

33.595.100 Uses in the IH Zone.

A. Allowed Uses. The following uses are allowed in the IH zone in the West Hayden Island plan district.

1. Deep-water Marine Terminals except as stated in Subsection C, below.

2. Stockpiling of sand, gravel, or other aggregate materials including the placement of dredge materials and associated operations such as dewatering of the materials;

3. Mooring of ships and barges within the water;

4. Basic Utilities;

5. Parks and Open Areas;

6. Rail Lines and Utility Corridors;

7. Railroad Yards; and

8. Radio Frequency Transmission Facilities. Some facilities are allowed by right. All facilities are subject to the standards of ~~ See~~ Chapter 33.274.

B. Limited Uses. Manufacturing and Production, Industrial Service, or Warehouse and Freight are allowed uses if they handle, produce, or use materials that are shipped through a ~~have a functional and economic reliance upon the~~ deep water marine terminal that is located in the plan district.

C. Prohibited Uses. The following uses are prohibited in the IH zone in the West Hayden Island plan district:

1. Deep-water Marine Terminals that transport or process coal or liquefied natural gas; and

2. All other uses not listed in Subsections A or B.

33.595.110 Uses in the OS Zone

A. Allowed Uses. The following uses are allowed in the OS zone in the West Hayden Island plan district.

1. Utility Corridors within areas shown on Map 595-1.

2. The following Basic Utilities are allowed:

   a. Water ~~and sewer~~ pump stations and conveyance systems;

   b. Sewage disposal, pump stations, and conveyance systems; and

   c. Basic Utilities that serve an allowed ~~primary~~ use are considered accessory to the ~~primary~~ use being served.

33.595.110 Uses in the OS Zone (contd)

3. Specific uses in the Parks and Open Areas category are allowed within the following ~~certain~~ geographic areas ~~as stated below~~:

   a. Within the area west of the Bonneville Power Administration right-of-way, as shown on map 595-1, uses in the Parks and Open Areas category are limited to existing and enhanced natural areas or nature preserves .

   b. Within the Bonneville Power Administration right-of-way, as shown on map 595-1, and within the area east of the Bonneville Power Administration right-of-way, uses in the Parks and Open Area category are limited to existing and enhanced natural areas or nature preserves and outdoor recreation that consists of recreational trails, interpretive centers, picnic shelters, restrooms, viewpoints, maintenance buildings and a non-motorized boat launch.

4. Mooring of ships and barges within the water; and

5. Parking and other accessory uses ~~Driveways to~~ intended to provide access to allowed uses in the plan district.

B. Limited Uses. Basic Utility Uses not allowed by Subsection A are Conditional Uses.

C. Prohibited Uses. Uses not listed in Subsections A and B are prohibited in the plan district.

Development Standards

33.595.200 Additional Standards

This section provides additional setback standards from the Columbia River and from the Open Spaced zoned forest to the west of the terminal.

A. Setback from the river. The intent of the river setback is to require all development, except specific development that requires river access (e.g., dock ramps, outfalls, beach trail), to be located at least 100 feet upland from the ordinary high water mark of the Columbia River. The goal is to minimize the impacts of development on shallow water habitat, and preserve the public access to the beach. These regulations will work in conjunction with the natural resource regulations listed later in the chapter to limit impacts.

The ordinary high water mark (OHWM) is a measurement that is considered by the Army Corp of Engineers (ACOE) along the length of the Columbia River to determine their jurisdiction. This mark can vary over time and over geographies, resulting in the OHWM being at one elevation at one end of the island and another at the other end. During the development of the West Hayden Island Natural Resources Inventory (NRI), the city used the ACOE's 2004 calculated elevation of 17 feet NGVD29, which was based on survey points within the river. There have been subsequent analyses done without survey points that indicated a potential lowering of the OHWM. However, for the purposes of the NRI analysis and subsequent regulations, the more conservative figure of 17 feet will be used which will preserve a larger portion of the beach area. If this measurement changes significantly over time, a subsequent legislative process can be used to amend the zoning code.~~During the summer of 2012, BPS staff used the current information provided by the ACOE along with Lidar imaging data and mapped out the general location of the OHWM. However, development proposals in the future will need to indicate the location of the OHWM as part of future permits or land use reviews~~.

4. Exceptions~~**Exemptions**~~**.** The intent of these regulations is to ensure that the characteristic of the river is maintained within the setback. Exceptions to the setback ~~Specific exemptions~~ are provided for recreational trails within the setback to encourage the development of a waterfront trail between the port facility and the beach. Exceptions are also provided ~~Allowances~~ for the provision of docks and other structures that need to be connected to the water, ~~are provided~~ to ensure an economically viable port. However, development in the river setback is subject to the plan district's Environmental regulations. Generally, these exceptions ~~exemptions~~ provide for development that can meet the West Hayden Island environmental standards and regulations, but if not, development will be required to go through a West Hayden Island Resource review.

Development Standards

33.595.200 Additional Setbacks. The following setbacks apply in addition to other required setbacks:

A. Setback from the river.

1. Purpose. The purpose of the river setback is to provide public access to the beach, protect and maintain existing natural resources located within the setback, and minimize impacts from industrial development on shallow water habitat.

2. Where the setback applies. The setback applies within the IH zone.

3. Setback. ~~Unless exempted in paragraph A.4 below,~~ D~~d~~evelopment must be setback 100 feet landward from the Ordinary High Water Mark of the Columbia River. For the purposes of the regulations of this chapter, the Ordinary High Water Mark is defined as the point measured at the elevation 17 feet NGVD29~~determined in accordance with the US Army Corp of Engineers definition and protocol, and must be shown on the site plan~~.

4. Exce~~m~~ptions. The following development is allowed within ~~is exempt from~~ the river setback:

   a. Trails, including signage;

   b. Docks and dock ramps that provide access to a dock;

   c. Cargo conveyors;

   d. Outfalls and pipes;

   e. Ground water monitoring wells and water quality monitoring stations;

   f. Natural resource enhancement and mitigation; and

   g. Temporary structures for construction staging and access to the site, and for conveyance of dredge materials when the following are met:

      1. The structure will not be in place for more than 180 days; and

      2. If the structure will cross over, or block the recreational trail for more than 90 days, a temporary trail is provided.

B. Setback from OS Zone. The intent of the OS setback standard is to limit development impacts to the adjoining habitat in the Open Space (OS) zone and maintain tree canopy coverage as a buffer between uses. This is accomplished both through direct development limits, and by requiring excepted development to meet the Environmental Standards listed later in the chapter, or go through a West Hayden Island Resource Review. The intent is to ensure that the trees removed are replaced, through standards or a review, at a density that preserves closed canopy forest.

2. Where The Regulations Apply. The regulations apply to the curved area adjacent to a potential rail loop within ~~first 100 feet of~~ the IH zone adjacent to the OS zone to provide a buffer at the edge of the IH zone. Map 595-2 is provided at the end of the chapter to clarify the location.

3. Setback ~~Area Regulations~~. Development, clearing and grading are required to be setback 100 feet from the western zone line boundary between the IH and the OS zone. Limited ~~to the~~ exceptions to the setback are allowed below ~~in order to maintain the forested buffer that exists in this area~~.

4. Exceptions. Within the 100 foot setback, a limited set of exceptions provides a small amount of flexibility in the case that the final design of the rail loop or edge of the development doesn't conform with the designs developed during the Concept Plan for the island. These exceptions apply generally to development related to the perimeter of the marine terminal. However, the area where exceptions may be allowed contains a large number of trees, so development in the OS setback is subject to the Environmental Regulations later in this chapter. Generally, the standards will require the replacement of trees to ensure the maintenance of the forest canopy.

B. Setback from OS Zone.

1. Purpose. The purpose of this setback ~~area~~ is to preserve tree canopy within the IH zone as a vegetated buffer between the deep-water marine terminal and the OS zone. Preserving trees within the setback ~~area~~ will help to reduce the detrimental impacts of heavy industrial development on the natural resources and functional values that exist within the OS zone west of the IH zone. The setback ~~area~~ will also provide space for the placement of future rail infrastructure and security infrastructure if necessary to serve the marine terminal.

2. Where the setback ~~regulation~~ applies. The setback applies within the IH zone that is ~~area regulation applies within the 100 foot setback from the OS area~~, adjacent to the OS zone, as shown on map 595-2. Adjustments are prohibited, but modifications may be requested through a West Hayden Island Resource Review.

3. Setback ~~area regulation~~. ~~Unless exempted in paragraph B.4 below,~~ D~~d~~evelopment, clearing, grading and filling must be setback 100 feet from the OS zone, as shown on map 595-2 ~~are prohibited within the setback from OS area~~.

4. Exc~~em~~ptions. The following development is allowed within ~~is exempt from~~ the OS zone setback ~~area regulation~~:

   a. Railroad spur or lead lines and railroad yards associated with a deep-water marine terminal;

   b. Development required to provide security for the deep-water marine terminal;

   c. Driveways; ~~and~~

   d. Groundwater monitoring wells and water quality monitoring stations;

   e. Natural resource enhancement and mitigation including tree and vegetation replacement; and

   d. Clearing, grading and filling that is required in order to construct the development allowed in subparagraphs B.4.a through B.4.c.

C. **Setback from IH Zone.** The intent of the IH setback standard is to further limit development impacts to the adjoining habitat in the Open Space (OS) zone west of the marine terminal by preserving the tree canopy coverage into the OS zone as a buffer between uses. The width of the setback is 100 ft into the OS zone itself, and limits all development, including recreational development with the buffer. Only a single driveway access and environmental mitigation is allowed to cross into the buffer, and it will be subject to the West Hayden Island environmental standards and regulations, including the replacement of trees to ensure a density that preserves closed canopy forest.

C. Setback from IH Zone.

1. Purpose. The purpose of this setback ~~area~~ is to limit the location of recreational improvements ~~and environmental mitigation activities~~ to ensure that they are not located too close to the adjacent industrial zoner~~area~~. The setback ~~area~~, in conjunction with a corresponding setback in the industrial zone, will also help establish a transitional forested buffer between conflicting land uses. .

2. Where the setback~~regulation~~ applies. The setback ~~area regulation~~ applies within the OS zone that is~~100 foot Setback from IH Area,~~ adjacent to the IH zone, as shown on map 595-2. Adjustments are prohibited, but modifications may be requested through a West Hayden Island Resource Review.

3. Setback ~~area regulation. Unless exempted in paragraph C.4 below,~~ D~~d~~evelopment, clearing and grading must be setback 100 feet from the IH zone, as shown on map 595-2~~are prohibited within the Setback from IH Area~~.

4. Exc~~em~~ptions. The following development is allowed within~~is exempt from~~ the IH zone setback ~~area regulation~~:

   a. A driveway that provides maintenance access to uses allowed in the OS zone~~outdoor recreation or to existing or enhanced natural areas or nature preserves~~;

   b. Groundwater monitoring wells and water quality monitoring stations;

   c. Resource enhancement and mitigation including tree and vegetation replacement; and

   ~~d~~b. Clearing, grading and filling required to construct a driveway allowed by subparagraph C.2.a, above.

33.595.210 Maximum Heavy Truck Transportation Impacts

As part of the development of the plan district, initial transportation studies have been run for a variety of scenarios and have determined that the existing street network, with the development of the Columbia River Crossing (CRC), would continue operating at a satisfactory level of service. This means that traffic generated by the development will be using North Hayden Island Drive to access Interstate 5 and the region. There is a concern over the uncertainty of the type of terminal and the amount of traffic it may create, considering that development may not occur for over ten years. The 205-truck threshold that is proposed here ensures that a future Marine Terminal will generate a relatively small number of heavy truck trips. The 205 heavy trucks is considered an adequate average number to allow the operations of two bulk terminals, one auto terminal and marine related manufacturing as proposed in the Concept Plan. This number would be averaged over a monthly basis, and a maximum number of 275 in any single day provides a limited amount of flexibility for brief higher demand periods. If either of the trip thresholds are is exceeded, the Port would be in violation of the code and subject to the Code Compliance process. ~~it~~This would require the Port to either reduce the heavy truck traffic to the levels allowed in the code or to request a legislative amendment to the plan district. The~~is~~ legislative amendment would require approval by the City Council, and would trigger additional transportation studies at that time.

33.595.220 Parking

The existing minimum and maximum parking requirements are based upon certain use and development categories and use the square footage of buildings in these uses to define the number of parking spaces required. Marine terminals have a wide range of potential development patterns, and the amount of building square footage does not relate to the number of employees in similar ways to other uses. As an example, an auto terminal may have very few buildings but a larger workforce than a potash terminal which has a large storage building for the materials but is heavily automated. As a result, it is difficult to apply minimum and maximum parking ranges to the potential development. The code amendment provides flexibility for the Port to provide an adequate number of spaces for employees and customers based upon the market rather than based upon a regulatory requirement.

33.595.210 Maximum Heavy Truck Transportation Impacts

A. Purpose. Deep water marine terminals can have a wide range of transportation impacts depending on the type of materials shipped, their mode of shipping across land, and how the materials are handled on site. The development proposed for West Hayden Island relies primarily on rail and water modes of transportation, and is intended to have a limited impact on the adjoining street network on Hayden Island. The regulations provide a maximum threshold of heavy truck trips that will be generated by the marine terminal development in the plan district. The effect of this threshold is that a legislative project to amend the plan district would be necessary to allow a greater amount of truck traffic. Proposed or expanding marine terminal or industrial development must document that their truck traffic is within the threshold.

B. Maximum Heavy Truck Traffic. The total daily number~~traffic~~ of heavy trucks ~~as defined in Chapter 33.910~~ generated by the marine terminal and associated industrial development is subject to the following standards~~. Adjustments are prohibited~~:

1. The average daily total number of heavy truck trips will~~does~~ not exceed 205 trips;

2. The average daily total number of heavy truck trips is calculated on a monthly basis by dividing the number of total trips in the month by the number of total days in the month; and

3. The maximum daily number of heavy truck trips cannot exceed 275 trips for any single day within the month~~.~~; and

4. Adjustments to this subsection are prohibited.

C. Supplemental Application Requirements. All proposals for new development or expansions of existing development that increase floor area or exterior development by more than 10,000 square feet in the IH zone must provide an estimate of total daily heavy truck trips generated by industrial uses in the IH zone as part of the permit application.

33.595.220 Parking. There are no minimum or maximum parking requirements in the plan district.

Environmental Regulations

The West Hayden Island plan district has its own set of environmental regulations.

33.595.300 Purpose. The purpose statement states the reasons for the application of a set of environmental regulations that are specific to the plan district.

33.595.305 Environmental Report. This section identifies the background document that leads to many of the regulations. The *Hayden Island Natural Resource Plan* is the document that should be referenced whenever there are questions about the types and functions of the resources within West Hayden Island.

33.595.310 Where These Regulations Apply

This section clarifies that the environmental regulations apply only within the boundaries of the West Hayden Island plan district, in areas zoned OS and in areas zoned IH that within water or in proximity to aquatic habitats. This includes areas below ordinary high water mark, within the River Setback and within, or in close proximity to wetlands. For the purpose of these regulations, ordinary high water mark is defined as the elevation of 17 feet NGVD29. This is the elevation that was used for the city's analysis within the Natural Resource Inventory (NRI), and was taken from the Army Corp of Engineers (ACOE) 2004 calculation based upon survey points within the river. There have been subsequent analyses done without survey points that indicated a potential lowering of the OHWM. However, for the purposes of the NRI analysis and subsequent regulations, the more conservative figure of 17 feet will be used which will preserve a larger portion of the beach area. If this measurement changes significantly over time, a subsequent legislative process can be used to amend the zoning code. ~~the measurement determined in accordance with the protocol established by the U.S. Army Corp of Engineers who use this mark to determine regulatory jurisdiction. This agency has estimated this measurement through the Columbia River and Oregon Slough~~.

Environmental Regulations

33.595.300 Purpose

The environmental regulations (33.595.300 through 33.595.610) in the West Hayden Island plan district:

- Protect resources and functional values that have been indentified by the City as providing benefits to the public;
- Provide opportunities for passive recreation;
- Provide opportunities for natural resource conservation, mitigation, remediation, and enhancement;
- Encourage coordination between City, Port, regional, state, and federal agencies with jurisdiction over some or all natural resources on and around West Hayden Island.
- Contribute towards City compliance with regional, state and federal environmental goals and regulations.

33.595.305 Environmental Report

The application of the environmental regulations contained in 33.595.300 through 33.595.610 is intended to protect and conserve specific natural resources and functional values identified in the *Hayden Island Natural Resources Inventory* (April 2013). The report identifies the type, location, extent and relative condition of natural resource features and describes functional values they provide within the study area. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of the report.

33.595.310 Where These Regulations Apply

As shown on map 595-3, the regulations of Sections 33.595.300 through 33.595.610 apply to areas of the plan district within:

A. The Open Space zone; and

B. Areas within the Heavy Industrial zone that:

1. Are located below the ordinary high water mark of the Columbia River and Oregon Slough;

2. Contain wetlands or land within 50 feet of wetlands;

3. Are within the River Setback area; or

4. Are within the Setback from OS Area shown on map 595-2.

For the purposes of the regulations of this chapter, the Ordinary High Water Mark is defined as the point measured at the elevation 17 feet NGVD29~~determined in accordance with the Army Corp of Engineers definition and protocol~~.

33.595.320~~15~~ When These Regulations Apply
This section illustrates the types of development that trigger the Environmental Regulations. These examples are similar to the types of development that trigger the regulations in environmental zones.

33.595.325~~0~~ Items Exempt From These Regulations
This section lists the types of development that are exempt from the Environmental Regulations. Many of these exemptions are similar to exemptions listed in Chapter 33.430 Environmental Overlay Zones. However, some specific exemptions have been added to address circumstances unique to West Hayden Island, such as dredging within the river, and other development that may be associated with docks. If any of these features exceed the amounts allowed through an exemption, a West Hayden Island Resource Review will be required.

D. Existing Development. . . .

3. There is a federally- designated dredge material placement and handling site on West Hayden Island. Map 595-1 shows the extent of the area where dredge material placement, removal and handling is exempt from the environmental regulations of this chapter.

33.595.32~~15~~20 When These Regulations Apply
Unless exempted by Section 33.595.320, the regulations of 33.595.300 through 33.595.610 apply to the following:

A. Development;

B. Removing, cutting, mowing, clearing, burning, or poisoning native vegetation listed in the *Portland Plant List*;

C. Planting or removing plants listed on the Nuisance Plants List;

D. Changing topography, grading, excavating, and filling;

E. Resource enhancement; and

F. Dedication and expansions of public rights-of-way.

33.595.32~~0~~50 Items Exempt From These Regulations
The following items, unless prohibited by Section 33.595.325, below, are exempt from the regulations contained in 33.595.300 through 33.595.610 Other City regulations such as Title 10, Erosion Control, must still be met:

A. Change of ownership;

B. Land Divisions and Property Line Adjustments;

C. Temporary emergency procedures necessary for the protection of life, health, safety, or property;

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

1. Operation, maintenance, repair, and replacement of existing structures, exterior improvements, roads, public recreational trails, public rest points, public view points, public interpretative facilities, and utilities. Replacement is not exempt whenever coverage or utility size is increased;

2. Continued maintenance of pastures, lawns, and other planted areas, including the installation of new irrigation and drainage facilities, new erosion control features, and the installation of plants except those listed on the Nuisance Plants List. Pruning trees and shrubs within 10 feet of structures;

3. Placement or removal of dredge material and related operations in an existing federally-designated dredge management area ~~facility~~, as show in map 595-1;

4. Removal of existing structures. Removal is not exempt whenever there is ground disturbance;

5. Alterations to buildings that do not change the building footprint and do not require adjustments to site-related development standards;

33.595.325~~0~~ Items Exempt From These Regulations (contd)

E. The following new development. . . .

1. West Hayden Island may be used as a receiving site for enhancement actions performed as mitigation ~~or enhancement related~~ for impacts to natural resource ~~impacts~~ elsewhere in Portland. The ~~impacts of the~~ mitigation actions must be permitted through a state or federal process and may or may not also go through a local environmental review. The mitigation must be for impacts to natural resources located off West Hayden Island but within Portland. A mitigation bank is one example of how West Hayden Island could be used as a receiving site. In this situation, mitigation ~~or enhancement~~ actions on West Hayden Island are exempt.

When a local environmental review is approved for impacts outside the Plan District, the land use is approved for both the impacts and the mitigation actions; no additional West Hayden Island Plan District review is required. This exemption does not apply to mitigation actions done as a result of development impacts on West Hayden Island.

~~Mitigation or e~~Enhancement or restoration performed as mitigation for impacts ~~related~~ to natural resource ~~impacts~~ outside of Portland may go to West Hayden Island but are not exempt and must either meet standards or go through environmental review. Natural resource enhancement is defined as performing actions that improve the condition or functions ascertained with existing natural resources; e.g., removing invasive plants and installing native plants. Enhancement is a type of action that can be performed as mitigation for impacts to natural resources.

6. Operation, maintenance, and repair of the following:

   a. Irrigation systems;

   b. Stormwater management systems;

   c. Pumping stations;

   d. Erosion control and soil stabilization features; and

   e. Municipal sewer conveyance pipes and outfalls.

7. Dredging, channel maintenance and removal of materials as follows:

   a. Dredging within the Columbia River below elevation -14 feet (NAVD88~~) as determined in accordance with the US Army Corp of Engineers definition and protocol~~; or

   b. Channel, slip and berth maintenance that has been approved by the US Army Corps of Engineers.

8. Removing vegetation listed on the Nuisance Plants List;

9. Removing trees or portions of trees when they pose an immediate danger to life safety or property, as determined by the City Forester or an arborist;

10. Exterior work activities on deep-water marine terminal docks, dock access structures or conveyance system structures;

11. Development over existing paved surfaces; and

12. Structures on an existing dock, wharf, or pier.

E. The following new development and improvements:

1. Natural resource enhancement, restoration, or remediation projects performed within the West Hayden Island Plan District as mitigation for impacts outside the Plan District when ~~it meets the following:~~

   ~~a. The enhancement is required to offset impacts to natural resources located within the city limits of Portland outside of the West Hayden Island Plan District; and~~

   ~~b.~~ t~~T~~he enhancement project has been granted ~~obtained~~ a permit from the US Army Corps of Engineers or Oregon Department of State Lands including but not limited to a Clean Water Act 404 permit, Endangered Species Section 7 permit, or permits for work resulting from Natural Resources Damages Assessment.

2. Planting of native vegetation listed on the *Portland Plant List* when planted with hand-held equipment;

3. Public street and sidewalk improvements if the improvements are within an existing public right-of-way used by truck or automobile traffic;

33.595.325~~0~~ Items Exempt From These Regulations (contd)

E. The following new development. . . (contd)

9. An additional special exemption is provided to allow any temporary structures to continue to be used for the existing dredge operations, so that the equipment and structures can cross between the barge and the dredge materials area. However, these temporary structures should not impede the use of any public trail for more than 90 days.

33.595.330~~25~~ Prohibitions

The planting and propagation of nuisance plants is prohibited in environmentally regulated areas of the city. The prohibition is included in this plan district.

4. Groundwater monitoring wells constructed to the standards of the Oregon Water Resources Department, and water quality monitoring stations when access is by foot only;

5. Utilities installed above or below portions of public rights-of-way or within existing utility easements as shown on Map 595-1;

6. 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, and when the disturbed area is restored to its pre-construction condition;

7. Temporary structures located in the IH zone river setback that are used for construction staging and access to the site, or for conveyance of dredge materials

8. Temporary site investigative work including soil tests, land surveys, groundwater and water quality monitoring stations when all of the following are met:

   a. The work is conducted using hand-held equipment only;

   b. The disturbance is temporary;

   c. Disturbance areas are restored to pre-existing conditions; and

   d. No native trees identified in the *Portland Plant List* are removed.

9. Installation of temporary fencing to protect resource enhancement project planting areas, or to close off or control the use of illegal trails. The fence must be removed within 2 years; and

10. Installation of signage as part of public recreational trail and resource enhancement projects.

F. Hand removal of trash, provided that native vegetation is not removed or damaged.

33.595.33025 Prohibitions. The planting or propagation of any plant listed on the *Nuisance Plant List is* prohibited.

Environmental Development Standards

These sections provide a set of development standards to allow limited types of development to occur without having to go through a Natural Resource review, provided they meet the conditions required. The intent is to encourage some types of development to follow a set of non-discretionary standards to provide adequate mitigation for impacts, or to allow certain low impact recreation uses that have a public benefit. If the development cannot meet these standards, it will have to gain approval through a West Hayden Island Resource Review before submitting for permit.

33.595.400 Purpose

This section lays out the purpose for providing a set of Environmental Development Standards within the plan district.

33.595.410 Procedure

This section provides the process for developing under the Environmental Development Standards. Only the types of development listed in these sections can use these development standards. If a development does not comply with these standards and/or does not propose development that is exempt from these regulations, it must go through a Resource Review.

33.595.415~~0~~ Permit Application Requirements

These sections provide the process requirements for proposing development as part of a building permit review under the Environmental Development Standards.

The applicant will need to provide a site plan indicating the existing conditions on the site. This will include the location of all utilities, which includes outfalls and associated armoring, location of wetlands and waterbodies in the vicinity, including the Ordinary High Water Mark (OHWM) described below, vegetative cover including species, trees over 6 inches in diameter and topography.

~~As part of these requirements, the applicant will need to provide~~ T~~t~~he location of the Ordinary High Water Mark (OHWM) i~~as~~ defined by the Army Corp of Engineers. This mark can fluctuate over time and geography, and was mapped ~~as of 2012~~ for illustrative purposes (see map 595-3). For the purposes of the NRI analysis and subsequent regulations, the figure of 17 feet NGVD29 has been used, and will be the elevation used for the city's regulations. ~~However, future permits and land use reviews will need to secure updated elevation information from the Corp at the time they are submitted.~~

Environmental Development Standards

33.595.400 Purpose

The environmental development standards are intended to:

A. Minimize impacts on natural resources and functional values;

B. Provide clear limitations on disturbance;

C. Ensure that new development and alterations to existing development are compatible with and preserve the natural resources and functional values protected by the environmental regulations; and

D. Provide clear planting and erosion control requirements.

33.595.410 Procedure

Compliance with the standards of Sections 33.595.500 through 33.595.570 is determined as part of the building permit or development permit application process and is required for all development. When a proposal cannot meet a standard, or when there are no applicable standards, the proposal must be approved through a West Hayden Island Resource Review. Discretionary review is required only for the portions of the development that cannot meet the applicable standards. Where a proposal can meet the standards, the applicant may choose to go through the discretionary review process, or to meet the objective development standards. Modification of any of these standards requires approval through a West Hayden Island Resource Review.

33.595.41~~0~~5 Permit Application Requirements

A building permit or development permit application that is reviewed for compliance with the standards of this chapter requires more information than a permit not affected by these provisions. The information in Subsections A and B must be submitted with permit application plans. Submission of the information in Subsection C is optional.

A. An existing conditions site plan including:

1. Outline of any existing disturbance area, including existing utilities~~y~~ and outfall pipes and associated armoring ~~locations~~;

2. Location of any wetlands or water bodies on the site or within 100 feet of the site. This includes the location of the following:

   a. top of bank;

   b. ordinary high water ~~mark as determined in accordance with the US Army Corp of Engineers definition and protocol~~;

   c. shallow water habitat is defined as the area between the ordinary high water mark and elevation -14 feet (NAVD88) ~~in accordance with the by the US Army Corps of Engineers definition and protocol~~;

   d. centerline of stream; and

   e. wetland boundary as appropriate;

33.595.415~~0~~ Permit Application Requirements (contd)

33.595.420 Standards for Dock Ramps and Cargo Conveyors.

These standards provide an option to allow dock ramps and cargo conveyors to provide access between the terminal and the dock without requiring a WHI Resources Review. The primary standard is that there are no footings between the ordinary high water mark and the lower extent of shallow water habitat~~ as defined by the U.S. Army Corps of Engineers~~. In addition, the size of the dock ramps and cargo conveyors is limited and any trees removed must be replaced. The purpose of these standards is to minimize impacts to critical fish habitat. If any of these standards cannot be met, then the development must go through environmental review.

3. Vegetative cover on site, indicating species composition;

4. Within the disturbance area, all trees that are more than 6 inches in diameter must be indicated by size and species; and

5. Topography shown by contour lines at 2 foot vertical contours in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater.

B. Proposed development plan including:

1. Outline of the proposed disturbance area, including all areas of proposed utility work;

2. Location and description of all proposed erosion control devices;

3. A stormwater management plan;

4. A landscape plan indicating the size, species, and location of all vegetation to be planted; and

5. Where applicable, the location and specifications of the site enhancement option with dimensions and a list of Nuisance or Prohibited Plants to be removed,

C. Photographs of the site are not required but are encouraged to supplement the existing conditions site plan.

33.595.420 Standards for Dock Ramps and Cargo Conveyors. The following standards apply to dock ramps and cargo conveyors in the IH zone. All of the standards must be met.

A. There are no footings located within shallow water habitat. Shallow water habitat is defined as the area between the ordinary high water mark and elevation -14 feet (NAVD88~~) in accordance with the by the US Army Corps of Engineers definition and protocol~~;

B. The ramp or cargo conveyor does not block or physically preclude a trail in the River Setback.

C. A single ramp or cargo conveyor is no more than 60 feet wide, and the cumulative width of all ramps and cargo conveyors in the plan district does not exceed 250 feet; and

D. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

33.595.425 Standards for Rail and Security

These are standards for rail and security facilities located within the IH zone. These standards only apply in the areas in the IH zone that are subject to the environmental regulations as stated in 33.595.310. Development associated with rail and security facilities is allowed provided there are no impacts to wetlands or land within 50 feet of wetlands and that tree removal/replacement standards are met.

33.595.430 Standards for Utility Lines

These are the standards for utility lines. They are a modified version of the standards of Chapter 33.430 Environmental Overlay Zones, but with allowances for work within an existing utility easement and a different set of tree removal/replacement standards.

33.595.440 Standards for Development Associated with Uses in the Parks and Open Areas Category.

This section provides several sets of standards to address many of the parks and open space development that was envisioned in the West Hayden Island Final Base Concept Plan. These include standards for trails and viewpoints, non-motorized boat launches, and possible parking areas and structures that could be affiliated with parks and open space uses, such as trailhead or beach parking or a smaller structures that could provide park interpretive or management facilities or a covered rest area.

Other parks development or parks development not specifically addressed under these standards (or through any exemptions above) would need to receive approval through a Natural Resource Review.

A. Trails and Viewing Areas. These provide a series of standards to allow a trail network to be constructed without requiring an environmental review. The maximum width of 60 inches should allow for a trail to be built that meet ADA standards. A limited number of viewing areas that were shown as part of the Concept Plan will be allowed as part of this network. Trees that are removed will need to be replaced to ensure the maintenance of the tree canopy on the island.

33.595.425. Standards for Rail and Security.
The following standards apply to railroad spur, lead lines, railroad yard, security facilities and associated clearing, grading and fill located in the IH zone. All standards must be met.

A. There is no filling or grading with wetlands or land within 50 feet of wetlands; and

B. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

33.595.430 Standards for Utility Lines
The following standards apply to utility lines, except outfall pipes and structures associated with an outfall pipe, which are addressed in 33.595.480. All of the standards must be met.

A. Disturbance area. When a utility line is located outside of an existing right of way or utility easement, the disturbance area may be no greater than 10 feet wide. Existing utility easements are shown on Map 595-1. There is no disturbance area limitation on utility lines located within an existing utility easement;

B. The construction of a utility line may not occur within 100 feet of the top of bank of a stream channel, wetland, or water body or below the ordinary high water mark of the Columbia River or Oregon Slough; and

C. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

33.595.440 Standards for Development Associated with Uses in the Parks and Open Areas Category.
The following standards apply to development associated with uses in the Parks and Open Areas Category. All of the standards must be met.

A. Trails and viewing areas. The following standards apply to trails and viewing areas:

1. The trail may not be greater than 5 feet wide;

2. The disturbance area for the trail may not be greater than 15 feet wide.

3. Except as allowed by subparagraph B.5.a, the disturbance area associated with a trail must be set back at least 50 feet from the top of bank of a stream channel or wetland, or be located landward of the ordinary high water mark of the Columbia River or Oregon Slough;

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

5. Viewing areas developed in conjunction with a trail must meet the following:

   a. The viewing area is not located within a stream channel, wetland or water body;

   b. No more than four viewing areas are allowed within the OS zone in the plan district;

33.595.440 Standards for Development Associated with Uses in the Parks and Open Areas Category. (contd)

B. Boat Launches. The Concept Plan considered several possible locations to place a non-motorized boat launching area. These standards provide an opportunity for a single, smaller hand boat launch to be created on WHI without requiring a land use review. A dock or other permanent in-water structure associated with a launch would need to go through environmental review.

C. Parking areas and trailheads. The Concept Plan envisioned the need to accommodate parking and facilities for people using the trails and beach areas on WHI. These standards provide an opportunity for these types of facilities to be developed without undergoing a Natural Resource Review, provided that they are limited in size and location. The intent is to allow structures directly related to trails, non-motorized boat launches and beach access. These structures would include restrooms, buildings that function as visitor centers or provide interpretive information about the natural resources or cultural history of the site, maintenance buildings or structures, and picnic shelters. Larger recreational facilities may be proposed, but would have to be approved through a land use review.

Tree replacement is required to ensure the maintenance of the islands forest canopy.

The intent of requiring fencing to be split rail is to allow for wildlife passage.

c. The maximum permanent disturbance area for each viewing area is 500 square feet; and

d. Bank armoring does not occur below the ordinary high water mark of the Columbia River or Oregon Slough.

~~6. Interpretive and directional signs are allowed only within the permanent disturbance area;~~

6~~7~~. Exterior lights are not allowed; and

7~~8~~. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

B. Boat launches. The following standards apply to boat launches:

1. Boat launches for motorized boats are not allowed;

2. One boat launch for non-motorized boats is allowed within the Plan District;

3. The permanent disturbance area for the boat launch may be located below the ordinary high water mark of the Columbia River or Oregon Slough;

4. No permanent structures may be located below the ordinary high water mark of the Columbia River or Oregon Slough;

5. A trail to access the boat launch is allowed as follows:

a. The permanent disturbance area for the trail may be located below the ordinary high water mark of the Columbia River or Oregon Slough to link to the boat launch to an upland area;

b. The trail width may not be greater than 6 feet wide;

c. The disturbance area for the boat launch access trail may not exceed 15 feet wide;

6. Exterior lights are not allowed; and

7. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

C. Parking areas. The following standards apply to parking areas:

1. The total permanent disturbance allowed for parking areas may not exceed 20,000 square feet;

2. No more than two parking areas for trails, a non-motorized boat launch or beach access are allowed;

3. The permanent disturbance for the parking areas must be set back at least 100 feet from a stream channel, wetland or water body or the ordinary high water mark of the Columbia River and the Oregon Slough

33.595.450 Standards for Driveways

This section provides a set of standards for driveways. It allows the opportunity in limited instances to build a new driveway, or realign an existing driveway to serve uses on the driveway. It requires a bridge crossing for any driveway crossing a water body, and requires mitigation for tree removal.

33.595.460 Standards for Resource Enhancement Projects

If the resource enhancement is not exempt per 33.595.320.E.1, this section provides a set of standards for resource enhancement projects that do not require excavation or fill work within wetlands and do not result in the removal of any native vegetation. Enhancement projects that cannot meet these standards must go through a Natural Resources Review; there are specific approval criteria for enhancement projects.

C.3 The standard for large wood and bioengineered structures is intended to allow use of living and non-living plant materials to reduce localized erosion and improve bank stabilization. Examples of bioengineered structures include bundles of plant materials or soil cells wrapped in biodegradable fabrics.

4. Structures are allowed within the permanent disturbance for the parking areas as follows:

   a. The total maximum floor area allowed for buildings is 5,000 square feet;

   b. Structures must be set back at least 10 feet from the edge of the permanent disturbance area; and

   c. Permanent fencing must be split rail; and

5. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

33.595.450 Standards for Driveways. The following standards apply to driveways.

A. Where a driveway crosses a water body, the crossing must be by bridge, and the foundation or footings of the bridge must be located above the top of bank of the stream channel, wetland or water body or the ordinary high water mark of the Columbia River or Oregon Slough;

B. The driveway may not be greater than 20 feet wide;

C. The disturbance area associated with the driveway may not be greater than 40 feet wide;

D. Driveways serving uses in the parks and open areas category must be paved. Driveways serving other uses do not have to be paved.

E. Exterior lights are not allowed; and

F. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

33.595.460 Standards for Resource Enhancement Projects. The following standards apply to resource enhancement projects. All of the standards must be met.

A. Removing native vegetation listed on the *Portland Plant List* is not allowed;

B. Excavating, filling or grading within a wetland is not allowed;

C. Excavation, fill or grading is allowed below the ordinary high water mark of the Columbia River or Oregon Slough when all of the following are met:

1. The final slope after grading is 20 percent or less (20 percent slope represents a rise to run ratio equal to 1:5);

2. Rock armoring is not used except as allowed for outfalls under 33.595.480; and

3. Large wood and bioengineered structures are placed on the bank below the Ordinary High Water Mark to stabilize the bank.

D. Disturbance areas must be replanted to achieve 90 percent vegetative cover within one year, except within sandy beach areas, or areas located below the ordinary high water mark of Columbia River or Oregon Slough;

33.595.470 Standards for Rights-of-Way

This standard is intended to allow the construction of a public or private right-of-way to provide access from the end of North Hayden Island Drive into the proposed Marine Terminal site. Limitations on distance and location preclude it from being used in internal areas of the island.

33.595.480 Standards for Outfall Pipes and Associated Structures

This section lays out the standards for outfall pipes that may be necessary to handle stormwater with the development. The amount of linear disturbance for all of these facilities and associated structures such as riprap or rock armoring is limited to 120 feet in the plan district.

33.595.490 Standards for Tree and Vegetation Removal

This section works in conjunction with the previous Environmental Development Standards and with development allowed in the River, OS and IH setback areas, to ensure that trees removed as part of any of the applicable projects covered under the standards provide replacement trees and vegetation within the plan district. The tree and vegetation ratio is sufficient to maintain a full canopy forest for the future in the area of the replanting.

The figure providing an example planting plan is located earlier in the chapter under the OS Setback vegetation replacement subsection.

It is required that trees removed in the River Setback, be replaced within the River Setback. However, trees in the OS setback that are removed may be replaced either in the OS setback or within the IH setback. This is to allow flexibility to adjust to engineering constraints related to development of a rail loop.

E. All vegetation planted must be native and on the *Portland Plant List*; and

F. Except as allowed in paragraph C.3 above, permanent structures are not allowed as part of the resource enhancement.

33.595.470 Standards for Rights-of-Way
The following standards apply to public rights-of-way. All of the following standards must be met.

A. The improved right-of-way provides access from Hayden Island Drive to the area of the plan district that is zoned IH, or to parking associated with a trail or interpretive facility**;**

B. The permanent disturbance area associated with the right-of-way must be set back at least 100 feet from a stream channel, wetland or water body, or be located above the ordinary high water mark of the Columbia River and the Oregon Slough;

C. The paved roadway may not be greater than 40 feet wide and the right-of-way may not be more than 1,000 feet long;

D. The permanent disturbance area associated with the right-of-way may not be greater than 60 feet wide; and

E. The standards of 33.595.490 Tree and Vegetation Removal, must be met.

33.595.480 Standards for Outfall Pipes and other Structures Associated with an Outfall Pipes
The following standards apply to the installation of outfalls pipes. All of the standards must be met.

A. The total width of all outfall pipes, supporting structures, and rock armoring associated with the outfall pipe may not exceed than 120 feet

B. If rock armoring is used, the width may not exceed 1.5 times the width of the pipe;

C. Each outfall pipe may not be greater than 48 inches in diameter;

D. The pipes, supporting structures and rock armoring may not block or preclude a trail in the River Setback; and

E. The standards of 33.595.490, Tree and Vegetation Removal, must be met.

33.595.490 Standards for Tree and Vegetation Removal.
The following standards apply to tree and vegetation removal. All of the standards must be set. Modification of any of these standards requires approval through West Hayden Island Resource Review.

A. Trees and vegetation may be removed in conjunction with temporary or permanent disturbance, development and exterior improvements approved under the standards of sections 33.595.420 through 33.595.450 and 33.595.470 through 33.595.480.

33.595.490 Standards for Tree and Vegetation Removal (contd)

B. Tree and Vegetation Replacement. Trees larger than 6 inches in diameter that are removed must be replaced and must meet all of the following:

1. Replacement planting is based upon the total caliper inches of trees larger than 6 inches diameter that are removed. For every 6 inches of diameter removed, a 100 square foot area must be planted at the following density. See Figure 595-1, Example Planting Plan:

   a. One tree, five shrubs, and four other plants. Trees may be clustered; or

   b. One tree five shrubs, 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.

2. When more than 3 trees are planted, the planting must include at least 3 different tree species and 3 different shrub species;

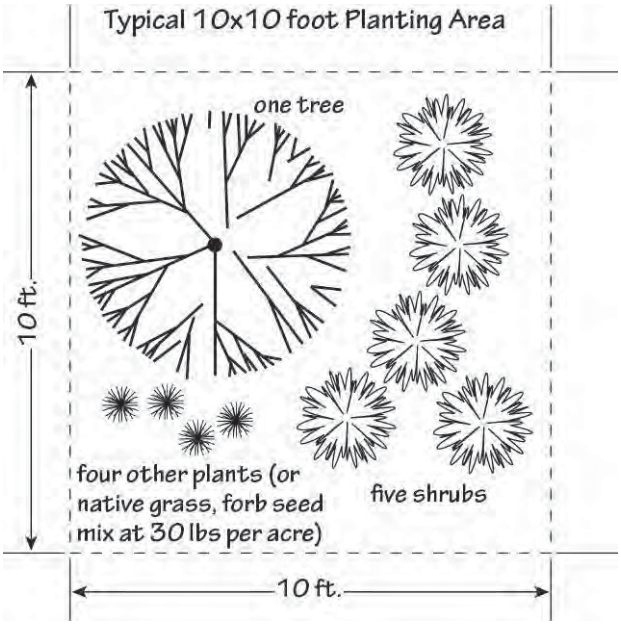
3. Trees removed within the River Setback must be replaced within the River Setback;

4. Trees removed within the Setback from the OS Zone must be replaced either within the Setback from the OS Area or Setback from the IH Area; and

3. Vegetation planted must be native and listed on the *Portland Plant List.*

C. Except within areas located below the ordinary high water mark of Columbia River or Oregon Slough, temporary disturbance areas must be replanted so that the area achieves a 90 percent vegetation cover within one year and vegetation planted must be native and listed on the *Portland Plant List*.

Figure 595-1
Example Planting Plan



West Hayden Island Resource Review

The following pages provide the application requirements, procedures and approval criteria for the West Hayden Island Resource Review. The layout and process closely follow the form of the environmental review process for environmental overlay zones.

33.595.500 Purpose

The purpose of the resource review is stated in this section. The purpose of this review is very similar to the purpose for an environmental review.

33.595.510 When West Hayden Island Resource Review is Required

A Resource Review will be required for any development that is either not exempt, or can't meet the development standards listed in the previous sections.

33.595.520 Procedure

In general, a Resource Review will be a Type II process, which is a public discretionary process that involves a staff decision for approval or denial that can be appealed to a public hearing with the City Hearing's Officer. Resource Enhancement projects will be processed under a Type I process which is a similar public discretionary process to the Type II process, but is only appealable to the State Land Use Board of Appeals.

West Hayden Island Resource Review

33.595.500 Purpose

West Hayden Island Resource Review is intended to:

A. Protect and conserve identified resources and functional values, compensate for unavoidable detrimental impacts, and ensure the success of mitigation and enhancement activities;

B. Provide a mechanism to modify the development standards of this Chapter if the proposed development can meet the purpose of these regulations;

C. Provide flexibility for unusual situations. The review provides for consideration of alternative designs for development that have the least impact on natural resource within the environmental sub-districts;

D. Provide a mechanism for the evaluation of detailed, site-specific information on the location, quantity or quality of resources and functional value;

E. Provide for the replacement of resources and functional values that are lost through violations of this Chapter; and

F. Help the City meet existing and future requirements pursuant to federal and state laws including the Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act, the Migratory Bird Treaty Act, and the National Flood Insurance Act.

33.595.510 When West Hayden Island Resource Review is Required

West Hayden Island Resource Review is required when development is not exempt from the West Hayden Island environmental regulations and either does not meet the environmental development standards of Sections 33.595.420 through 33.595.490, or there are no environmental development standards applicable to the proposal. West Hayden Island Resource Review is also required to correct a violation of this chapter.

33.595.520 Procedure

West Hayden Island Resource reviews are processed through the following procedures:

A. Applications for wetland removal and fill within the IH zone and resource enhancement projects in either the IH or OS zone are processed through the Type I procedure.

B. All other uses and development are processed through the Type II procedure.

33.595.530 Supplemental Application Requirements

This section lists the additional information that is needed to apply for a Resource Requirement. The intent is to give staff adequate information to complete a WHI Resource Review. Much of this section is the same as the requirements for an Environmental Review.

33.595.530 Supplemental Application Requirements

In addition to the application requirements of Section 33.730.060, the following information is required for a West Hayden Island Resource Review application:

A. Supplemental site plan requirements. One copy of each plan must be at a scale of at last one inch to 100 feet. Site plans must show existing conditions, conditions existing prior to a violation, proposed development, construction management and mitigation or remediation. A mitigation site plan is required whenever the proposed development will result in unavoidable detrimental impact on the identified resources and functional values. A remediation site plan is required whenever 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, soil type or wildlife species use may be requested through the review process.

1. Site plans must show the following:

   a. In areas of the site that have been or will be disturbed, or within 50 feet of the disturbance area:

      (1) 100-year floodplain and floodway boundaries;

      (2) The ordinary high water mark~~line~~ of the Columbia River and Oregon Slough ~~as determined in accordance with the US Army Corp of Engineers definition and protocol~~;

      (3) For in-water work, water depth, and shallow water habitat, which is defined as the area between the ordinary high water mark and elevation negative 14 feet (NAVD88)~~, as determined in accordance with the US Army Corp of Engineers definition and protocol~~;

      (4) Location of any stream channels, wetlands, or water bodies on the site or within 50 feet of the site. Indicate the location of top of bank, center line of stream channels or drainageways, or wetland boundary;

      (5) Topography shown by contour lines at two-foot vertical contours in areas of slopes less than ten percent and at five-foot vertical contours in areas of slopes ten percent or greater;

      (6) Drainage patters, using arrows to indicate the direction of major drainage flow;

      (7) Existing improvements such as structures, or buildings, utility lines, fences, etc.;

      (8) Distribution outline of shrubs and ground covers, with a list of most abundant species; and

      (9) Trees greater than six inches in diameter, identified by species. In the case of violations also indicate those that were cut or damaged by stump diameter and species.

   b. In areas of the site that are and will remain undisturbed: Tree crown cover outline, and generalized species composition.

33.595.530 Supplemental Application Requirements (contd)

2. A construction management site plan including:

   a. Areas that will be disturbed and vegetation removal will occur, including equipment maneuvering areas;

   b. Proposed grading plan with existing and proposed contours. The grading plan must show proposed alteration of the ground at 2-foot vertical contours in areas of slopes less than ten percent and 5-foot vertical contours in areas of slopes ten percent or greater;

   c. Location of excavation and fill and total quantities of each;

   d. Areas where existing topography and vegetation will be left undisturbed, including the root protection zone;

   e. Location of site access and egress;

   f. Equipment and material staging and stockpile areas;

   g. Erosion control measures; and

   h. Measures to protect trees and vegetation.

3. An on-site or off-site mitigation or remediation site plan including:

   a. The area of the mitigation size in square feet;

   b. Dams, weirs, culverts, large wood, or other in-water structures;

   c. A planting plan listing all trees, shrubs, groundcover or seeds to be installed including the ratio of seed to area to be planted, species name (common and scientific), number, size and spacing;

   d. Location, species, and size of each tree to be planted;

   d. Stormwater management features, including retention, infiltration, detention, discharges, and outfalls;

   e. Water bodies to be created, including grading contours at 2-foot intervals and depth;

   f. Water sources to be used, including volumes; and

   g. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings.

33.595.530 Supplemental Application Requirements (contd)

B. Supplemental Narrative

1. Impact evaluation. The *Hayden Island Natural Resources Inventory (*DATE) provides site-specific information on natural resource features including:
   - open water;
   - ordinary high water mark and bathymetry;
   - floodplain;
   - wetlands, streams, drainageways and ponds;
   - vegetation including forests, woodlands, shrubs and grasslands; and
   - Special Habitat Areas;

   The *Hayden Island Natural Resources Inventory (April 2013*) provides site-specific information on the functions provided by the 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 corridors;

   The *Hayden Island Natural Resources Inventory (*April, 2013) 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;

   It is expected that docks, dock ramps, cargo conveyors and associated armoring will be located within the IH zone and will impact resources located below the ordinary high water mark of the Columbia River. Applicants do not need to evaluate alternative development locations (on or off-site). The alternative analysis should evaluate alternative locations within the IH zone, and alternative designs and construction methods that have the least detrimental impacts on resources located below the ordinary high water mark in the IH zone.

   It is anticipated that all wetlands within the IH zone will be filled prior to development of a marine terminal facility. Applicants do not need to avoid or minimize impacts to wetlands or evaluate alternative development locations (on or off-site), designs or construction methods. The Environmental Review of impacts to wetlands in the IH zone is confined to review of mitigation alternatives and the adequacy of the mitigation to fully compensate detrimental impacts.

B. Supplemental narrative. The following is required:

1. Impact evaluation. An impact evaluation is required to determine compliance with the approval criteria and to evaluate development alternatives. The alternatives must be evaluated on the basis of their impact on the resources and functional values of the site. In the case of a violation, the impact evaluation is used to determine the nature and scope of the detrimental impacts. The evaluation must also consider the cumulative impacts on that system. The impact evaluation is based on the resources and functional values identified as significant in the adopted *Hayden Island Natural Resources Inventory (April 2013).*

   a. An impact evaluation includes:

      (1) Identification, by characteristics and quantity, of the resources and functional values found on the site. At a minimum the natural resource features and functions identified in the adopted *Hayden Island Natural Resources Inventory (April 2013*) must be addressed in the impact evaluation.

      (2) Evaluation of alternative locations, design modifications, or alternative methods of development that both achieve the project purpose, taking into account cost and technology, and minimize detrimental impacts on identified significant resources and function values; except under the following circumstances:

      - an alternatives analysis is not required for impacts to wetlands located with the Heavy Industrial (IH) zone; and
      - an evaluation of alternative locations is not required for docks, dock ramps, cargo conveyors, and associated armoring within the Heavy Industrial (IH) zone.

      (3) Identification of significant detrimental impacts on identified ~~signification~~ resources and functional values that are unavoidable.

      (4) When required under (2) above, d~~D~~etermination of the alternative that best meets the applicable approval criteria.

   b. An impact evaluation for a violation includes:

      (1) Description, by characteristics and quantity, of the resources and functional values on the site prior to the violation; and

      (2) Determination of the impact of the violation on the resources and functional values.

33.595.530 Supplemental Application Requirements (contd)

B. Supplemental Narrative (contd)

2. Functional assessment. In addition to local permitting, the applicant may be required to obtain permits from a state and/or federal agency for impacts to one or more natural resources. If a functional assessment is prepared for state or federal permitting, that assessment may be submitted to the City as the impact evaluation. The City may request additional natural resource information not covered in the functional assessment.

3. Supplemental environmental site assessment. Natural resources change over time. This allows flexibility for the applicant to bring forward new or refined natural resource data and information as prepared by a qualified professional. Any impact evaluation should cover all of the feature types and functions identified in the *Hayden Island Natural Resources Inventory (*DATE).

2. Functional assessment. A functional 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 functional assessment includes the information described in subparagraph B.1, above. In the event that the applicant submits a functional 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 functional assessment and, if necessary, identify which pieces of information will be included in the impact evaluation. For example, the relationship of the features impacted to the features and functions to be left undisturbed; or the native fish and wildlife species that will be, or reasonably expected to be, detrimentally impacted by the proposal.

3. Supplemental environmental site assessment. A site-specific environmental assessment, prepared by a qualified consultant, to more precisely determine the existence, location, type, extent, and quality of the natural resources and functional values can be provided as part of the supplemental narrative. The assessment may verify, supplement, or challenge the information in the City's inventory for the purpose of informing the impact evaluation and identifying mitigation obligations;

4. Construction management plan. Identify measures that will be taken during construction or remediation to protect the remaining resources and functional values at and near the construction site and provide a description of how undisturbed areas 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. A narrative describing the mitigation site's existing conditions and desired future conditions; resources and functional values to be restored, created, or enhanced; and how the proposed actions adequate replace the resource and functional values impacted;

    b. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;

    c. Construction timetables;

    d. Operations and maintenance practices;

    e. Monitoring and evaluation procedures;

    f. Remedial actions for unsuccessful mitigation;

    g. Information showing compliance with Section 33.248.090, Mitigation and Restoration Plantings; and

    h. If off-site mitigation is proposed, demonstration that on-site mitigation is not practicable or ecologically beneficial.

33.595.540 Approval Criteria

There are three sets of approval criteria that are intended to apply to any development on WHI that needs to go through a Resource Review.

A. General Criteria. The majority of these proposals would need to meet the General Criteria which are intended to minimize the impact to resources, ensure the least amount of detrimental impact, and to provide mitigation to compensate for any detrimental impact. Mitigation should be on West Hayden Island unless it is unfeasible.

2. It is expected that docks, dock ramps, cargo conveyors and associated armoring will be located within the IH zone and will impact resources located below the ordinary high water mark of the Columbia River. Applicants do not need to evaluate alternative development locations (on or off-site). The alternative analysis should evaluate ~~alternative locations within the IH zone, and~~ alternative designs and construction methods that have the least detrimental impacts on resources located below the ordinary high water mark in the IH zone.

   It is anticipated that all wetlands within the IH zone will be filled prior to development of a marine terminal facility. Applicants do not need to avoid or minimize impacts to wetlands or evaluate alternative development locations (on or off-site), designs or construction methods. The Environmental Review of impacts to wetlands in the IH zone is confined to review of mitigation alternatives and the adequacy of the mitigation to fully compensate detrimental impacts.

   ~~The forest fragmentation would not apply in the IH zone because the environmental regulations only apply to wetlands and shallow water habitat in the IH zone.~~

   ~~Indirect impacts such as noise, light, vibration may occur within areas to be left undisturbed. The mitigation plan should evaluate methods for compensating for indirect detrimental impacts to natural resources and functional values.~~

3. Direct impacts include vegetation clearing; grading, filling or excavation; or other physical alterations to natural resources to be left undisturbed. Indirect impacts include noise, vibration and lighting. It is anticipated that during construction and operation of the marine terminal facilities there will be indirect impacts on the resources to be left undisturbed.

33.595.540 Approval Criteria
A West Hayden Island Resource Review application will be approved if the review body finds that the applicant has shown that all of the applicable approval criteria are met. When West Hayden Island Resource Review is required because a proposal does not meet one or more of the development standards in Sections 33.595.360 through .390, the approval criteria will be applied only to the aspect of the proposal that does not meet the development standard or standards.

A. General Criteria. The following approval criteria apply to all development except resource enhancement projects and corrections to violations. The applicant's impact evaluation must demonstrate that all of the following are met:

1. Proposed development minimizes the loss of identified resources and functional values ~~and mitigation plan results in no net loss of resources and functional values,~~ consistent with the uses that are permitted or allowed within the West Hayden Island plan district;

2. Proposed development locations, designs, and construction methods have the least significant detrimental impact to identified resources and functional values of other practicable and significantly different alternatives including alternatives outside the West Hayden Island Plan District, except as follows:

   a. Within the Heavy Industrial (IH) zone, an evaluation of alternative off-site locations is not required for docks, dock ramps, cargo conveyors, and associated armoring; and

   b. Within the Heavy Industrial (IH) zone, this criterion, A.2., does not apply to impacts to wetlands or land within 50 feet of wetlands.

3 There will be no direct significant detrimental impact on resources and functional values in areas designated to be left undisturbed, including other mitigation sites in the plan district; and

4. The mitigation plan results in no net loss of resources and functional values. The mitigation plan must demonstrate that all significant detrimental impacts on identified resources and functional values, and the interim loss of functional values, will be compensated for. The amount of mitigation due as compensation will be based on the amount and relative condition of the resources and functional values impacted by the proposal, the extent to which the project design minimizes impacts, the uniqueness of the resources and functional values, and the time lag between when the resources and functional values are lost due to the impacts and the point when the mitigation site will achieve full function. To the extent practicable, the resources and functional values restored or enhanced as mitigation must be the same kind of resource, performing the same functional value as the lost resource.

33.595.540 Approval Criteria (contd)

A. General Criteria. (contd)

8. As appropriate, the City will accept mitigation actions permitted by state and federal agencies for impacts to the same resource features as those undergoing an environmental review. However, the City may have additional mitigation requirements to address impacts to features or functions not covered under state or federal permits. For example, if the state and federal permit mitigation actions do not address an *at risk* wildlife species or the relationship between the mitigation site and surrounding habitat, the City may require mitigation actions above and beyond those required for state and federal permitting.

5. Mitigation must occur within the West Hayden Island Plan District when practicable, and ecologically beneficial. Factors to be considered when evaluating this criterion include:

   a. The potential for the long-term success of the restored resources and functional values in the mitigation area;

   b. The amount, size, shape, and connectivity potential of on-site mitigation areas;

   c. 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;

   d. The location of the mitigation area in relationship to surrounding natural resources and land uses; and

   e. Contamination.~~; and~~

   ~~e. Any other site-specific issue or constraint.~~

6. In cases where the proposal is subject to mitigation as the result of ~~obtaining~~ permits obtained from the Oregon Department of State Lands or the U.S. Army Corps of Engineers, the mitigation required for those permits can count toward meeting this mitigation requirement as long as that mitigation is found to adequately compensate for impacts to the identified natural resources and functional values.

7. One of the following exists:

   a. The applicant owns the mitigation site;

   b. The applicant possesses a legal instrument that is approved by the City (such as an easement or deed restriction) sufficient to carry out and ensure the success of the mitigation program;

   c. The applicant can demonstrate legal authority to acquire property through eminent domain; or

   d. The applicant has purchased mitigation credits from a bank approved by the City.

8. 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 resource review must not preclude compliance with decisions made by those agencies.

33.595.540 Approval Criteria (contd)

B. **Resource Enhancement Projects.** A Resource Enhancement proposal that undergoes review need to meet a smaller number of approval criteria that ensure that resources are maintained and there is an improvement in at least one functional value.

C. **Corrections to Violations.** A Correction to a Violation must meet a set of remediation approval criteria in addition to all the general approval criteria. However, it should be noted that certain corrections may be able to meet the standards stated in 33.595.600 through 33.595.610 and avoid going through a land use review.

33.595.550 Performance Guarantees

This language provides the opportunity for the Bureau of Development Services (BDS) to require a performance guarantee to ensure completion of any mitigation.

33.595.560 Special Evaluation by a Professional

This criteria provides a reviewer with BDS to request expert consulting advice to aid the review of a proposal in special circumstances.

33.595.570 Modifications That Will Better Meet West Hayden Island Resource Review Requirements

This criterion is similar to criteria within environmental zones and allows an applicant to request a modification to a development standard if it better protects the natural resources. It cannot be used to modify the environmental development standards stated earlier in the chapter, nor can it be used to modify any use standards.

B. Resource Enhancement Projects. Resource enhancement projects will be approved if the applicant's impact evaluation demonstrates that all of the following are met:

1. There will be no loss of total area devoted to natural vegetation and wildlife habitat;

2. There will be no significant permanent detrimental impacts on any resources and functional values; and

3. There will be a significant improvement of at least one functional value.

C. Corrections to Violations. For corrections to violations of the environmental standards of this Chapter the application must meet all applicable approval criteria stated in subsections A and B above, and paragraphs 1, 2.b and 2.c, below. If these criteria cannot be met, then the applicant's remediation plan must demonstrate that all of the following are met:

1. The remediation is done in the same area as the violation; and

2. The remediation plan demonstrates that after its implementation there will be:

   a. No permanent loss of any type of resource or functional value;

   b. A significant improvement of a least one functional value; and

   c. There will be minimal loss of resources and functional values during remediation until the full remediation program is established.

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

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

33.595.570 Modifications That Will Better Meet West Hayden Island Resource Review Requirements
The review body may consider modifications for site-related development standards as part of the West Hayden Island Resource Review process. These modifications are done as part of the West Hayden Island resource review process and are not required to go through the adjustment process. Adjustments to use-related development standards (such as intensity of use, size of the use, or concentration of uses) are subject to the adjustment process of Chapter 33.805. In order to approve these modifications, the review body must find that the development will result in greater protection of the resources and functional values identified on the site and will, on balance, be consistent with the purpose of the applicable regulations.

Corrections to Violations of the Environmental Regulations of this Chapter

These provisions are similar to the standards to correct violations in environmental zones, and clarify the procedure for correcting various scales of violations. The menu approach allows alternatives to a land use review to resolve violations, especially those of a smaller scale that would benefit from quick corrective response rather than being part of a longer land use review process.

33.595.600 Purpose
The purpose for these options is provided here.

33.595.610 Correction Options
This section spells out the various options for correcting a resource violation. Certain violations may allow for either removing the violation and repairing the damage, retaining the development subject to the violation and meeting a set of mitigation standards, or going through a land use review. In order to use these options, the applicant must show that the violation and resulting corrections meet a set of threshold detailed below. If those thresholds cannot be met, the applicant must go through the land use review, and meet the approval criteria listed in the above section.

Corrections to Violations of the Environmental Regulations of this Chapter

33.595.600 Purpose
The purpose of Sections 33.595.6~~5~~00 and 33.595.610~~505~~ is to ensure the timely restoration and remediation of natural resources and functional values that have been degraded due to a violation of this chapter. These sections establish a process to determine which review requirements will be applied to remedy a violation of the environmental standards in the West Hayden Island Plan District. The type of review required depends on the circumstances of the violation. Section 33.595.505 details methods for correcting such violations and Title 3 of the City Code details the enforcement penalties.

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

A. When these options may be used.

1. If all of the following are met, the applicant may choose either Option One, Option Two, or Option Three described in Sections B through D below:

   a. Cumulatively, no more than 12 diameter inches of trees were removed; and

   b. No ground disturbance occurred riverward of the ordinary high water mark~~line~~ of the Columbia River or Oregon Slough, or within 30 feet of the top of bank of a stream, wetland or other water body;

   c. The correction will remove all illegal development; and

   d. The correction will replant illegal clearing.

2. If any of the following occurred, the applicant may not use Option One, but may chose either Option Two or Option Three:

   a. More than 12 diameter inches of trees were removed;

   b. Disturbance occurred riverward of the ordinary high water mark~~line~~ of the Columbia River or Oregon Slough, or within 30 feet of the top of bank of a stream, wetland or other water body;

3. If the applicant cannot meet Options One or Two, Option Three must be used.

4. If the violation also violates a condition of approval of a land use review, the applicant must use the process described in Section 33.730.140. The applicant may not choose one of the options in this section.

33.595.610 Correction Options (contd)

B. Option One: Remove and Repair. This option results in removal of illegal development and replanting and repair of any damage. All of the requirements of this subsection must be met. Adjustments and modifications to these requirements are prohibited.

1. All items and materials placed in the area of violation are removed and no new disturbance area is created;

2. Any soil compaction resulting from the violation is tilled or otherwise broken up to a depth of 6 inches prior to planting; and

3. Violation remediation planting. The area to be planted is the area disturbed by the violation. All of the following must be met:

   a. The area disturbed by the violation activity must be replanted;

   b. One tree, one shrub, and five groundcover plants are required to be planted for every 50 square feet of planting area. Plants must be native and selected from the *Portland Plant List*;

   c. A second area~~,~~ that is equal in size to the area disturbed by the violation activity must also be replanted as remediation, or seven additional plants as described in B.3.b must be planted on the site for every 50 square feet disturbed;

   d. Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;

   e. Trees must be a minimum one inch in diameter. Shrubs must be a minimum of two-gallon size. All other species must be a minimum of four-inch pots; and

   f. The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met.

4. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. Planted trees must be a minimum one inch in diameter.

33.595.610 Correction Options (contd)

C. Option Two: Retain and Mitigate. This option results in legalizing the illegal development and mitigating for any damage. All of the requirements of this subsection must be met. Adjustments and modifications to these standards are prohibited.

1. The applicable standards in ~~of Chapter~~ 33.595.400~~xxx~~ through 33.595.490 must be met; and

2. Violation remediation planting. The area to be planted is the area disturbed by the violation. Where development is approved for the area disturbed by the violation, an area of the same size elsewhere on the site must be planted. All of the following must be met:

   a. The area disturbed by the violation activity must be replanted;

   b. One tree, one shrub, and five groundcover plants are required to be planted for every 50 square feet of planting area. Plants must be native and selected from the *Portland Plant List*;

   c. A second area that is~~,~~ equal in size to the area disturbed by the violation activity must also be replanted as remediation, or seven additional plants as described in C.2.b must be planted on the site for every 50 square feet disturbed;

   d. Any Nuisance or Prohibited Plants listed on the *Portland Plant List* must be removed from the planting area and within 10 feet of the planting area;

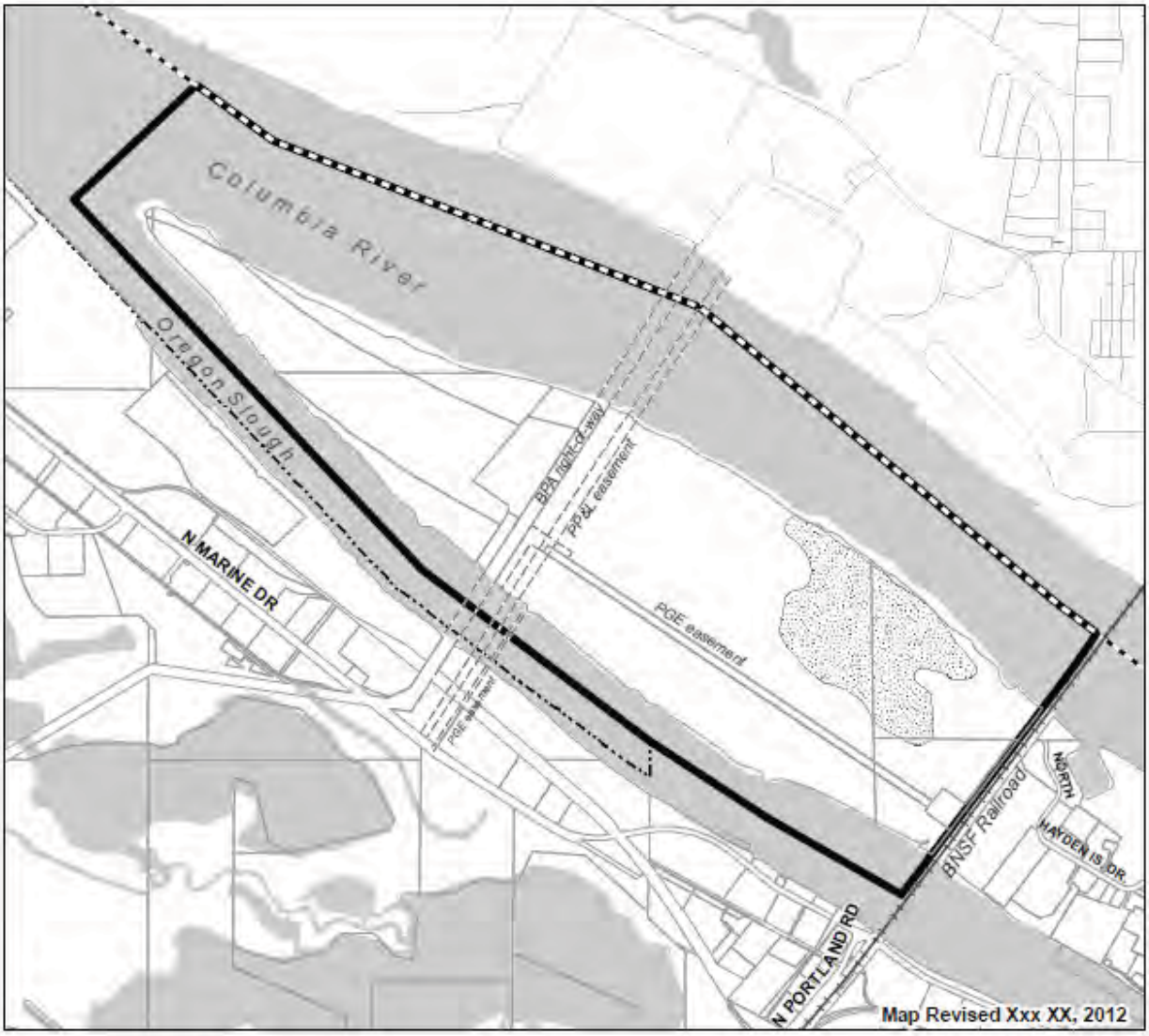
   e. Trees must be a minimum one inch in diameter. Shrubs must be a minimum of two-gallon size; and

   f. The requirements of Section 33.248.090, Mitigation and Restoration Planting, must be met.

3. For violations involving the removal of trees, two times the number of diameter inches removed must be planted on the site, in addition to other remediation vegetation planted. Planted trees must be a minimum 1 inch in diameter.

D. Option Three: West Hayden Island Resource Review. The procedures, application requirements, and approval criteria for West Hayden Island Resource Review are described in Sections 33.595.500 through 33.595.570.

Map 595-1
Map of the West Hayden Island plan district
This map provides an illustration of the boundaries of the West Hayden Island plan district, including the location of the existing utility lines.



NORTH

0 1,500 3,000

Scale in Feet

Plan District Boundary

State Boundary

City Boundary

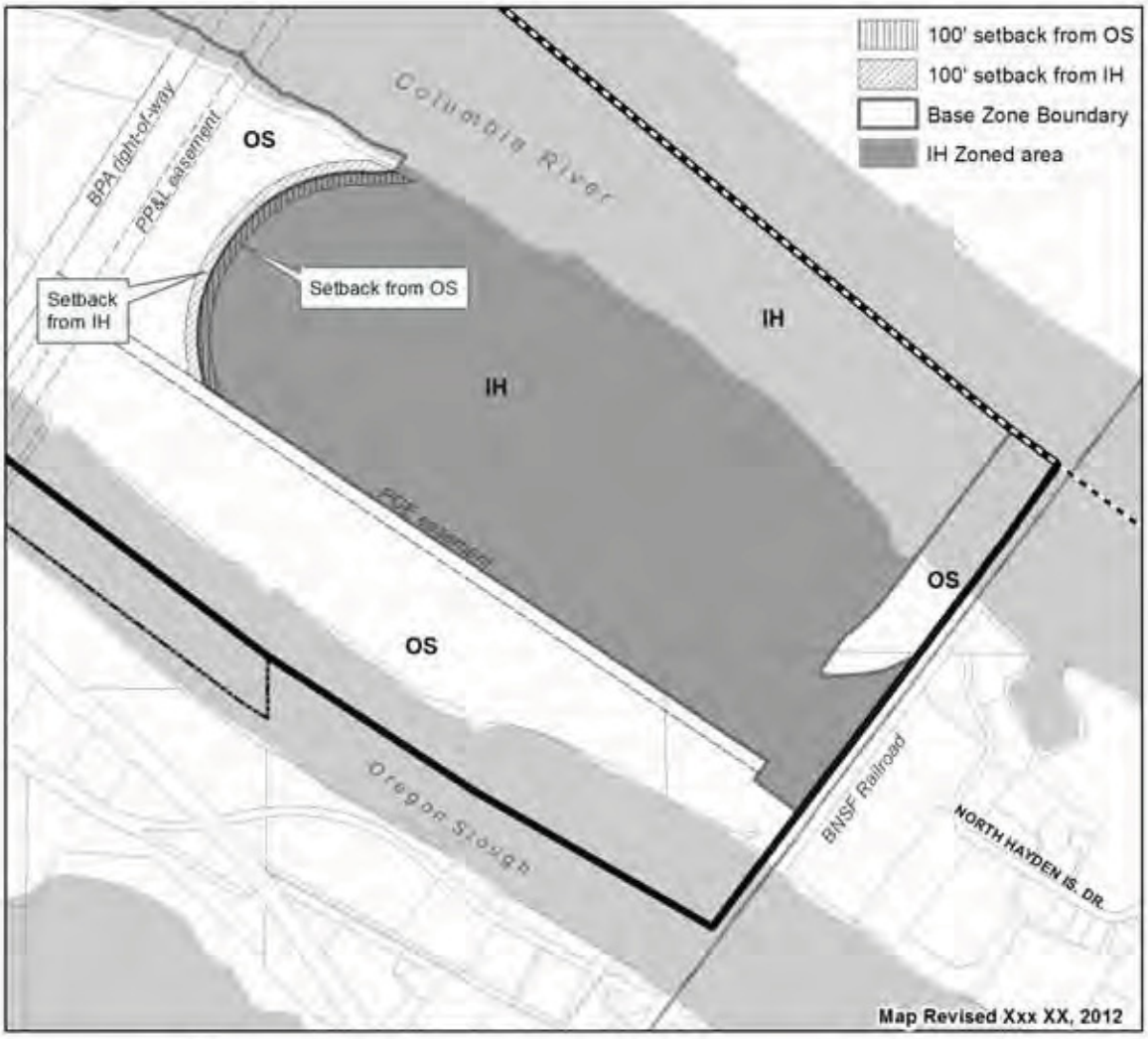
Dredge Deposit Management Area

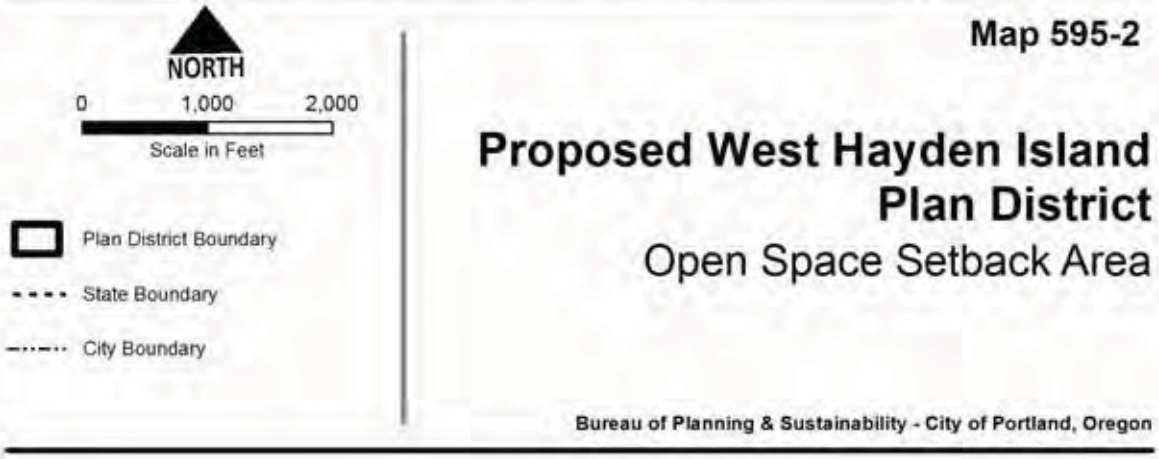
Map 595-1

Proposed West Hayden Island Plan District

Bureau of Planning & Sustainability - City of Portland, Oregon

Map 595-2
West Hayden Island plan district – Open Space Setback Area
This map illustrates the different setback areas between the terminal in the IH zone and the Open Space zone west of the terminal. The map is intended to be used with sub-section 33.595.200.B.



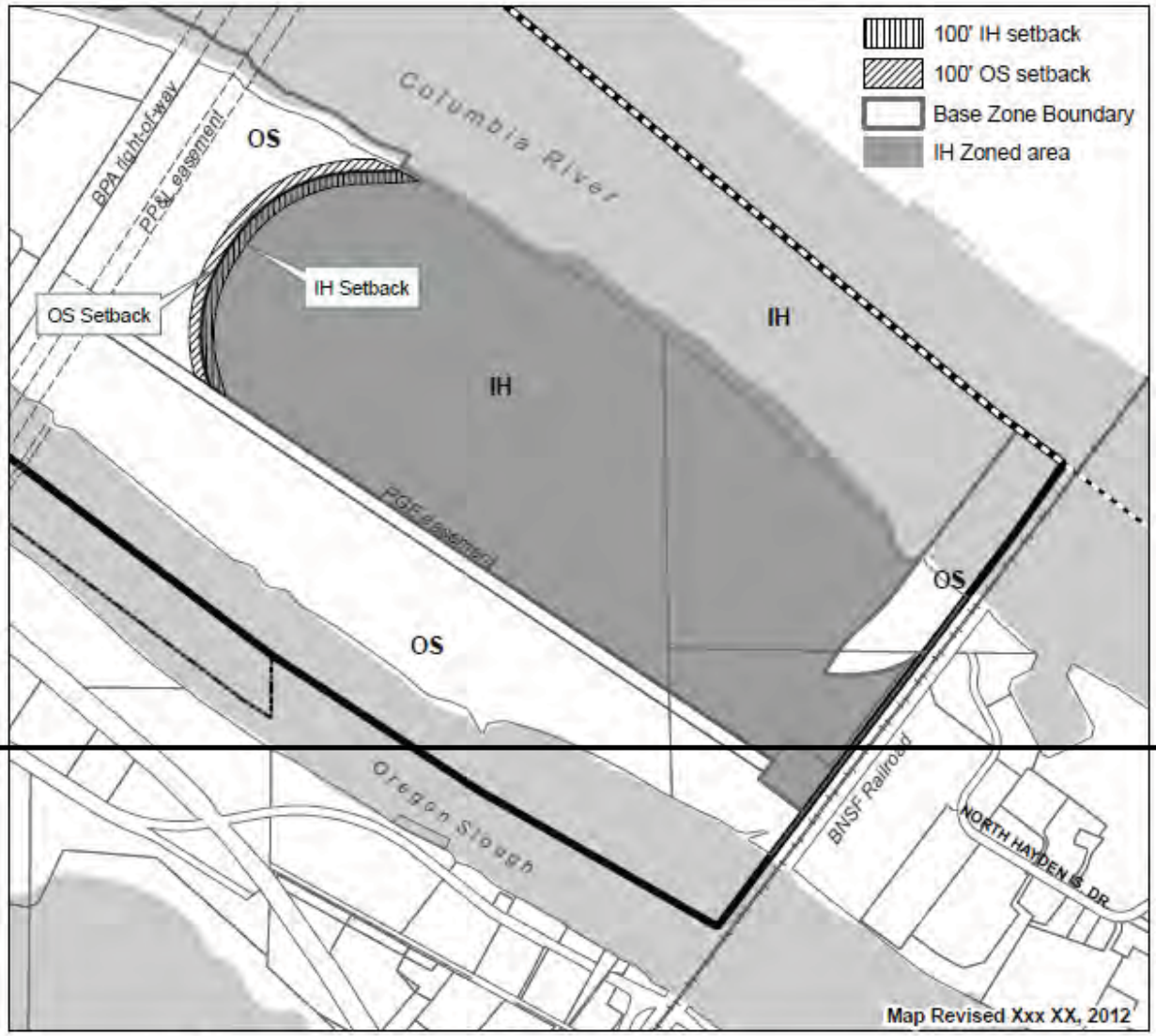


Map 595-2

Proposed West Hayden Island Plan District

Open Space Setback Area

Bureau of Planning & Sustainability - City of Portland, Oregon



NORTH

0 1,000 2,000

Scale in Feet

Plan District Boundary

State Boundary

City Boundary

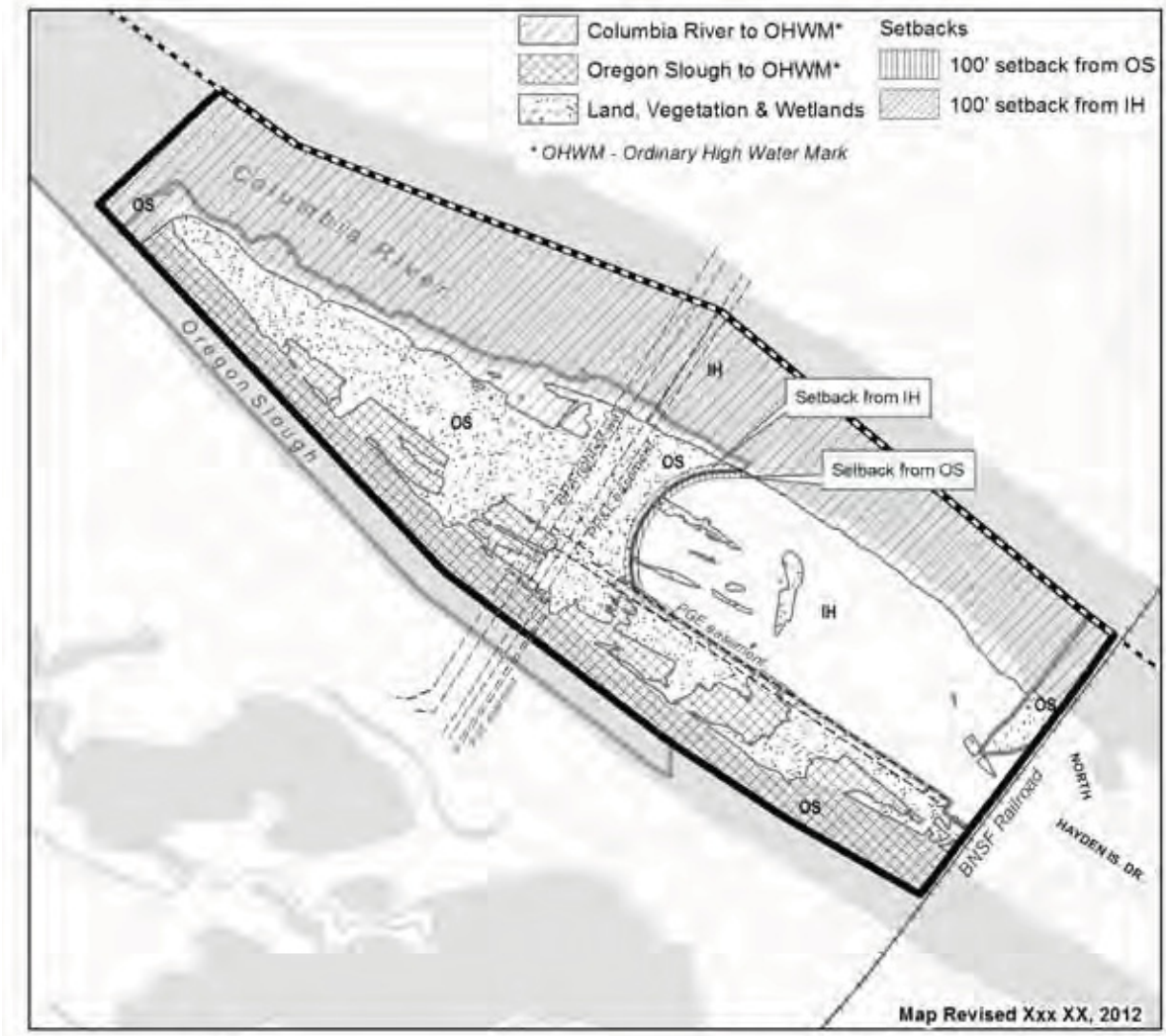
Map 595-2

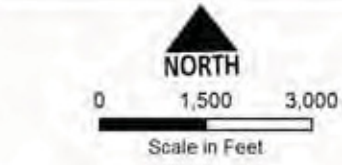
Proposed West Hayden Island Plan District

Open Space Setback Area

Bureau of Planning & Sustainability - City of Portland, Oregon

Map 595-3
West Hayden Island plan district – Natural Resources
This map illustrates where the environmental regulations 33.595-300 through 33.595.610 apply.





Plan District Boundary

Base Zone Boundary

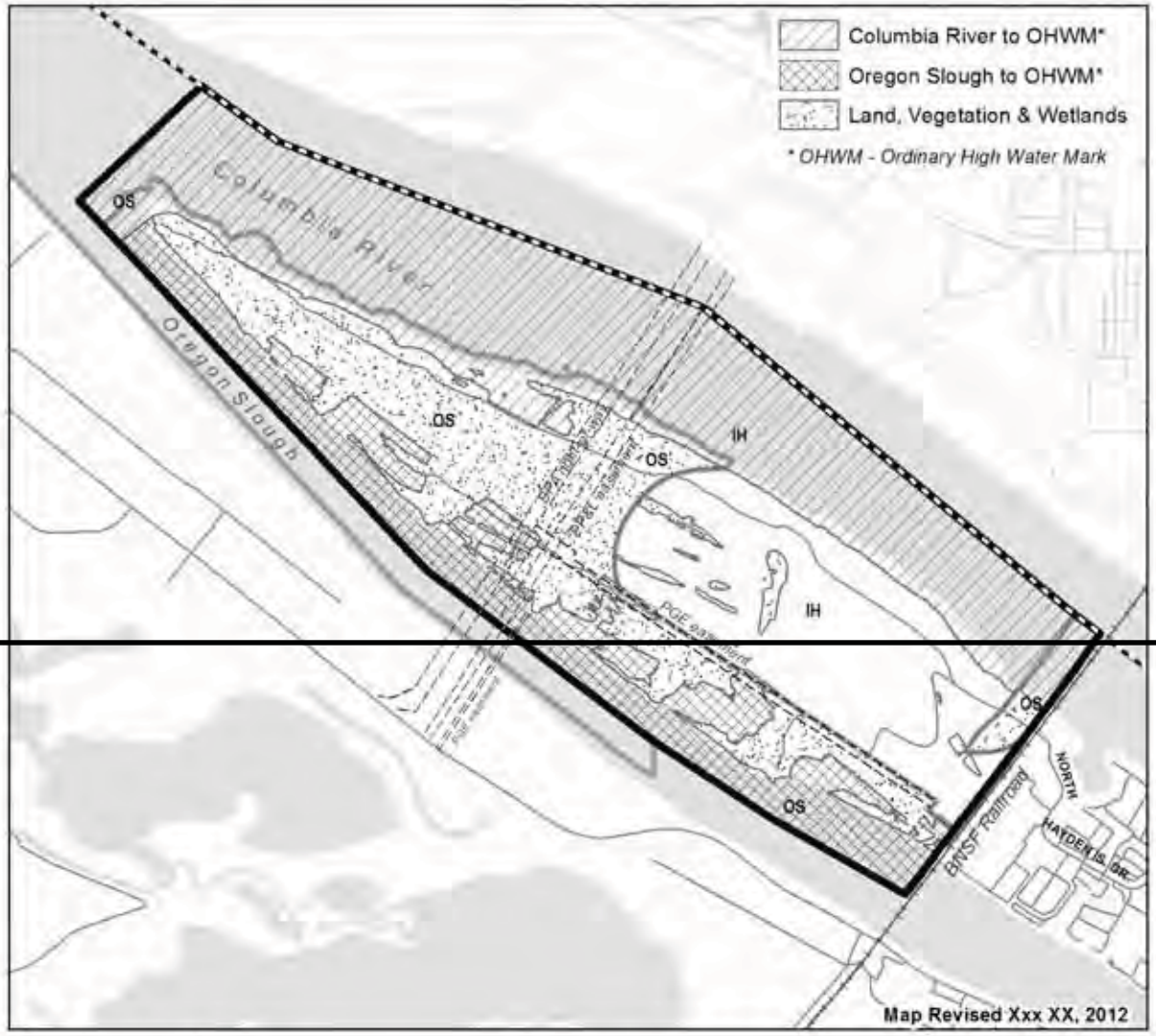
State Boundary

Map 595-3

Proposed West Hayden Island Plan District

Application of Environmental Regulations

Bureau of Planning & Sustainability - City of Portland, Oregon



NORTH

0 1,500 3,000

Scale in Feet

Plan District Boundary

Base Zone Boundary

State Boundary

Map 595-3

Proposed West Hayden Island Plan District Natural Resource Area

Bureau of Planning & Sustainability - City of Portland, Oregon

CHAPTER 33.910
DEFINITIONS

Cargo Conveyor. A definition of a cargo conveyor is added as that term is used within the West Hayden Island plan district. The definition has been taken from the River Plan and will be applicable if the River Plan is adopted in the future.

CHAPTER 33.910
DEFINITIONS

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.

Commentary

VI. Intergovernmental Agreement (IGA) between the Port and the City

Note: This draft reflects Planning and Sustainability Commission amendments to the April 9, 2013 amended proposed draft. The new language is shown as underlined and the removed language is shown as strikethough.

INTERGOVERNMENTAL AGREEMENT FOR ANNEXATION OF WEST HAYDEN ISLAND

This INTERGOVERNMENTAL AGREEMENT FOR ANNEXATION OF WEST HAYDEN ISLAND (Agreement) signed and effective _____, 2012 (Effective Date) is between **THE PORT OF PORTLAND**, a port district of the State of Oregon (Port), and **THE CITY OF PORTLAND, OREGON**, a municipal corporation (City) (collectively the Parties).

RECITALS

A. The Port and the City are authorized to enter into intergovernmental agreements with each other pursuant to the terms of ORS 190.003 to 190.010.

B. The Port and the City entered into an *Intergovernmental Agreement West Hayden Island Land Use Approvals Work Program and Tasks*, effective May 29, 2009 (Ordinance No. 182856) and amended on June 9, 2010 (Ordinance No. 183884), December 3, 2010 (Ordinance No. 184211), and October 7, 2011 (Ordinance No. 184846).

C. West Hayden Island (WHI) is that portion of Hayden Island lying westward of the Burlington Northern Railroad right of way, comprising approximately 800 acres. The property is shown on the Map included as Attachment A. WHI is located in Multnomah County and,is zoned County Multiple Use Forest 19 (MUF19) with a Significant Environmental Concern (SEC) overlay.

D. The Port acquired much of WHI in 1994, for the purpose of marine terminal development. The Port property includes a dredge material management area approximately 100 acres in size. Existing improvements include a City waste water outfall, right-of-way, easements and electric transmission lines, and a substation on PGE property, but otherwise WHI is largely undeveloped.

E. The Metropolitan Service District (Metro) included WHI within the Metro Urban Growth Boundary (UGB) in 1983 for the purpose of satisfying a regional need for marine terminal facilities (Metro Ordinance No. 83-151). Anticipating eventual annexation of WHI, since 1996 the City has provided planning and zoning services to WHI through an Intergovernmental Agreement with Multnomah County (Ordinance No. 170585). In 1995 Metro's Urban Growth Concept Plan and Map identified the northern half of the island as industrial and southern half as open space.

F. On July 29, 1998 the Portland City Council adopted a resolution in response to the Endangered Species Act listing of the steelhead, stating that "the City will work proactively to the best of its ability, through regulatory compliance, creation of incentives, and otherwise, to support the recovery of steelhead populations" (Resolution #35715).

G. Metro's previous planning decisions recognize WHI's value for both industrial development and natural resource protection. In 2004, Metro designated WHI as a "Regionally Significant Industrial Area" under Title 4 of Metro's Urban Growth Management Functional Plan (Functional Plan) (Metro Ordinance 04-104B). In 2005 Metro adopted its Nature in the Neighborhoods program to implement Title 13 of the Functional Plan and a regional approach to Statewide Planning Goal 5 for fish and wildlife habitat (Metro Code (MC) 3.07.1320). Nature in the Neighborhoods requires the City and the Port to create a District Plan for WHI (MC 3.07.1330.B.4.b). Metro also exempted much of the

WHI property from Title 3 (Water Quality and Flood Management) of the Functional Plan (MC 3.07.330.D).

H. On August 19, 2009 the Portland City Council adopted the Hayden Island Plan (Ordinance 183124). The plan was a collaborative effort between the City and the community, to improve accessibility, livability, and sustainability on Hayden Island over the next 35 years. Goal "j" of the plan provides direction to develop a plan for West Hayden Island.

I. To facilitate the development of a District Plan for the WHI property, the Port is requesting annexation of the entire 800-acre site that comprises WHI.

J. On July 29, 2010, the City Council approved Resolution No. 36805, directing the Bureau of Planning and Sustainability (BPS) staff to develop a legislative proposal for annexation of WHI to the City with the intent to retain at least 500 acres as open space, and to identify no more than 300 acres for future deep-water marine terminal development.

K. Public involvement has been an integral part of the West Hayden Island planning process. The Bureau of Planning and Sustainability produced a public involvement plan to guide and encourage participation and input from multiple stakeholders and the general public. Since 2009 the City and Port have worked collaboratively with a Community Working Group (CWG) and a WHI Advisory Committee (WHIAC). These committees have provided guidance and input on technical studies and advised the City and Port on all project activities. In addition, the City's Planning and Sustainability Commission has helped shape this agreement through a series of public hearings and work sessions.

L. The City approved Resolution 36941 in July 2012 stating the City's intent to formalize governmental relationships with its Tribal Government Partners and establish government-to government consultation agreements. The City recognizes that cultural and natural resources and customary use locations are invaluable and critical to the preservation of treaty rights, cultural heritage, and pursuit of tribal traditional lifeways. The City also recognizes the unique legal status of the Tribal Governments as sovereign nations as recognized by Treaty, Executive Order, or federal law of the United States. As this agreement is implemented, the City and the Port want to ensure that the tribal governments are an integral part of the planning and decision making process for West Hayden Island beyond the annexation of the property into City jurisdiction.

M. The City completed the Hayden Island Natural Resources Inventory [April 2013] (HINRI), which identifies the existing natural resource features and functions provided by WHI. WHI is a single habitat area, comprised of a mosaic of habitat types, located at the confluence of two major rivers systems, along the migration route for salmon, and in the Pacific Flyway. The WHI planning area includes the Columbia River and Oregon Slough, shallow water habitat, beaches, grassy and sparsely vegetated areas, shrubland, woodland and forest habitat nearly all of which are located within the 100-year floodplain. These habitat features support over 200 species of wildlife including 13 federally-listed ESA fish species and several at-risk species such as western meadowlark, pileated woodpecker, bald eagle, red-legged frog and myotis. The HINRI forms the basis for the evaluation of potential development impacts and actions taken in this agreement to replace or compensate for lost environmental features and ecological functions. The HINRI will be adopted as part of the West Hayden Island Plan District to support environmental regulations.

N. The City is undergoing state-mandated Periodic Review of its Comprehensive Plan. As part of Periodic Review, the City is required to complete an Economic Opportunities Analysis (EOA) to comply with Oregon Statewide Planning Goal 9 and its implementing administrative rule. The City Council adopted an EOA (Ordinance 185657, adopted October 3, 2012) and submitted it to the Department of Land Conservation and Development for acknowledgement of compliance with the statewide planning goals, including Goal 9.

O. The EOA evaluates the types and amounts of employment land needed to accommodate expected growth to 2035. The EOA estimates there is demand for 450 additional acres of vacant land in the Portland Harbor for river related and river dependent employment. The City's Buildable Lands Inventory (BLI) identified an effective available vacant land supply of 94 acres in the Portland Harbor. This leaves a projected deficit of 356 acres. The EOA states that "West Hayden Island represents the only significant opportunity to bring new capacity into Portland industrial land supply, especially for marine terminal use."

P. The Oregon Freight Plan documents the economic importance of freight movement in Oregon, identifies transportation networks important to freight-dependent industries and recommends multimodal strategies to increase strategic freight system efficiency. Among other things, it calls for the development of best practices for integrating freight movement and land uses in urban areas. This will be done in a way that minimizes the impact on surrounding neighborhoods and the natural environment.

Q. The Portland City Council recently adopted the Portland Plan (Resolution #39618) which sets short and long-range goals for the City and establishes a core set of priorities: prosperity, education, health, and equity. The prosperity and affordability strategy emphasizes expanding regional exports, increasing traded sector competitiveness, investment in freight transportation systems, and planning for an adequate industrial land supply. The Portland Plan also emphasizes the importance of securing more stable funding for education, considering human and ecological health, and improving access to nature. Above all, the Portland Plan prioritizes actions to improve equity and reduce disparity among Portlanders.

R. Within the area subject to annexation, The Port and City have identified approximately 300 acres for development of marine terminal facilities, which includes areas identified as high ranked natural resources and Special Habitat Area in the City's HINRI (zoning map enclosed as Attachment B). Based upon the Economic, Social, Environmental and Energy (ESEE) analysis the City conducted in compliance with Statewide Planning Goal 5, the City recommends:

1. *Limit* industrial uses below ordinary high water, within the Columbia River and within wetlands and on land within 50 feet of wetlands;
2. *Allow* industrial uses on land. Land includes natural resource features located above the ordinary high water of the Columbia River or Oregon Slough; or located more than 50 feet from a wetland.
3. *Strictly limit* open space uses within wetland and on land within 50 feet of wetlands and on land west of the BPA power line corridor; and
4. *Limit* open space uses on land east of the BPA power line corridor.

The ESEE is being adopted as part of the West Hayden Island Plan District to support environmental regulations.

S. The City supports the Ports desire to use unencumbered portions of West Hayden Island to meet Natural Resources Damages Assessment requirements.

T. Contemporaneous with approving this agreement the City Council is adopting ordinances annexing WHI into the City, applying Comprehensive Plan and zoning designations to WHI, adopting zoning code (Plan District) regulations for WHI, and amending its Transportation System Plan. Heavy Industrial (IH) zoning will be applied to the marine terminal area (the IH Area), and Open Space (OS) zoning will be applied to the remaining area of WHI.. North Hayden Island Drive will be re-classified as a Major Truck Street, consistent with its function as a connector between a proposed major intermodal freight facility with Interstate 5.

U. The Port and City have cooperated to develop information necessary to support the City's natural resources program update. The City has prepared the Natural Resources Inventory and ESEE analysis of WHI area properties, including Port-owned properties, which will support the comprehensive plan and zoning designations to be applied to WHI.

NOW, THEREFORE, in consideration of the promises and covenants contained in this Agreement, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Port and the City agree as follows.

AGREEMENT

1. PURPOSE

The purpose of the agreement is to describe the infrastructure improvements, community and recreational investments, actions that will be taken to improve ecosystem values and functions, and environmental mitigation measures that the Port and the City agree to undertake following annexation of West Hayden Island to the City. In doing so, the agreement also serves to provide greater certainty to the Port and City.

2. TERM, MILESTONES AND REVIEWS

2.1 Term. This Agreement shall be effective for thirty (30) years following the Effective Date unless extended by mutual agreement as provided in Section 2.2.

2.2 Extension. The Port and City will meet within the month falling one year before the expiration of this Agreement to comprehensively review accomplishments and

discuss whether the term of the Agreement should be extended, revised on mutually agreeable terms, or allowed to expire.

2.3 Milestones. This Agreement identifies milestones that, once completed, trigger subsequent actions by either the Port or the City or both parties. The milestones are described in Sections 2.3.1 – 2.3.4 below. These milestones are in the form of contingent obligations and each party's responsibility to take action becomes effective when the prerequisite milestone is completed. The actions subsequently required of each party are all specifically described in subsequent sections of this Agreement.

2.3.1 Milestone 1: Annexation. This is defined as one of the following three dates, whichever comes later: (a) the date WHI is annexed to the City or; (b) the date the Department of Land Conservation and Development (DLCD) acknowledges the land use decisions described in Recital T of this Agreement, and all appeals are resolved; or (c) the date the City and Port have finalized the business plan as defined in section 9.4~~; or (c) if the annexation is appealed, the date all appeals of the City's annexation and land use decisions referenced herein are resolved and the annexation becomes final~~.

2.3.2 Milestone 2: Port Identification of Private Sector Partner. This is defined as the date ~~when~~ the Port Commission approves a development agreement, tenant contract, or other similar agreement with a private sector terminal development partner.

2.3.3 Milestone 3: Federal Permits. This is defined as the date the ~~Port obtains a necessary federal permit approval under that complies with the~~ National Environmental Policy Act (NEPA) process is concluded and related permits are issued from the appropriate federal agency or agencies for the first development action on WHI, including any authorizations required for filling within jurisdictional wetlands. "Development" includes fill, rail or marine terminal structures or related docks and causeways below ordinary high water in the Columbia River. "Permit" includes those submitted by entities acting as agents of the Port or any lessee of Port property on WHI.

2.3.4 Milestone 4: Initial Marine Terminal Development Complete. This is defined as the date legal occupancy or operation of any industrial development on WHI begins.

2.4 Five Year Reviews, Adaptive Management. The Port and City will apply generally accepted principles of adaptive management in the implementation of this Agreement. Adaptive management is a tool that can be used as natural resource conditions, regulations, and ecological science evolve over the course of implementing this agreement. The Port and City will comprehensively review the work performed and funded under this Agreement at least every five (5) years, with the first comprehensive review to be completed no later than five years from the date of Milestone 1.

3. INFRASTRUCTURE DEVELOPMENT: TRANSPORTATION, RECREATION, AND SEWER & WATER SYSTEMS

3.1 Transportation Improvements. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed.

3.1.1 North Hayden Island Drive Project:

3.1.1.1 RTP and TSP Amendments. The Port will, in consultation with the City (Portland Bureau of Transportation – PBOT), prepare and seek amendments to the Regional Transportation Plan (RTP) Project List. The amendments will include removing the West Hayden Island Bridge (Metro ID# 10343) from the RTP Financially Constrained project list and replacing it with a project to reconstruct North Hayden Island Drive consistent with its proposed freight classification, from BNSF Railroad Bridge to the I-5/HaydenIsland interchange anticipated with the Columbia River Crossing Project (CRC), as described in Attachment C.

3.1.1.2 Adopting Amendments. Contemporaneous with this agreement the City Council is adopting corresponding amendments to its Transportation System Plan (TSP), which will be submitted to Metro for review and approval.

3.1.1.3 Funding. The Port and City will develop a cooperative funding strategy to support the N. Hayden Island Drive improvement project pursuant to Section 9 of this agreement and as further described in Sections 3.1.1.4 through 3.1.1.8 below.

3.1.1.4 City Contribution. The City will contribute one quarter of the project cost or $5.25 million, whichever is less.

3.1.1.5 Coordination. If funding is secured, the Port and City (PBOT) will collaborate to ensure that the N. Hayden Island Drive improvement project is built in a timely manner.

3.1.1.6 Partnerships. The Port and City (PBOT) will pursue partnerships with local businesses and industrial and commercial property owners on Hayden Island to explore options for forming a local improvement district to support the N. Hayden Island Drive improvement project. As development or redevelopment occurs along North Hayden Island Drive, the City will, as appropriate and within constitutional limits, require frontage improvements consistent with the street classification. If frontage improvements are waived or delayed, the City will require LID remonstrance waivers.

3.1.1.7 Timing. If the North Hayden Island Drive improvement project is not already complete at the time the Port files an application for a permit, land use approval or other approval with the City for industrial development on WHI, the Port will complete the project before Milestone 4 is reached, as defined in Section 2.3.

3.1.1.8 Continuing Obligation. The Port's obligations to fund and perform the transportation improvements described in Section 3.1 will survive the termination of this Agreement and continue in perpetuity as described in Section 11.

3.1.2 Right-of-Way Acquisition and Ownership. The Port will acquire any rights-of-way and dedicate any property necessary to extend Hayden Island Drive to Port property. The Port will own roads, driveways and accessways serving exclusively the terminal development. The Port will grant public rights-of-way or easements as the City determines are necessary to facilitate public access to trailheads, recreational parking, and associated recreational improvements.

3.1.3 Truck Traffic Cap. Contemporaneous with approving this agreement the City Council is adopting zoning code (Plan District) regulations for WHI that cap the number of heavy trucks using Hayden Island Drive to enter or exit the terminal gate house to

205 per day, calculated as a monthly average, with an absolute maximum of 275 trips on any single day. The definition of heavy trucks is as defined by City Code. The Port is responsible for documenting and reporting the daily truck traffic volumes to the WHI Advisory Committee as described in Sections 8 and 10.

3.1.4 Columbia River Crossing. If the CRC Project is not completed before Milestone 4 is reached, as defined in Section 2.3, the City and Port agree that the Hayden Island Plan (2009) and West Hayden Island traffic impact analysis and associated agreements will require re-evaluation. The City and Port will conduct any necessary re-evaluations and work collaboratively to identify any additional traffic mitigation requirements. Occupancy or operation of any industrial development on WHI will not be allowed until additional analysis and/or re-evaluation of the traffic mitigation requirements is completed to the mutual satisfaction and approval of the City and the Port. This Agreement does not commit the City of Portland to any level of funding for transportation improvements beyond those related to the N. Hayden Island Drive improvement project discussed in Section 3.1 of this agreement. The benchmark for determining that the CRC Project is "completed" is when all of the following improvements are physically in place or when the CRC Project has received all necessary funding authorizations to bid, award, and completely construct: (a) the local arterial bridge spanning Portland North Harbor; and (b) the Hayden Island light rail facility and station; and (c) the improvements along North Hayden Island Drive east of North Main Street and freeway access ramps. All of these elements are required for the CRC project to be functional and provide multi-modal circulation that meets the City's level of service requirements and other applicable City requirements.

3.1.5 Advocacy for Rail Infrastructure. The Port and City will make a good faith effort to advocate for the following projects, which are identified on the City's Transportation System Plan and/or Regional Transportation Plan:

3.1.5.1 Mainline into WHI. Construction of a rail line from the BNSF mainline into the WHI site necessary to support marine terminal development (RTP projects #11353, and #11354, TSP Projects #30019 and #30062).

3.1.5.2 Kenton Line Upgrade. Improvement of the Kenton Line Upgrade, which is part of the North Portland junction necessary to increase the efficiency of the future marine terminal on WHI (RTP#11356 and TSP Project #30065).

3.1.5.3 BNSF Rail Bridge. Conversion of the BNSF Rail Bridge from a swing span to a lift span, to improve train and marine cargo traffic movement (TSP Project #30076)

3.2 Recreation Improvements. The Port and City obligations within this section become effective when: (a) Milestone 2, as defined in Section 2.3, has been completed and (b) the Open Space Planning described in Section 4.6. has been adopted.

3.2.1 <u>West Hayden Island</u> Park and Trail Funding. Consistent with the Hayden Island Plan (2009) and their mutual interest in marine terminal development and improving recreational and open space access, the Port and City will contribute funds to be

used for ~~park land acquisition on Hayden Island and~~ recreational facilities including trails, parking lot, restrooms and overlook development on West Hayden Island as described in Sections 3.2.2 through 3.2.~~6~~5below.

~~**3.2.2 Hayden Island Park**.. The Port will purchase, and convey at no cost to the City, at least 3 acres of park land within the Hayden Island Neighborhood, east of the BNSF Railroad. All environmental cleanup and roadway improvements will be the Port's responsibility. The property must be clean at the time of conveyance to the City. The Port will provide $7.0 million to the City for subsequent parks design, engineering, and capital improvements pursuant to Section 9. A portion of this amount, up to 35%, , will be available to PP&R for design, engineering and permitting upon the Port's conveyance of the property to the City, with the remainder available upon completion of permit-ready design drawings. The City will contribute at least $1 million toward design and engineering and/or capital improvements.~~

3.2.2~~3~~ West Hayden Island Trail and Trailhead Facilities. The Port will provide the City's Bureau of Parks and Recreation (PP & R) $2.4 million for recreational trail and trailhead development on WHI consistent with the open space strategy process described in Section 4.6, and pursuant to Section 9. This development will include trails, a small parking lot, and a comfort station and an overlook as defined on the concept plan, a map of which is enclosed with Attachment D. A portion of this amount, up to 35%, will be available to PP&R for design and engineering upon completion of the Open Space Strategy described in Section 4.6, with the remainder available no later than the date of Milestone 4, as defined in Section 2.3. If mitigation is required by the permitting agencies for the construction of recreational facilities, the Port will be responsible for providing mitigation, including operation and maintenance (O&M), and fulfilling all monitoring requirements. The Port will fund all environmental testing, cleanup and roadway improvements.

3.2.3~~4~~ Operations and Maintenance. When trail, trailhead, and parks construction drawings are complete for the ~~each~~ facilit~~y~~ies described in 3.2.2 ~~and 3.2.3~~, consistent with section 9, the Port agrees to establish a special revenue fund for PP& R to cover operation and maintenance (O&M) costs. The intent is to fund 10 years of O&M for the future WHI recreational trails, trailhead, small parking lot, comfort station and overlook ~~and at least 3 acres of East Hayden Island park land~~ described in section 3.2.2. The Port will establish this fund by making a lump sum payment into the fund to cover 5 years of O&M, using PP&R's standard O&M methodology. The next five year increment will be initiated by an invoice from the City to the Port at which time the Port will add an additional 5 years of funding to the special revenue fund. The Port will manage this fund in accordance with Oregon State Law and the Port's Investment Policy.

3.2.4~~5~~ City Responsibilities. Permitting, design and construction of these trail and parks improvements described in Section 3.2.2-3.2.34 will be the City's responsibility. The City will contribute at least $1 million toward design and engineering and/or capital improvements.

3.2.5~~6~~ Public Access. The Port will provide any necessary public access through Port property to recreation facilities built under this section by dedicating property, granting public access easements, or using similar methods, provided that any access granted shall not conflict with marine terminal operations or natural resource conservation measures.

3.3 Sewer and Water System Improvements. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed.

3.3.1 Sewer Facilities. After completing Milestone 1, but before completing Milestone 4, the Port will extend the public sewer main in Hayden Island Drive to the site. In addition, the Port will obtain a permit for on-site disposal and treatment of stormwater and process water or provide the necessary upgrades to the City's system off site, as required at the time of development.

3.3.2 Water Facilities. After completing Milestone 1, but before completing Milestone 4, the Port will contract with the Water Bureau to extend water mains required by the proposed terminal development, located on North Hayden Island Drive, to the site.

3.3.3 Continuing Obligation. The Port's obligations to fund and perform the water and sewer improvements as described in this Section will survive the termination of this Agreement and continue in perpetuity, as described in Section 11.

3.4 Systems Development Charge Credits. Any transportation, recreation, sanitary sewer or storm sewer projects conducted by the Port under this agreement will be eligible for, and receive system development charge (SDC) credits in the manner and to the extent provided by the City's adopted SDC credit provisions. The credits shall be administered and used consistent with established City SDC requirements. The Port may allocate credits to both its marine and aviation operations, at their discretion.

4. OPEN SPACE – USE, OWNERSHIP AND FURTHER PLANNING

4.1 Contingent Obligation. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed.

4.2 Restoration Vision. The natural resources mitigation and enhancement objectives for the 500 acres of open space on WHI are part of the larger goal to achieve net improvement of ecosystem function. The concept plan produced for the West Hayden Island project provides measures to improve habitats that have been degraded and reestablish habitats that will be lost to future development (Attachment D).

The 500-acre natural resource site will be permanently set aside as an ecologically significant area for conservation and natural resource protection, incorporating natural resource

mitigation and enhancement strategies designed to improve and support ecological structure and function. The site will provide passive recreational opportunities that will be compatible with natural resource protections.

4.3. Use of OS-Zoned Area. The Port intends to use the Open Space (OS)-zoned portions of WHI for mitigation, conservation, enhancement, natural resource restoration projects and similar uses consistent with the City's zoning regulations, including the West Hayden Island Plan District (Plan District). While the Plan District specifies allowed uses in the OS-zoned area, this Agreement does not require the Port to take action in the OS zoned area unless otherwise specifically stated herein.

4.4 Prohibition on Rezoning. The Port will not use or seek or support rezoning of the OS-zoned area for any uses inconsistent with City zoning and Plan District regulations applied to WHI at the time of annexation. This commitment will survive the termination of this Agreement and continue in perpetuity unless modified with the consent of the City and a third party, as described in Section 11.1.2 .

4.5 Future Ownership of OS-Zoned Area. The Port may, at its discretion, transfer ownership of the OS-zoned acreage to another ~~person or~~ entity, consistent with Sections 4.5.1 – 4.5.3. In the alternative, the Port may make arrangements with another entity (including but not limited to PP&R or Metro) to manage some or all of the OS-zoned area in the future.

4.5.1 Future Sale or Transfer. Any subsequent Port transfer of an ownership interest of all or a portion of the OS zoned property must be to a public agency, non-profit land trust, or similar non-profit land conservation organization that is mutually acceptable to the Port and City and whose principal mission will be to maintain property protections in perpetuity.

4.5.2 Right of First Refusal. The Port will give the City Metro, or the State of Oregon a right of first refusal, with a twelve (12) month period of consideration, to purchase the OS zoned property.

4.5.3 Mandatory Conference. Within 1 year of reaching Milestone 3, the City and the Port will hold a mandatory meeting to discuss future ownership of the OS-Zoned Area and the status of fulfilling the vision described in Section 4.2 and meeting the natural resources mitigation performance obligations as discussed in Section 5.

4.6 Open Space Planning

4.6.1. Open Space Strategy. The Port will prepare a written strategy for the use of the OS-zoned area (OS Strategy) in consultation with the City, specifically PP&R and BES. The OS Strategy will be in a form appropriate to the Port's desired utilization of the Open Space Area (described herein) and may evolve over time as specific needs arise. The topics addressed in the OS Strategy will include but are not limited to desired future conditions for natural resources on WHI, satisfying on-site and off site mitigation

obligations, and long-term management practices for both natural areas and recreational amenities. The OS Strategy will be used to guide the refinement and design of specific recreational improvement plans, and establish a timeline for those improvements in consultation with the City Bureaus of Parks and Recreation and Environmental Services. Development of the OS Strategy is intended to facilitate implementing the conservation measures described in Section 5, and serve as a means to coordinate recreation projects described in Section 3.2. However, the OS Strategy does not independently obligate the Port to implement any specific projects.

4.6.2 Timing. The Port will prepare and submit a draft OS Strategy for review and comment to the WHI Advisory Committee (the "WHI AC") established in Section 8, no later than: five years from the date Milestone 1 has been completed. The Port Commission will adopt the open space strategy within 6 months of its completion and of the WHI AC review process.

4.6.3 Funding. The Port will pay for BES, PP&R and consultant time to support City participation in development of this strategy up to a maximum of $200,000.

5. MEASURES TO IMPROVE ECOSYSTEM VALUES AND FUNCTIONS

5.1 Context. The Port and City acknowledge that development of marine terminal facilities within the IH-zoned area and the adjoining waterway is an essential element of their shared vision for WHI. Development of a marine terminal on WHI will impact 300 acres of existing habitat including shallow water, wetlands, flood area, forests and grasslands. As described in the *Hayden Island Natural Resources Inventory* [April 2013] (HINRI) these features provide multiple riparian corridor functions such as flood storage, nutrient cycling and large wood recruitment and habitat for over 200 hundred species of mammals, birds, reptiles, amphibians and fish. There are 19 at-risk wildlife species that use the habitats located within the 300 acre development footprint.

5.2 Intent. The Port and City will ~~intend to~~:

- fully replace the natural resource features and functions impacted both directly and indirectly, by marine terminal development, and document how replacement in quality and quantity of habitat has been achieved, with concurrence of state and federal natural resource agencies.
- reach a net increase in overall ecosystem functions,
- provide certainty to the Port, City and public regarding mitigation actions and costs,
- allow flexibility to respond to federal, state and local regulatory requirements, and
- allow flexibility to respond to changing science, regulatory structures, and opportunities on the landscape.

5.3 Anticipated Impacts. The City's consultant, Worley Parsons, prepared a conceptual plan for the development of marine terminal facilities on WHI. Based on this conceptual plan and the HINRI, the Port and City anticipate this development will directly affect the following natural resources in the approximate amounts listed below:

- ~~1.5~~ 0.3 acres of shallow water habitat
- 10 acres of wetlands
- 140 acres of forest (plus an additional 9 acres of forest edge impact)
- 123 acres of grassland and sparsely vegetated area
- 200 acres of floodplain

5.4 Contingent Obligations. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed. The timing of specific actions are coordinated with the completion of subsequent Milestones as described in Section 5.5.

5.5 Natural Resource Actions

5.5.1 Terms. The terms "Re-Establishment", "Enhancement", "Rehabilitation", and "Preservation" are defined as described in Attachment E

5.5.2 Wetlands and Shallow Water. The Port will implement wetland and shallow water mitigation as prescribed by state, federal, and local permits. Wetland mitigation will, at minimum, include two different kinds of wetlands: (1) at least one wetland with a surface water connection to the Columbia River during seasonal high flows that provides access for ESA-listed fish species; and (2) at least one wetland interior to bottomland forest, that has a surface water connection to the Columbia River only during 30-year or larger flood events, and that provides habitat for red legged frogs.

5.5.3 Forest Actions

5.5.3.1 Performance Standards. The Port will implement actions that achieve 110% functional replacement of the impacted bottomland hardwood forest, consistent with the City (BES) *WHI Forest Mitigation Framework* (March 22, 2012) and other performance standards in Attachment E.

5.5.3.2~~1~~ West Hayden Island Forest Actions. The Port will protect 272 acres of existing forest on WHI and within that protected area the Port will enhance 187 acres of cottonwood-ash forest. In addition the Port will protect and re-establish 22 acres of cottonwood-ash forest on the south side of the island. The WHI forest actions are shown in Attachment E.

5.5.3.3~~2~~ Government Island Forest Actions. Pending agreement by the Federal Aviation Administration (FAA) and Metro, the Port will re-establish 174 acres and enhance 296 acres of cottonwood-ash forest on Government Island, for a total of 470

acres, as shown in Attachment E.

~~**5.5.3.3 Performance Standards.** The Port will meet the performance standards, included in Attachment E.~~

5.5.3.4 Additional Forest Actions. The specific forest actions described in Paragraphs 5.5.3.2 and 5.5.3.3 would achieve approximately 103% of the required bottomland forest replacement. In addition the Port will perform additional bottomland cottonwood/ash forest re-establishment within the geography described in Section 5.5.8, as necessary to reach the 110% performance standard stated in Paragraph 5.5.3.1. ~~The specific forest objectives described in Paragraphs 5.5.2.1 and 5.5.2.2 represent one possible package of forest actions. The result of all cumulative forest actions will be to replace 101% of bottomland forest features and functions. Notwithstanding Sections 5.5.2.1 and 5.5.2.2, the Port, City or other designated entity may at their discretion use the City (BES)*WHI Forest Mitigation Framework* (March 22, 2012) to determine an alternative package of forest actions that creates the equivalent level of ecological function and replacement. The methodology to determine equivalency is summarized in Attachment E.~~

5.5.3.5 Port Payment. In lieu of performing the additional actions described in Paragraph 5.5.3.4, the Port at its discretion may make a one-time payment to the City (BES) for the purpose of bottomland cottonwood/ash forest re-establishment within the geography described in Section 5.5.8. The amount of the payment will be based on the estimated cost of specific actions that would reach the 110% performance standard stated in Paragraph 5.5.3.1. The payment will occur when Milestone 1 has been completed.

5.5.3.6 Alternative Forest Actions. The specific forest actions described in Paragraphs 5.5.3.2 through 5.5.3.5 represent only one possible package of forest actions. Notwithstanding Paragraphs 5.5.3.2 through 5.5.3.5, in order to achieve 110% replacement of the bottomland hardwood features and functions, the Port, City or other designated entity may at their discretion use the performance standards referenced in Paragraph 5.5.3.1 to determine alternative actions that create the equivalent level of ecological function and replacement.

5.5.3.~~5~~ 7Timing of Forest Actions. In order for these actions to achieve a net increase in forest functions, the specific acreage of forest actions described in Paragraphs 5.5.~~2~~3.1 through ~~and~~ 5.5.~~2~~3.5~~2~~ are based on an assumption that the forest actions will be implemented when Milestone 1 has been completed, which is approximately 10 years before site preparation for marine terminal development (forest clearing) begins. Upon determining the actual time period between implementation of the forest actions and forest clearing for marine terminal development, the Port and City will use the City (BES) *WHI Forest Mitigation Framework* (March 22, 2012) to determine the percentage of the Port's forest obligation that has been achieved by these actions, and (if necessary), calculate the additional acres of forest enhancement or re-establishment obligation, as described in Section 5.5.2.4. In any event, forest actions will be implemented no later than when Milestone 3 becomes effective.

5.5.4 Floodplain Actions

5.5.4.1 Floodplain Re-Establishment. The Port will implement actions that restore a 100-year flood event to at least 179 ~~200~~ acres of land within the historic Columbia River floodplain. Within the 179-acre restoration site, at least 25.4 acres will be inundated during a 2-year flood event, at least 96.5 acres will be inundated during a10-year flood event, and at least 135.8 acres will be inundated during a 30-year flood event. The Port may choose at it~~'~~s discretion to co-locate other actions described in Section 5 with floodplain actions.

5.5.4.2 Timing of Action. The obligation to implement floodplain actions becomes effective when Milestone 3, has been completed, and will be implemented before Milestone 4 becomes effective.

5.5.4.3 Funding. The Port will complete the floodplain re-establishment actions as described in 5.5.4.1 until the project costs have reached a maximum amount of $20M.

5.5.5 Grassland Actions

5.5.5.1 Port Payment. The Port will make a one-time payment of $1.5 million to the City (BES) for the purpose of western meadowlark habitat conservation or enhancement. The City may at its discretion further distribute these funds to a third party for the purposes of western meadowlark habitat conservation or enhancement.

5.5.5.2 Timing of Payment. The Port will make the payment described in Paragraph 5.5.4.1 when Milestone 3 has been completed.

5.5.6 Consolidated Actions Encouraged. The Port and City agree that where possible consolidating mitigation actions for different habitat types at a single site will better replicate the mosaic of habitats displaced on WHI. Therefore, mitigations actions must take place at no more than three sites within the acceptable geography. Acres may (and are encouraged to) overlap: for example, floodplain, wetland and forest actions could occur on the same acres, if all of these features are provided by the action.

5.5.7 Preparation of Management Prescriptions. The Port will draft and submit site specific management prescriptions for forest re-establishment and enhancement and floodplain re-establishment to the City (BES) for review and approval. The management prescriptions will meet the performance standards as established~~described~~ in Attachment E and will describe: site preparation; native species mix and planting densities; understory planting plan; invasive species control; maintenance and monitoring plans; specific timelines; and reporting/outreach requirements. To ensure that the agreed upon performance standards are met over time, the management prescriptions will be based on the principles of adaptive management.

5.5.8 Acceptable Geography. The acceptable geography where the actions

described in Sections 5.5.1 through 5.5.64 must take place is within the Columbia River Estuary Hydrogremorphic Reaches F, Middle Tidal Flood Plain Basin, and G, Upper Tidal Flood Plain Basin as shown in Attachment F. This area generally encompasses the Columbia River ~~500-year~~ floodplain between the Sandy River Delta to the east, the East Fork of the Lewis River to the west/north and the Multnomah Channel confluence with the Willamette River to the south, including all of Sauvie Island.

5.5.9 Monitoring Periods and Continuing Obligations. The Monitoring Period for any actions taken under Section 5 of this Agreement will be 30 years for forest actions and 10 years for other actions. The Port's obligation to implement and monitor any actions taken directly under Sections 5.5 -5.5.7 will survive the termination of this Agreement and continue for the duration of the Monitoring Period, as described in Section 11.

5.5.10 Adaptive Management. ~~The use of~~ Adaptive management, as described in Section 2.4 will be used as natural resource conditions, regulatory requirements, and scientific understanding evolve over time. ~~It is not the intent of this agreement to require an inflexible mitigation approach that cannot respond to these changes. The Port and City may agree in writing to deviate from these objectives if such changes are necessary to respond to significant changes in regulatory context (for example, additional ESA listings), natural resource conditions, or improved scientific understanding~~ The requirements and objectives of Section 5 of this Agreement may be modified or waived only upon the express written agreement of the City and Port and only after consulting with the West Hayden Island Advisory Committee described in Section 8 of this Agreement.

5.6 Permit Consultation and Coordination

5.6.1 Context. Port development of marine terminal facilities will be subject to state and federal permitting requirements, such as those required for filling within jurisdictional wetlands, and subject to local permitting. Marine terminal development will require compliance with, at a minimum, the National Environmental Policy Act (NEPA) and the Environmental Regulations of the WHI Plan District. These permitting processes involve opportunities for public comment, evaluation of alternatives, and evaluation of mitigation for environmental impact. The Port and City intend that (1) State and federal applications for marine terminal facilities development will be based on sound mitigation proposals that are consistent with City environmental regulations; (2) Marine terminal development on WHI will occur in a manner that minimizes environmental impacts and employs state of the art mitigation principles and techniques as required by the permitting agencies; and (3) The Port and City will collaborate to advance these purposes.

5.6.2 Consultation During Permitting Process. The Port will consult with the City as the Port develops the final mitigation proposals that will be included in the state and federal permit applications related to both shallow water habitat and wetlands. The Port will notify its agents or lessees of this consultation process, and secure their cooperation.

5.6.3 Advanced Notice. The Port will give the City twelve (12) months

advance notice of its intent to submit any state or federal permit application for development on WHI as described in Section 22.3.

5.6.4 Consultation and Funding. The Port and City will jointly fund staff time necessary to support consultation for at least three (3) months before each application is submitted to state and/or federal authorities. The Port will provide the City with draft permit application packages, including mitigation design drawings, Biological Assessments, and any other supporting information the Port intends to submit to permitting agencies.

5.6.5 Early Mitigation Consultation and Agreement with State/Federal Authorities. The Port and City will seek early mitigation-related consultation with state and federal authorities. The goal of early consultation is to reach a mutually acceptable pre-mitigation settlement. If state and federal regulatory authorities are willing to engage in early consultation, or consider a pre-mitigation settlement, the Port and City will make a good faith effort to engage in that consultation, and reach a pre-mitigation settlement.

5.6.6 Timing of Development and FEMA Consultation. The Port will not place fill or remove trees outside the federally-designated Dredge Deposit Management Area until such time as the Port has completed any required NEPA process and obtained any necessary Clean Water Act (CWA) 404 permit(s). Further, the Port will obtain ESA authorization for any FEMA floodplain modification requests (such as a Conditional Letter of Map Revision (LOMR-F or a LOMR-F).

5.6.7 Timing of In-water Development. The Port will not seek state or federal approval to construct marine terminal docks until Milestone 1 has been reached and, in the event that annexation or the WHI Plan District takes effect in stages, City zoning is in effect within the in-water area.

5.7 City Reservation of Rights. Notwithstanding other provisions of Section 5, the City reserves all rights to regulate wetlands and in-water habitat consistent with its obligations under state and federal laws.

5.8 Mitigation Banking Option. As described in Section 5.5, the Port may complete some natural resource actions before obtaining state and federal permits for marine terminal development. The City agrees that the Port may convert any of these completed natural resource actions into a mitigation bank, with credits available to mitigate for other (non-WHI) projects, in the event that: (1) The 300 acres zoned for marine terminal development is not developed during the term of this agreement; (2) No additional forest clearing has occurred within the 300 acres; and (3) The entire 300 acres has been transferred to a third party that is a public agency, non-profit land trust, or similar non-profit land conservation organization whose principal mission is to maintain property protections in perpetuity and that is mutually acceptable to the Port and City.

6. COMMUNITY BENEFIT MEASURES

6.1 Context. The purposes of the community benefit measures described in Sections 6.2 through 6.6 are: (a) to mitigate and offset the potential adverse effects of development on WHI on households located within one mile of WHI, including light, noise, and air pollution associated with industrial development; and (b) to maintain and improve relations between the City, Port, and affected communities.

6.2 Recreation Funding. The Port and City obligations within this section become effective when the following actions have been completed: (a) Milestone 2, as defined in Section 2.3, and (b) the Open Space Strategy described in Section 4.6.

6.2.1 Purpose. The purpose of the community impact mitigation measures for recreation is to implement the Parties' mutual interest in improving recreational and open space access on Hayden Island in a manner that is also consistent with the Hayden Island Plan (2009).

6.2.2 Funding. The City and Port will fund the community recreational improvements described in Section 3.2 of this Agreement consistent with Section 9.

6.3 Community Grant Program. The Port and City obligations within this section are contingent on reaching Milestone 3, as defined in Section 2.3.

6.3.1 Establishment of Grant Program. The Port will establish a Community Benefit Grant Program (Grant Program) and, jointly with the City, will define Grant Program procedures and eligibility within three (3) months of the date the program is established. The Port and City will consult with the Advisory Committee described in Section 8 in developing the Grant Program procedures and eligibility. Consistent with Section 11, the Port's obligation to administer and continue the Grant Program will survive the termination of this Agreement and continue based on truck traffic volumes on North Hayden Island Drive as described in Paragraph 6.3.4 below.

6.3.2 Timing. The Port will establish the Grant Program by no later than one year from the date of Milestone 3.

6.3.3 Recommendation of Projects. The Advisory Committee will recommend Grant Program funded projects for Port consideration and approval.

6.3.4 Funding. The Port will contribute $100,000 each fiscal year to the Grant Program for ten years. After ten years, the Port's annual contribution will be the higher of: (1) a total dollar amount calculated at 50 cents for every heavy truck that uses Hayden Island Drive to enter or exit the terminal gate house each day; or (2) $25,000. The Port will document and report truck traffic volumes to the City (PBOT) as described in Sections 10.3-10.4. Grant Program funds not spent in any one fiscal year will be carried forward to the next fiscal year.

6.4 Health Impact Assessment. The Port and City obligations within this section become effective when Milestone 2, as defined in Section 2.3, has been completed.

6.4.1 Context. The Port and City understand that consideration of health impacts may be part of federal permitting for marine terminal development. A Health Impact Assessment (HIA) may be one mechanism to develop that information and make it available to the public. The City (BPS) and the Multnomah County Health Department (MCHD) completed a preliminary public health analysis as part of the annexation process. The scope of that study was general in nature, because there was no specific Port development proposal to consider during that process. The City and the Port agree that a HIA will be conducted once the type of terminal development is known and Milestone 2 has been completed.

6.4.2 Scope of HIA and supplemental HIAs. The scope of the HIA will focus on the specific Port development proposal(s). A baseline health study of the local island population will be conducted as part of the HIA. The HIA process will be lead by a HIA practitioner and member of the Society of HIA practitioners, to be selected by the City (BPS) and MCHD. The HIA practitioner will design and lead the study in consultation with the City (BPS), MCHD, and the Port. Supplemental HIAs or addenda to the assessment will may be required if additional terminal facilities are proposed and development permits are submitted within the IH zoned area.

6.4.3 Funding. To build on the HIA described in Section 6.4.1 and 6.4.2, and consistent with Section 9, the Port will provide the following funds:

6.4.3.1 Funding Amount. The amount of $95,000 to the City (BPS) for the purpose of developing a HIA of the Port's specific development plans; and

6.4.3.2 Fund for future mitigation. The amount of $1 14 million for the purpose of establishing and managing a fund to implement further mitigation measures that may be recommended in the HIA and/or supplemental HIAs described in Sections 6.4.1 and 6.4.2. The Port will consult with the Advisory Committee described in Section 8 as the Port establishes and manages this fund.

6.4.4 Timing of HIA. The City will complete the HIA described in Subsections 6.4.1 and 6.4.2 before the Port submits the first federal permit or federal funding application for development on WHI. The term "development" includes fill, rail or marine terminal development on WHI, or related docks and causeways below ordinary high water in the Columbia River. The term "permits" includes federal permit or funding applications submitted by entities acting as agents of the Port, or by any lessee of Port property on WHI. The Port will notify and secure the cooperation of it agents and lessees in complying with this requirement.

6.4.5 Notice of Permit Applications and Funding Availability. The Port will give the City advance notice of its intent to submit any state or federal permit application for development on WHI, pursuant to Section 22.3 of this Agreement. The Port will make available to the City the funding described in Section 6.4.3. within three (3) months of completing Milestone 2, as defined in Section 2.3.

6.5 Manufactured Home Park Community Grant Program. The Port and City obligations within this section become effective when Milestone 3, as defined in Section 2.3, has been completed.

6.5.1 Establishment of Grant Program. The Port will establish a Manufactured Home Park Community (MHPC Grant Fund) in the amount of $3.6 million, consistent with Section 9, to mitigate for the impacts of marine terminal and industrial development on the neighboring manufactured home park community. The MHPCGrant Fund may be used for activities that include but are not limited to:

- Down payment assistance for replacement manufactured homes
- Weatherization updates
- HVAC upgrades
- Window replacement
- Individual development accounts
- Case management services

The City Housing Bureau will develop a program plan that describes how the MHPC Grant Fund will be administered, how grant funds will be used, and public involvement in operation of the fund.

6.5.2 Timing and Relationship to Health Impact Assessment. The MHPC Grant Fund will be available at the completion of the HIA. This will enable the Port and the City (Housing Bureau)to determine, with the HIA practitioner, the appropriate uses for the fund based on the results of the assessment.

6.5.3 Funding. Initial funding in the amount of $150,000 to set up the MHPC Grant Fund program(s) will be available to the City (Housing Bureau) at the completion of the HIA described below in Section 6.4. The Housing Bureau will deliver a plan for the distribution and use of funds to the City Council within 9 months of the date the Housing Bureau receives from the Port the initial disbursement of planning funds to set up the program. The Port will make the remainder of the funds available at the completion of milestone 3 as defined in Section 2.3.

6.5.4 Partnerships and Development of Fund. The City and Port will develop a cooperative funding strategy to support ongoing development of the MHPC Grant Fund pursuant to Section 9 of this Agreement.

6.5.4.1 Match Commitment.The intended goal of the strategy will be to leverage a 1:1 match with any state and federal funds that may be available.

6.5.4.2 Funding Recommendations. If the recommendations from the HIA(s) suggest the need for a different amount of base funding, the parties will negotiate in good faith to adjust the amount as described in Section 20.

~~**6.6 Local Permitting Process (ORS 197.722 – 197.728).** The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed. Neither the City nor the Port will invoke Senate Bill 766, enacted into law by the Legislative Assembly in 2011, to bypass the local regulatory process. This commitment does not preclude either party from supporting Metro or state designation of WHI as a regionally significant industrial area.~~

~~**6.7 Local Hiring**. To the extent permitted by law and labor contracts existing at the time of development, the Port agrees to implement a "first source agreement" giving North Portland residents priority for jobs on WHI created by the development. The agreement will include specific outreach to Hayden Island residents.~~

6.1. Context and Intent. The purposes of the community benefit measures described in Sections 6.2 through 6.7 are: (a) to mitigate and offset the potential adverse effects of development on WHI on households located within one mile of WHI, including light, noise, traffic and air pollution associated with industrial development; and (b) to maintain and improve relations between the City, Port, and affected communities.

The City (BPS) and the Multnomah County Health Department (MCHD) completed a preliminary public health analysis as part of the annexation process. The scope of that study was general in nature, because there was no specific Port development proposal to consider during that process. The Port and City understand that consideration of public health impacts may be part of federal permitting for marine terminal development. A Health Impact Assessment ("HIA") may be one mechanism to develop that information and make it available to the public. The intent of this section is to describe a few ways to mitigate impacts, but to allow flexibility for future options after a full Health Impact Assessment(s) (HIA) is performed.

There may be many ways to mitigate and/or offset the potential adverse effects of development on the Hayden Island community. Overall cost of future community mitigation projects may be less than described in Section 6.2.2 below as long as mitigation responds to the impacts identified in the HIA. This section provides flexibility to allow for marine terminal(s) designs to be completed and best management practices to be implemented which may result in fewer impacts .

6.2. Port Funding

6.2.1. HIA. Consistent with Section 9, the Port will provide $95,000 to the City (BPS) for the purpose of developing a HIA of the Port's specific development plans. The HIA is described in more detail in Section 6.3.

6.2.2. Community Fund ("Fund"). The Port will contribute a minimum of $5 million and a maximum of $17.4 million to the Fund. The final amount will be approved by City Council and the Port Commission as defined by the results of the HIA(s) and consistent with Section 9 of this Agreement. The Fund is described in more detail in Section 6.4.

6.2.3. Community Grant Program ("Grant Program"). The Port will contribute at least $100,000 annually for 10 years to a Grant Program. After ten years, the Port's annual contribution will be the higher of: (1) a total dollar amount calculated at 50 cents for every heavy truck that uses Hayden Island Drive to enter or exit the terminal gate house each day; or (2) $25,000. The Port will document and report truck traffic volumes to the City (PBOT) as described in Sections 10.3- 10.4. Grant Program funds not spent in any one fiscal year will be carried forward to the next fiscal year. The Grant Program is described in more detail in Section 6.5.

6.3. Health Impact Assessment

6.3.1. Notice of Permit Applications and Funding Availability. The Port will give the City advance notice of its intent to submit any state or federal permit application for development on WHI, pursuant to Section 22.3 of this Agreement. The Port will make available to the City the funding described in Section 6.2.1 within three (3) months of completing Milestone 2, as defined in Section 2.3.

6.3.2. Timing. The HIA will be completed before the Port submits the first federal permit or federal funding application for the first development action on WHI. The term "development" includes fill, rail or marine terminal development on WHI, or related docks and causeways below ordinary high water in the Columbia River. The term "permit" includes a federal permit or funding application submitted by an entity acting as an agent of the Port, or by any lessee of Port property on WHI. The Port will notify and secure the cooperation of it agents and lessees in complying with this requirement.

6.3.3. Scope. The HIA will focus on the specific Port development proposal(s). A baseline health study of the local island population will be conducted as part of the HIA. The HIA process will be lead by a HIA practitioner who is a member of the Society of HIA practitioners and will be selected by the City (BPS) in consultation with the Multnomah County Health Department (MCHD). The HIA practitioner will design and lead the study in consultation with the City (BPS), MCHD, and the Port. Supplemental HIAs or addenda to the HIA will be required if additional terminal facilities are proposed and development permits are submitted within the IH zoned area.

6.4. Community Fund.

6.4.1. Purpose. The purpose of this fund is to implement further mitigation measures that may be recommended upon completion of the HIA and/or supplemental HIAs described in Section 6.3.

6.4.2 Timing and Establishment. The Port will establish the Fund no later than one year from the date of Milestone 3, as defined in Section 2.3. The Portand the City will jointly define Fund procedures and eligibility within three (3) months of the date the Fund is established, after reviewing the HIA described in Section 6.3. The Port and City will

consult with the Advisory Committee described in Section 8 in developing the Fund procedures and eligibility. Consistent with Section 11, the Port's obligation to administer and continue the Fund will survive the termination of this Agreement.

6.4.3. Decision Making. After consultation with the Advisory Committee described in Section 8, the City and Port will deliver a plan for the distribution and use of funds to the City Council and Port Commission for approval within 9 months of defining procedures and eligibility.

6.5. Potential Uses of the Community Fund.

6.5.1 Additional Recreational Improvements. The Community Fund may be used to support (additional recreational improvements, including more trails, land acquisition, design, engineering, construction, operation, and maintenance costs.

If funds are allocated for additional recreational activities, the City (PP&R) and Port will strive to improve recreational and open space access on Hayden Island in a manner that is also consistent with the Hayden Island Plan (2009) and complies with applicable components of the Open Space Strategy defined in section 4.6.

If funds are allocated to recreation-related capital improvements and the City (PP&R) is managing these improvements, some portion of those funds will be directed to the Operation and Maintenance (O&M) revenue fund described in Section 3.2.4. The methodology to determine the amount that will be directed to the O&M revenue fund is described in Section 3.2.4.

6.5.2. Housing Upgrades for the Manufactured Home Community. In addition to the activities that are described in Section 6.4.1, the Fund may be used to improve housing conditions in the Hayden Island Manufactured Home Community abutting North Hayden Island Drive. While not providing direct mitigation of potential noise or air quality impacts, improvements to housing conditions may provide an offset, by having a positive impact on human health. Actions may include, but are not limited to:

- Down payment assistance or grants toward replacement of older manufactured homes
- Weatherization
- HVAC upgrades
- Window replacement
- Individual development accounts
- Case management services

If monies from the Fund are allocated to address housing conditions, the City (Housing Bureau) will develop a plan (Housing Plan) for City Council and Port Commission consideration. The Housing Plan will describe how the allocated Fund monies will be administeredand used, and the nature of public involvement in operation of the allocated monies. Initial funding in the amount of $150,000 will be provided to the City (Housing Bureau) to support development of the Housing Plan. This plan will be completed within 6

months of the establishment of the Fund described in Section 6.2.2 and 6.4..

6.5.3 Other Potential Uses. The Community Fund may also be used, but not limited to addressing:

- Air quality improvements, such as tree and vegetation buffering, and
- Noise abatement projects.

6.6. Community Grant Program.

6.6.1. Timing and Establishment of Grant Program. The Port will establish a Community Grant Program (Grant Program) by no later than one year from the Date of Milestone 3. In consultation with the Advisory Committee described in Section 8, the City and the Port will jointly define Grant Program procedures and eligibility within three (3) months of the date the program is established. Consistent with Sections 10.3 and 11, the Port's obligation to administer and continue the Grant Program will survive the termination of this Agreement.

6.6.2. Recommendation of Projects. The Advisory Committee will recommend Grant Program funded projects for Port consideration and approval.

6.7. Other Community Benefit Provisions.

6.7.1. Partnerships and Development of Fund and Grant Program. The City and Port will develop a cooperative funding strategy to support ongoing development of the Community Fund pursuant to Section 9 of this Agreement.

6.7.2 Local Permitting Process. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed. The Port and its assignees will not use the designations land use designations described in ORS 197.722-197.728 on WHI to bypass otherwise applicable local or state land use review processes, including rights to notice and comment, public hearings, complete (non expedited) comment and review periods, and all existing causes of action for appeal. This commitment does not preclude either party from supporting Metro or state designation of WHI as a regionally significant industrial area.

6.7.3. Local Hiring. To the extent permitted by law and labor contracts existing at the time of development, the Port agrees to implement a "first source agreement" giving North Portland residents priority for jobs on WHI created by the development. The agreement will include specific outreach to Hayden Island residents.

7. TRIBAL GOVERNMENT COORDINATION AND CONSULTATION

7.1 Contingent Obligation. The Port and City obligations within this section

become effective when Milestone 1, as defined in Section 2.3, has been completed.

7.2 Coordination and Consultation. The City and the Port mutually agree to coordinate and consult with the Tribal Governments throughout the life of the relevant WHI process and as this agreement is implemented . Consultation is understood to be an open, mutually shared conversation that occurs early in the decision-making process; provides the opportunity for technical, legal, and policy review and input; and considers the rights and interests of the Tribal Governments affected by actions taken on West Hayden Island. The outcome of consultation is informed decision-making that adequately considers the legitimate rights and interests of the Tribal Governments and any statutory obligations of the City . The City and the Port will facilitate consultation by establishing and maintaining the appropriate communication and working relationships between City, Port and Tribal Government staff at the technical, policy, legal, and leadership levels.

8. WEST HAYDEN ISLAND ADVISORY COMMITTEE

8.1 Contingent Obligations. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed.

8.2. Role of West Hayden Island Advisory Committee. The City (Mayor) and the Port will collaborate ~~The Port, in collaboration with the City will~~ to establish an ongoing WHI Advisory Committee (WHI AC) consistent with Attachment G ~~F~~. The role ~~mission~~ of the WHI AC will be to: (a) comment on the development and implementation of an OS Strategy; (b) advise the Port and City during recreational facility design and development; (c) negotiate a Good Neighbor Agreement to be implemented during construction and subsequent terminal operations; (d) provide an ongoing forum for discussion of neighborhood impacts associated with ongoing recreational and marine terminal uses on WHI; (e) review truck traffic volumes on a monthly basis (f) recommend projects for funding under the Community Benefit Grant Program, ~~and~~ (g) review of the HIA(s); and (h) review and comment on implementation of and amendments to this Agreement, including the Port's annual report required by Section 10.3, as requested by the City and/or the Port.

8.3 Sponsorship. The Port and the City (represented by the Mayor) will collectively sponsor the WHI AC ~~(Sponsors). The Sponsors will coordinate appointment of members to and sustain the WHI AC. Specifically, t~~The ~~Sponsors,~~ Port and the City will collaborate to coordinate the appointment of members, ~~will~~ define the WHI AC parameters, ~~confirm all appointments~~, provide administrative and technical resources, receive regular reports, evaluate performances and evaluate future structure. Sponsors will provide staff support and technical expertise and work with the WHI AC to resolve issues and navigate barriers**.**

8.4 Reevaluation. The membership, role and responsibilities of the WHI AC will be re-evaluated every 5 years. The WHI AC may be suspended or disbanded and/ or its purpose or operations may be amended by mutual agreement of the Port and City.

9. FUNDING

9.1 Contingent Obligations. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed.

9.2. Funding Context. The Port and City are public agencies with the fiduciary duty to spend public funds in accordance with applicable law. The Port is subject to grant assurances, revenue use policies, and aviation land use constraints with respect to aviation-related operations. The City is restricted by state law and the City Charter regarding the use of General Fund monies for private purposes, as well as by other financial policies and limitations. The purpose of Sections 9.2 – 9.8 are to memorialize the Parties' understanding of their respective rights and limitations relating to funding obligations contained in this Agreement.

9.3 Nonappropriation of Funds. All specific funding obligations of the Port and City contained in this Agreement (summarized below) are contingent upon funding being available and appropriated by the Port Commission and City Council. The Parties acknowledge there are a variety of uncertainties, including future market conditions, that will affect the availability of funds, and these uncertainties may affect the parties unequally. The parties will ~~strive~~ work diligently to attain funding necessary to meet their respective obligations under this Agreement to the maximum extent ~~reasonably~~ possible. If, despite these efforts, the City and/or the Port determine that insufficient funds are available to meet their obligations under this Agreement, the City Council and/or the Port will adopt a written decision describing: (a) the efforts undertaken to identify funding to perform their obligations under this Agreement; (b) why sufficient funding is currently unavailable; and (c) when sufficient funding is anticipated to be available. The party adopting the decision will send a copy of this decision to the other party within 7 days of the date the decision is adopted consistent with the notice provisions in Section 22 of this Agreement. Additionally, a copy of the decision will be sent to the City's Mayor and the Port's Executive Director. Following receipt of the decision, the City and Port will first initiate and complete the process to reprioritize funding pursuant to Section 9.6 before pursuing any other remedy permitted by this Agreement.

Obligation	**Summary of Obligations**	
	Amount	**Timing**
North Hayden Island Drive (Section 3.1)	TBD (estimated: ~~*up to*~~ *$12.35 million* ~~*total*~~) City = limited to lesser of $5.25 million or 25%.	Milestone 1
Recreation Improvements (Section 3.2)	Port = $2.4 ~~9.4~~ million + O&M TBD City = $1.0 million	Milestone 2
Sewer and Water Improvements (Section 3.3)	TBD	Milestone 1
Open Space Strategy (Section 4.6.1)	Port = $200,000	Milestone 1

Ecosystem Values and Functions (Section 5)	TBD (estimated: ~~*up to* $44~~ *50~~-million*)	Milestones 1 - 4
Community Fund (Section 6.4)	Port = minimum of $5 million and a maximum of $17.4 million	Milestone 3
Community ~~Benefit~~ Grant Program (Section 6.6~~3~~)	Port = $100,000 x 10 years + TBD ongoing	Milestone 3
Health Impact Assessment (to BPS and MCHD) (Section 6.3~~4~~)	Port = ~~$1.095 million~~ $95,000	Milestone 2
~~Housing Grant (Section 6.5)~~	~~Port = $3.6 million~~	~~Milestone 3~~

9.4 Business plan. A WHI project consultant (Worley Parsons) prepared a preliminary cost estimate of necessary public infrastructure associated with development of WHI as part of the Concept Plan final report. The City (Office of Management and Finance – OMF, PBOT and BPS) and the Port will work together, with the State of Oregon and Metro, to develop a business plan for WHI marine terminal development. The City and the Port will negotiate a Memorandum of Understanding with other entities including but not limited to the State of Oregon and Metro to seek additional funding. This plan will include refined project lists, cost estimates, and timelines; and will identify more specific financing tools and funding sources that could support the anticipated public investments. The City and the Port agree to develop this plan by July 1 2016. The Port will not seek permits to place fill outside the federally-designated Dredge Deposit Management Area until such time as this business plan is complete.

9.5 Additional Funding Sources. The preliminary cost estimate described in section 9.4 assumes funding from sources not wholly within the Parties' control, which the Parties may use to meet their respective obligations in this Agreement. The City and Port, individually and collectively, agree to diligently pursue reasonable funding from non-local public sources, including federal, state and regional allocations and cost-share funds, private foundations, grant programs, donations and other appropriate and available funds or programs (External Funds). In particular, the transportation, recreation, and site preparation work identified in Sections 3.1 – 3.3 of this agreement may be eligible for External Funds. The Port does not intend to seek external funds for environmental restoration or natural resource actions. The City and the Port will jointly develop priorities for pursuing these External Funds, and set specific goals. The Parties agree to seek funding in a manner that that will not divert from (or compete with) the City's general transportation revenue sources including state gas tax revenues. The Port and City may use these External Funds to meet their respective obligations under this Agreement. The City's Regional Flexible Funds suballocation could be used to meet the City's obligation.

9.6 Reprioritization of Funding. If the Port Commission and/or City Council ~~do not appropriate funding or anticipated External Funds are not committed when and as required~~ adopt a written decision that insufficient funds are available consistent with Section 9.3 of this Agreement, that party will initiate negotiations within 14 days of receipt of the written decision described in Section 9.3. The Port and City will ~~immediately~~negotiate in good faith ~~in an effort to agree on~~ an amendment to this Agreement that will identify : (a) a

time frame within which sufficient funds may be available to meet the obligations specified in this Agreement; and/or (b) a reprioritization of the sources and uses of funding set forth in this Agreement~~and negotiate an amendment to this Agreement to reflect that reprioritization.~~ If the Port and City agree to amend this Agreement, the Port Commission and City Council will adopt the amendment within 30 days of the date agreement is reached. If after at least ninety (90) days of good faith negotiations the Parties are unable to agree on the terms of an amendment, then either Party may elect to terminate this Agreement in the manner specified in Section 21 of this Agreement.

9.7 Funding Index. All specific funding amounts identified in this Agreement are stated in 2012 dollars. At the time a specific project or action with a specifically stated dollar amount is implemented, the dollar amount will be converted to the current equivalent amount using the CPI-U. The term "CPI-U" means the most recent *Consumer Price Index for All Urban Consumers (1982-1984 equal to 100) Portland-Salem OR-WA* for All Items or a comparable index published by the United States Bureau of Labor Statistics if such Consumer Price Index is discontinued. For all transportation related costs identified in this Agreement, future costs will be adjusted based on the National Highway Construction Cost Index as documented by the Federal Highway Administration (FHWA). The City (PBOT) will also determine additional inflation factors, that are not accounted for by FHWA, such as City overhead rates.

9.8 Suspension and Resumption of Obligations. If no industrial development has occurred on WHI by July 1, 2027, or if the Port has been unsuccessful in securing permits, land use approvals or other necessary approvals for such development by that date, the City and Port's pre-development financial obligations will be suspended. The obligations will resume again when Milestone 2 as defined in Paragraph 2.3, has been completed. . For purposes of this paragraph, the City and Port's predevelopment obligations are those summarized in Section 9.3.

10. ENVIRONMENTAL MANAGEMENT SYSTEM, REPORTING AND ADAPTIVE MANAGEMENT

10.1 Contingent Obligations. The Port and City obligations within this section become effective when Milestone 1, as defined in Section 2.3, has been completed.

10.2 Sustainability Policy and Best Management Practices for Marine Terminal. The Port will implement the "Vision for a Sustainable West Hayden Island"(Vision) described in Attachment H ~~G~~ during marine terminal construction and operation, including the guiding principles and strategic goals therein. The Best Management Practices referenced in the Vision represent best management practices at this time, and are expected to be refined over time. The Port will maintain a process for monitoring progress toward the Vision using adaptive management as described in Section 2.4, and including implementation of an environmental management system.

10.3 Reporting by Port. Within 30 days of the beginning of each Port fiscal year, the Port will report in writing to the WHI AC established under Section 8 on the progress and status of the following:

10.3.1 The environmental activities described in Section 5;

10.3.2 Truck traffic volumes as referenced in Sections 3.1.3 and 6.3.4. and specifically, the number of heavy trucks that use Hayden Island Drive to enter or exit the marine terminal gate house each day. The total number of truck trips during the month will be divided by the number of days in the month to obtain the average. This truck data must be independently verifiable in the event that the WHI AC requests a 3rd party audit;

10.3.3 Sustainability Policy and Best Management Practices referenced in Section 10.2

10.3.4 Progress toward implementing the Open Space Strategy in Paragraph 4.6.1.

10.4 Contents of Reports. Each report required by Section 10 will describe specific projects completed during the previous year and anticipated to be accomplished during the next year, including relevant cost and budget information. Additionally, the report will describe whether the Port anticipates sufficient funds will be available to meet its obligations under this Agreement, and, if not, the Port's actions to comply with Sections 9.3 and 9.6 of this Agreement.

11. CONTINUING OBLIGATIONS

11.1 Specific Continuing Obligations. The Port and City obligations within this section are contingent on reaching the specific milestones stated below, as defined in Section 2.3. All of the following Port obligations will survive the termination of this Agreement and continue as described in this Section unless modified with the City's consent.

11.1.1 The Port's obligations to fund and perform the transportation, sewer and water improvements as described in Sections 3.1 and 3.3 will survive the termination of this Agreement and continue in perpetuity. This obligation becomes effective when Milestone 1 has been completed.

11.1.2 The Port's commitment to not seek or support rezoning of the OS zoned area pursuant to Section 4.4 will survive the termination of this Agreement and continue in perpetuity. The instrument memorializing this commitment will include a third party organization selected by the City, which will be granted the power to veto future amendments to that agreement. This obligation becomes effective when Milestone 1 has been completed.

11.1.3 The Port's obligation to maintain natural resource mitigation sites established pursuant to Section 5.5 will survive the termination of this Agreement and continue as described in Section 5.5.9. ~~for a 30-year period. This obligation is contingent on the Port choosing to directly implement environmental actions described in Section 5.5.~~

11.1.4 The Port's obligation to continue a Community ~~Benefits~~ Grant Program pursuant to Section 6.6~~3~~ will survive the termination of this Agreement and continue in perpetuity based on a truck traffic volume metric defined in Section 10.2.2. This obligation becomes effective when Milestone 3 has been completed.

11.2 Memorialization of Continuing Obligations. To memorialize the continuing obligations described in Sections 11.1.1 through 11.1.4, the Port will execute and record covenants, maintenance agreements, easements, or other binding instruments, in a form acceptable to the City. These instruments will be in a form that runs with the WHI land and will be binding on subsequent property owners of that land, any entities acting on the Port's behalf on WHI, and any entities leasing land on WHI. The instruments will be executed and recorded no later than: one year from the date the milestones in Section 11.1 have been completed.

12. DISPUTE RESOLUTION

12.1 Initiation of Dispute Resolution. Within 30 days of the identification of a dispute (Dispute Date) under this Agreement, the Port and City will expeditiously initiate the informal dispute resolution described in Sections 12.2 - 12.3.

12.2 Initial Meeting. City and Port staff will meet to discuss and resolve the dispute to the extent possible. If the dispute cannot be resolved by City and Port staff within 60 days of the Dispute Date, staff will promptly refer the dispute to the appropriate City and Port program managers for discussion and resolution.

12.3 Termination of Dispute Resolution. If the dispute cannot be resolved by City and Port Program Managers within 90 days of the Dispute Date, the informal dispute resolution process will terminate. Each party may elect to declare a default and pursue any remedies available under Section 13 of this Agreement.

13. REMEDIES

13.1 Default. The following shall constitute default: Any breach of the provisions of this Agreement whether by action or inaction that continues and is not remedied within ninety (90) days after the non-defaulting party has given written notice to the defaulting party specifying the breach.

13.2 Cure. If the defaulting party determines the breach cannot with due diligence be cured within a period of ninety (90) days, the non-defaulting party may, in its sole discretion, grant a longer period of time to cure the breach, so long as the defaulting party diligently proceeds to cure the breach and the cure is accomplished within no more than one hundred eighty (180) days.

13.3 Specific Performance. If a Party defaults under the terms of this Agreement,

the non-defaulting party may, in addition to any other remedies at law or equity, compel the other Party's performance under this Agreement or prevent any action contrary to this Agreement by injunction or other equitable relief.

13.4 Nonexclusive Remedies. No remedy conferred on or reserved to any Party under this Agreement is intended to be exclusive of any other remedy allowed by law. Unless expressly provided otherwise in this Agreement, each and every remedy will be cumulative and will be in addition to any other remedy given to each Party in this Agreement.

13.5 Waiver of Default. To the extent not precluded by this Agreement, the nondefaulting Party may, in its discretion, waive any default and its consequences and rescind any consequences of such default. In case of any such waiver or rescission, the Parties will be restored to their respective former positions or rights under this Agreement. No such waiver or rescission will: (a) extend to or affect any later or other default, or impair any right consequent thereon; or (b) be effective unless it is in writing and signed by the nondefaulting Party.

14. CAPACITY TO EXECUTE

The Port and City each warrant and represent to one another that this Agreement constitutes a legal, valid and binding obligation of that party. The individuals executing this Agreement personally warrant that they have full authority to execute this Agreement on behalf of the party for whom they purport to be acting.

15. COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, and such counterparts shall constitute one and the same instrument.

16. DEFINED TERMS

Capitalized terms will have the meaning given them in the text of this Agreement. Any undefined terms will have their dictionary definitions.

17. ENTIRE AGREEMENT

This Agreement represents the entire agreement between the Port and the City relating to annexation of WHI. This Agreement has been thoroughly negotiated between the Port and the City. In the event of ambiguity, there will be no presumption that such ambiguity should be construed against the drafter.

18. GOVERNING LAW

This Agreement will be governed by, construed and enforced in accordance with the laws of the State of Oregon. Jurisdiction will be with Multnomah County Courts or the Federal Court located in Portland, Oregon.

19. HEADINGS

The section headings contained in this Agreement are for convenience in reference and are not intended to define or limit the scope of any provision of this Agreement.

20. MODIFICATION

Unless otherwise specifically set forth herein, this Agreement may be amended only by a written agreement of the Port and the City that is signed by authorized signatories for both Parties.

21. TERMINATION

21.1 Mutual Termination. This Agreement may be terminated only on mutual written agreement of the Parties.

21.2 Termination by Either Party. Notwithstanding Paragraph 21.1, either party may terminate this agreement if the other party fails to fulfill the obligations stated in Section 9.3 with 90 days written notice to the other party.

22. NOTICES AND COMMUNICATION

22.1 Notification of Parties. Any notice required by this Agreement shall be mailed to each party as specified in Sections 22.1.1 - 22.1.3.

22.1.1 Notice to the City. A notice or communication to the City shall be addressed as follows:

Director, Bureau of Planning and Sustainability
1900 SW Fourth Avenue, Suite 7000
Portland, OR 97201

with a copy to:

City Attorney
1221 SW Fourth Avenue, Suite 430
Portland, OR 97204

22.1.2 Notice to the Port. A notice or communication to the Port shall be addressed as follows:

Executive Director, Port of Portland
7200 NE Airport Way
Portland, OR 97218

22.1.3 Change in Addressee. A notice or communication may be addressed to a Party in any other way than as provided in Sections 22.1.1 and 22.1.2 as that Party may designate in writing. [Sec. 18.1.3]

22.2 Receipt of Notification. A notice or communication by one Party to the other Party required by this Agreement is deemed received by the addressee on the earlier of: (a) The actual date of receipt; or (b) Three (3) days after mailing, if mailed by registered or certified mail, postage prepaid, return receipt requested.

22.2.1 Notice Transmitted by Facsimile or Electronic Communication. In lieu of a mailing, a communication is deemed received by a Party on the date it was transmitted by facsimile or e-mail to that Party at the facsimile number set out above if the transmitting Party has a written confirmation of the successful transmittal.

22.3 Notice of State or Federal Permit Application. The Port will give the City advance notice of its intent to submit any state or federal permit application for development on WHI at least twelve (12) months before the application is filed with the issuing agency. "Development" includes fill, rail or marine terminal structures or related docks and causeways below ordinary high water in the Columbia River. "Permit application" include those submitted by entities acting as agents of the Port or any lessee of Port property on WHI.

23. SEVERABILITY

23.1 Continuing Validity. Except as provided in Section 23.2, if any clause, sentence, section, paragraph, or other portion of this Agreement is declared illegal, null or void for any reason, the validity of the remaining portions will not be affected and the rights and obligations of the Parties will remain in full force and effect to the fullest extent permitted by law.

23.2 Termination of Agreement. If all or any portions of Section 3.1 (Transportation), Section 3.3 (Sewer and Water Systems), Section 4.3 (Open Space Zoning), Section 5 (Ecosystem values and Functions), and Sections 6.3 through 6.5 (Community Impact Mitigation) of this Agreement is declared illegal, null or void for any reason, this Agreement will terminate in its entirety and the rights and obligations of the Parties under this Agreement will have no further force and effect.

24. OTHER CITY, REGIONAL, STATE, AND FEDERAL LAWS AND REGULATIONS

24.1 References to Other Laws and Regulations. All references in this Agreement to other City, regional, state, or federal laws or regulations are for informational purposes only, and do not constitute a complete list of the laws or regulations applicable to future development on WHI by the Port. These references do not imply any responsibility by the City for enforcement of regional, state, or federal laws or regulations. References also do not preclude exceeding minimum requirements.

24.2 Compliance Required. In addition to the requirements of this Agreement, all uses and development on WHI must comply with all other applicable City, regional, state, and federal laws and regulations.

IN WITNESS HEREOF, the Port and the City have subscribed their names hereto effective as of the year and date first written above.

THE CITY OF PORTLAND

By: _____
Charlie Hales, Mayor

Date: _____

By: _____
LaVonne Griffin-Valade, Auditor

Date: _____

APPROVED AS TO FORM FOR THE CITY:

By: _____
City Attorney

THE PORT OF PORTLAND

By: _____
Bill Wyatt, Executive Director

Date: _____

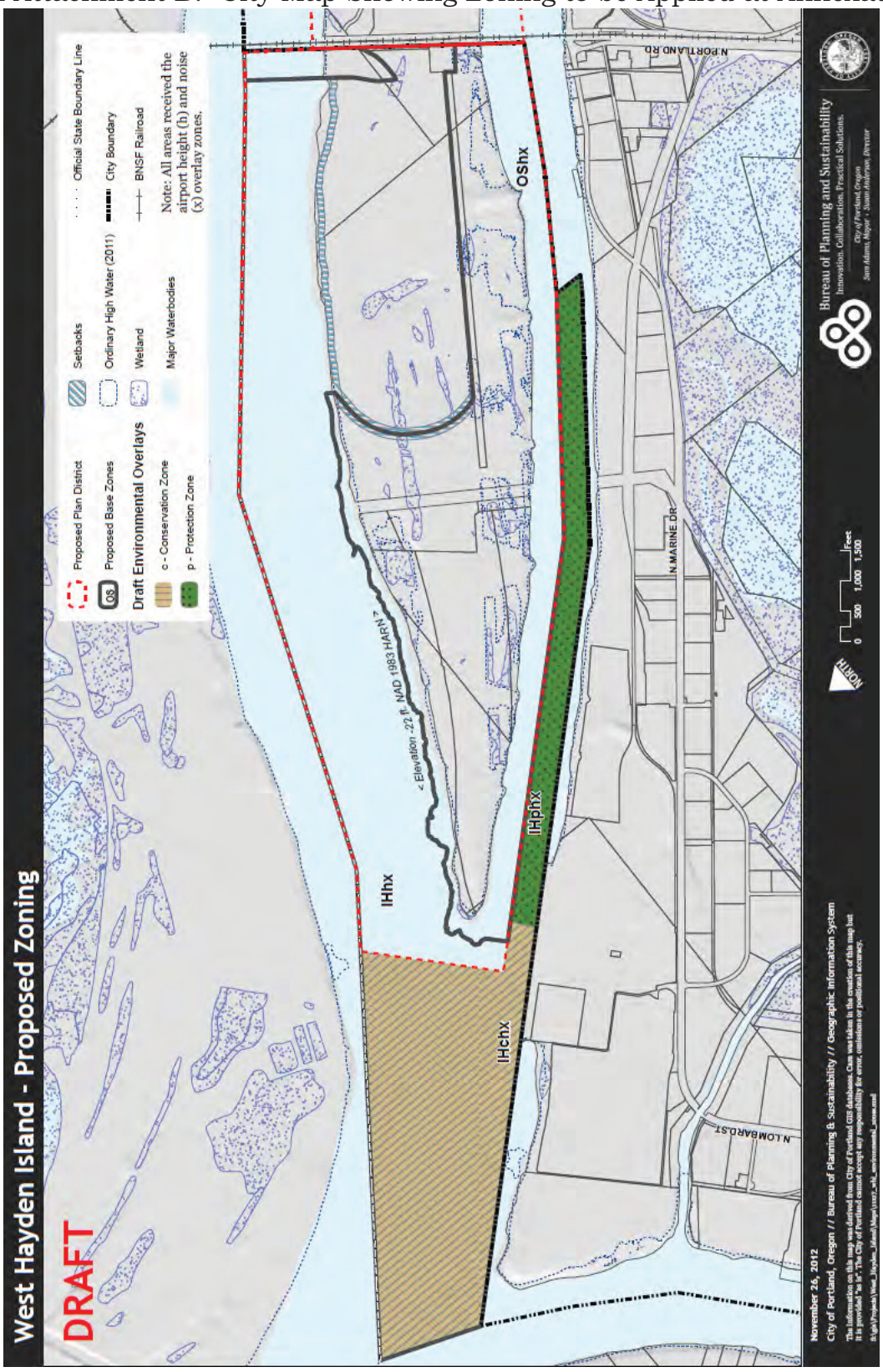
APPROVED FOR LEGAL SUFFICIENCY FOR THE PORT:

By: _____
Counsel for The Port of Portland

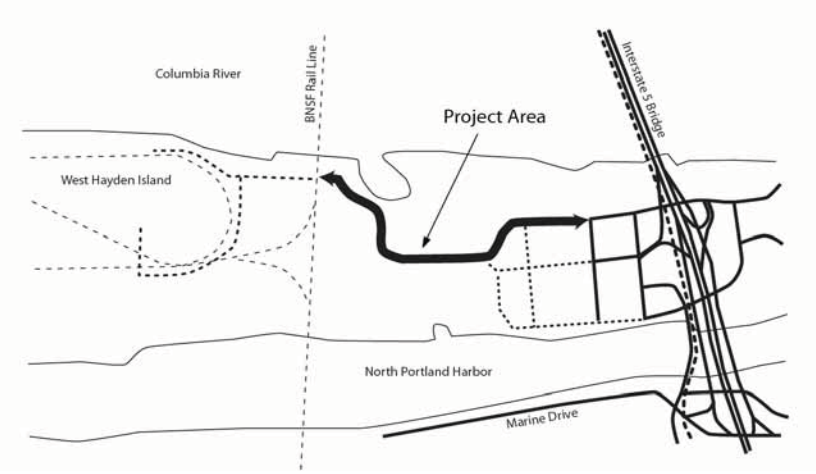
IGA ATTACHMENTS:
ATTACHMENT "A" depicting WHI
ATTACHMENT "B" City Map showing zoning to be applied on the effective date of the Agreement
ATTACHMENT "C" describing transportation system upgrades and recommended improvements to North Hayden island Drive, referenced in Section 3.1.
ATTACHMENT "D" WHI Concept Plan Map
ATTACHMENT "E" providing mitigation definitions, depicting agreed-upon forest re-establishment and enhancement areas, and describing mitigation performance standards, referenced in Section 5.
ATTACHMENT "F" Acceptable Geography Map
ATTACHMENT "G ~~F~~" Membership and Establishment of West Hayden Island Advisory Committee, referernced by Section 8
ATTACHMENT "H~~G~~" Vision for Sustainable West hayden island, referenced by Section 10.2.

IGA Attachment A: West Hayden Island

IGA Attachment B: City Map Showing Zoning to be Applied at Annexation



IGA Attachment C: North Hayden Island Drive Improvements



Project Description:
Reconstruct North Hayden Island Drive from the Burlington Northern rail bridge to the Columbia River Crossing interchange. Improvements will be designed to accommodate all modes, including tractor-trailers, passenger vehicles, bicycles and pedestrians. Buffering treatments will be considered for residential property abutting N. Hayden Island Drive to mitigate roadway noise. Unless safety conditions or land use changes warrant an alternative, maintain the main entrance to the Hayden Island Manufactured Home Park at its current location.

Public Design Process:
A public involvement process will occur to refine project design as part of further project development, following standard PBOT public involvement procedures.

Cost Estimate for TSP:
The estimate below represents costs for North Hayden Island Drive roadway improvements, potential noise buffer upgrade, right of way acquisition, and intersection signalization.

1.	NHID Total	$9.76 m
2.	Noise buffer	$1.36 m
3.	RW for buffer	$0.10 m
4.	Add segment	$0.63 m
5.	Signalize intersection	$0.5 m
6.	Total (all)	$12.35 m

Notes:
1. $9.76 m total cost includes contingency of $2.94 m (30% of total).
2. Noise buffer along a portion of Hayden Island Drive adjacent to residences.
3. Needed RW for buffer = 5’ 5’x1170’ = 5850sf x $6/sf to $12/sf (est. range of residential) = $35 to $100k.
4. Segment east of Pavilion not completed by CRC (~ 300’). Length of NHID=4700’@$9.76m; 300’=$630k.
5. Rough cost for Pavillion Street intersection signalization. Assumes street improvements in place.
6. Total cost.

IGA Attachment D: WHI Concept Plan Map

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Attachment E, Part 1: Mitigation Definition

The terms used in this document are based on definitions used for wetland mitigation:

Re-establishment is the act of creating new habitat on a site where it is currently absent, but formerly occurred. This approach *results in a gain in habitat acreage* and an increase in functions and key ecological process provided by the habitat.

Example: The existing condition of the mitigation site is within the historic floodplain but has been filled or is behind a levee and the natural resources cleared: vacant land, agriculture, dilapidated residential, ball fields etc. The site was historically floodplain forest and/or forested wetlands. The hydrologic processes would be re-introduced into the site including grading to remove fill or breaching of a levee. Channels or basins are re-established and dense planting efforts establish cottonwood/ash/willow vegetation community. Placement of large downed wood could be included. Functions are significantly improved and there is a gain in habitat acreage.

Rehabilitation is the reintroduction of environmental processes into an existing degraded habitat. This provides significant functional lift, but does not produce a gain in habitat area (acreage). This approach *does not increase habitat acreage*, but can significantly improve functionality.

Example: The existing condition of the mitigation site is a relatively healthy cottonwood/ash forest but historic hydrologic processes that have been reduced or eliminated by humans. A regular flood regime is reinstated and the forest now receives full or partial inundation during periods of high water. Vegetation enhancement activities would also be included. Functions are significantly improved, but there is no gain in habitat acreage. *Note: rehabilitation has been proposed as part of any WHI forest mitigation proposals to date.*

Enhancement is the act of improving structural conditions (usually vegetation) in an existing degraded habitat. This approach *does not increase habitat acreage*, but modifies condition of existing vegetation structure and provides functional lift (but less than rehabilitation). It does not address environmental processes like flooding.

Example: The existing condition of the mitigation site is cottonwood/ash forest with some tree regeneration and a shrub layer and groundcover that is a mix of native and non-native species. All the primary vegetation layers are present, but non-native cover is adversely affecting the forest. By controlling non-native plants and planting new natives at a relative low density, total native cover is increased and non-native cover is reduced. Tree regeneration is boosted. The result is forest functions are improved with no gain in acreage.

Preservation ("Protection") is removing an imminent threat or cause of decline of a healthy forest habitat. *Results in net loss of habitat acreage*, but can preserve multiple functions long term and prevent additional loss. Preservation reduce the risk of additional habitat loss in the future. Preservation includes stewardship commitment.

Example: The existing condition of the mitigation site is a cottonwood/ash forest interspersed with wetlands that is within the active floodplain. Site is under an imminent threat of development (e.g., fill and construction) and is purchased and brought into permanent conservation status. Or the land maintains same ownership, but a change in zoning and/or legal instruments bring the resource under permanent protection. Functions are not improved and there is no gain in habitat acreage. This action is often combined with other mitigation actions, e.g., preservation and enhancement.


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Attachment E, Part 2: City of Portland WHI Forest Mitigation Framework - Executive Summary
June 11, 2013

1. Framework Context

1.a. Purpose

As part of the West Hayden Island (WHI) Phase II planning project, the City of Portland Bureau of Environmental Services and Office of Health Work Rivers developed the *WHI Forest Mitigation Framework* (Framework) to aide in determining the type and amount of compensatory mitigation actions needed to replace bottomland hardwood forests impacted by future marine terminal development on the island. This memorandum provides a summary of the Framework methodology.

The Framework is a science-based forest mitigation approach derived from established compensatory mitigation practices. The Framework is a tool that serves to answer the question: What mitigation is required to fully replace floodplain forest functions detrimentally impacted by future WHI development? The framework evaluates forest mitigation proposals based on the type of action, location, and timing.

The Framework provides flexibility and options in terms of mitigation timing, location and methodology. Extensive detail on the development of the framework is documented in the *City of Portland WHI Forest Mitigation Framework* March 23, 2012 and the *Addendum* dated August 16, 2012.

The purpose of this document is to provide guidance to City planners on how to evaluate future forest mitigation proposals for impacts to floodplain forests on WHI.

1.b. Goal of Forest Mitigation

The goal for WHI forest mitigation is a net increase in ecosystem function. The Framework quantifies in acres the amount of forest mitigation to return to baseline conditions. Returning to baseline is also expressed as "no net loss", full replacement, or 100% mitigation. The City has set a policy goal of defining net increase in ecosystem function as an additional 10% above full replacement for forests, or 110% forest mitigation. The framework is the tool used to quantify how much of that goal is achieved with a specific action or set of actions.

1.c. Assumptions

- "Baseline" represents the current conditions on WHI: 480 acres of existing, mostly contiguous bottomland hardwood forest, with a canopy comprised primarily of cottonwood and ash, located within the Columbia River 100 year floodplain with increasing areas of inundation for 2-year, 10-year, and 30-year flood events.
- A fully functioning mitigation site means that the forest is providing all of the functions that were provided by the baseline condition on WHI; this includes relative size, age, interior area, and habitat mosaic functions.

- The City's framework was developed specifically for WHI forests and tailored to specific functions provided by the site and what would be required to replace those features and functions.

1.d. Mitigation Terminology

The terms used in the Framework are based on definitions used for wetland mitigation by the Washington Department of Ecology and have been adapted to WHI floodplain forest habitat:

Re-establishment is the act of creating new habitat on a site where it is currently absent, but formerly occurred. This approach *results in a gain in habitat acreage* and an increase in functions and key ecological process provided by the habitat.

Example: The existing condition of the mitigation site is within the historic floodplain but has been filled or is behind a levee and the natural resources cleared: vacant land, agriculture, dilapidated residential, ball fields etc. The site was historically floodplain forest and/or forested wetlands. The hydrologic processes would be re-introduced into the site including grading to remove fill or breaching of a levee. Channels or basins are re-established and dense planting efforts establish cottonwood/ash/willow vegetation community. Placement of large downed wood could be included. Functions are significantly improved and there is a gain in habitat acreage.

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Example: The existing condition of the mitigation site is a relatively healthy cottonwood/ash forest but historic hydrologic processes that have been reduced or eliminated by humans. A regular flood regime is reinstated and the forest now receives full or partial inundation during periods of high water. Vegetation enhancement activities would also be included. Functions are significantly improved, but there is no gain in habitat acreage. *Note: rehabilitation has been proposed as part of any WHI forest mitigation proposals to date.*

Enhancement is the act of improving structural conditions (usually vegetation) in an existing degraded habitat. This approach *does not increase habitat acreage*, but modifies condition of existing vegetation structure and provides functional lift (but less than rehabilitation). It does not address environmental processes like flooding.

Example: The existing condition of the mitigation site is cottonwood/ash forest with some tree regeneration and a shrub layer and groundcover that is a mix of native and non-native species. All the primary vegetation layers are present, but non-native cover is adversely affecting the forest. By controlling non-native plants and planting new natives at a relative low density, total native cover is increased and non-native cover is reduced. Tree regeneration is boosted. The result is forest functions are improved with no gain in acreage.

Preservation ("Protection") is removing an imminent threat or cause of decline of a healthy forest habitat. *Results in net loss of habitat acreage*, but can preserve multiple functions long term and prevent additional loss. Preservation reduce the risk of additional habitat loss in the future. Preservation includes stewardship commitment.

Example: The existing condition of the mitigation site is a cottonwood/ash forest interspersed with wetlands that is within the active floodplain. Site is under an imminent threat of development (e.g., fill and construction) and is purchased and brought into permanent conservation status. Or the land maintains same ownership, but a change in zoning and/or legal instruments bring the resource under

permanent protection. Functions are not improved and there is no gain in habitat acreage. This action is often combined with other mitigation actions, e.g., preservation and enhancement.

1.e. Existing Conditions

The documentation of WHI existing conditions, vegetation assemblages, wildlife habitat and riparian corridor functions can be found in the *Hayden Island Natural Resources Inventory* (DATE). For the purposes of determining impacts and mitigation, the mapped forest and woodland habitats were combined and are called the floodplain forest.

Six attributes combine to make WHI forests highly unique and significant: size, location, old age, habitat rarity, health, and complexity. The forest canopy is almost entirely native cottonwood and ash trees. There are impacts from invasive species, including Armenian blackberry, primarily along roads, trails and power line corridors; however, the interior of the forest is comprised of native vegetation layers, varied age classes, vegetation regeneration, deep leaf litter, and standing/downed wood. The forest is utilized by 13 *at-risk* wildlife species that are in decline (birds, bats, and an amphibian), as well as many more native species. The cottonwood-ash floodplain forest habitat on WHI has been identified as high quality and high value/priority by several agencies and organization.

1.d. Development Impacts

The Hayden Island Natural Resources Inventory, Worley Parsons Final Base Concept Plan and the City's proposed zoning were used to determine floodplain forest impacts. The direct impact of development is assumed to be complete removal of floodplain forest habitat within the Final Base Concept Plan footprint, 140 acres.

Outside the development footprint the City's propose zoning applies a buffer between the development and the areas to remain open space. Some limited development impacts could occur within this buffer; however, without additional engineering it is uncertain any direct impacts would occur. There will be on-going, indirect impacts on the remaining floodplain forest. These indirect impacts will reduce the functionality of the forests at the edge. Based on scientific literature, edge effects can have impacts up to 400 feet into the remaining forest (the impacts diminish moving inward from the edge of the forest). The buffer and area of indirect impacts was estimated to be 18 acres of floodplain forest habitat.

Because direct impacts to the buffer area are unknown and because edge effects will be greater closer to the development and diminishing moving into the forest, the total indirect impacts added to direct impacts is 9 acres (50% of the total indirect impact area). **Therefore the total impacted floodplain forest area that requires mitigation at this time is <u>149 acres</u>.**

2. Methodology

The City's Forest framework use ratios to determine the quantity in acres of mitigation needed to replace lost WHI floodplain forests. The ratios express what is needed for full replacement or 100% mitigation. A net increase is then defined as 10% more effort beyond full replacement, or 110% forest mitigation.

The ratios express mitigation area to impact area. For example a ratio of 2:1 means 2 acres of mitigation for every one acre of impact. The Framework starts with a set of base ratios and then includes modifiers to those ratios for timing, location, type of mitigation, and landscape context ("island mosaic").

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Table 1. Base Ratios for Forest Mitigation Framework.

Mitigation Method	base ratio
Re-establishment	2:1
Rehabilitation	4:1
Enhancement	8:1
Preservation	15:1

2.a. Distance Modifier

The location of proposed mitigation is incorporated into the analysis with the potential application of a distance modifier to the base ratio. Mitigation on WHI is considered on-site and results in a reduction of the base ratio. Mitigation within 5 miles is "in-proximity" and has no modifier making it the same as the base ratio. Mitigation more than five miles from WHI is "off-proximity" and subject to the distance modifier. The distance is measured in a straight line from the closest shoreline of WHI or from the rail line on the eastern border of WHI.

WHI mitigation must occur within the acceptable geography outlined in this Intergovernmental Agreement: within the Columbia River 500-year floodplain between the Sandy River Delta to the east, the East Fork of the Lewis River to the west/north and the Multnomah Channel confluence with the Willamette to the south, including all of Sauvie Island. Note that the mitigation must also occur on no more than three site within the acceptable geography.

Table 2. The framework ratios relative to distance.

		Distance Modifiers		
Mitigation Method	base ratio	on-site (base ratio ÷ 1.5)	in-proximity 0-5 mile from WHI (no multiplier)	off-proximity > 5 miles from WHI (base ratio x 1.5)
Re-establishment	2:1	1.3:1	2:1	3:1
Rehabilitation	4:1	2.6:1	4:1	6:1
Enhancement	8:1	5.3:1	8:1	12:1
Preservation	15:1	10:1	15:1	22.5:1

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Example 1:

150 acres of forest enhancement is proposed on-site on WHI. The base ratio for enhancement is 8:1 and the modifier for onsite is to divide the base by 1.5:

1. base ratio 8:1 ÷ 1.5 = 5.3:1 effective ratio

2. 150 mitigation acres ÷ 5.3 = 28.3 impact acres.

therefore: 150 acres of forest enhancement mitigation at a ratio of 5.3:1 mitigates for 28.3 impact acres

result: 28.3 impact acres out of 149 impacts acres = 19% of mitigation needed for full replacement (28.3 ÷ 149 = 0.18993 or 19%).

2.b. Island Mosaic Habitat Modifier

This modifier takes into account whether or not the proposed forest mitigation is on an island in the Columbia River or situated within a mosaic of other habitat types. The city combined these landscape considerations into a single multiplier and they are presented as an "or" choice in the framework. This means it only applies if neither criterion is met. In other words, a project does not need to meet both the island and habitat mosaic criteria (but this is ideal to best replace ecological function). A mitigation site could be on the mainland and within a mosaic and the modifier would not apply. And the site could be on island but not within a mosaic and the modifier would not apply.

Table 3. The framework ratios relative to islands and habitat mosaics.

		Island/Habitat Mosaic Modifiers	
Mitigation Method	**base ratio**	**site is on island or in a floodplain habitat mosaic = no multiplier and no change to base ratio**	**site is not on island or in a floodplain habitat mosaic = base ratio x 1.5**
Re-establishment	2:1	2:1	3:1
Rehabilitation	4:1	4:1	6:1
Enhancement	8:1	8:1	12:1
Preservation	15:1	15:1	22.5:1

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2.c. Temporal Modifiers

These factors address the time between the impacts and when the mitigation actions would be fully functioning. It is assumed in the framework that a newly planted stand of floodplain forest will take at least 100 years to reach the level of function currently provided at the WHI impact site. Full function not only relates to the height of the trees, but also to soil conditions, leaf litter, presence of snags and downed wood, and native shrub and sub-canopy layers of vegetation.

For every decade it takes the mitigation site to get to full function 0.1 is added to the base ratio. Table 4 provides the temporal modifiers as they apply to re-establishment, rehabilitation, and enhancement. The temporal modifies do not apply to preservation.

Table 4. The framework ratios relative to islands and habitat mosaics.

Mitigation Action	temporal loss	temporal gain
Re-establishment *assumes 100 years to full function*	base ratio + 1.0 or also expressed as: +0.1 for each decade until full function	- 1.0 from base ratio for every 10 years of concurrent full functions provided by advanced mitigation
Rehabilitation *varies*	varies	
Enhancement *assumes 10 years to full function*	base ratio + 0.1	

Applying these modifiers requires careful analysis. One must know the timeframe of both the impact (removal of resource) and of planned mitigation. One must also consider the type of mitigation: the Framework assumes a re-establishment actions will take 100 years to reach full ecological function while an enhancement action will only take 10 years to reach full ecological function.

The temporal loss modifier applies + 1.0 to the base ratio for re-establishment. The value of 1.0 for re-establishment reflects the 100 year timeframe and can be broken down to +0.1 for each decade. Conversely, -1.0 is applied to the base ratio for every decade of concurrent ecological function where impact site and the mitigation are providing full ecological function. This would be the result of advanced mitigation actions. However, with the WHI planning timeline it is not feasible that a temporal gain would be applied to a forest re-establishment action because it takes 100 years to reach full function. On the other hand, because enhancement reaches full function within just 10 years, it is a feasible a temporal gain could result from early forest enhancement actions.

Note that the temporal modifier is either added or subtracted and not multiplied. The temporal modifier is always applied last in the analysis after the other modifiers. This is important because if a ratio was multiplied by 1.5 for distance *after* the time was added, the effective ratio would be inflated inconsistent with the intent of the Framework.

Example 2:

150 acres of forest *re-establishment* is proposed on a hypothetical site 20 years prior to the impact on WHI and the associated removal of the forest. What follows is step by step analysis of the *temporal* elements of this proposal:

Step 1. apply distance modifier if appropriate

Step 2. apply island habitat mosaic if appropriate

Step 3. determine effective ratio based on Steps 1 and 2

Step 4. apply temporal modifier last:

4a) the action is re-establishment therefore the temporal modifier is +0.1 for each decade until full ecological function
4b) the mitigation site has a 20 year head start on the impact, so when the forest is removed it will only take 80 years beyond that time for the new forest to reach 100 years of age and full ecological function; therefore add 0.8 to the effective ratio to accommodate the 80 year temporal loss.
4c) effective ratio + 0.8 = final effective ratio

Example 3:

50 acres of forest *enhancement* is proposed on a hypothetical site 20 years prior to the impact on WHI and the removal of the forest. What follows is step by step analysis of the *temporal* elements of this proposal:

Step 1. apply distance modifier if appropriate

Step 2. apply island habitat mosaic if appropriate

Step 3. determine effective ratio based on Steps 1 and 2

Step 4. apply temporal modifier last:

4d) the action is enhancement therefore either a temporal loss or gain could apply
4e) A temporal gain will be realized because the advanced enhancement mitigation will achieve full ecological function within 10 years. The mitigation has a 20 year head start on the impact resulting in 10 years of concurrent full ecological function provided by both the impact site and the advanced enhancement mitigation
4f) subtract 1.0 from the effective ratio to provide credit for the advanced mitigation and the temporal gain provided by a decade of concurrent ecological function on both the impact site and the mitigation site.
4g) effective ratio -1.0 = final effective ratio

3. How To Use The Framework

Use the following sequence when evaluating a proposal for WHI floodplain forest mitigation:

1. determine the type of mitigation action proposed: it is re-establishment, enhancement, or preservation?
2. consider the geographic location and apply the distance modifier if appropriate
3. consider the landform (island?) and landscape context (within mosaic?) and apply the island habitat mosaic modifier if appropriate
4. consider the timing of the impact, the timing of the mitigation, and the type of mitigation. Apply temporal modifiers.

Always use this sequence and apply the temporal modifier(s) last.

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3.a Step by Step analysis of this package proposal using the Framework:

A hypothetical proposal for WHI Forest mitigation includes the following three actions. The example package assumes that all actions are initiated in the same year that the habitat is removed from WHI (no advanced mitigation). This also assumes the impact is loss of 149 acres of floodplain forest habitat on WHI.

A. 300 acres floodplain forest *re-establishment* on Sauvie Island more than 5 miles from the western tip of WHI. The site is historic floodplain that was filled/drained/cleared has been in agricultural production since 1910.
B. 300 acres of floodplain forest *enhancement* adjacent to the same site on Sauvie Island; the forest that will be enhanced is an existing but degraded stand cottonwood-ash forest with an understory totally dominated by invasive plants.
C. preservation of an existing healthy 150 acre stand of cottonwood-ash forest on the south side of Sauvie island within 5 miles of the western tip of WHI. The stand is healthy and high function but zoned for development and under imminent threat of loss.

Action A: 300 acres forest re-establishment

1. Determine type of mitigation action: the action will restore habitat where it formerly occurred by is now completely absent. The action will result in a gain in habitat acreage. This action is *re-establishment*. The base ratio is 2:1.

2. Determine location: the site is within the acceptable geography, but more than 5 miles from WHI and therefore "off=proximity". The distance modifier applies to the base ratio: 2:1 x 1.5 = 3:1.

3. Consider landscape form and context: the site is on an island therefore the island habitat mosaic modifier does not apply.

4. Consider timing: the mitigation and the impact are happening at the same time. There is no advanced mitigation. It will take 100 years for the mitigation site to reach full ecological function resulting a 100 year temporal loss. the full modifier for temporal loss is now added to the ratio after the distance modifier has been applied: 3:1 + 1.0 = 4:1 final effective ratio.

5. 300 acres of re-establishment at a ratio of 4:1 mitigates for 75 impact acres or 50% of needed to mitigation.

Action B: 300 acres forest enhancement

1. Determine type of mitigation action: The action will improve the function of an existing floodplain forest stand providing some ecological lift The action does not increase habitat acreage, rather it improves the condition of existing habitat. This action is *enhancement*. The base ratio is 8:1.

2. Determine location: the site is within the acceptable geography, but more than 5 miles from WHI and therefore "off=proximity". The distance modifier applies to the base ratio: 8:1 x 1.5 = 12:1.

3. Consider landscape form and context: the site is on an island therefore the island habitat mosaic modifier does not apply.

4. Consider timing: the mitigation and the impact are happening at the same time. There is no advanced mitigation. It will take 10 years for the mitigation site to reach full ecological function resulting a 10 year temporal loss. 0.1 is added to base ratio to compensate for he decade of temporal loss. The addition is made after the distance modifier has been applied: 12:1 + 1.0 = 13:1 final effective ratio.

5. 300 acres of enhancement at a ratio of 13:1 mitigates for 23.1 impact acres or 15% of needed mitigation.

Action C: Preservation of 150 acres

1. Determine type of mitigation action: the action will preserve existing high quality habitat under imminent threat of loss. The action will not increase habitat acreage. This action is *preservation*. The base ratio is 15:1.

2. Determine location: the site is within the acceptable geography and within 5 miles of WHI and therefore "in-proximity". The distance modifier does not apply and there is no change to the base ratio of 15:1.

3. Consider landscape form and context: the site is on an island therefore the island habitat mosaic modifier does not apply. No change to base ratio of 15:1

4. Consider timing: timing does not apply to preservation.

5. 150 acres of preservation at a ratio of 15:1 mitigates for 10 impact acres or 7% of needed mitigation.

Summary Results:

Action A mitigates for 75 impact acres or 50%
Action B mitigates for 23.1 impacts acres or 15%
Action C mitigates for 10 impact acres or 7%

The hypothetical proposal package mitigates for 108.1 of 149 impacts acres or 72%. Additional actions are need to reach 110% mitigation.

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Table 5. Summary of all base ratios and modifiers.

		distance modifiers			island habitat mosaic modifier		temporal modifier
mitigation method	**base ratio**	**on-site** **base ratio ÷ 1.5**	**0-5 miles from WHI** **= no change to base ratio**	**for > 5 miles from WHI** **base ratio x 1.5**	**island mosaic** **site is on island or floodplain habitat mosaic** **= no change to base ratio**	**island mosaic** **site is not on island or a floodplain habitat mosaic** **base ratio x 1.5**	**temporal loss & gain modifiers** **= varies by project timeline**
Re-establishment	2:1	1.3:1	2:1	3:1	2:1	3:1	varies
Rehabilitation	4:1	2.6:1	4:1	6:1	4:1	6:1	varies
Enhancement	8:1	5.3:1	8:1	12:1	8:1	12:1	varies
Preservation	15:1	10:1	15:1	22.5:1	15:1	22.5:1	n/a

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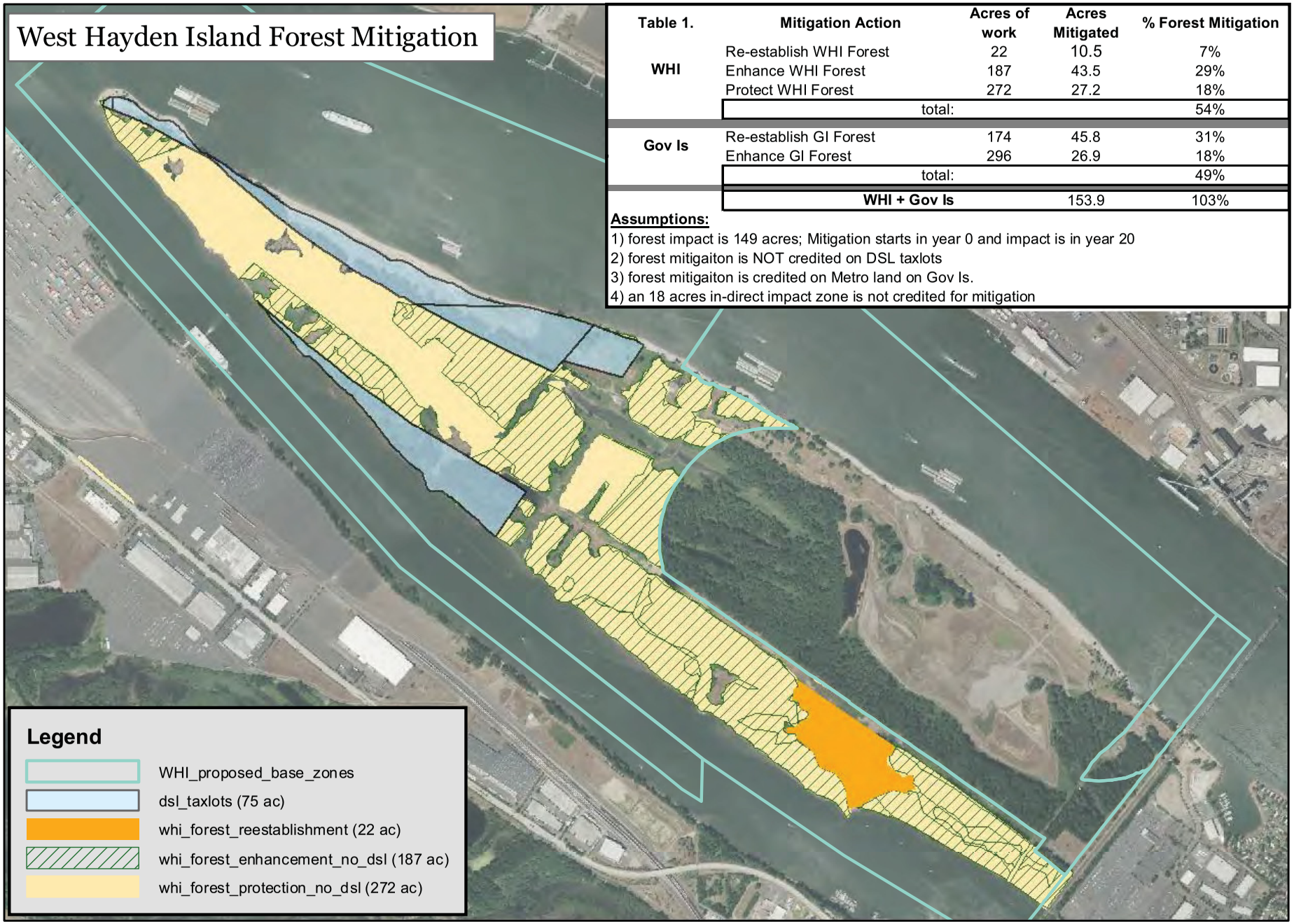
Attachment E, Part 3: Map of West Hayden Island and Government Island Forest Mitigation

West Hayden Island Forest Mitigation

Table 1.	Mitigation Action	Acres of work	Acres Mitigated	% Forest Mitigation
WHI	Re-establish WHI Forest	22	10.5	7%
	Enhance WHI Forest	187	43.5	29%
	Protect WHI Forest	272	27.2	18%
	total:			54%
Gov Is	Re-establish GI Forest	174	45.8	31%
	Enhance GI Forest	296	26.9	18%
	total:			49%
	WHI + Gov Is		153.9	103%

Assumptions:

1) forest impact is 149 acres; Mitigation starts in year 0 and impact is in year 20
2) forest mitigaiton is NOT credited on DSL taxlots
3) forest mitigaiton is credited on Metro land on Gov Is.
4) an 18 acres in-direct impact zone is not credited for mitigation

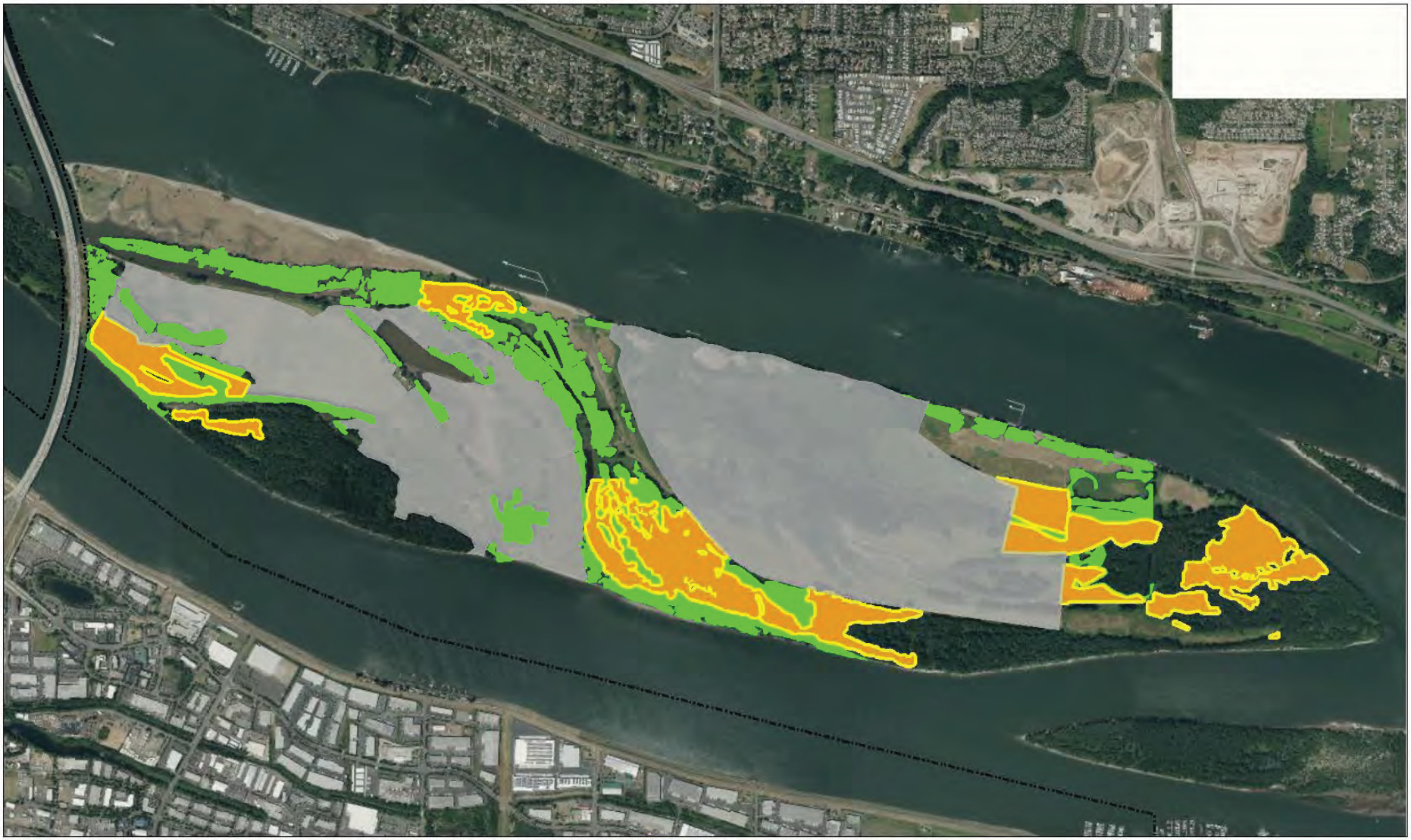


West Hayden Island Forest Mitigation

N W E S

0 0.125 0.25 0.5 0.75 1 Miles

City of Portland Environmental Services March 29, 2013


Map 1: Government Island
Forest Re-establishment and Enhancement
Existign Port Mitigation Sites
Forest Re-establishment Areas
Forest Enhancement Buffers around Plantings
Forest Enhancement Areas
NORTH
1 in = 1,345 ft
City of Portland
Planning and Sustainability
August 2012

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Attachment E, Part 4: Floodplain Forest Mitigation Performance Standards

Below are the performance standards use to measure the success of the floodplain forest mitigation actions for impacts to West Hayden Island.

Floodplain Forest Mitigation

The performance standards are based on the Ecological Performance Standards for Wetland Mitigation (prepared for the Environmental Protection Agency by NatureServe, 2008) and the standards used by the Bureau of Environmental Services, Revegetation Program to ensure success within their restoration sites.

The performance standards are an average across the mitigation plots. There may be plots that do not meet the performance standards provided 85% of plots do meet the standards.

1. Mitigation Actions and Timelines

There are two different types of mitigation actions described below: re-establishment and enhancement (see maps X and Y).

(1) Re-establishment is converting an area from its existing condition to floodplain forest through removal of invasive vegetation and planting native vegetation.
   a. The establishment period is year 0-5 for re-establishment actions.
   b. The stabilization period is year 0-25 for enhancement actions and year 6-25 post establishment for re-establishment actions.
   c. The asset management period is year 26-100 post stabilization.

(2) Enhancement is working within an existing floodplain forest to remove invasive vegetation and re-store native mid and understory vegetation.
   a. The stabilization period is year 0-5.
   b. The asset management period is year 6-100 post stabilization.

2. Plant Species

All vegetation planted must be native to the Portland metropolitan area and be chosen for the following list (additional species can be used with pre-approval):

Trees	
Species	**Common Name**
Alnus rubra	Red Alder
Crataegus suksdorfii	Black Hawthorn
Fraxinus latifolia	Oregon Ash
Malus fusca	Western Crabapple
Populus basalmifera ssp. trichocarpa	Black Cottonwood
Rhamnus purshiana	Cascara
Salix lucida var. lasiandra	Pacific Willow

Shrubs	
Cornus sericea	Red Osier Dogwood
Oemlaria cerasiformis	Indian Plum
Ribes divaricatum	Gooseberry
Rosa nutkana	Nootka Rose
Rosa pisocarpa	Swamp Rose
Salix fluviatilis	Columbia River Willow
Salix prolixa	Heart-shaped willow
Salix sitchensis	Sitka Willow
Salix hookeriana	Piper's willow
Sambucus racemosa	Red Elderberry
Spiraea douglasii	Hardhack
Symphoricarpos albus	Snowberry
Rubus ursinus	Trailing Blackberry
Herbaceous Species	**Common Name**
Achillea millefolium	Western Yarrow
Agrostis exarata	Spike Bentgrass
Alopecuris geniculatus	Water Foxtail
Athyrium felix-femina	lady fern
Bidens frondosa	Nodding Beggarticks
Carex aperta	Columbia sedge
Carex leptopoda	Dewey's Sedge
Carex obnupta	Slough Sedge
Claytonia sibirica	Miner's Lettuce
Coreopsis atkinsoniana	Columbia Coreopsis
Deschampsia cespitosa	Tufted Hairgrass
Elymus glaucus	Blue wild-rye
Euthamia occidentalis	Western Goldenrod
Geum macrophyllum	Large-Leaved Avens
Hordeum brachyantherum	Meadow Barley
Juncus effusus var. pacficus	Pacific rush
Juncus tenuis	Slender Rush
Phacelia nemoralis	Shade Phacelia
Polystichum munitum	Sword fern
Rumex salicifolius	Willow-Leaved Dock
Sanicula crassicaulis	Pacific Sanicle
Stachys cooleyae	Great Betony
Tellima grandiflora	Fringecup
Urtica dioica	Stinging nettle

3. Establishment Period Standards

Applies to the floodplain forest re-establishment plots only.

(1) Planting Densities

a. One tree, five shrubs, and four herbaceous plants per 100 square feet; or

b. One tree and five shrubs per 100 square feet, and the planting area must be seeded with a native grass and forb seed mix resulting in 100 PLS (pure live seeds) per square foot.

(2) Native plant structure. At the end of the establishment period:
   a. Tree cover: 400 tree/acre and at least 50% total cover
   a. Shrub cover: 15 shrubs/acre and at least 25% total cover
   b. Groundcover: at least 30% cover under the tree and shrub layer

(2) Native plant coverage. (The percent of coverage that is native, i.e. if there is 25% canopy coverage with 20% Oregon Ash and 5% English Hawthorn in the mid-story, there would be 80% native species coverage and 20% non-native species coverage) At the end of the establishment period:
   a. Native plant species coverage within the upper-story (tree level: above 15 ft) is greater than 97%;
   b. Native plant species coverage within the mid-story (shrub level or 6-15 ft) is greater than 80%; and
   c. Native plant species coverage within the under-story (groundcover or below 6 ft) is greater than 70%.

(3) Native plant diversity. At the end of the establishment period.
   a. Tree species: Dominated by cottonwood and Oregon ash; other tree species no more than 25% of total tree stems.
   b. Shrub species: At least 8 species of shrubs dominated by snowberry, dogwood, and indian plum; other species should no more than 30% of shrub stems.
   c. Groundcover species: Native groundcovers no more than 40% grass species and no single species dominates more than 40% of the groundcover percentage.

4. Stabilization Period Standards

Applies to re-establishment and enhancements plots.

(1) Native plant structure. At the end of the stabilization period:
   a. Tree cover: at least 75% cover above 15 feet, at least 10% of tree species cover below 15 ft and at least 3 snags per acre.
   b. Shrub cover: at least 50% cover in the mid-story with 20 clusters per acre (dense shrub areas at least 10ft by 10ft and 4 ft tall) and at least 20% of shrub cover is over 8 ft tall.
   c. Groundcover: at least 40% cover below the tree and shrub layer.

(2) Native plant coverage. At the end of the stabilization period:
   a. Native plant species coverage within the upper-story (tree) is greater than 99%;
   b. Native plant species coverage within the mid-story (shrub) is greater than 90%;
   c. Native plant species coverage within the under-story (groundcover) is greater than 70%; and
   d. Combined native plant species coverage is at least 80%.

(3) Native plant diversity. At the end of the stabilization period.
   a. Tree species: at least 50% cottonwood and 20% Oregon ash.

b. Shrub species: minimum of 8 shrub species present with at least 20% dogwood, 20% snowberry and 10% Indian plum. Evidence of native shrub seedlings (1% of cover below 1 ft).
c. Groundcover species: minimum of 15 native groundcover species, of which none should have over 25% cover; at least 5 clusters of 10 ft by 10ft per acre of stinging nettle; and a diverse mix of ferns, wildflowers and native grasses as well as common and uncommon species.

5. Asset Management Period Standards

Applies to re-establishment and enhancement plots.

(1) Native plant structure. During the asset management period:
   a. Tree cover: at least 85% cover above 30 ft in height and average height of 70 ft; average cottonwood dbh is over 12 inches; at least 10 snags (>15 inches dbh) per acre.
   b. Shrub cover: at least 50% mid-story (6-15 ft) is native shrub species and 10% mid-story is immature trees; below 6 feet, at least 40% is native shrub species and 5% immature trees species.
   c. Groundcover: over 70% cover below the tree and shrub layer; be at least 5 large dead trees on the ground per acre.

(2) Native plant coverage. During the asset management period:
   a. Native plant species coverage within the upper-story (tree) is maintained at greater than 99%;
   b. Native plant species coverage within the mid-story (shrub) is maintained at greater than 90%;
   c. Native plant species coverage within the under-story (groundcover) is maintained at greater than 70%; and
   d. Combined native plant species coverage is at least 80%.

(3) Native plant diversity. During the asset management period:
   a. Tree species: at least 50% cottonwood and 20% Oregon ash.
   b. Shrub species: minimum of 8 shrub species present with at least 20% dogwood, 20% snowberry and 10% Indian plum. Evidence of native shrub seedlings (1% of cover below 1 ft).
   c. Groundcover species: minimum of 15 native groundcover species, of which none should have over 25% cover; at least 5 clusters of 10 ft by 10ft per acre of stinging nettle; and a diverse mix of ferns, wildflowers and native grasses as well as common and uncommon species.

6. Monitoring and Reporting

Monitoring and report will occur on the following schedule:
- Annually during the establishment period;
- Every five years during the stabilization period; and
- Every ten years during the asset management period.

Reporting will include documentation of the plant structure, species coverage and diversity; survival rates and amount of replanting to achieve the performance standards; and wildlife species observed. Documentation will include written reports, maps and photography. Reports will be submitted to the City of Portland Bureau of Environmental Services for approval.

Attachment F – Natural Resource Mitigation Geography

The acceptable geography for mitigation related to West Hayden Island development impacts to occur is within HGM reaches F and G, as shown on the map.

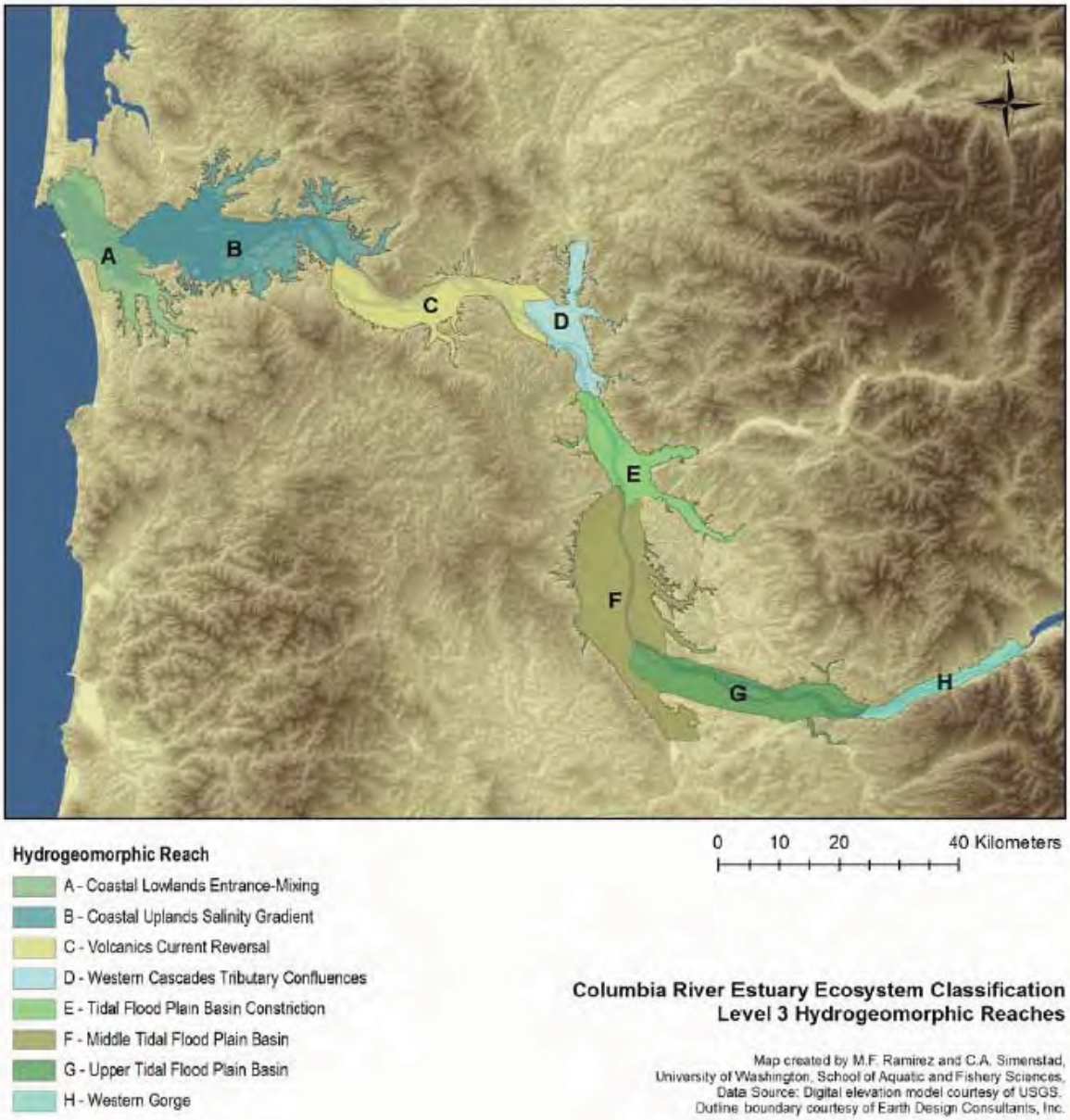


Figure 4. Classification Level 3-Hydrogeomorphic Reaches indicating where the eight reaches are delineated by subdividing and adjusting the borders of EPA Ecoregion IV classes (see Figure 3) according to hydrological and physiographic discontinuities (see Methods).

IGA Attachment G: Membership and Establishment of the WHI Advisory Committee

WHI AC Membership. The AC will consist up to twelve (12) voting members. To the extent feasible, the WHI AC will incorporate bi-state, regional, and diverse representation, including representatives of the local WHI community, environmental organizations, economic development organizations, buisinees and public agencies. An effort will be made to ensure that membership among different groups are balanced. The City (Mayor) and the Port will collaborate to appoint a member from each interest group that has been identified, ~~Each of the specific membership interest groups shall appoint a member~~, for terms beginning upon reaching Milestone 1, as defined in Paragraph 2.3. Initial appointments shall be for a period of two (2) or three (3) years staggered to ensure continuity of membership. Following the initial year, appointments shall be for a period of two (2) years with no term limits. All appointed members shall be confirmed by Sponsors (as defined in the Intergovernmental Agreement) based on Sponsor approved appointment guidelines. Each appointment shall be effective on the date of confirmation by the Sponsors. For those WHI AC positions where no one organization holds the interest, Sponsors agree to circulate a broad invitation letter to appropriate interest groups to request joint agreement on an appointment. If the groups do not achieve consensus, Sponsors shall appoint the member from a pool of interested candidates in collaboration with the Chair, Vice Chair and WHI AC members. Meetings shall be held quarterly with meetings added or eliminated as needed.

Port of Portland
Vision for a Sustainable West Hayden Island

The mission of the Port of Portland is to enhance the region's economy and quality of life by providing efficient cargo and air passenger access to national and global markets. In support of this mission, the Port's organizational vision is to be a prominent, innovative economic development entity while acting as a steward of the region's community and environmental best interests. As the property owner of nearly 800 acres on West Hayden Island (WHI), the Port of Portland recognizes WHI's unique locational, economic, recreational, and natural resource attributes.

The Port of Portland's vision for West Hayden Island is to develop the most sustainable deep-draft marine terminal facility in the State of Oregon and Columbia River system. Sustainability for WHI means meeting the region's marine cargo transportation needs while enhancing livability and the quality of life for future generations. To achieve sustainability the Port will balance economic, environmental and social interests as WHI is developed, protected, and enhanced.

The future WHI will support long term economic health, integrate with community values and reflect a deep and broad commitment to environmental stewardship. Permanently setting aside 500 acres for open space and 300 acres for marine development will:

.

- Enable future port development which will allow the city to further its role in international trade;
- Ensure open space (habitat and recreation) is advanced in tandem with marine industrial growth to further the City's urban natural resource ecology; and
- Provide the community with the opportunity to participate in and influence WHI development.

In doing so, Port development and operational decisions will:

- Balance and sustain economic, environmental and social interests;

- Utilize the Joint West Coast Technical Committee's *Sustainable Design and Construction Guidelines*[1] to direct WHI marine terminal development;
- Provide public involvement process with opportunities for meaningful public engagement; and
- Provide a system to monitor and measure success and share results with the public.

Sustainable development of WHI requires that three distinct geographies be considered. These geographies are the 300-acre marine terminal development, the 500-acre natural resource protection area, and the abutting Hayden Island community consisting of light industrial areas, residential neighborhoods, and regional scale commercial development. Specific to these geographies:

- The 300-acre marine industrial site will develop into the most sustainable deep-draft marine terminal complex in the State of Oregon and Columbia River system. The Port will utilize the West Coast Technical Committee's Sustainable Design and Construction Guidelines as the primary resource for selecting sustainable practices. The Port will also use its Environmental Management System and knowledge from other ports to inform best operational practices.

- The 500-acre natural resource site will be permanently set aside as an ecologically significant area for conservation and natural resource protection, incorporating natural resource mitigation and enhancement strategies designed to improve and support ecological function. The Port also sees this site as providing high quality but limited passive recreational opportunities that will not detract from natural resource protections.

- The Port will act as a good neighbor with the abutting Hayden Island community as the area grows consistent with the adopted Hayden Island plan. In doing this the Port will provide a forum for community input, contribute to neighborhood improvements, and will avoid, minimize or mitigate negative impacts from marine terminal construction and operation.

Guiding Principles[2]

1. Generational Fairness and the Triple Bottom Line: The essence of sustainability is to find a balance between the economic, environmental, and social equity of current and future generations. As society changes its emphasis from quantity to quality growth, we need to ensure the resources we consume and the impacts of our footprint are understood, considered, and balanced with future quality of life needs when making development decisions.

2. Community: Engage and involve our community and encourage our citizens to take responsibility for their individual actions to reduce resource use, production of pollution

[1] West Coast Technical Committee; *Sustainable Design and Construction Guidelines for Ports, Draft; 2013*

[2] These Guiding Principles are based on the *Airport Futures Sustainability Report Visions and Values* adopted by the Port Commission, the Portland Planning and Sustainability Commission and Portland City Council in 2010/2011

and waste. This requires collaboratively developing solutions that remove barriers and build upon existing private and public efforts to ensure efficient, timely and complementary results.

3. Measure Progress: Establish and track clear, measurable goals, both short and long term, that are linked to those of our governmental partners (e.g., 2009 City of Portland and Multnomah County Climate Action Plan), do not default to regulatory minimums, and take responsibility for our proportional share of the problems and solutions without regulatory prompting.

4. Stay Ahead of the Curve: Supplement traditional regulatory approaches by taking voluntary actions with incentive-based and performance-oriented systems.

5. Balance: Explore alternative strategies to achieve objectives when current goals cannot be reconciled with future needs. Decisions should be made in consideration of their individual and cumulative economic, environmental and social impacts, and whether they substantially benefit or harm the health of the region for future generations.

6. Economy: Develop and operate West Hayden Island as a world class marine terminal that meets the marine cargo transportation needs of the region, supports the role of the Port's marine terminals in the bi-state regional economy and produces a return for future generation's use.

7. Reduce, Reuse, and Recycle: Use resources (e.g., fossil fuel-derived energy) efficiently and reduce demand, rather than first looking to expand capacity. Commit to the maximum use of existing facilities. Consider alternative methods of managing demand, including the application of emerging technologies, before building new facilities. Prefer options that reduce pollution and waste.

8. Natural Resource Protection: Permanently protect at least 500 acres of West Hayden Island to retain significant natural resource functions associated with an island in the Columbia River. Enhance those functions by preserving capacity for the Port to fulfill natural resource mitigation obligations

9. Continuous Learning and Education: Emphasize on-going learning and adaptive management to inform and improve the process continually, consider future generations, and educate the public about goals and what was learned.

10. Equity: Ensure commitment to equity so impacts and the costs of protecting our resources do not burden unfairly any one geographic, socioeconomic, ethnic, or generational group, particularly those that are disadvantaged.

11. Leadership Now: Accelerate, support, and implement innovative programs, projects, and initiatives to maintain and increase our collective leadership in sustainability, including encouraging our partners to use sustainability practices.

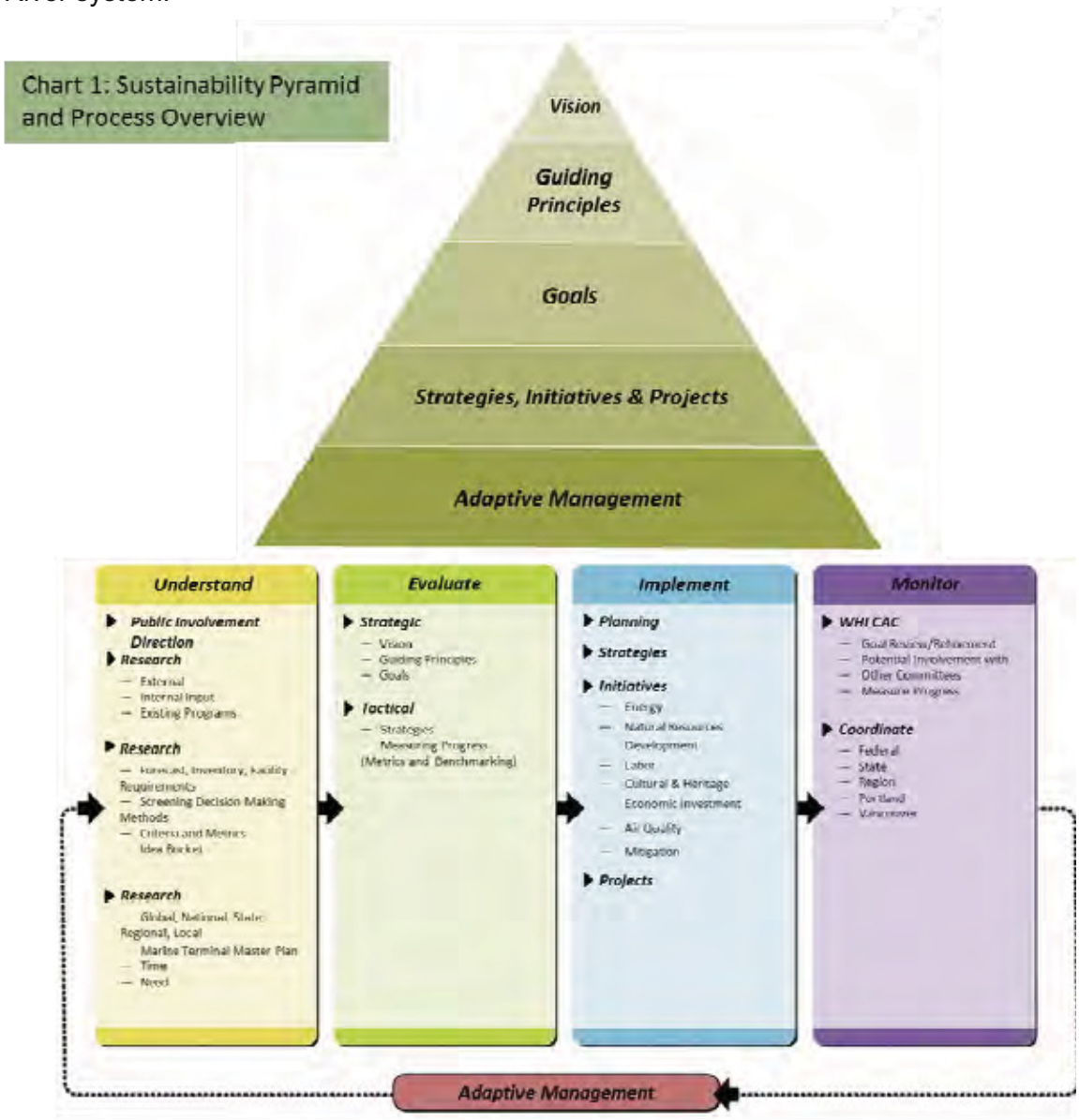
12. Accountability: Using a project management approach, report on our results, lessons learned, plan adjustments, and future endeavors to our stakeholders, including the West Hayden Island Community Advisory Committee.

To guide the process of achieving sustainability, the Port will utilize the following

Hierarchy and Adaptive Management and Guiding Principles.

Hierarchy and Adaptive Management

The Port's West Hayden Island Vision recognizes the long-term, interconnection between economic development, environmental stewardship, and social equity. The Port of Portland will use the following Guiding Principles as they work towards assuring West Hayden Island becomes the most sustainable marine terminal in Oregon and Columbia River system.



The Guiding Principles should be read in conjunction with our vision for WHI, and considered alongside the Sustainability Pyramid and Process Overview graphics. The concepts will be implemented in the future as described below.

Strategic Goals (Performance Standards**)**

To ensure the success of these guiding principles, the Port will adopt and commit to achieving the following strategic goals. The outcome based goals listed here establish the basis for Port accountability for development of the 300 acre and 500 acre geographies. Elements of the Intergovernmental Agreement include specific targets separate from these goals.

It is the Port's intent to utilize the Joint West Coast Sustainable Design and Construction Guidelines as the primary resource for selecting sustainable practices during the development of the marine terminal site. The Port will also use its Environmental Management System and knowledge from other ports to inform best operational practices for the marine terminal. Attached to this vision statement is a document titled "WHI – Green Performance Goals" which are included here to illustrate the best practices in 2012/2013 when annexation process took place. These measures may or may not reflect marine terminal best management practices when WHI is developed in the future. The Port is committed to best development practices as available at time of development.

Economic

1. The Port will ensure WHI viability and its part in the regional economy by making WHI investment decisions based on life-cycle costs.

2. Meet the cargo transportation needs of the region and state as measured by the regional five year commodity flow forecast[3] .

3. Utilize the existing public and private investment in highway, class one railroad and deep draft navigation infrastructure by ensuring the terminal development is predominantly marine and rail dependent.

4. Ensure that 95% of direct jobs on WHI are living wage jobs.

5. Ensure WHI positively contributes to the state and regional economy by evaluating its economic impact in the bi-state region every five years.

6. Support Portland's labor force by:
    a. Employing existing marine labor and services; and
    b. Utilizing local business and minority, woman, disadvantaged, or emerging small business enterprises in alignment with the Port's Small Business participation target of 10%.

7. Provide a diverse job mix that offers low barriers to entry for the range of Portland's skilled workers.

8. Provide a positive net return on investment.

9. Provide for a market viable development for the developer and operator.

[3] Port of Portland, Metro, ODOT, Port of Vancouver, Regional Transportation Council; *Commodity Flow Forecast Update and Lower Columbia River Cargo Forecast, ODOT PCMS No. 21778;* 2002

Environment

1. Enhance natural resources in the City of Portland by:
    a. Permanently setting aside 500 acres of open space from its current designation as farm and forest use consistent with the provisions of the annexation agreement;
    b. Improving beyond baseline the habitat function of the 500 acre open space;
    c. Pursue cumulative and comprehensive improvement over time; and
    d. Continue improvement of habitat through adaptive management.

2. Preserve capacity on the 500 acres of open space for the Port to fulfill natural resource mitigation obligations.

3. Consistent with the WHI annexation agreement, the Port will fully comply with required mitigation for development impacts and will contribute to the overall net improvement of the ecological function on West Hayden Island.

4. The Port will continue to measure impacts on the local environment and community and develop annual goals and benchmarks for continuous improvement, above-and-beyond regulatory requirements. At a minimum the Port will comply with all local, state and federal air quality mandates. In addition the Port is committed to:
    a. Mitigation of significant impacts identified through the NEPA process; and
    b. Developing a cleaner operating marine facility than federal or state regulations require through utilization of reasonable available control technologies (for air quality), especially as they apply to toxic air pollutants including diesel particulate emissions from trucks and other sources.

5. The Port will reduce direct and indirect Port greenhouse gas emissions 15% below 1990 levels by 2020.

6. The Port will utilize and require its tenants to implement operational activities that employ best management practices for the control of pest species to preclude occurrences. This will occur through:
    a. Programs to exclude pest species from the terminal site through design and operations;
    b. Following the City's bird-safe Building Guidelines. Utilize target specific control measures that avoid or minimize non-target mortality in wildlife depredation circumstances and/or pest control.

7. WHI will achieve net zero landfill waste.[4]

8. The Port will incorporate WHI into its environmental management system (EMS), underpinned by measurable environmental goals, and subject them to biennial EMS conformance auditing by a third party

9. The Port will comply with all local, state and federal water quality mandates and will continue to measure impacts on the local environment and develop annual goals

[4] The Port uses the One Planet Living definition of "zero waste" to mean no more than 2 percent of construction or normal operational wastes would go to landfills. (See separate goal for toxic and hazardous wastes)

and benchmarks for continuous improvement, above-and-beyond regulatory requirements. Water quality mandates currently include infiltration or treatment of on-site water or runoff from marine terminal facilities.

10. Development will:
    a. Meet or exceed all regulatory requirements;
    b. Utilize the West Coast Technical Committee's *Sustainable Design and Construction Guidelines* to direct WHI marine terminal development:
    c. Use the Best Management Practices (defined by benchmark study at time of pre-design) to inform WHI development; and
    d. Mitigate all significant impacts identified in NEPA processes.

11. Marine tenants at WHI will achieve carbon neutrality in their own development and operations.

Community

1. To address community impacts and concerns about WHI development the Port will appoint an advisory group to help achieve continuous improvement in its public involvement, transparency of activity and sustainability efforts.[5]

2. Through on-going activities and operations the Port will support the goals and economic viability of the Hayden Island community.

3. To help protect human health and the environment the Port will eliminate or minimize toxic substances used and hazardous waste generated in the operation of WHI.[6]

4. The Port will require the use of commercially available non-toxic construction material for development.

5. The Port will obtain 100 percent of operating power for Port-controlled facilities from renewable sources and will achieve in-building energy efficiency levels of 45 W/M2 by 2035.[7]

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[5] A key focus of the ongoing WHI Community Advisory Committee is sustainability and that group will consider how best to communicate and achieve productive dialogue at its inception.

[6] Details on how this will be accomplished will be worked out during development and operation of WHI marine terminals. In general, implementing will involve developing a plan to annually:
- Evaluate current and new technologies that can achieve further reductions of toxic chemicals and hazardous waste;
- Review and updating process and personnel procedures involving hazardous materials use and hazardous waste generation; and
- Train employees about how they can help the facility reduce its toxics use and hazardous waste generated.

[7] 45 W/M2 is a metric for energy consumption in a building measured in watts per square meter.

6. The Port will give preference to doing business with firms that have implemented Environmental Management Systems under ISO 14001,[8] with the goal of having 75 percent of them compliant by 2035.

7. Consistent with the Joint West Coast Technical Committee's *Sustainable Design and Construction Guidelines,* (when available), the Port will invite a review of current best industry practices during design and development to avoid, minimize or mitigate noise, vibrations, and light impacts.

8. The Port will participate in the US Dark Sky Initiative[9] to limit light pollution to the extent that this is allowed by federal marine security regulations.

9. The Port will provide 5 hours of sustainability education and awareness training annually to its employees and will encourage all companies operating at WHI to do the same.

10. The Port will implement a first source agreement, to the extent possible, giving residents of North Portland priority for the jobs on WHI.

11. Provide high quality recreational opportunities.

[8] ISO 14001 is a standard developed by the International Standards Organization (ISO) for environmental management systems applicable to any business, regardless of size, location, or income. The aim of the standard is to reduce the environmental footprint of a business and to decrease the pollution and waste a business produces.

[9] US and international Dark Sky initiatives seek to reduce light pollution by promoting more efficient lighting systems that reduce glare and protect nighttime darkness.

WHI – GREEN PERFORMANCE GOALS

The following measures are to be implemented where technologically feasible and practicable based on the specific type of facility that may ultimately be designed and constructed on West Hayden Island in accordance with City/Port IGA. The Port recognizes that technology, regulations, and state of the art practices will evolve over time, and it is the Port's intent to not only keep up with these changes but to also to continue to be a national leader in sustainable port development practices. With this in mind it is likely that some of the specific measures listed below will be added to or improved by the time development of West Hayden Island occurs.

Federal, State, and City Standards

- The Port and its future tenants on West Hayden will be required to meet certain mandates from certain federal, state, and city requirements that address the impact areas listed below. In many cases these requirements are currently very robust, and will likely evolve to be even more stringent in the future and will have the effect of significantly mitigating impacts in areas such as noise and air quality, and include but are not limited to North American Emission Control Area fuel requirements, DEQ stationary source permits and the City of Portland's Title 18. These and other requirements will be identified and applied through either the federally required Environmental Impact Statement (NEPA) and or actual permits applied for an obtained to develop the site and associated marine terminals.

Noise

- Utilize separated rail crossings to eliminate train whistle noise: As per the WorleyParsons concept plan every opportunity to avoid onsite road/rail crossings is to be pursued. This limits the need for train horn noise during terminal operations.
- Incorporate mitigation of air-borne and ground-borne noise and vibration during facility design and construction.
- Establish programs to monitor and minimize noise and vibration during operations. Incorporate community feedback on noise impacts through use of the community advisory committee
- Follow the City Noise Code (Title 18) in development and operations of the marine terminals
- Follow the City Noise Code (Title 18) for trucks operating to and from the marine terminals.

Light

- Incorporate lighting zones that balance facility lighting needs with natural resource areas during facility design.
- Develop and implement a site lighting plan based on Dark Sky design standards. The design shall include but not be limited to:
    - Design facility lighting with full cutoff lenses.

- Incorporate lighting zones shielding that balances facility lighting needs with natural resource areas during facility design.
- Use lighting shields and angle lights where needed to limit glare on neighboring communities.
- Follow best practices and current technologies for design of buildings that minimize bird hazards.

Waste

- Strive for zero waste during development, construction, and operation of the facility. Require contractors and site operators to adopt and implement a waste reduction plan that strives for zero waste, and in all cases produces the minimum amount of waste practicable.
- Develop waste guidelines to meet or exceed current and future national and local waste minimization standards.
- Require contractors and site operators to adopt and implement a materials management plan for development, construction and operation of their facility. The plan shall seek to reduce environmental impacts by managing materials throughout their lifecycle, including extraction production, use, and end-of-life management in a manner similar to the principals laid out in the Oregon DEQ report "Materials Management in Oregon: 2050 Vision and Framework for Action"

Water Use

- Require water conservation measures in the building design to reduce aggregate water use by 20% from the baseline (per LEED 2009 for New Construction, Water Efficiency prerequisite 1).
- Reduce potable water consumption through the use of other available sources including groundwater, surface water (Municipal Water Rights), waste water and storm water.
- Reduce potable water use for landscape irrigation by 50% from a midsummer baseline case (per LEED 2009 for New Construction Water Efficiency credit 1, option 1).

Water Quality

- Use a sustainable design approach to incorporate Low Impact Development techniques with the goal of minimizing hydrologic post-development impacts from impervious areas.
- Incorporate site-specific management practices that target natural surface or pre-development hydrologic conditions.
- Make pollutant source control a priority in facility design based on industry best available technology.

Air/Energy

- Marine vessels shall meet the North American Emission Control Area fuel requirements by increasing use of alternative fuels and fuel efficiency.
- Continue efforts already in place to replace older engines including repowering tugboats and the Port's dredging vessel.

- .
- Require that dust generated by marine terminal development, or construction activities and operations meet or exceed DEQ standards. (Note: DEQ standards are more stringent than federal standards and the Port does not have the authority to set or enforce stationary source emission limits). These standards require use of best available control technologies and address elements such as:
    - Conduct long term periodic perimeter monitoring to collect air samples of dust
    - Use dust controls such as enclosed silos, bag houses, food oil based sprays for grain dust or non-agricultural products to reduce dust.
    - Place spouts further in ship holds during loading of material or installation of apparatus to slow material during exit from the spout
    - Enclose conveyors and bag houses
    - Enclose all material transfer sites.
- Use a carbon and energy life cycle cost analysis during facility design with the goal to achieve a more energy efficient product with a smaller carbon footprint verses conventional design.
- Use carbon and energy life cycle analyses for facility operations decisions to help guide decisions around efficient fuel use and to reduce air emissions.
- Minimize vehicle idling through design of efficient terminal entry and exit gates, as well as the adoption of an idle reduction policy that prohibits unnecessary idling by trucks and equipment.
- Incorporate renewable or alternative energy sources into facilities design where technologically feasible and practical to meet the Port's Carbon Reduction and Energy Management Plan. This plan is an enterprise-wide strategy to reduce greenhouse gas emissions by 15 percent below 1990 levels by 2020. This goal is beyond the State of Oregon's goal of 10 percent less than 1990 levels. This is being achieved and will be achieved while the Port has almost doubled its use of power since 1990 due to expansion and increased facility demands.
- Consider facility designs that enable on-site use of alternative fuels or distribution to transportation providers.
- Provide electrical infrastructure and the underground backbone to allow electrification of multi-modes:
    - Ships
    - Locomotives
    - Trucks
- Establish energy efficiency design standards that are consistent with the intent of the Oregon Reach Code, including mechanical systems, lighting designs, overall building design, plumbing practices and products.
- Require Energy Star or other high efficiency equipment.

- Require a business case analysis to explore the feasibility of district energy systems and screening of potential alternative energy generation, such as biomass or on-site co-generation.
- Develop and utilize goals for ongoing benchmarking and tracking of building and facility energy performance.
- Mobile-source emissions will be reduced through a progression of regulatory measures including tighter emission standards for heavy-duty diesel trucks and off-road equipment nationwide. Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially less pollutants.
- Implement Transportation Demand Management programs where employees are provided incentives for carpooling, bicycling, or using alternative transit consistent with the DEQ's Employee Commute Options Rule.
- Support Metro's regional transportation planning process to reduce vehicle miles travelled per capita.

Other

Work with Oregon OSHA to ensure that workplace safety best practices are strictly adhered to in the design and operation of the marine terminals.

Proposed Draft Project Attachments

Attachment A: - Resolution 36805

RESOLUTION No. 36805 As Amended

Direct the Bureau of Planning and Sustainability to develop a legislative proposal for annexation of West Hayden Island to the City with the intent to protect at least 500 acres as open space, and identify no more than 300 acres for future deep water marine terminal development (Resolution)

WHEREAS, West Hayden Island (WHI) is located on the south shore of the Columbia River approximately nine miles north of downtown Portland and includes approximately 814 acres of land (measured landward of the ordinary high water mark, 15' NGVD) abutting approximately 240 acres of shallow water habitat; and

WHEREAS, WHI is located within Multnomah County outside of the City boundary and is zoned by Multnomah County as Multiple Use Forest 19 with a Significant Environmental Concern overlay zone; and

WHEREAS, most of WHI, above the ordinary high water line, is owned by the Port of Portland and is bisected by several utility corridor rights of way; and

WHEREAS, WHI contains approximately 165 acres of existing development, including a sewer treatment outfall facility, BPA, PPL, and PGE utility corridors, a Port of Portland dredge material placement site, and several Division of State Lands leases for barge and log staging; and

WHEREAS, WHI was brought into the Metro Urban Growth Boundary in 1983 to "satisfy a long term regional need for water-dependent, deep water marine terminal and industrial facilities." (Metro Ordinance No. 83-151); and

WHEREAS, WHI was designated by Metro in 2004 as a Regionally Significant Industrial Area, an area "with site characteristics that are relatively rare in the region that render them especially suitable for industrial use" (Metro Ordinance 04-104B; MC 3.07.130); and

WHEREAS, Metro has completed a draft Urban Growth Report: 2009-2030 Employment and Residential, January 2010 that assumes approximately 380 acres on WHI is available for large lot future industrial development; and

WHEREAS, the City has completed a draft Economic Opportunities Analysis that indicates by 2035, the expected demand for industrial land in the City will exceed the supply by approximately 600 acres for the mid-range employment forecast; and

WHEREAS, in 2005, Metro adopted the "Nature in the Neighborhoods" program as a regional approach to meeting the requirements of Statewide Land Use Goal 5; and

WHEREAS, because WHI had both high riparian habitat values (Class I Riparian Habitat) and high development value, Metro designated WHI as a moderate Habitat

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Conservation Area and required that the City develop a District Plan for WHI in cooperation with the owner, the Port of Portland, to establish site-specific habitat conservation measures that protect natural resources and mitigate the environmental impacts of industrial development (Metro Code § 307.1330.B.4.b); and

WHEREAS, anticipating eventual annexation of WHI, since 1996 the City of Portland has provided planning and zoning services to West Hayden Island through an Intergovernmental Agreement with Multnomah County (Ordinance No. 170585); and

WHEREAS, the City and the Port of Portland entered into an agreement (IGA) on May 29, 2009, to prepare a long-term vision for West Hayden Island, which included establishment of a Community Working Group (CWG) (Ordinances No. 182856 and No. 183884); and

WHEREAS, the Mayor charged the CWG "to advise City Council on how marine industrial, habitat, and recreational uses might be reconciled on WHI; and, if the CWG determines that a mix of uses is possible on WHI, to recommend a preferred concept plan" (CWG Charter); and

WHEREAS, the Bureau of Planning and Sustainability and Bureau of Environmental Services have worked with a consultant (ENTRIX, Inc.) to prepare several Foundation Studies, and supporting technical memorandums, outlining relevant economic and environmental factors for the Council's consideration; and

WHEREAS, the Economic Foundation Studies found that water-dependent industries are linked to other industries in the harbor and elsewhere throughout the metro region; and

WHEREAS, the Economic Foundation Studies found that cargo and manufacturing activities dependent on waterborne transportation contribute significantly to the metro region's economy; and

WHEREAS, the Economic Foundation Studies found that marine-related economic activity generates approximately 20,000 direct, indirect, and induced jobs and $1.4 billion in income, while economic activity in the overall harbor area may support approximately 100,000 direct, indirect, and induced jobs and $3.5 billion in regional income annually; and

WHEREAS, the Economic Foundation Studies found that the most recent and conservative forecasts estimate marine cargo growth rates varying from 0.2 percent to 3.7 percent annually (2007-2040); and

WHEREAS, the Economic Foundation Studies found that ship size is increasing for most cargo types, resulting in larger desired berth lengths and deeper river depth; and

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WHEREAS, the Economic Foundation Studies found that the trend towards larger trains for grain and international/national dry bulk cargoes means that larger sites (100+ acres) are expected to be necessary for future competitiveness and many of Portland's existing marine facilities do not have these characteristics; and

WHEREAS, the Economic Foundation Studies found that to capture economic growth opportunities in marine-industrial cargo, Portland will need to have large parcels for marine industrial growth; and

WHEREAS, the Economic Foundation Studies found that without larger development-ready sites, it is expected that Portland would lose opportunities to expand marine-related economic activity and would forfeit a portion of the associated jobs and income; and

WHEREAS, preliminary estimates indicate that a 300 acre deep water marine terminal on WHI would create over 1,000 jobs in the region (including on-terminal jobs, as well as related and induced jobs that directly serve the terminal), generating over and generate up to $20 million in additional tax revenue for the state; and

WHEREAS, WHI is uniquely located close to many significant transportation facilities, including a deep water 43-foot federally maintained navigation channel at the confluence of the Willamette and Columbia Rivers, rail lines, and Interstate 5; and

WHEREAS, the Economic Foundation Studies found that the economic value of WHI is increased by proximity to other deep water marine terminal infrastructure in the Portland/Vancouver Harbor; and

WHEREAS, the Environmental Foundation Studies found that WHI provides high quality habitat for a diversity of wildlife, in a unique location at the Columbia River/Willamette River confluence; and

WHEREAS, the Environmental Foundation Studies found that the value of the habitat on WHI is increased by its size, diversity of habitats, proximity to other natural areas, and location at the confluence of the Willamette and Columbia Rivers; and

WHEREAS, the Environmental Foundation Studies found that WHI includes mature cottonwood ash stands, wetlands, grasslands, and 5.8 miles of critical habitat shoreline for threatened and endangered salmonid species; and

WHEREAS, the Environmental Foundation Studies found that in larger rivers such as the Columbia, that serve as migratory corridors for salmon, the continuity of habitats and presence of shallow water along the shoreline is very important; and

WHEREAS, the Environmental Foundation Studies found that WHI is a large undeveloped tract amidst a fragmented urban landscape that provides nesting and stopover opportunities for migratory birds using the Pacific Flyway; and

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WHEREAS, the Environmental Foundation Studies found that habitat patch size, habitat diversity, and disturbance from human activity are the key limiting factors for wildlife; and

WHEREAS, the Environmental Foundation Studies found that, given its size and unique location, WHI environmental resources cannot readily be replaced through mitigation; and

WHEREAS, the Environmental Foundation Studies found that, in general, the quality of habitat on WHI is due to the large size of the natural area, the diversity of vegetation, and the connectivity to water; and

WHEREAS, the Environmental Foundation Studies found that total ecosystem service benefits of WHI under current conditions are estimated to be valued (conservatively) from $613,000 to $4.7 million annually, with the majority of that value attributed to shallow water habitat; and

WHEREAS, the Environmental Foundation Studies found that there is opportunity on WHI for ecosystem services gains through restoration activities such as increasing off channel habitat connections, revegetation of forest and grassland areas, and increasing or enhancing wetlands; and

WHEREAS, the Hayden Island Community Plan found deficiencies in recreation for area residents, and portions of WHI are well suited to provide nature-based recreation and stewardship activities for Hayden Island residents and the larger Portland community; and

WHEREAS, the CWG issued its Report to the City Council dated July 29, 2010; and

WHEREAS, the CWG Report indicates that the CWG was unable to reach a consensus (requiring 75% approval under the CWG's procedures) on a recommendation to the City Council; and

WHEREAS, eight of the CWG members agreed that it was possible to reconcile a mix of meaningful Port development and habitat values, six members voted that it was not possible, one member abstained, and one member was not present; and

WHEREAS, the CWG Report outlined points of agreement, and articulated a set of evaluation principles to guide further planning; and

WHEREAS, the City and the Port agreed in the IGA that "the City Council, through resolution in July 2010, will direct staff on whether to continue planning for a mix of land uses on West Hayden Island" (IGA, Sect. 1).

NOW, THEREFORE, BE IT RESOLVED:

1. The City Council directs the Bureau of Planning and Sustainability, in coordination with

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other City agencies, to take the next steps toward addressing the future of West Hayden Island, including the following:

a. Develop a legislative proposal for annexation of WHI to the City, and bring that draft proposal to the Council for consideration by December 2011;

b. The legislative proposal should include Comprehensive Plan and zoning designations, and Plan District regulations;

c. The proposal should include documentation of compliance with state Goal 5 and Metro Title 13, including an ESEE Analysis, and a process to determine appropriate mitigation requirements for future development impacts to significant natural resources;

d. The proposal should include an analysis of the infrastructure needs and a cost/benefit analysis to the public associated with those needs after annexation, and an analysis of the financial tools available to facilitate infrastructure development;

e. The proposal should include a thorough analysis/explanation of existing marine industrial land supply, marine industrial needs in the future and the feasibility of consolidation and/or expansion of existing sites to meet those needs.

f. Develop alternatives for how natural resource lands could be managed over the long term, including proposals for long term land ownership, and strategies to pay for land management activities;

g. Include the industrial lands immediately east of WHI in the study area, to determine how the future use of those lands will relate to the use of WHI;

h. Develop an access plan to serve the existing development, a 300-acre deep water marine terminal site, and anticipated nature-based recreation and habitat management areas;

i. Supplement the recently completed Foundation Studies with an update of the cargo forecasts, additional analysis of the expected cost/benefits to the City, analysis of operational efficiencies that allow more compact deep water marine terminal facilities, and an evaluation of opportunities for increased coordination with the Port of Vancouver;

j. Develop a public involvement plan to keep the public, regional partners, and residents of Hayden Island informed and meaningfully involved. Mayor Adams will evaluate the continued role, structure, and membership of the CWG, by September 1, 2010; and

k. If necessary, bring amendments to the City/Port IGA, consistent with this resolution, to Council by September 15, 2010.

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BE IT FURTHER RESOLVED, The City Council intends that the following parameters should guide development of the legislative proposal:

a. The evaluation principles developed by the CWG should serve as core values to inform the proposal;

b. The primary feature of the proposal should be permanent protection and enhancement of at least 500 acres as open space, to be managed primarily for the benefit of the regional ecosystem;

c. The proposal should also include zoning no more than 300 acres of land in an industrial designation for future deep water marine terminal development. The deep water marine terminal footprint should be located, to the extent feasible, over the existing dredge disposal site area. All development associated with Port Marine Terminal Facilities including but not limited to the terminal area, docks, railroad tracks, access roads, bridges and multi-use utility corridors must be included within the 300 acre footprint. The terminal should be east of the north/south PPL/PGE powerline easement, north of the east/west PGE powerline easement, and west of the City of Portland's sewer outfall corridor;

d. The existing utility corridors, which occupy approximately 55 acres, should remain and continue to serve multiple purposes. To the extent compatible with the existing utilities, these areas should be considered for open space use, and be managed for natural resource benefits, and may contain multiple use access roads, trailheads, and maintenance roads;

e. Any docks should be designed to avoid shallow water impacts. The proposal should not include a vertical sea wall or similar structure. The proposal will include a report on ESA, CWA, EPA (Strategic Plan—Columbia River Watershed) and the State's Estuary Partnership Management Plan along with FEMA requirements and how they may or may not be met.

f. The proposal should include allowances for operationally viable rail access, sufficient to serve a7,500 to 10,000-foot-long unit train;

g. Nature based recreational uses should be evaluated in more detail. Any significant recreational structures or development footprints should be located primarily at the eastern edge of the site, and should minimize impacts on the highest value habitat areas. Within the 500 acres of open space, low impact recreational facilities may be considered as a means to direct and manage human access in ways that support habitat objectives. Options for placing more active recreational facilities east of the railroad bridge should be considered;

h. Traffic impacts should be examined in light of the most up-to-date Columbia Crossing design options. Access plans should be designed to avoid and minimize any adverse impacts on East Hayden Island residents. The need for a dedicated

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West Hayden Island access bridge should be investigated as to public cost/benefits and, if needed and determined to be feasible, integrated into planning for the Columbia Crossing project;

i. The Plan District should incorporate and build on information from the Local Impacts report prepared by the Bureau of Planning and Sustainability. The plan should consider air quality impacts (dust and emissions), noise, light and traffic impacts; and

j. The Plan District proposal should include a framework for consideration of mitigation actions associated with future development of less than 300 acres, developed in coordination with federal and state agencies.

k. The proposal should include analysis of options for restoration and long-term care of the proposed natural areas, including models for financing both. This analysis includes but is not limited to, ownership of the natural area, remediation and mitigation opportunities, and the creation of an endowment for operations and maintenance of the land.

BE IT FURTHER RESOLVED, this resolution sets forth the City Council's preliminary intentions and interim directions to the Bureau of Planning and Sustainability, based on the information available at this time, and nothing in this resolution constitutes a final decision concerning any land use planning action with respect to West Hayden Island. The City Council intends that any land use planning actions for West Hayden Island will be adopted in the future as required by the statewide planning goals, state law, the City's comprehensive plan, and the City's zoning code and may include the adoption of an annexation ordinance, zoning designations and a Plan District.

Adopted by the Council: JUL 29 2010

Mayor Sam Adams
Prepared by: Eric Engstrom
Date Prepared: July 22, 2010

LaVonne Griffin-Valade
Auditor of the City of Portland
By Susan Parsons
Deputy

Agenda No. 36805
RESOLUTION NO. As Amended
Title

Direct the Bureau of Planning and Sustainability to develop a legislative proposal for annexation of West Hayden Island to the City with the intent to protect at least 500 acres as open space, and identify no more than 300 acres for future marine terminal development. (Resolution)

INTRODUCED BY Commissioner/Auditor: **Adams**	CLERK USE: DATE FILED JUL 23 2010
COMMISSIONER APPROVAL	LaVonne Griffin-Valade Auditor of the City of Portland
Mayor—Finance and Administration - Adams	By: _____ Deputy
Position 1/Utilities - Fritz	**ACTION TAKEN:**
Position 2/Works - Fish	
Position 3/Affairs - Saltzman	
Position 4/Safety - Leonard	
BUREAU APPROVAL	
Bureau: Planning & Sustainability Bureau Head: Susan Anderson	
Prepared by: Eric Engstrom Date Prepared: July 21, 2010	
Financial Impact Statement Completed ☐ Amends Budget ☐ Not Required ☒	
Portland Policy Document If "Yes" requires City Policy paragraph stated in document. Yes ☐ No ☐	
Council Meeting Date **July 29, 2010**	
City Attorney Approval	

AGENDA
TIME CERTAIN ☒ 2 of 2 **Start time: 6:00p.m.** **Total amount of time needed: 3 hrs** **(for presentation, testimony and discussion)**
CONSENT ☐
REGULAR ☐ **Total amount of time needed:** _____ **(for presentation, testimony and discussion)**

FOUR-FIFTHS AGENDA	COMMISSIONERS VOTED AS FOLLOWS:	YEAS	NAYS
1. Fritz	1. Fritz	✓	
2. Fish	2. Fish	✓	
3. Saltzman	3. Saltzman	✓	
4. Leonard	4. Leonard	—	
Adams	Adams	✓	

Attachment B
West Hayden Island Public Outreach & Involvement Process

The public involvement goal for this project has been to inform and encourage meaningful public engagement in the decision making process from as many people and groups as possible, in conjunction with the drafting of a proposed concept plan to achieve a viable mix of natural resource protection and marine industrial development (within the parameters provided by City Council), while also potentially providing some passive nature-based recreation.

Through Resolution #36805, City Council has directed the Bureau of Planning & Sustainability to develop a legislative proposal for annexation of West Hayden Island to the City with the intent to protect at least 500 acres as open space, and identify no more than 300 acres for future deep water marine terminal development. As part of this planning process City Council directed BPS to establish a public involvement plan. The summary that follows provides 1) a brief description of the public involvement activities that occurred prior to City Council's resolution (2008-July 2010), and 2) Phase II outreach and involvement activities (July 2010-present).

Project History (Phase I Community Working Group and Technical Advisory Pool)

In the summer of 2007, the City began preparation of the Hayden Island Plan (for that portion of the island east of BNSF railroad tracks), which does not include WHI. The Hayden Island Plan was scheduled to coincide with the work on improvements planned for the I-5 corridor across Hayden Island, known as the Columbia Crossing. The City also initiated a new WHI planning process at that time, to respond to the regional policies, and to ensure plans for the future of WHI are closely linked to plans for the rest of Hayden Island, and the Columbia Crossing.

In 2008, the Oregon Consensus Program, based at Portland State University, assessed stakeholder interests for the future planning of West Hayden Island and recommended a collaborative planning process. Over the past several years the City has convened two groups of stakeholders to plan for economic, natural resources and recreational opportunities.

In Phase 1 of the West Hayden Island planning project the mayor named 18 people to a community working group (CWG) with the task of advising City Council on how marine industrial, habitat, and recreational uses might be reconciled on West Hayden Island. This committee was focused on determining feasibility of the project. The group met monthly for a total of 16 meetings to hear consultant updates on the Economic and Environmental Foundation Studies that would inform their discussions. The City hired ENTRIX inc. to produce the Foundation Studies, providing background information about the environmental and economic aspects of the project. A number of other white papers were also produced by staff. (For more information, and specific project documents, refer to the project website: http://www.portlandonline.com/bps/index.cfm?c=53713&

The CWG created a set of principles that continues to guide planning for the island (The CWG final report, membership and list of guiding principles can be found on the project website at the following link: http://www.portlandoregon.gov/bps/56198).

To help City staff and the CWG in reviewing these studies, a Technical Advisory Pool (TAP) was created. The TAP functioned as a pool of experts on issues related to the West Hayden Island project. The TAP met intermittently to review information and provide their technical comments. TAP members included representatives from Federal and State environmental and economic agencies, Metro, City Bureaus, PDC, Portland Audubon, and the Port of Portland.

It was during this early phase of the project that the CWG asked the city to look at local impacts from industrial development. One of our challenges was determining what impacts to focus on without a Port development proposal. We proceeded with meetings on Hayden Island and with adjacent community groups including HiNoon, Hayden Island Manufactured Home Park, Bridgeton, St. Johns, Cathedral Park, East Columbia, Linnton, and the Pearl to determine the types of impacts we should focus on. City staff also conducted interviews with neighborhood groups that currently abut industrial areas to determine areas of concern for residents. The process we followed led to the decision to focus future research on air quality, noise, light, and traffic related impacts.

In July of 2010 the City Council received a report from the CWG (See project website: http://www.portlandoregon.gov/bps/56198) and after hearing extensive public testimony City Council directed the Bureau of Planning and Sustainability to develop a legislative proposal for annexation of West Hayden Island to the City with the intent to protect at least 500 acres as open space, and identify no more than 300 acres for future deep water marine terminal development.

Phase II Advisory Committee

The Phase II (July 2010 – November 2012) public engagement and outreach activities focused on the development of a concept plan and additional studies requested by City Council through resolution 36805 (Attachment C – Summary of Technical studies produced in accordance with Resolution 36805). During the fall of 2010 and winter of 2011, staff began the additional background research, hiring the consultants to work on the technical reports and they Mayor set up a new project Advisory Committee consisting of members of business and environmental groups, community members and regional agency interests. Advisory Committee membership included:

Susan Barnes, Oregon Department of Fish and Wildlife
Andrew Colas, Colas Construction
Andy Cotugno, Metro
Pam Ferguson, Hayden Island Resident
Don Hanson, OTAC Consultants and BPS Planning & Sustainability Commission
Chris Hathaway, Lower Columbia River Esturary Partnership
Brian Owendoff, Capacity Commercial Group
Emily Roth, Portland Parks and Recreation
Sam Ruda, Marine Director, Port of Portland
Bob Sallinger, Audubon Society
Bob Tackett, NW Oregon Labor Council
Victor Viets, HaydenIsland Resident

This group met monthly for a total of 23 meetings from December 2010 through November 2012. Their main focus has been the development of a concept plan and review of technical

studies. The Advisory Committee and Facilitator's final report can be found on the project web site at the following link: http://www.portlandoregon.gov/bps/article/425926.

Public Involvement Summit

BPS staff held a workshop in November 2010 with Advisory Committee members and a larger stakeholder audience to get feedback on the public involvement process moving forward and methods for engaging the public. Key outcomes from that session which have helped guide outreach activities for this project phase include:

- Make it clear that parameters set by City Council are to help develop a concept plan, not a predetermined outcome.
- Stakeholders need to work with a concept; a visual map early in this next phase is important to progress.
- Framing questions for the public to respond to is very important
- It is important for the city to lay out what type of involvement they want so questions can be framed accordingly to get meaningful input
- People need more time to digest information especially with the large number of studies to be released. The City also needs to provide summary information/ key takeaways and more access to technical experts to clarify information for the public.

Technical Work Sessions

In Phase I staff worked through the Technical Advisory Pool to vet technical documents. In Phase II technical work sessions were held to review and discuss technical reports through the summer of 2011 through the spring of 2012. Topics discussed included:

#1: August 2011: Recreation Analysis, Regulatory Requirements, and the Natural Resources Inventory
#2: September 2011: Operational Efficiencies and Rail Options
#3: December 2011:Transportation Modeling Analysis, Port of Portland/Port of Vancouver Coordination
#4: March 2012: Harbor Lands Inventory, Cost/Benefit Analysis, and Land Management Options Memo
#5: April 2012: Economic, Social, Environmental and Energy report

The Advisory Committee met with groups of technical experts to review and discuss the technical studies per City Council's resolution. The facilitated work sessions gave the Advisory Committee a chance to hear and discuss the experts' insights on the reports and allowed time for the general public to ask questions and comment on the studies. Meeting summaries for each of these works sessions are available on the project website at http://www.portlandonline.com/bps/index.cfm?c=53717.

Additional technical work sessions were held in the fall 2012 and early 2013 on the Proposed Draft Plan. These are described in more detail below.

Concept Planning Process

Several of the technical studies were informed by the completion of the concept plan work. Some of this work helped to inform a base concept plan that was developed by project

consultant, Worley Parsons on behalf of the city. The concept plan was requested by the City to help determine whether economically viable marine terminals could be built within the 300 acre area defined by City Council, while also providing opportunities for natural resource protection and enhancement and passive recreation on the remainder. City Staff, in conjunction with Worley Parsons, released the draft Concept Plan in October 2011. The City conducted two open houses, held four discussions of the concept plan with the Advisory Committee, held 16 hours of office hours on the island, and provided an on-line survey for people to take to comment on the concept plans. Cogan Owens Cogan worked with the city to structure the public input for the concept planning process. The report summarizing the results of the concept plan development phase of the project is located on the project website at this link: http://www.portlandoregon.gov/bps/article/380479.

West Hayden Island Proposed Plan Outreach

The City has engaged the Advisory Committee and the public during the formation of the Staff Proposed Draft Plan. This included several meetings with the full Advisory Committee as well as meetings with subcommittees of the Advisory Committee . Two open houses were held on the island in June and July, 2012 to review and receive comments on the Advisory Committee's Preliminary Draft Plan that was released in June. The questions and comments were recorded by staff and responses were prepared and shared through our project web site at the following link: http://www.portlandoregon.gov/bps/49816. This public input helped the City produce the first Proposed Draft which was released on August 14, 2012.

Two Open houses were held in September and November 2012 on the the Proposed Draft Plan. In addition, in the fall of 2012, staff held additional work sessions with the Advisory Committee to discuss key issues such as transportation, natural resources, and financing. During this time, the Multnomah County Health Department conducted a health analysis at the request of the City of Portland's Bureau of Planning and Sustainability. This health analysis addressed one central question: How might annexation of West Hayden Island (WHI) by the City of Portland, and later port development, affect human health? Two public health organizations, Upstream Public Health and Oregon Public Health Institute, provided consultation and technical expertise, and participated on the Health Department's health analysis and research team. This study was also reviewed through a work session with the WHI Advisory Committee and made available to the Planning and Sustainability Commission.

On November 15, 2012, the Planning and Sustainability Commission (PSC) held a public hearing on the Proposed draft plan. On November 21, 2012, then-Mayor Sam Adams released a second draft of the proposal for zoning and an IGA for WHI. This proposal was further discussed at a continued hearing on November 28, 2012, and during a work session on December 11, 2012.

The PSC decided to postpone a decision on whether to recommend the annexation to City Council for adoption until after a series of work sessions in February and March 2013. These sessions were open to the public and offered an opportunity for the Commissioners to discuss key elements of the November 21st proposal related to community health, natural resource mitigation, transportation and economic/financial feasibility. The staff reports and PSC discussions for each of the work sessions can be found on the project website at the following link: http://www.portlandoregon.gov/bps/49816.

Staff also held small stakeholder meetings with the Port, Environmental groups and the Hayden Island Community on a bi-weekly basis from January –April 2013 to collect input for the next draft plan. The Commission provided direction to staff on the key elements outlined above, which resulted in the current (third) draft proposal, which includes:

- Consideration of annexation.
- Comprehensive Plan designations and Map Amendments.
- WHI Plan District with Zoning Maps and Code.
- A draft IGA between the Port of Portland and the City of Portland.

The Hayden Island Natural Resource Inventory (HINRI) and the Economic, Social, Environment and Energy Analysis (ESEE) are part of the Zoning Code decision and will be included as appendices to the final recommended proposal given to the City Council. The technical studies will also be made available to decision-makers as background reports to help with their deliberations. Brief summaries of all of these reports are contained in this document as Attachment C. The full reports are available for download and located within the project website under the Phase II Technical Studies (http://www.portlandoregon.gov/bps/53714).

Targeted Outreach and Strategies used for Public Participation

The City has been committed to targeted outreach efforts to special interest groups, neighborhood groups and the general public to solicit questions, comments and suggestions as additional studies are done to inform this project. Below is a short description of some of the additional audiences we worked with either through a targeted presentation or on a more regular basis to provide project updates. Attached as Appendix A is our meeting log for Phase II of this project.

Policy Makers and Local Governments

- Project team met with Planning & Sustainability Commission for 3 briefings and several officers briefings to update on project activities.
- Joint session between the City Council and Port Commission to discuss the concept plan and a special work session with City Council to define the scope of work for the Cost/Benefit report.
- Quarterly e-mail and phone check-ins with Tribal Government Representatives who have expressed interest in the project. Tribes include: Grande Ronde, Yakama Nation, Warm Springs, Umatilla, Siletz and Nez Perce. Grande Ronde and Yakama Nation representative have attended Advisory Committee meetings on occasion and reviewed technical reports for the project.
- Project team has partnered with the Bureau of Environmental Services, Portland Department of Transportation, the Office of Health Working Rivers and Portland Parks and Recreation
- Metro has participated in both Advisory Committees for the project
- Project team has provided updates and coordinated project activities with the Governor's Regional Solutions Team

Interest Groups

- The project has engaged many interest groups in this project including Advisory Committee membership from Audubon, Columbia Corridor Association, Lower Columbia River Estuary Partnership, and Willamette Riverkeepers. Project updates

and presentations have also been provided to The Working Waterfront Coalition, ILWU, AFSME, AFL CIO and other Labor Unions, The Columbia Slough Watershed Council, The Albina Rotary Club, and The Portland Business Alliance.

Neighborhood/Business Associations/General Public

- Updates to neighborhood associations, homeowners associations, and moorages on the island have been provided upon request. City staff regularly attended island meetings of HiNoon and the Hayden Island Livability Project, and updated surrounding neighborhood groups through meetings and e-mail blasts. The project e-mail list currently has 900+ individuals.

Strategies Implemented for Public Participation

The degree of public input varied by work product and project activity depending on public/stakeholder interest and/or local impact. The review of technical studies, concept plan development and the legislative process were the key focus areas for public involvement during Phase II of this project.

Some of the tools used over the course of the project included:

- Project website provides access to information, reports, calendar of events, meeting minutes and agendas
- Public Involvement Log
- On line discussion board- used in Phase I for expert panel discussions
- Maintained 900+ e-mail list for people interested in project updates
- Maintained/updated project fact sheet
- Sent Monthly project e-news
- BPS newsletter – occasional articles/ notices
- Open Houses – 1 Open house at the end of Phase I, 2 Open Houses for the Concept Planning Process, 4 Open houses for the review of the draft and proposed plan
- Online Open House and Survey for Concept Plan review and comments
- Office Hours – to review the proposed draft plan on Hayden Island
- Structured workshops/interviews to gather community input on local impacts

Appendix A: Public Involvement Log

This begins on next page.

Attachment C
Summary of Technical Studies
Produced in accordance with City Council Resolution 36805

As mentioned above, this project has included a considerable amount of background research and the production of several studies. In addition to the foundation studies for Phase I, below is a summary of staff and consultant work that is being used to help inform this proposal, along with some key 'takeaways' from each study.

Consultant Studies:

Concept Planning: Worley Parsons developed a concept plan for West Hayden Island based upon the City Council resolution to protect at least 500 acres as open space and allow marine terminal development on up to 300 acres. This concept serves as a planning basis to draft zoning recommendations and an annexation agreement for Planning & Sustainability Commission and council consideration.

Key takeaways from the Base Concept Plan include:

- It is possible to fit a rail loop for 10,000-foot long unit trains within the 300 acre footprint.
- The concept plan includes three marine terminals (processing autos, grain, and dry bulk) and two dock facilities.
- The facility can meet the acreage and dimensional parameters within the Council resolution.
- The concept plan preserves large areas of the island for natural resource protection and enhancement.
- The concept plan allows for access to either be from a new bridge from Marine Drive, or from an extension of North Hayden Island Drive.

Harbor Lands Analysis: The study reviews the most recent Cargo Forecasts done for the Portland Harbor to determine the potential need for marine terminal land and considers the redevelopment potential of certain sites along the Portland Harbor for future Marine Terminal use. In addition, the study determines whether the Port of Vancouver may have excess capacity to absorb additional demand, and analyzes ways to measure industrial land efficiency along the harbor lands. Key takeaways include:

- There are two sites in the Portland Harbor that may include enough vacant land (Time Oil and Atofina sites). Both sites would require the acquisition of additional land, and both have infrastructure and contamination issues that could be barriers to development. Neither site meets the dimensional requirements for modern "unit train" rail access.
- The Bureau of Planning and Sustainability has completed a number of inventories of vacant land in the Portland harbor, which are summarized in the ECONorthwest report. The effective supply of land in the Portland harbor is 50 to 174 acres. The range reflects the outcomes of several different studies, with a range of assumptions about how "vacant" is defined, and how constraints may impact the effective use of land – such as contamination, and environmental resources.
- The number of new marine terminals necessary to meet these capacity shortfalls varies based on the commodity type, and assumptions we make about terminal size. The ECONorthwest report summarizes that information. They estimate that between 51 and 1,457 acres of land will be needed to meet projected demand for new marine

terminals through 2040. Assuming the middle of the forecast range, the need is estimated at 570 acres.

- The Port of Vancouver has about 350 acres of vacant land in reserve for future marine terminal growth. ECONorthwest estimates that the regional need for new marine terminals will be 570 acres through 2040 (assuming the mid-range in the cargo growth forecasts). Unless cargo volume growth is on the low end of the expected range, there is not enough land in Vancouver to meet the regional need by itself.

Costs and Benefits Analysis: The study considers the benefits and costs that may accrue to the public over time if West Hayden Island is developed in accordance with the Concept Plan. This is compared with a baseline (no build) scenario. Key takeaways include:

- The report considers the effects of the development scenario with the baseline scenario on natural resources, recreation, local impacts and port economics (expressed in terms of 100-year Net Present Value).
- Development would reduce the value of the ecosystems services provided by WHI natural resources by $4.5 to $11.5 million (100-year NPV).
- Anticipated mitigation is estimated to cost $24.5million (including operating/maintenance costs), and creates $1.9 to $5.9 million of ecosystem services lift (100-year NPV).
- Development creates between $1.5 and $5.0 million in additional recreational benefits (100-year NPV).
- Recreational improvements shown in the concept plan may cost between $2.4 and $5.3 million (including operating/maintenance costs) (NPV).
- Traffic, air quality, light and noise where identified as impacts that have been known to have economic effects or effects on property values. For example, air pollution costs associated with traffic may range from $.02 to $.04 per vehicle mile traveled. Port-related rail traffic might have a one-time impact on the property values for homes within 275 meters of the development. Given the number of homes in that zone (8), they quantified this impact as $33,440. They estimated the cost of traffic-congestion related impacts as $23,500 annually. The report cautioned that these are illustrative examples, and recommended additional work to evaluate health impacts via a Health impact Assessment.
- Port operations would need to generate at least $5.5 million in net economic benefit per year to produce a sufficient level of benefit to offset the expected local costs.
- This amount of benefit is a fairly small portion of the potential job and income amount that the port would generate overall – for example experts estimate 2,300 to 3,600 jobs could result from development of a marine terminal on WHI. This includes direct jobs, induced jobs and indirect jobs. Together, these jobs could generate $200 to $300 million in personal annual income, and $18 to $30 million in annual state/local tax revenue (in Oregon and Washington).

WHI Health Analysis:

The health analysis addressed one central question: How might annexation of West Hayden Island (WHI) by the City of Portland, and later port development, affect human health? The Multnomah County Health Department conducted this analysis at the request of the City of Portland's Bureau of Planning and Sustainability. Two public health organizations, Upstream Public Health and Oregon Public Health Institute, provided consultation and technical expertise, and participated on the Health Department's health analysis and research team. The goals of this analysis were to: 1) build on the information already gathered during the West Hayden Island planning process; 2) respond to stakeholder requests to better understand

the potential health impacts of annexation and port development, and 3)aid the City of Portland in integrating health considerations into its planning. Key takeaways from the study include:

- This was a prospective analysis of changes planned for the island, how the changes could affect the health of residents of the island and the larger region, and whether potential benefits and harms of the changes are equitably distributed.
- The analysis focused on seven factors that have been identified as concerns during the West Hayden Island planning process and that have been shown to influence health outcomes, including: Air quality, Noise and vibration, Light, physical activity, traffic safety, community design & housing, and employment.
- The study found that the most likely negative health impacts are related to air quality, noise and vibration, and community design and housing.
- The most likely positive health impacts of the development scenario are related to newly available, family wage jobs and improvements in opportunities for physical activity, including the benefits of improved infrastructure for walking and biking as well as the provision of open spaces and trails for recreational opportunities.

Staff Work

Hayden Island Natural Resource Inventory (NRI): This work includes updating a inventory of existing natural resources for all of Hayden Island as well as the south bank of the Oregon Slough. This work provided natural resource background data for the concept planning and ESEE work. Key takeaways include:

- West Hayden Island is a mosaic of features including forests, woodlands, grasslands, wetlands, open areas and shallow water area that function together as one habitat unit.
- Its location at the confluence of the Columbia and Willamette Rivers and on the Pacific Flyway for migrating birds is unique in the region.
- Over 200 wildlife species, included federally-listed fishes, use WHI and the surrounding Columbia River
- Although impacted historically by agricultural activities and on-going dredge material placement, all of WHI is a high-ranked riparian corridor and wildlife habitat area.

Economic, Social, Environment and Energy (ESEE) Analysis: This analysis identifies the range of positive, negative, mixed and neutral consequences of allowing, limiting, or prohibiting industrial, recreation, and open space uses on WHI. Key takeaways include:

- This trade-off analysis arrays the consequences and produces a recommendation for the decision makers to consider.
- The recommendation is made within the context of local, regional, state and federal regulations, goals and policies.
- The recommendation is to limit development of WHI to approximately 300 acres of marine terminal uses:
    - allow marine terminal development on land within the IH zoned areas,
    - limit in-water development of docks,
    - limit recreation to areas east of the BPA powerlines, and
    - require mitigation for impacts to resources within open space areas.

Recreation Memo: This memos draws on previous recreational work done for the Hayden Island plan and ENTRIX in phase 1 of this project. The memo identifies local recreational needs, opportunities to meet those needs on West Hayden Island, or on property just east of the railroad and ways to reduce the negative impacts between recreation and natural resources and recreation and marine terminals. Key takeaways include:

- Previous studies and planning processes indicate that Hayden Island is deficient in public recreation facilities.
- Low-impact recreation opportunities on West Hayden Island, must be sensitive to the existing natural resource function.
- The base concept plan provides opportunities for low impact recreation such as trails, potential non-motorized boat launches and wildlife viewpoints.

Regulatory Requirements Memo: This report reviews federal, state, regional and local environmental regulations and policies that could affect future development of WHI. Examples include Endangered Species Act, Clean Water Act, and Environmental Protection Agency's Strategic Plan for the Columbia River, the State's Estuary Partnership Management Plan and Federal Emergency Management Agency requirements. Key takeaways include:

- There are several overlapping regulations and policies that address natural resources on WHI. Specific regulatory requirements are difficult to predict until there is a specific proposal.
- State and federal regulations apply to in –water resources and the floodplain. Other resources, such as forests and grasslands, are not regulated at the state or federal level, but can be regulated at the local level.
- The final base concept plan, if developed as shown, would require mitigation, both on- and off-island to achieve no-net-loss of ecosystem functions. This mitigation is above what would be required solely through existing regulations.
- There are different areas off-site that could receive compensatory mitigation. The port is proposing work on Government Island.

Analysis of Vancouver Port Coordination: This analysis looks at advantages and opportunities for increased coordination between the Port of Portland and Port of Vancouver as well as some research on interstate Port Authority logistics. Key takeaways include:

- Formal and informal coordination has increased more recently among the ports. One example is the deepening of the Columbia River.
- Greater coordination and/or sharing of operations may be possible if both parties agree to the benefit.
- Creation of bi-state, joint port authorities require an arduous process involving both state governments and an act of Congress. NY/NJ is the only current example related to marine ports.

Land Management Options: This analysis discusses options for how natural resource lands could be managed over the long term, including proposals for long term ownership, and strategies to pay for land mgmt activities. Key takeaways include:

- There are several options for long term ownership and maintenance, but port mitigation activities may be best on port-owned property.
- Creating a master plan for the on going management of the natural resources and recreation areas is important to achieve long-term goals.
- A financing strategy is important to get up front, through the use an agreement to ensure adequate funding in the future.

North Portland Rail Study Analysis: This analysis reviewed previous rail and freight studies with an emphasis on reviewing congestion issues within the rail corridor in North Portland, Vancouver and the bridge, and summarized the recommendations from these reports for improving efficiency. Key takeaways include:

- There are several studies that have considered congestion issues along the rail lines (BNSF & UP) in North Portland. Most expect congestion to increase.
- Speed limitations on either side of the bridge are a greater impediment to efficiency than the bridge itself. Track improvements that increase the speed of freight trains in the vicinity of North Portland and Peninsula Junction would provide benefit to both freight and passenger trains.
- Long term goals to accommodate high-speed passenger rail would require large-scale improvements made to the entire line, including the potential for a dedicated track along the entire corridor.

Transportation Modeling Analysis (produced by PBOT): Phase I of this transportation analysis was conducted for what was determined to be a reasonable high impact traffic generation scenario for a 300 acre Port development site that includes two auto import terminals and one bulk marine facility on WHI. Phase II provided a detailed operational level analysis at the intersection level. Key takeaways:

- The high impact scenario was modeled with and without a WHI bridge, using the Hayden Island Neighborhood plan future street network and the CRC Option D interchange design
- The high impact scenario generates up to 2,050 daily vehicle trips, including 516 trucks. PBOT report explained that 12% of the 2035 Hayden Island traffic would be attributable to the Port development. This number is the average Port impact on all the different links in the model that was studied on Hayden Island. This modeling number is useful only as a way to understand the total system-wide impact, but it is not a representation of the impact at any one location.
- The PBOT modeling suggests that in 2035 about 22% of the anticipated traffic in the vicinity of the manufactured home community would be port-generated.
- The modeling suggests that all intersections, except for one off-island, are projected to operate at the level meeting both City and ODOT mobility standards in 2035. Several intersections may be close to their capacities, and mitigation could be required.


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