



Bureau of Planning and Sustainability
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MEMO

DATE: July 3, 2013
TO: Planning and Sustainability Commission
FROM: Eric Engstrom, BPS
CC: Susan Anderson and Joe Zehnder, BPS; Mike Rosen, BES
SUBJECT: West Hayden Island Work Session and Recommendation

On May 28, 2013 the Planning and Sustainability Commission met for a work session to discuss Commissioner amendments to the WHI Amended Proposed Draft which was released on April 9, 2012. On June 18 staff published an amended draft, compiling those amendments into a complete report for Commission consideration on July 9. Since that time Commission leadership has directed staff to prepare an additional set of amendments, in response to several remaining questions/concerns.

The desired outcomes for this project have not changed from the June 18 amended draft, however; the Commission leadership would like to point out that future mitigation costs may be reduced through impact avoidance and stronger partnerships. A set of amendments to carry out that intent is found below. Ultimately, the mitigation must respond to impacts, and if impacts can be avoided, then these amendments ensure that flexibility exists to enable corresponding reduction in mitigation.

*Note: to distinguish amendments in this memo from those distributed with the June 18 draft, new changes are **highlighted in yellow**.*

1) Health Impacts and Emissions Reduction Measures:

Truck traffic and associated emission along Hayden Island Drive remain a concern, but could be reduced further with the implementation of more specific emission reduction incentives. Although most trucks that would be entering and exiting the facility would not be Port-controlled fleet vehicles, there may be an opportunity to impact third party vehicles through directed incentive programs managed by the Port or the terminal operator, potentially with EPA support. Other ports have implemented programs like this. Programs could include, for



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example, incentives or financial assistance to accelerate replacement of older vehicles, retrofitting or repowering existing engines, or incentives to encourage use of alternate fuels. The Port and City should strongly consider the research conducted by DEQ through the Portland Air Toxics Solutions program, specifically, the White Paper for On Road Diesel should be cited within the IGA, section 3.1.3, Truck Traffic Cap and within the Port Sustainability Vision.

Staff also recommends adding language to Section 6.5.3 under Health Impact Assessment to allow flexibility in the future for some of the Community Fund to be used for truck retrofitting or replacement.. The impact-avoidance measures discussed above related to truck emissions may be less expensive than the cost of mitigating health impacts in the future.

IGA language:

Page 125, Section 3.1.3: Truck Traffic Cap and Emissions Reduction. Contemporaneous with approving this agreement the City Council is adopting zoning code (Plan District) regulations for WHI that caps 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 Port will take additional steps to reduce heavy truck emissions as described in the Port Sustainability Vision, Attachment H.** Pursuant to section 9 of this agreement, the Port will seek partnerships with federal, state and local agencies to support additional funding in support of that goal. 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. **The Port will also collect data on the age of heavy trucks calling on the WHI Port facility.**

Page 142, 6.5.3: Other Potential Uses.

The purposes for which the Community Fund may also be used include, but are not limited to, addressing the following:

- Air quality improvements, such as tree and vegetation buffering, and
- Noise abatement projects.
- **Grant assistance for older truck replacement (pre -2006) or retrofitting (for 2006 models) if leveraged with EPA or other funding sources.**

Page 147, 10.3.2: Reporting by the Port.

Truck volumes **and truck age** as referenced in Sections 3.1.3 and 6.3.4, and...

Attachment H: Port Sustainability Vision: The edits below represent a change from what staff suggested in our June 19 memo. We recommend that the following language be added to the Port's Sustainability Vision:

Port's Sustainability Vision excerpt:

Page 185:

Guiding Principle #8: Natural Resources Protection: ~~Permanently protect at least 500 acres of West Hayden Island to Achieve net improvement of ecosystem functions retain significant natural resource functions associated with West Hayden Island in the Columbia River. Enhance those functions by preserving capacity for the Port to fulfill natural resource mitigation obligations.~~

Page 188:

Environment

1. Enhance natural resources in the City of Portland by:
 - a. Permanently setting aside 500 acres of open space on WHI 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. The Port will go beyond the minimum compliance with all local, state and federal air quality mandates related to air quality, water quality, natural hazards and fish and wildlife habitat. The Port is committed to mitigation of significant impacts identified through the NEPA process; and 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. This may include, but is not limited to:
 - a. Developing contracts with terminal tenants to put strong incentives in place encouraging trucks entering and leaving the terminal facility to achieve early implementation of the EPA's diesel emissions reduction schedule by 2025 (exceed the regional rate of fleet turnover, earlier adoption of cleaner engines, engine replacement, use of low sulfur fuels, etc.) The Port will use DEQ's White Paper for On Road Diesel, produced through the Portland Air Toxics program, as a guide to developing incentives.
 - b. Heavy Trucks entering the facility that meet the EPA 2007 and 2010 standards will move to the front of the line for early unloading of goods and/or qualify for discounted fuel (price to be determined at time of

terminal occupancy)

- c. Developing a terminal facility that provides the infrastructure to facilitate electrification or use of other cleaner fuels for ships, locomotives and on-site trucks.
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. As applicable to industrial development, utilizing 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.¹
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 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 through local, stated or federal permitting in NEPA processes.
11. Marine tenants at WHI will achieve carbon neutrality in their own development and operations.

2) Floodplain Re-establishment:

With the use of less fill and locating some segments of the proposed rail loop on elevated structures, some level of existing flood regime could be preserved, in some areas within the proposed facility. This action could reduce the cost of floodplain re-establishment elsewhere. For example, if 50 acres of floodplain could be retained within the rail loop, mitigation noted in Section 5.5.4 of the IGA could be reduced by a corresponding amount (~\$4M savings), and the cost of fill would be reduced (~\$5M savings).

¹ 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)

IGA Language:

5.5.4.1 Floodplain Re-Establishment. The Port will implement actions that achieve 100% replacement of the impacted floodplain, which is defined as replacing the area associated with a 100-year, 30-year, 10-year and 2-year flood event, where the flood events overlap, at a 1:1 ratio. The Port will 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 a 10-year flood event, and at least 135.8 acres will be inundated during a 30-year flood event. The acres may be reduced if the final terminal designs allow preservation of additional floodplain area inside the industrially zoned area, provided 100% replacement is achieved. The Port may choose at its discretion to co-locate other actions described in Section 5 with floodplain actions.

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. This cap may be reduced by a proportional amount if final terminal designs allow preservation of additional floodplain area inside the industrially zoned area.

3) Forest Mitigation:

Saving some additional forest within the industrially-zoned area could similarly reduce the forest mitigation obligations. For example, saving an additional 50 acres of contiguous forest would reduce forest mitigation obligations significantly, with potential savings of \$5 million or more.

IGA Language:

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. In addition, the Port may reduce the total forest mitigation obligations by preserving more forest area within the industrially-zoned footprint consistent with the City (BES) Forest Mitigation Framework and other performance standards in Attachment E, provided that the additional preserved forest is contiguous to the forest within the open space area.

4) Collaboration with Sovereign Nations:

There should be a more intentional level of collaboration on this project with the six tribes that have expressed an interest in West Hayden Island, specifically; the tribes should be consulted during the discussion related to environmental mitigation with a goal of greater impact avoidance.

IGA language:

7.2 Coordination and Consultation. The City and the Port mutually agree to coordinate and consult with the Tribal Governments with an interest in the WHI project including but not limited to The Confederated Tribes of the Grande Ronde, the Confederated Tribes of Warm Springs, the Nez Perce, the Confederated Tribes of the Yakama Nation, the Confederated Tribes of the Siletz Indians, and the Confederated Tribes of the Umatilla Indian Reservation 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 Tribal Governments are interested in discussions related to environmental mitigation with a goal of greater impact avoidance. 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.

5)Forming Strong Partnerships

The Commission feels that with strong partnerships and leveraging funds at the federal, state and local level the Port can more successfully build a new terminal facility and respond to all the necessary mitigation requirements. The table within Section 9.3 Nonappropriation of Funds has been updated to include a column on partnerships.

IGA Language:

Obligation	Summary of Obligations		Timing
	Amount	Partnerships	
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%.	<u>Business Oregon, Oregon Dept. of Transportation, Metro, Federal Highway Administration</u>	Milestone 1
Recreation Improvements (Section 3.2)	Port = \$2.4 9.4 million + O&M TBD City = \$1.0 million	<u>Metro, State of Oregon</u>	Milestone 2
Sewer and Water Improvements (Section 3.3)	TBD	<u>Business Oregon, Environmental Protection Agency</u>	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)	<u>Bureau of Environmental</u>	Milestones 1 - 4

		<u>Service, Metro</u>	
<u>Community Fund (Section 6.4)</u>	<u>Port = minimum of \$5 million and a maximum of \$17.4 million</u>	<u>Multnomah County Health Dept., Environmental Protection Agency, Oregon Dept. of Environmental Quality</u>	<u>Milestone 3</u>
<u>Community Benefit Grant Program (Section 6.63)</u>	Port = \$100,000 x 10 years + TBD ongoing		Milestone 3
<u>Health Impact Assessment (to BPS and MCHD) (Section 6.34)</u>	Port = \$1.095 million <u>\$95,000</u>		Milestone 2
<u>Housing Grant (Section 6.5)</u>	Port = <u>\$3.6 million</u>		<u>Milestone 3</u>

6)Annexation Costs Table with Potential Cost Savings

The table below shows existing proposed elements and costs, plus we have added a potential cost reduction column and partnership column.

**Annexation Costs for WHI per PSC Terms
(City Estimates)**

July 9, 2013

Worley Parsons Concept

Terminal Operations (acres)	278.0
Dock (acres)	6.4
Total (acres)	284.4
Sq. ft.	12,388,464

Proposal Element	Cost per City estimates (2012\$)	Potential Design Savings, Partnerships	Resulting Cost to Port
Wetland + shallow water mit. (Federal State permits)	\$10.1M		<p>= \$64M + or - \$8 (\$5.17 sq/ft, +/- \$0.65)</p>
Forest mitigation – Government Island (174 acres planting, 296 enhancement) + WHI (124 acres enhancement, 22 acres planting) + additional amount to reach 110% of function, amount based on proxy project	\$22M	\$5M+, if 50 acres of contiguous forest were retained inside industrial zone	
Forest mitigation – placeholder to represent lease of GI – payment to Aviation Division	\$3M		
Floodplain project based on revised scenario with more detailed prescription	\$16M-\$20M (capped by PSC)	\$4M, if 50 acres of floodplain were retained inside rail loop (would require engineered/elevated section of rail loop).	
Grassland mitigation –grant to third party entity for Western Meadowlark conservation	\$1.5M		
Transportation – Reconstruct NHID (Project is \$10-24M, estimate reflects assumption of how much Port may actually pay – local match on state/federal grant.)	\$12.35M	\$3M -\$5M City \$6 target for package of state/federal funding	
Community benefit grant (\$100k for first 10 years, upon annexation. Funded later – ongoing - by 50 cents per truck entering gatehouse, upon terminal opening)	\$1.4M		
HIA follow up (\$95,000 to BPS + MCHD, plus set-aside to implement recommendations)	\$5M -\$17.2M	Some portion could be reduced through implementation of truck emissions reduction incentives.	
Open Space follow up planning	\$0.2 M		
WHI recreation/trail development	\$2.4 M	Some portion may be eligible for state or regional assistance.	
10 years of WHI recreation (trail) O&M	\$1.0M		
TOTAL Annexation	\$74.95M - \$91.15M \$6.05 - \$7.36 /sq. ft.	Total = Up to \$27M in potential design savings or partnership opportunity.	

Note: Design, engineering, construction management, contingency are built into individual line items where applicable. Some amounts are fixed per IGA.

Site Preparation	Cost per Worley Parsons	Potential Design Savings, Partnerships	Resulting Cost to Port
Site clearing and prep	\$.566M		
Fill, excavation and erosion control	\$33.6M	\$4M could be saved by avoiding 50 acres of fill within the rail loop. Some portion eligible for state/federal funding.	
Street access to the site	\$.45M	Some portion eligible for state/federal funding.	
Roads within the site	\$3M	Some portion eligible for state economic development funding.	
Water connections to the site	\$.1M	Some portion eligible for state economic development funding.	
Sewer connections to the site	\$5.9M	\$2.9M savings if on-site sanitary sewage facility is built, with DEQ outfall permit, rather than pumping to City facility.	
Power/electrical – off site only	\$.95M		
Buffer	\$.32M		
SUBTOTAL	\$44.89		
Design, engineering, construction management, contingency (38%)	\$17.06M		
TOTAL Site Preparation	\$61.95M (\$5/sq.ft.)	Total = Up to \$10M in potential in potential design savings or partnership opportunity.	

TOTAL \$115M
(~ \$9.29/sq.ft., +/- \$0.65)