Responses from Eric Engstrom to PSC members' inquiries: 11/27/12

Natural Resources

Q1 Assertion of the Tribes that treaty rights come into play either with respect to fish issues or with respect to treatment of the island itself..

While one or more tribes have expressed concern about the effect that developing a port facility may have on their fishing rights, staff is not aware of any treaty violation related to this project and no specific treaty violation has been asserted

There are a variety of treaties with Pacific Northwest Sovereign Nations/Tribes. Some tribes have treaty rights to fish in the Columbia River. Other tribes have retained rights to hunt and gather, or perform traditional ceremony in traditional locations. The Yakama have reserved rights under the Treaty of 1855 to fish at all usual and accustomed places known at the time of the treaty signing. This includes both on - and off-reservation sites. The Grande Ronde include descendants of the original people of the Portland area, and they were the tribe that ceded the land that makes up Portland to the United States. Because the Columbia River was such a significant trade corridor, other tribes also have treaty interest in lands along it. In the case of WHI, our primary treaty-related concern is that Port development would impact fisheries in the Columbia River.

Staff's approach to respecting and honoring these treaty rights includes: 1) conducting detailed natural resource evaluations (the HNRI), and inviting tribal review of that work; 2) designing the site to be as salmon-friendly as possible - in this case avoiding shallow water impacts (a key habitat for salmon) and fully mitigating forest impacts; 3) staying in close communication with interested tribes at each stage of our work; and 4) coordinating information and actions related to state archeological resource protections.

A. Fisheries Impacts

Shallow water habitat is designated *Critical Habitat* for Endangered Species Act (ESA) -listed salmon species. Pacific salmon, especially juveniles, are one of the more sensitive aquatic species to water quality and quantity, and physically diverse and complex habitats.

Shallow water habitat in the Lower Columbia River provides important functions such as velocity moderation and food production that support aquatic organisms. For juvenile salmonids migrating out of the Columbia River system, shallow water habitat is where they begin to experience tidal action. These fish can have extended rearing (resting and eating) periods in the lower river prior to outmigration. Shallow water habitat also builds and maintains the aquatic food web for fish, amphibians, birds and mammals. The highest quality shallow water habitat on West Hayden Island predominantly occurs on the south side of the island where we find forest land contiguous to the in-water areas and evidence of large woody debris accumulation. Maintaining the continuity of shoreline habitats is important, fragmentation of the shoreline area can disrupt migratory behaviors of fish. Chinook salmon, coho salmon, and steelhead are highly reliant on shallow water habitats; slower water is especially important during high flows, which can negatively affect the younger and weakerswimming fish.

More information about this can be found in the Environmental Foundation Report (ENTRIX, 2010), the Concept Plan report (Worley Parsons, 2012), and the Hayden island Natural Resources Inventory (BPS, 2012). In particular:

- Hayden Island NRI (aka HNRI), pg 91-97
- Environmental Foundation Study (ENTRIX), pg ES-15 and pg 3
- Concept Plan Final Report (WorleyParsons), pg 14 and memo dated 11-10-11

The Concept Plan looked at two basic layouts:

<u>A Series</u>: Avoided the wetlands and shallow water habitat along the south bank of the island by keeping all development north of the PGE easement

<u>B Series:</u> Impacted some of the wetlands and shallow water habitat along the south bank, but avoided the large forest patch just west of the DDMA

Both the A and B Series proposed that development be set back 100ft from the Ordinary High Water Mark on the north shore. This was to avoid impacts to shallow water habitat to the maximum extent possible.

The Advisory Committee preferred the A Series of site layouts for preserving onsite, shallow water habitat for the benefit of Salmon. The only impacts to shallow water habitat in the Final Base Concept Plan are the docks (less than 2 acres of direct impact). The AC also chose the version of the A Series that pushed the rail loop as far east as possible to minimize impacts to the floodplain cottonwood/ash forest.

B. Tribal Involvement

In early 2010 (prior to the City Council's resolution) staff worked with the City's Government Relations Office to discuss sovereign nation involvement in the WHI project and to determine the list of sovereign nations in the area that may have an interest in the WHI planning process. We contacted the following tribal representatives by e-mail in the spring of 2010 and again in the fall of 2010 to discuss involvement in the WHI project:

Erin Madden, Nez Perce Tribe Mike Karnosh, Grand Ronde Ceded Lands Coordinator Tom Downey, Siletz Tribes Brian Cunninghame, Warm Springs Tribes Matt Johnson, Umatilla Tribes Rose Longoria, Yakama Nation

We provided background on the project and asked how they would like to participate. This included:

- Periodic check-ins via phone or email;
- Quarterly meetings to discuss the project;
- Identifying experts to participate in technical review of reports; or
- Discussions with the project advisory committee.

Grande Ronde, Warm Springs, Nez Perce and Yakama requested periodic phone check ins and updates by e-mail. BPS has provided quarterly check ins or at key project milestones to provide updates. Since Council's resolution in July 2010 we have also had additional involvement by Grande Ronde and Yakama as part of a technical review team to review our Natural Resources Inventory and ESEE. In March 2011 BPS staff and management participated in a meeting with Grande Ronde staff in Grande Ronde, to discuss more details on the WHI and River plan projects.

Grande Ronde, Nez Perce and Yakama requested notification of technical work sessions to review consultant and staff reports. Staff provided e-mail updates on a quarterly basis, or as key studies were completed, with notification of technical works sessions of interest. Over the past year and half Yakama has become more involved in attending WHI Advisory Committee meetings. Grande Ronde has requested phone check ins and staff to staff meetings to receive updates on the concept plan, land management options report and natural resources mitigation.

Q2: Answer the 300 acres of fill in the floodplain issue. We know that Metro said that they don't have to put the fill in but obviously something has to happen. This is a major sticking point and so lets answer the question scientifically.

Q3: Is the island likely to flood more frequently in the future? How does this impact terminal development or floodplain management?

Q4: Whether or not "balanced cut and fill" should be required for the site?

Worley Parsons calculated approximate earthwork quantities for the concept plan. Finish grade was set at an elevation of 30 feet. The existing elevations within the site range from 44 feet in portions of the DMA to 12 feet in and around some of the wetlands.

Anticipated Cut = 620,000 Cubic Yards (where existing elevations are above 30) Anticipated Fill = 1,940,000 Cubic Yards Net Change = 1,320,000 Cubic Yards (Fill)

In addition, over the long term, the Port is proposing creation of new shallow water areas in the vicinity of Benson Pond, and along the south shore of the site, which involves approximately 500,000 to 955,000 Cubic Yards of cut. Some of his work would be done as mitigation for WHI development (wetlands and shallow water impact), and, if approved by the trustees, some for Superfund damages assessment purposes.

The attached map shows the boundaries of the dredge material area and the proposed 300 acre footprint, with the amount of anticipated fill indicated by color coding.

The most obvious function of the floodplain is to hold water during flood events, reducing the impact of floods to properties up and down stream from any given site. On WHI, filling 1.3M cubic yards of WHI will result in 1.3M cubic yards less of flood capacity at this location. Think of a bathtub - if it's full of sand, it can't hold as much water.

The floodplain provides a number of other important natural resource functions that are based on a river or streams ability to overtop the bank and flow into the floodplain:

- 1. Flooding in undeveloped areas cycles nutrients (food web) picking up nutrients on land and bringing them to the river and depositing nutrients from the river on land
- 2. Flooding in woodlands and forests introduces large wood and leaves to the river this structure is critical to aquatic species
- Channel migration is a natural function of rivers and streams and is aided by flooding that carves out areas in the floodplain and deposits sand in other areas
- 4. Floods help maintain habitats floods deposit seeds from upstream cottonwood/ash forests benefit from periodic flooding
- 5. Adaptation current climate change models show that flooding the Columbia River could increase in frequency and/or volume due to warmer, wetter

winters – existing, undeveloped floodplains will help respond to those changes.

There are three regulatory systems in Portland to floodplain impacts and protect these functions. First, the federal FEMA flood insurance program requires Cities to regulate fill in the floodplain. Second, through Title 3, Metro requires Cities to implement balanced cut and fill, in most situations (WHI is one such exception), and finally, the City has adopted environmental overlays to protect forests and other habitats in the floodplain.

The City implements the normal FEMA requirements through Title 24, with requires an engineering evaluation at the time of development (at the time of the fill). This includes a "no net rise" requirement, requiring that fill does not cause more than a 1 inch rise in flooding, and prohibiting fill in locations where there is typically active flowing water (the FEMA floodway). Habitable buildings must also have finished floor elevations at least 1 foot above the flood elevation.

Metro's requirement is also implemented through Title 24. In most areas of the city any fill in the floodplain must be balanced by an equivalent cut, creating new floodable volume. This is in addition to the "no-net rise" rule described above. There are several exempt properties, including the South Waterfront District, and several Port properties, including WHI. These exemptions were provided because development of these sites were important elements of the regional growth management strategy, and important to the City's economic development strategy. Ports are, by their nature, inherently located with fill or other structures in the floodplain. While on balance the region practices balanced cut and fill, there was an economic concern that a strict application to all sites may present a significant barrier to our ability to remain a Port city.

Through its application of State Goal 5, the City also typically regulates removal of forests and wetlands and other natural areas located in the floodplain. This is done via the Environmental Overlay regulations (for example, along Johnson Creek), or via the Greenway regulations (along the Willamette). In the case of the WHI open space, the City has proposed standards that are substantially similar to the environmental overlay, as an element of the proposed Plan District. For purposes of State Goal 5, we are recommending that marine terminal development be allowed within a 300 acre area on WHI. Within that footprint, we have proposed an agreement with the Port to carry out mitigation forest mitigation.

Recently in Washington and Oregon, lawsuits were filed making it necessary for FEMA to consult with NOAA on any changes to the mapped 100-year floodplain. The requirement is to ensure no harm to ESA-listed species (salmon in this case). This recognizes the important relationship between the floodplain and in-water aquatic habitat. The City's current IGA proposal includes provisions that address ESA-listed species:

- 1. No fill can be placed outside the dredge area until the NEPA process is completed and CWA 404 permits are obtained; and
- 2. The Port will get ESA authorization prior to requesting any FEMA map modifications.

Q5: If a principal argument for this facility is the export of grain to Pacific markets, do our climate scenarios give any insight into whether grain production in the river and rail transport "shed" for this facility can likely to be sustained at current or increased levels?

The Columbia River basin "transportation shed" includes a very large and diverse area, including eastern Oregon and Washington, Idaho, British Columbia, Montana, and the Canadian great plains. The short answer is that this is one of the richest agricultural regions in the world, and it would continue to be under almost any foreseeable climate scenario.

The region has long been impacted by cyclical weather changes that come with the El Nino Southern Oscillation, which brings multi-year periods of drought alternating with wetter periods. Climate change will impact water availability in some areas within this region more than others - depending on the specific source of the irrigation water (mountain snowpack impacts). Temperature changes could reduce crop yields in some areas, but increased carbon in the atmosphere could offset that, in part. Some crop zones could shift northward, benefitting Canadian farmers. Also, keep in mind that other agricultural regions may be even more impacted than we are, which could increase demand for products being shipped via Portland. The following publication has a good summary of thinking about climate change and agriculture (in particular, the article starting on Page 57):

http://wrdc.usu.edu/files/uploads/Rural%20Connections/RCJUN11w.pdf

Q6: How does the siting of rail/marine terminals in the lower Columbia impact greenhouse gas emissions?

Development of WHI for marine terminal purposes is generally expected to help us reduce our GHG emissions, relative to other alternative locations where that growth might otherwise occur. Freight movement on an ocean-going ship is significantly less carbon-intensive than other freight modes:

CO2 emissions - grams per ton-mile (estimates from a variety of sources)

• ocean-going ship: less than 10

- inland waterways barge: 15-20
- rail: 20-30
- truck: 65-135
- air: 100-1000

A nice graphic from MIT explains this: http://web.mit.edu/newsoffice/2010/corporate-greenhouse-gas-1108.html

In general, this means we want to develop infrastructure that brings ocean-going ships as far inland as possible, and connect those ships with barge or rail. Right now, the Columbia River Shipping channel depth permits large ocean-going ships to reach Portland/Vancouver. If market demand plays out as projected, and the Port of Portland does not develop WHI, some demand may be met by expanding other downstream Ports - Longview, Kelso, St. Helens, Astoria. This is already happening (for example, the new grain terminal in Longview). Failure to develop sufficient marine terminal capacity in Portland/Vancouver will encourage more of those facilities to develop farther downstream, shifting freight to a more carbon intensive mode. This is a significant impact as the emissions from the different modes differ by several orders of magnitude.

Additional downstream port development would likely require development of additional truck and rail infrastructure along the Lower Columbia. Existing roads and rail infrastructure on the Oregon side of the river are particularly ill-equipped to handle growth. Portland/Vancouver is the only location in the Lower Columbia with access to the deep shipping channel, the interstate highway system, and two competing transcontinental railroads. Building new infrastructure elsewhere in the Lower Columbia would have its own environmental impacts. In general, maximizing existing infrastructure will minimize GHG emissions because building large scale infrastructure is a fairly carbon intensive activity. This is part of our effort to plan for a compact urban growth boundary, building up rather than out.

Meeting marine terminal growth demand elsewhere in the Lower Columbia will also potentially increase emissions from car and small trucks in the region, because the majority of the port workers and firms that provide logistical support for marine terminal operations are based in Portland. There is an existing cluster of businesses located in Portland built up around the Port. In other words, allowing the future demand to drift to downstream ports will spread out this industry, and could put more service trucks and longshore cars on I-5 and/or Highway 30.

Q7: Review progress on the ability of the mitigation plan to achieve the "net ecosystem benefit" objective.

The City Council's resolution referenced a number of principles, including the goal of achieving a "a net increase in ecosystem function". There are several different habitat types on WHI, which provide different ecosystem functions: wetlands, shallow water, cottonwood/ash forests, and grasslands/sandy areas of sparse vegetation. Most of these habitat types are also in the floodplain, and the whole site is on an island in the river (which adds some additional context and contributes to ecological function/value). The most recent proposed code and IGA (Mayor's proposal) provides mitigation to replace these functions, and in some cases the mitigation goes above replacement (to net improvement).

Habitat Type	Impact	Mitigation	Estimated % of function
wetlands	10 acres	Min 30 acres, tbd via state and federal permit	replaced 100% +
shallow water	<2 acres	tbd via future land use review	100%
cottonwood/ash forest (floodplain, island context)	149 acres	More than 600 acres of forest enhancement and planting, on WHI and Government Island, plus \$4.1M fund	110%
grassland + sandy areas with sparse vegetation	123 acres	\$1.5 M fund to benefit Western Meadowlark	100%

The following table summarizes the Mayor's current mitigation proposal.

Q8: During testimony on Nov 15th it was asserted that the CRC drainage ponds could have floodplain impact and should be considered in the floodplain decisions. I would appreciate any staff perspective on this assertion.

Staff has no basis to evaluate floodplain impacts of any CRC project element. The CRC drainage ponds are not part of the WHI project.

Q9: Whether it is appropriate to reserve mitigation opportunities on WHI for NRDA mitigation for the Portland Harbor or whether the first priority for on-island mitigation should be for impacts of the terminal development?

Staff agrees with other resource agencies (including ODFW) that on-site in-kind mitigation is the first priority, as a general principle. The Advisory Committee also leaned in this direction (though not unanimous). Accordingly, the Mayor's current proposal incorporates a requirement for 124 acres of on-site forest enhancement and 22 acres of forest planting. The Port's proposal also already included wetland

and shallow water mitigation occurring on site, in the vicinity of Benson Pond, if approved by DSL.

Staff believes that the greatest NRDA opportunity on WHI is additional shoreline wetland enhancement, and/or further actions to expand/improve hydolologcal connections to shoreline wetlands (providing more off-channel fish habitat). The Worley Parsons concept plan identified significant opportunities for this kind of work, beyond the mitigation necessary to replace functions lost with Port development. In other words, staff believes there are enough opportunities to accomplish both significant on-site mitigation for Port development and generate significant credits for other purposes (such as NRDA). However, the ability to use actions on WHI for NRDA is a decision that is in the hands of the Portland Harbor Trustees Council, not the City. A recent letter from the Trustees helps explain this process (enclosed).

Q10: Who will ultimately own and manage the protected open space?

The Port is the logical owner and manager for the next 30-100 years because we anticipate they would have significant mitigation obligations covering much of the site. These mitigation obligations could be either directly related to WHI Port development, or related to Superfund damages. Other potential owners are not interested in taking on management of a site that is primarily being managed for natural resource mitigation actions obligated to the Port. Portland Parks is willing to manage trails and related facilities during that period, on contract. In the long term, both the Port and the City agree that other ownership may be desirable. That future decision is better left to a future City Council and Port Commission. The best entity to manage the site at that point may not even exist today.

Q11: Who will be the third party to the IGA to protect the open space interests?

This is not determined. The most recent Mayor's draft of the IGA states that this entity would be identified by the City.

Q12: What is the timing of mitigation efforts with respect to development?

Staff anticipates the timing would be as follows:

 The timing of wetland and shallow water mitigation would be resolved as a result of state and federal permits. Staff anticipates the permits could be applied for sometime over the next decade, prior to 2022. Actual mitigation actions would be expected in conjunction with development, in the mid 2020's.

- 2. Forest mitigation, per the proposed IGA, would initiate within 6 months of the resolution of any annexation related legal appeals. The rationale for early forest action is that it takes a long time to grow trees.
- 3. Transportation improvements (North Hayden island Drive) would need to occur before or with development, anytime over the next decade. The City and the Port would immediately begin seeking funding upon IGA approval.
- 4. The community fund is proposed to begin within 1 year of the resolution of any annexation related legal appeals.
- 5. The housing fund would require an initial planning phase, to set up administrative details. It would be available within 6 months of the resolution of any annexation related legal appeals. The Housing Bureau will deliver a plan for the distribution and use of funds to City Council within 9 months of receiving the initial disbursement of planning funds to set up the program. The remainder of funds will be available within one year of City Council approval of the program plan.
- 6. Parks improvements will also require several years of additional planning/design. Land acquisition could begin immediately upon approval of the IGA (and resolution of any annexation related legal appeals). Capital improvements in the parks and trail construction would probably begin in conjunction with development, no later than the mid 2020's.

The timing of this mitigation has a big impact on financial planning for the Port, and they will likely raise concerns about this, or propose refinements to this sequence.

Q13: How do recreation opportunities on WHI impact habitat preservation? How will recreation opportunities be accessed?

To limit the impact on habitat, recreation uses is only on a limited part of the site. Recreation is planned on the eastern side of the open space, with beach access and a trailhead near the site entrance. Trails would provide access to the southern shore, and possibly along the beach or along the Power line corridor. The western side of the open space is reserved for natural resource mitigation and enhancement, with no formal recreation. A more specific trail plan and open space strategy is suggested in the IGA, to be developed after annexation, but before development.

Recreation could be accessed by one of several methods: 1) by car, parking at the proposed trailhead parking lot near the site entrance; 2) by bike, from the light rail station or CRC bike facility, and then travelling along the new multi-use-path along North Hayden Island Drive; and 3) by walking, from the manufactured home community or the light rail station, travelling along the new multi-use-path along North Hayden Island Drive.

Community Impact/Health

Q14: Can we properly assess/plan mitigation for health impacts without baseline health data for the immediate community?

Through the health analysis we analyzed 2010 demographics for the island. We know from the census and other recent local surveys that Hayden Island residents have a higher percentage of seniors, persons on fixed incomes and persons with pre-existing medical conditions. As a result, this existing community is especially vulnerable to future impacts described in the report.

However, the timing of a future development is estimated to begin no earlier than 2023 (construction) with operations beginning no earlier than 2026. The population will change during that ten year period. A baseline health survey in 2012 will not tell us much about who will be impacted in 2023 or 2026. It may be much more appropriate to do a baseline health study of the population closer to the time of a proposed development.

Q15: What is the trigger for the HIA required before development begins?

State and Federal permit application.

Q16: How are construction impacts assessed/mitigated?

The proposed IGA includes a requirement for an ongoing WHI advisory committee, charged with developing a good neighbor agreement, and monitoring construction impacts, among other things. It is premature to evaluate construction impacts at this stage because we do not know what kind of terminal will be built, or what technology may be available at that time.

Q17: How likely is it that the project will destabilize home ownership in the nearby community. If so, how can this be mitigated?

This was identified as a potential impact in the Health Report, but the report authors characterized this topic as being supported by very limited literaturebased evidence. The main point made by the report is that manufactured home owners are inherently less able to cope with such destabilization, if it occurs, due to the structure of financing for those homes.

Q18: One comprehensive natural habitat and health impact mitigation report. The report should demonstrate exactly what would be mitigated, how, an estimated

time line and estimated budget. The report presented to the PSC was grim. The mitigation plan has to be realistic and meaningful.

Staff agrees that one comprehensive table would be useful that layouts out 1) what would be mitigated, 2) how, 3) estimated timeline, 4) budget. We will prepare a table for the commission prior to the next meeting that shows both natural habitat and health impact mitigation and clearly crosswalks the potential impacts and proposed mitigation.

Transportation

Q19: Traffic Issues fully mitigated and described. This is not rocket science. There should be a map with streets and connections that make sense to people and traffic flow on the island. Show it.

Traffic to and from the proposed Port would follow North Hayden Island Drive to and from the Jantzen Beach I-5 interchange, as shown on the enclosed map.

Q20: Columbia River Crossing Bridge Plan B. Is there a Plan B if the CRC does not materialize? Is it a deal breaker?

If the CRC does not materialize the entire region's traffic model would need to be updated, and traffic analysis re-done. This question/issue is larger than the WHI project. All traffic analysis for projects like this are based on underlying planning assumptions – about what the transportation system will look like over the next 25 years. Those assumptions are based on adopted projects in the TSP and Regional RTP.

If the CRC did not materialize, other traffic mitigation measures may need to be discussed, such as removing other traffic from the Jantzen Beach or Marine Drive interchanges to offset the Port's additional impact. The need for some other secondary access to Hayden Island could also come up. In that scenario, the City would also need to revisit the adopted Hayden Island Plan, and substantially scale back expectations about other future commercial and residential development on the Island. Remember that the vast majority of materials moving in and out of a WHI Port would be arriving and departing via barge and rail, so the Port's overall impact on road traffic is very very small, relative to other traffic sources on the island. If there is no CRC, there would be a far greater impact on the commercial and residential interests on the island, which are expected to generate much more traffic.

Q21: North Hayden Island Drive (NHID) issues:

• Adequacy of design (cross-section, MUP design, etc.)

- Gap between WHI-driven improvements and CRC-driven improvements, including intersection at NHID and Main/Pavillion (likely to be the primary pedestrian access point between manufactured home community and mall)
- Adequacy of funding for NHID improvements who holds the financial risk to ensure the completion of the improvements?

At this stage a variety of street design options have been considered, but only for the purpose of cost analysis and establishing basic design goals. A separate design process will occur with appropriate public involvement when the project moves forward. There is not a gap between the two projects. The Port-driven project is responsible for improvements in NHID, up to the Main/Pavilion intersection. The City has a reasonable expectation that improvements beyond that point (and eastward) would be borne by the CRC project, in order to establish functional traffic flow into the I-5 onramps. It is likely that turning lanes will be needed in the block abutting Target, in connection with the CRC improvements. As currently written, the draft IGA places the financial risk related to NHID with the Port. The IGA says in effect that the NHID project associated with WHI must extend to where the CRC stops. So if the CRC stops short of the Main intersection, then the WHI is responsible. The PBOT cost estimates however only go as far as that intersection. There is enough contingency in the PBOT estimate to cover pedestrian crossing improvements.

Q22: Has a Transportation Planning Rule analysis of the terminal development been conducted?

Yes, A TPR analysis was completed and submitted to ODOT for their review and acceptance. On October 23, 2012 ODOT wrote back with a finding that the City's traffic analysis documents "no significant affect".

Economics

Q23: I would also like to see exactly what the local economic benefits will be. Are the predictions about local jobs being created true and if so, all I need is a simple chart about what the local, regional and state benefits will be from having a new marine terminal on WHI.

The EcoNorthwest Benefit/Cost Report took a fairly conservative view of Port benefits, pointing out that many port benefits flow to the larger region, and many impacts are local. Despite that general statement, they did conclude (and the numbers show) that the local benefits would still exceed the public costs, potentially by a wide margin.

These public benefits could be anywhere from \$3.75 to \$90 million annually, in local benefit. The wide range reflects the range of expert opinion on the amount of

benefits actually captured locally, and if that benefit might be achieved by other means.

The marine terminal is also expected to generate \$18 to \$30 million annually in state and local tax revenue. As noted in their conclusion, the break even point for the public investment is about \$5.5 million annually. The projected benefits are well above that. They summarized by saying "it is likely that the Development Scenario will generate net local economic benefits relative to the Baseline Scenario"

Studies done to date project that WHI development would lead to roughly 2,300 to 3,600 jobs, including direct, indirect, and induced. This does not include jobs associated with terminal construction. For context, there were about 18,000 jobs in the entire Central Eastside Industrial Area in 2008. The citywide job total in 2008 was 292,000. Between 2000 and 2008 Portland gained only about 3,000 jobs in total.

Q24: What is the reality of using the Port of Vancouver instead of WHI? Is that realistic or fantasy?

This was addressed in the Harbor Lands Analysis Report. The short answer is that Vancouver's land supply is only enough if we lower our economic growth expectations.

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.

Q25: Has this area been designated for industrial development for decades? If so, then why is everyone so surprised that it is being discussed for development? If not, then why are people saying it is?

West Hayden Island was brought into the urban growth boundary in 1983 (29 years ago) for the purpose of satisfying a regional need for future marine industrial facilities. Presumably many people involved in the current process were not aware of those plans, and that decision. Subsequent regional decisions have also designated the site as an important natural resource. Metro directed the City to develop a plan to accommodate both objectives, if possible.

Process

Q26: Can the IGA specify that SB 766 protections for development are waived?

Yes, the IGA could say such a thing, but it would have almost no real impact. It would be symbolic statement.

The City has not been able to identify a situation where the provisions of 766 would provide any advantage to the Port on WHI. 766 does not apply to projects where federal environmental permits must be obtained. Almost all anticipated work on WHI would require federal permits. If 766 did apply, for example, to a minor nonfederal aspect of the project, it still only provides an advantage if the local government has established a local land use review. In other words, 766 provides an expedited hearings/review process, if such a review is imposed by the City. In this case, there is no additional local review proposed that could be expedited. Finally, even if we could find some advantage in applying 766 provisions on WHI, an agreement by the City and the Port does not prevent a third party from nominating WHI for 766 provisions.

It is possible that state funding for future industrial infrastructure development will be specifically tied to areas designated as "Regionally Significant Industrial Lands" (a term defined under 766). Agreeing to forgo 766 provisions on WHI could have the unintended consequence of reducing our funding opportunities.

Q27: I would appreciate staff commentary on the zoning language changes proposed by the Port.

The recent draft proposed by the Mayor's Office incorporates a variety of code amendments in direct response to the Port's written comments (provided via the AC). Staff reviewed the requested changes, and the Mayor's proposal incorporated changes where staff agreed. We can provide a more detailed point by point response if there is interest.