



April 18, 2011

Holly Pence, Solid Waste Permit Coordinator  
2120 SW 4th Ave, Suite 400  
Portland, OR 97201  
[Pence.Holly@deq.state.or.us](mailto:Pence.Holly@deq.state.or.us)



Re: Comments on Post Office Bar BUD Reconsideration

Dear Ms. Pence;

On behalf of the Port of Portland, I am submitting this letter and the attached materials for inclusion in the record of the Post Office Bar beneficial use determination (BUD) reconsideration process.

The Port is the local sponsor for the Corps of Engineers' Post Office Bar dredging project, and as such is required to provide facilities for the upland placement of dredged material. It is the Port's July 8, 2010 BUD for the Post Office Bar material that is now under reconsideration. The Port's West Hayden Island facility has been built and maintained expressly for the purpose of handling material from this kind of dredging operation. Like much of West Hayden Island, the Port's facility is itself composed of dredged sands, and contains material from recent dredging operations on the Columbia River and at the Port's marine terminals on the Willamette River.

### Beneficial Use

The Port has submitted an application for a case-specific beneficial use determination under DEQ's new rules, OAR 340-093-0260 to -0290. In order to obtain an authorization under these rules, the applicant must designate a "productive" use of the material, including "an identified or reasonably likely use for the material that is not speculative." The Port's dredged material management facility is itself an essential part of the navigation dredging process for the Columbia and Willamette river system, irrespective of future use of West Hayden Island. There are numerous such sites up and down the Columbia River which serve the same purpose. This "use," in and of itself, is not only beneficial but essential to navigation and the commerce dependent on it.

West Hayden Island has been a repository of dredged material for decades, and the facility is identified in the environmental documentation for both the Post Office Bar project and the recently completed Columbia River Channel Deepening project. The Port has no other

repositories permitted and available at comparable cost, and thus has not proposed other sites for beneficial use authorization at this time.

The Port plans to develop marine terminal facilities on West Hayden Island, and in our BUD application we identified the intended use of dredged material as “fill material to increase the site grade elevation prior to future development at West Hayden Island.” The land was acquired for this purpose in 1994, it was brought into the urban growth boundary by the previous owner for maritime industrial purposes, and was permitted for this purpose in the 1980s. It is designated as regionally significant industrial land by METRO and is counted in the region’s land base for employment. The Port is now seeking annexation into the City of Portland in furtherance of this goal. The annexation process is further indication that marine terminal development is an “identified” and “reasonably likely” use. Eventual development will require much more fill material than will be generated in the Post Office Bar project – material that will be dredged from the adjoining river systems. Further detail on the land use history of the Island, and the role of future marine industrial development, is provided in the enclosed memorandum from the Ball Janik law firm, which the Port has previously shared with various stakeholders.

### Environmental Impact

The evidence in this proceeding (both the original application and the reconsideration process), and the associated Section 401 Water Quality Certification proceeding, shows beyond doubt that there will be no adverse impact to public health, safety, welfare, or the environment from the placement of Post Office Bar material at West Hayden Island. The material has been tested and vetted numerous times, by multiple agencies specializing in the analysis of sediment and its relation to human and ecological health. Most recently, the testimony of Dr. Teresa Michelsen explains why the low levels of contamination present in the Post Office Bar material will not adversely affect the adjoining neighborhoods, human activities at the dredged material site itself, wildlife on the Island, water quality, or any other environmental consideration. In the two public information sessions and the public hearing conducted in this reconsideration process, no evidence was brought forward casting any doubt on these conclusions.

The enclosed aerial photograph helps illustrate the relatively small volume of material involved in the Post Office Bar and T-5 dredging operations as compared to the entire 100-acre dredged material management site and the Island as a whole. Note that the exact location of the Post Office Bar material will be determined when and if DEQ re-issues the BUD.

### Environmental Justice

The Port recognizes that there are low income and minority households on Hayden Island. The Port also recognizes that there is opposition within the residential community to the continued use of the dredged material placement facility. While the Port respects the opinions of the Hayden Island residents opposing the Post Office Bar project, the Port does not accept the contention that its continued use of its facility will adversely affect the adjoining community or the environment at large.

We are not aware of evidence having been submitted in this proceeding concerning the status of particular Island neighborhoods as “environmental justice communities.” At least one analysis (attached), done in connection with the Columbia River Crossing project, has established that Hayden Island as a whole does not constitute an environmental justice community under federal standards. We recognize that the state and federal standards may differ, but we assume that both require some form of evidence to establish the presence of an environmental justice community, and some environmental impact on that community. The impact can then be analyzed to determine if it is inequitable or disproportionate. The evidence indicates that there will be no impact from the Post Office Bar project on the nearby residential communities, on the human and wildlife activities at the placement location, or on the environment generally. Consequently, there will be no inequitable or disproportionate impact.

### Additional Testimony

The enclosed materials include the following items:

1. Aerial view of the West Hayden Island dredged material facility, showing the (approximate) boundaries of the facility itself (green line), the area which holds the material from the recent Terminal 5 (T-5) dredging operation (red), and the area intended to hold the Post Office Bar material (yellow). Of course, the DEQ may impose requirements on the location of the Post Office Bar material so its precise location is not known at this time.
2. Post-survey drawing of the active portion of the dredged material facility, indicating the cells where the T-5 material was placed in 2010, and where the Post Office Bar material will be placed, subject to DEQ approval.
3. A series of photographs accompanying the post-survey drawing.
4. Memorandum from Carrie Butler, Mitigation Site Specialist. This memorandum summarizes the Port’s current understanding regarding bald eagle activity on the site.
5. Testimony of Sebastian Degens, Department of Planning & Development Manager. Mr. Degens testified at the public hearing on April 12, and also answered questions at the informational meeting on March 29.
6. Declaration of Eric Burnette, Senior Waterways Planner. This declaration was included with the Port’s motion to intervene in the lawsuit filed by HILP and the Portland Audubon Society against DEQ.
7. Testimony of Dr. Teresa Michelsen. Dr. Michelsen also testified at the April 12 public hearing.

8. PowerPoint presentation on T-5, presented to the West Hayden Island Citizens Advisory Group (May 12, 2010).
9. December 22, 2010 Technical Memorandum from the Columbia River Crossing project, concerning environmental justice communities and other issues.
10. March 30, 2009 Memorandum from Ball Janik LLP re: Zoning and Planning Framework for West Hayden Island Annexation.

In addition, the Port requests that all material submitted by the Port and Corps of Engineers in the DEQ's 401 Water Quality Certification proceeding, (August 30, 2010), be incorporated in this record.

Sincerely,

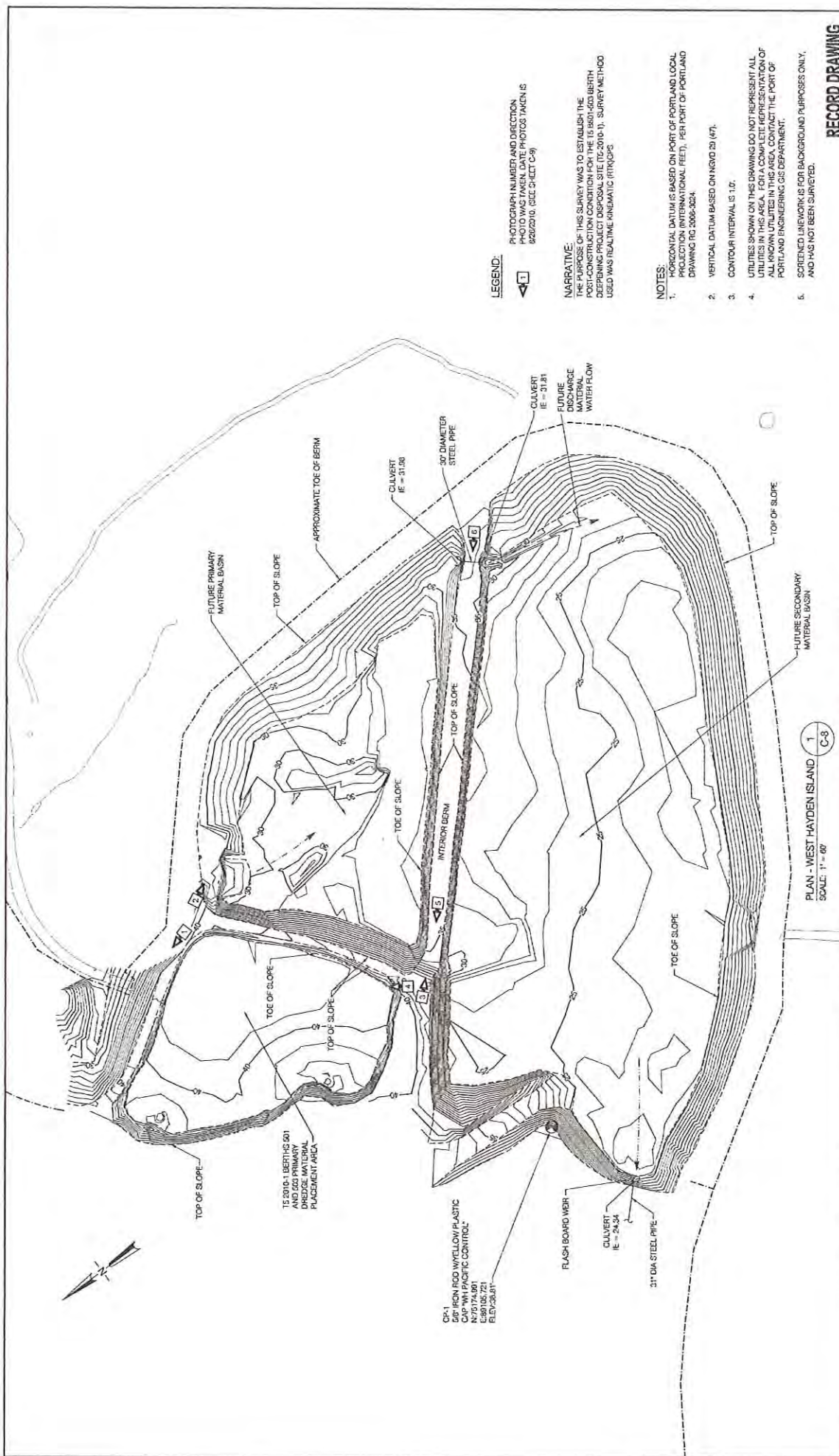


Marla Harrison  
Marine & Industrial Development Environmental Manager  
Port of Portland



Approximate boundary of  
T-5 material containment cell

Probable location of  
Post Office Bar material



**LEGEND:**

- 1. PHOTOGRAPH NUMBER AND DIRECTION PHOTO WAS TAKEN. DATE PHOTOS TAKEN IS 02/20/10. (SEE SHEET C-9)

**NARRATIVE:**

THE PURPOSE OF THIS SURVEY WAS TO ESTABLISH THE POST-CONSTRUCTION CONDITION FOR THE 15 8501-603 BERTH DEEPENING PROJECT DISPOSAL SITE (12-2010-1). SURVEY METHOD USED WAS REALTIME KINEMATIC (RTKINS)

**NOTES:**

- HORIZONTAL DATUM IS BASED ON PORT OF PORTLAND LOCAL PROJECTION (INTERNATIONAL FEET). PER PORT OF PORTLAND DRAWING TIC 3006-3024.
- VERTICAL DATUM BASED ON NAVD 80 (47).
- CONTOUR INTERVAL IS 1.0'.
- UTILITIES SHOWN ON THIS DRAWING DO NOT REPRESENT ALL UTILITIES IN THIS AREA. CONTACT THE PORT OF PORTLAND ENGINEERING GIS DEPARTMENT.
- SCREENED LINWORK IS FOR BACKGROUND PURPOSES ONLY, AND HAS NOT BEEN SURVEYED.

**RECORD DRAWING**

<p>PORT OF PORTLAND PORTLAND, OREGON</p>		<p>TERMINAL 5</p>	
<p>PLAN - WEST HAYDEN ISLAND SCALE: 1" = 60'</p>		<p>TS 8501-603 BERTH DEEPENING WEST HAYDEN ISLAND POST SURVEY PLAN</p>	
<p>DESIGNED BY D. NOBLE</p>	<p>CHECKED BY D. NOBLE</p>	<p>DATE DEC 2009</p>	<p>SCALE 1" = 60'</p>
<p>APPROVED BY M. OTTNEY</p>	<p>DATE DEC 2009</p>	<p>TYPE CD</p>	<p>NO. / REV. 15 2010-1</p>
<p>PROJECT NO. 15 2010-1</p>	<p>DATE DEC 2009</p>	<p>PROJECT NAME WEST HAYDEN ISLAND</p>	<p>DATE 9/16</p>
<p>PROJECT NO. 15 2010-1</p>	<p>DATE DEC 2009</p>	<p>PROJECT NAME WEST HAYDEN ISLAND</p>	<p>DATE 9/16</p>



NO.	DATE	BY	REVISION
1	02/20/10	DN	RECORD DRAWING
2	02/20/10	DN	ISSUED SHEET FOR POST DISPOSAL SURVEY



EAST BERM OF DREDGE MATERIAL PLACEMENT AREA  
SCALE: N.T.S. 1 C-9



BARGE DREDGE MATERIAL CLEAN-UP AREA  
SCALE: N.T.S. 2 C-9



INTERIOR BERM LOOKING SOUTHEAST  
SCALE: N.T.S. 3 C-9



DREDGE MATERIAL PLACEMENT AREA  
SCALE: N.T.S. 4 C-9



BERM SLOPE FROM 35 TO 40 IN ELEVATION  
SCALE: N.T.S. 5 C-9



INTERIOR BERM LOOKING NORTHWEST  
SCALE: N.T.S. 6 C-9

NO.	DATE	BY	CHK'D	APP'D	REVISIONS	DATE	APP'D
1	02/27/10	MKS			RECORD DRAWING		
2	02/27/10	MKS			ISSUED SHEET FOR POST DEPOSIT TO BUREAU		



PORT OF PORTLAND  
PORTLAND, OREGON

DESIGNED BY: D. NOELIN  
DRAWN BY: M. DUTTMER  
CHECKED BY: D. NOELIN  
DATE: DEC. 2009  
SCALE: NONE

TERMINAL 5

TS B501-503 BERTH DEEPENING  
WEST HAYDEN ISLAND POST SURVEY PHOTOS

SUBMITTER: D/AN NOELIN  
DATE: 10/6  
TYPE: DRAWING  
CD: TS 2010-1 (C-9)

RECORD DRAWING

## MEMORANDUM

From: Carrie Butler, Mitigation Site Specialist  
To: Marla Harrison, MID Environmental Manager  
Subject: Recent Observations of Bald Eagle Activity on West Hayden Island  
Date: April 14, 2011

I was asked to confirm recent statements regarding a number of observations of Bald eagle activity on West Hayden Island. These observations were attributed to Dave Helzer at the City of Portland, BES. Additional observations were reported by Brooke Berglund and Chris White on the Port's Community Affairs staff.

I have confirmed with Brooke, Chris and Dave Helzer that the nest they recently looked at in the field together is the same one I've been watching since early March. Please see the attached diagrams for locations – one is from Dave and the other I developed based on past and current observations.

I touched base with Dave this morning on the phone and we compared our observations. We agree there are two eagle nests on WHI, the old one located on the south side and the new nest located in a clump of cottonwood in the northwest area of the dredge placement site adjacent to the access road. Dave has provided a summary of his observations by e-mail, and he asserts that the sites are active. According to Birds of Oregon (2003) egg-laying may occur from mid-February to late April so there is still the chance nesting could take place on WHI this year.

The City has spent quite a lot of time on WHI in the past few months in conjunction with their Natural Resource Inventory so Dave has much more detailed eagle observations than I do. My focus on the island is typically to manage our wetland mitigation site for regulatory requirements, not to make frequent visits for wildlife data collection. With that said, I have been monitoring the south eagle nest for several years and, as a rule, record my observations throughout the island as well as the mitigation site. I have a cumulative list of over 80 bird species, 12 mammals and 8 herps recorded on the island since Jan 2006. Other wildlife-related activities include a turtle survey I arranged last year with ODFW and City staff as a result of my involvement with a local native turtle working group; developing plans for next year's amphibian egg mass surveys (Port Environmental Objective and Target); and developing plans for this year's turtle surveys by Oregon Wildlife Institute for the local Turtle Conservation Strategy.

My specific observations regarding the eagle nests this year are as follows:

North Nest: On 3/7 the nest appeared "in progress" but I did not observe eagles near the nest. On 3/31 A.M. there was one adult eagle perched in the clump of trees near the nest but no other activity; the nest appeared more complete than noted on 3/7. On 4/12, upon request, I visited the dredge placement area and observed no activity at/near the nest however an adult flew overhead at high elevation. On 4/13 Larry Devroy, Noel Jinings and I saw no activity on or near the nest and did not observe any bald eagles during our two hour visit that afternoon (we walked a loop



from the stormwater facility south and west along the power line corridor, through the mitigation area and along the main access road, passing the north nest on our way back).

South Nest: This nest is often difficult to access this time of year due to flooded conditions, however on 3/7 I checked it and found it in the dilapidated condition Dave describes below (same as last season). I observed one adult bald eagle in a nearby tree upon approach but no other activity. On 4/12 Michelle Hollis, Noel Jinings, Maureen Minister and I boated the Oregon Slough along the south edge of the island. We observed one adult and one juvenile bald eagle perched in different locations along the forested south edge of the island. We did not see activity near the south nest and found no other nests.

According to the US Fish & Wildlife Service's "Bald Eagle Management Guidelines and Conservation" web page, ([http://www.fws.gov/pacific/eagle/guidelines/baea\\_nhstry\\_snstvtty.html](http://www.fws.gov/pacific/eagle/guidelines/baea_nhstry_snstvtty.html)), the most critical time for nest abandonment is during the first phase - courtship and nest building which occurs during the winter months. As you probably are aware there are multiple parties visiting the island for different reasons including Port staff, City staff, security contractors, maintenance contractors, County Vector Control, BPA, PGE, ODA, school groups, joggers, off-road cyclists, homeless people and of course residents walking their dogs, some probably on a daily basis. Search and Rescue has had permission in the past to conduct training on the island. I'm sure there are more that I'm not aware of. All visitors would likely use the main access road directly adjacent to the stand of trees this nest is constructed in. Some of this activity may unintentionally cause disturbance to the eagle nest.

The Port will work with the USFWS as necessary to monitor nest status and avoid disturbance.

Attachments: Eagle nest location (PDF); Raptor nest locations (PDF).

Testimony of Sebastian Degens  
Department of Planning & Development Manager  
Port of Portland

I manage Planning & Development for the Marine & Industrial Division at the Port of Portland.

In that capacity I have worked on dredging and harbor improvement projects for over 25 years, including maintenance dredging & channel deepening.

**Port's Mission**

The Port was originally established over 100 years ago to dredge a channel from Portland to the sea. Our specific responsibilities have changed, but navigation has stayed a core part of the Port's mission.

**Port's Role as Sponsor**

The federal government, through the Corps of Engineers, is now responsible for the actual maintenance of the channel- on the Columbia it's been longer, but on the Willamette it has been since the 1960's.

As local sponsor, we are required to provide the Corps a pipeline dredge -- at cost -- to do the work, which is unique in the country. As local sponsor of the Willamette River and Columbia River channels, we are also required to provide upland placement sites for dredged material if it needs to go upland. Every channel in the country has these local port sponsorship requirements, and most channels in the country, particularly every river port I know of, have upland placement sites.

We meet this need up and down the river with sites like Rice Island, Wauna, and with this site on WHI.

**Placement is historical and regulated**

Placement of dredged materials from the navigation channel at WHI is an approved use, and has been going on since at least 1907. In fact, it created a

good portion of the island. Since the adoption of the Clean Water Act in 1972, this work has been aggressively regulated to protect the public interest.

More recently, in 2003, as part of the Channel Deepening Project, the WHI placement site underwent full environmental regulatory review that included an environmental impact statement. As part of the channel improvement project, the dikes at the placement site were raised and the spillways were reconstructed to make sure that the dredged material doesn't re-enter the waterway, either through erosion or as suspended sediment in return water.

### **Over 10 million CY and no unsuitable material**

A lot of material has been placed there over the years before the Port purchased the property in the mid 1990's and to my knowledge, no unsuitable dredged material has ever gone onto the Port's property.

### **Not a secret we plan to develop this site**

It is not a secret that we eventually plan to develop this portion of the island for marine uses. We acquired the land for this purpose from PGE in 1994, it is brought into the urban growth boundary by the previous owner for maritime industrial purposes and was permitted for this in the 1980s. It is designated as regionally significant industrial land by METRO and is counted in the region's land base for employment. Therefore, we wouldn't allow activity on the land that would cause a future liability for ourselves. We will not negatively impact our own future plans nor manage the land in other than a protective manner in the interim.

### **But no connection between channel maintenance, placement on WHI & Annexation**

Still- There is no direct connection between the plan to put channel material from Post Office Bar at the West Hayden Island site with the annexation and planning effort we are involved in. Our placement program for this material would have been exactly the same 5 or 10 years ago as it is today.

However, our overwhelming preference for projects like Post Office Bar or Terminal 5 maintenance dredging is that the Corps' dredge material and our berth maintenance material stay in-water. That is by far the least expensive and most expeditious method of managing dredged material.

But it that not always possible. Meeting the on-going navigation needs of the Portland Vancouver harbor and the channel that serves it, will require routine and regular maintenance dredging. We will continue to need to place dredged material upland and have designed and managed this site for this purpose now and for many decades to come.

Over the years, I have provided tours of the island, and been very upfront about the placemnt of dredge material at the site. Likewise, I have been clear about our ongoing need, from a navigation perspective, for a dredge material placement site here. There has been planning for marine use, and some regional decisions that move in that direction. Still, it is ultimately for the Portland City Council to decide the extent and appropriateness of future land use. That decision was not made by the placement of the dredged material over past decades nor will it be made by the placement of dredge material here in the future.

**To sum up-**

**We have a continuing need to provide an upland dredged material placement site in the Portland Vancouver harbor area to meet our role in navigation**

**The Post Office Bar material can be placed there without harm to human health or the environment.**

**We believe DEQ properly provided the BUD and respectfully request that you reissue the Beneficial Use Determination on the same terms and conditions which will allow this overdue project to proceed.**

STOEL NIVES LLP  
600 University Street, Suite 3600, Seattle, WA 98101  
Main (206) 624-0900 Fax (206) 386-7500

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IN THE CIRCUIT COURT OF THE STATE OF OREGON  
FOR THE COUNTY OF MULTNOMAH

HAYDEN ISLAND LIVABILITY PROJECT, an Oregon community-based organization, HAYDEN ISLAND MANUFACTURED HOME COMMUNITY HOMEOWNERS ASSOCIATION, an Oregon homeowners association, AUDUBON SOCIETY OF PORTLAND, an Oregon non-profit corporation, PAM FERGUSON, an Individual, and BOB SALLINGER, an Individual,  
  
Petitioner,  
  
v.  
  
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Oregon, and DICK PEDERSON, in his official capacity as Director of Environmental Quality,  
  
Respondents.

No. 1011-16565  
  
**DECLARATION OF ERIC BURNETTE  
IN SUPPORT OF PORT OF  
PORTLAND'S MOTION TO  
INTERVENE**

I, ERIC BURNETTE, declare as follows:  
  
1. I am a Senior Waterways Planner at the Port of Portland ("Port") and am authorized to provide this affidavit on the Port's behalf in support of intervention. I make this affidavit based on my personal knowledge.  
  
2. Petitioners challenge the process followed by DEQ in evaluating beneficial use determination ("BUD") applications for the disposal of sediments from two dredging

1 projects within the Willamette Navigation Channel: (a) an Army Corps of Engineers'  
2 ("COE") maintenance dredge project at Post Office Bar ("Post Office Bar BUD"); and  
3 (b) the Port's Terminal 5 ("T5") Deepening Project, ("T5 BUD").

4 3. More than 16 million tons of waterborne commerce transit this reach of the  
5 Willamette River every year on their way to and from facilities in the inner harbor. Vessels  
6 transiting this point include outbound deep-draft grain ships bound for Asian markets, and  
7 bulk ships serving the Pacific Basin and beyond, inbound auto ships, and inbound tank  
8 vessels laden with gasoline and fuel oils. These vessels routinely sail at between 30 and 40  
9 feet of draft.

10 4. The Port has completed the first project, which involved the dredging of  
11 approximately 23,000 cubic yards of sediments from the Willamette River at T5 in order to  
12 deepen two berths to 43 feet so that larger and deeper ships can serve the Port's customers  
13 located at the terminal. T5 is on the north edge of the Port's Rivergate Industrial District  
14 near the Willamette River's confluence with the Columbia River. Both the Willamette River  
15 navigation channel from T5 to the confluence of the Columbia River and the Columbia  
16 River's navigation channel are 43 feet or greater. The T5 sediments were dredged and  
17 deposited in the WHI Placement Facility, where dredged sediments have been placed since at  
18 least the 1930s.

19 5. The U.S. Army Corps of Engineers, Portland District ("COE"), is planning to  
20 conduct maintenance dredging of approximately 75,000 cubic yards of material from Post  
21 Office Bar. Post Office Bar is located between river mile ("RM") 2 and RM 3 within the  
22 Willamette River Deep Draft Navigation Channel. From a commercial navigation  
23 perspective, Post Office Bar is critical because it lies at the head of navigation into the  
24 Willamette River and Portland Harbor.

25 6. Post Office Bar was dredged several times in the 1950s and 1960s as part of  
26 massive navigation improvements to the Willamette Channel to remove the shoal adjacent to

1 the previous 35-foot channel, and to bring the channel to its present 40 foot depth. Over  
2 6 million cubic yards of material were removed during an 11-year period from 1952 to 1963  
3 as part of this channel improvement. In total, since 1952, the area has since been dredged  
4 fifteen times – about once every 2.5 years -- until 1989.

5 7. Post Office Bar has not been dredged since 1989. As a result, it is an  
6 increasing hazard to vessel navigation and related commerce. Since 1989, ships have  
7 become more efficient by becoming significantly larger and deeper. Over this same period  
8 of time, without maintenance dredging, substantial sedimentation has occurred. The average  
9 annual sedimentation for the years 1990 to 2006 was 0.32 feet, which equates to over five  
10 feet of sedimentation across the navigation channel at the Post Office Bar location. Even  
11 greater rates of sedimentation occur along the inside of the bend within the outbound lane of  
12 the navigation channel.

13 8. Currently, the accumulation of sediment on the inner, east face of the bend  
14 forces outbound deep draft vessels out into the west side (inbound lane) of the navigation  
15 channel. In so doing, this shoal creates a potentially hazardous situation for vessels seeking  
16 to pass each other anywhere in the vicinity. Without dredging, the Post Office Bar shoal is  
17 expected to continue to grow as the Willamette River naturally rebuilds the shoal historically  
18 located at Post Office Bar. Consequently, in the absence of routine maintenance dredging,  
19 hazards to navigation and impediments to commerce will continue to increase.

20 9. The Port is the local, non-federal, sponsor for both the Willamette and  
21 Columbia River deep draft navigation channels including the reach of the Willamette River  
22 containing Post Office Bar. Virtually every federal navigation channel in the United States  
23 today has a local, non-federal, sponsor.

24 10. Among other duties, it is the responsibility of the non-federal sponsor to  
25 provide lands, easements, or rights of way for the placement of dredged material. This  
26 responsibility is essential to the operation of a navigation channel because few channels and

1 harbors can be maintained without dredging, and all require an approved location in which to  
2 place the dredged material.

3 11. West Hayden Island (“WHI”) has been used as a dredge placement site dating  
4 back to the late 1800s. The COE’s use of WHI for dredge placement dates to approximately  
5 1907.

6 12. The Port acquired WHI in 1993 and 1994, and has since operated the Dredged  
7 Material Placement Facility there for use in association with COE maintenance and channel  
8 deepening projects within the navigation channels of the Columbia and Willamette Rivers.  
9 Permitting for this site usage by the COE was reviewed and renewed with the Channel  
10 Deepening Feasibility Study and Environmental Impact Statement in 2002.

11 13. The Port’s Dredged Material Placement Facility at WHI is surrounded by a  
12 raised berm extending, at its lowest point, more than five feet above the 100-year flood plain  
13 at this location. As a result, the facility is not subject to 100-year flood events and serves no  
14 floodplain value or purpose. Moreover, for small, low volume projects such as the Post  
15 Office Bar project or the Port’s maintenance dredging, the Port’s WHI facility can be  
16 operated to eliminate runoff or other direct discharge of water and other substances entrained  
17 within the dredged material.

18 14. The COE intends to use a portion of the Port’s WHI Dredged Material  
19 Placement Facility for its maintenance dredging of Post Office Bar and intends to operate the  
20 facility in a manner that will eliminate runoff from the site back to the Columbia River.

21 15. The Port is charged by the state of Oregon with the promotion, maintenance  
22 and safe management of waterborne trade and commerce within the lower Willamette River  
23 and Portland Harbor areas, and specifically within the Willamette River Deep Draft  
24 Navigation Channel, for which the Port is the local, non-federal, sponsor. Accordingly, the  
25 Port has direct, long-standing and significant public and proprietary interests in maintenance  
26 dredging of the channel, including at Post Office Bar. The Port’s public interests would be



1 directly and significantly impaired if maintenance dredging of Post Office Bar does not occur  
2 because of continued sedimentation within the channel at this location, and the associated  
3 impacts and risks posed by existing and future sedimentation.

4       16.     The Port is responsible for providing to the COE a place to receive dredge  
5 material from dredging of navigation channels sponsored by the Port. The Port has  
6 constructed its Dredged Material Placement Facility at WHI for this purpose, and the COE  
7 intends to use this facility for its Post Office Bar maintenance dredging project. The Port's  
8 public and proprietary interests are directly and significantly affected by the pending claims  
9 because petitioner's contentions are, primarily, if not entirely, directed at the agency process  
10 for authorizing disposal of sediments from critical dredging projects at the WHI Placement  
11 Facility. The Post Office Bar maintenance dredging project cannot proceed if dredge  
12 material placement at the Port's WHI facility is impaired.

13       17.     Because of the Port's direct interests, the Port was an active participant in the  
14 local, state and federal planning process and permitting processes associated with the Post  
15 Office Bar maintenance dredging project. Among other actions, the Port submitted multiple  
16 written comments on, and participated in the public hearing concerning, the Clean Water  
17 Act 401 Water Quality Certification that is challenged in this proceeding.

18       18.     The T5 project is finished and the dredge sediments have already been  
19 successfully placed at the WHI Facility in accordance with the T5 BUD. If the T5 BUD is  
20 withdrawn, then the status of this disposal is thrown into question, despite the fact that the  
21 placement of dredged material not only is a long-standing and authorized use of this site but  
22 also is based upon consultation with DEQ to ensure all environmental regulations are met.  
23 Clearly, the continued use of the WHI Placement Facility in this manner is a matter of  
24 ongoing and substantial interest to the Port.

25       I HEREBY DECLARE THAT THE ABOVE STATEMENT IS TRUE TO THE  
26 ///

1 BEST OF MY KNOWLEDGE AND BELIEF, AND THAT I UNDERSTAND IT IS MADE  
2 FOR USE AS EVIDENCE IN COURT AND IS SUBJECT TO PENALTY FOR PERJURY.

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DATED: January 10, 2010.

  
ERIC BURNETTE

**STOEL RIVES LLP**  
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900 SW Fifth Avenue, Suite 2600, Portland, OR 97204  
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1 **CERTIFICATE OF SERVICE**

2 I hereby certify that I served the foregoing **DECLARATION OF**  
3 **ERIC BURNETTE IN SUPPORT OF PORT OF PORTLAND'S MOTION TO**  
4 **INTERVENE** on the following named person(s) on the date indicated below by  
5  mailing with postage prepaid  
6  hand delivery  
7  facsimile transmission  
8  overnight delivery  
9  email  
10 to said person(s) a true copy thereof, contained in a sealed envelope if by mail, addressed to  
11 said person(s) at his or her last-known address(es) indicated below.

12 Jonathan S. Ostar  
13 OPAL Environmental Justice Law  
14 Clinic  
15 2407 SE 49th Avenue  
16 Portland, OR 97206

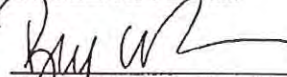
17 Attorney for Petitioners

Stephanie m. Parent  
Oregon Department of Justice  
1515 SW Fifth Avenue, Suite 410  
Portland, OR 97201

Attorney for Respondent Oregon  
Department of Environmental  
Quality

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20 DATED: January 11, 2011.

21 STOEL RIVES LLP

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23 BEVERLY C. PEARMAN, OSB No. 994524  
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25 Attorneys for Intervenor-Respondent  
26 Port of Portland

**POST OFFICE BAR BENEFICIAL USE DETERMINATION**  
**Public Hearing Written Testimony**

Dr. Teresa Michelsen  
Avocet Consulting

April 13, 2011

**Introduction**

The following written testimony was prepared on behalf of the Port of Portland, and addresses human health and ecological risks associated with beneficial use of dredged material from Post Office Bar at West Hayden Island, and specifically the criteria outlined in OAR 340-093-0280(3)(c) and (d). In addition, the overall decision process used to make the Beneficial Use Determination and the regulatory and regional context in which it occurred is discussed.

**Qualifications**

I am an independent environmental consultant and geochemist specializing in sediment site investigations and development of regulatory programs and cleanup standards for marine and freshwater sediments. My resume is attached. I received a Ph.D. in Environmental Science and Engineering from UCLA in 1991, a M.S. in Geology and Geochemistry from MIT in 1987, and a B.S. in Chemistry from Caltech in 1985. My doctoral thesis was written on the development of the Model Toxics Control Act cleanup standards and the Sediment Management Standards, which I was involved with as a contractor to the Washington Department of Ecology in 1989-1990.

For the past 21 years, I have been involved in the development and implementation of regulatory programs for marine and freshwater sediments, including source control programs, dredging programs, sediment cleanup programs, and the development of sediment quality guidelines in the Pacific Northwest. From 1989 to 1992, I was an environmental scientist at PTI Environmental Services, and worked on the development of the Washington State Sediment Management Standards and associated guidance documents. Subsequently, I was hired by the Washington Department of Ecology to establish and implement the regional sediment management program at the Northwest Regional Office, which includes an area of responsibility from King County north to the Canadian border. During 1992-1998, I was the Ecology site manager for more than 60 contaminated sediment sites in the Northwest Region. My responsibilities during this time included review, technical assistance, and approval of remedial investigations, feasibility studies, and cleanup plans; development of sediment cleanup guidance documents; training of state and federal agency staff on sediment investigations and cleanups; and participation in interagency dredged material management programs (PSDDA/DMMP, Corps of Engineers, Seattle District).

As an independent consultant since 1998, I have worked on a variety of sediment management programs in Alaska, British Columbia, Washington, and Oregon, including development of freshwater cleanup standards for Washington State, the tri-state Columbia River area, and the Portland Harbor site in Oregon, as well as bioaccumulation-based sediment and tissue guidelines for Washington and Oregon dredging and cleanup programs. The above projects were carried out primarily on behalf of federal, state, and provincial agencies, including WA Dept. of Ecology, Oregon DEQ, US Army Corps of Engineers, and US EPA Region 10. I have intimate knowledge of regional decision processes for sediments and dredged material and the basis for the criteria used.

## Testimony

### **1. The regulatory decision process used by RSET and DEQ was appropriate and should be upheld.**

When it issued the original Beneficial Use Determination for the Post Office Bar material, DEQ followed all of the steps required by the Case-Specific Beneficial Use Performance Criteria (OAR 340-093-0280), and appropriate decisions were made. The technical basis for the decision remains accurate and should be upheld in the final decision, as described below.

- **Initial open-water determination.** The Project Review Group (PRG) followed standard evaluation procedures in evaluating the dredged material characterization report submitted by the Corps of Engineers (USACOE 2009b). The PRG reached reasonable conclusions given the data available and lack of finalized freshwater guidelines, as well as the uncertainty regarding bioaccumulative impacts. These two topics are discussed further below in Item 2, but under the current regulatory decision framework (USACOE 2009a), the sediments could not be approved for open-water disposal without additional testing, which is time-prohibitive under the circumstances. Barring in-water disposal, the Port of Portland, as the local sponsor for this project, is required to provide the Corps of Engineers with a means of disposal for these sediments. Beneficial reuse of sediments is preferable to upland disposal, thus, the Port chose to conduct beneficial reuse utilizing the DEQ's new Beneficial Use Determination process.
- **Sediment Characterization (OAR 340-093-0280(1)).** The sediment chemistry testing above conducted for the PRG process provides sufficient characterization of the dredged material for all purposes, including beneficial reuse and disposal, as agreed by the RSET group of federal and state agencies. Subsequent testing by USF&W confirmed that additional testing of the sediments with 10 times the number of samples produced the same chemical results (Jeremy Buck, USF&W, personal

communication at ODEQ public meeting, March 29, 2011, Portland, OR). These sediment chemistry results can be used to compare to in-place sediment quality guidelines, to human health and ecological risk standards for soils for upland disposal, and to solid and hazardous waste criteria.

- **Productive use (OAR 340-093-0280(2)).** The use of the sediments is productive. Dredged material is a common substitute for upland fill material used at many construction sites, and is being placed at a facility that has been engineered and operated for this purpose for decades.

A beneficial use, use as fill material for commercial development, was identified and is reasonably likely, given past Port and regional planning processes. The rule does not require that the land use be set in stone, only that it be reasonably likely. Future planning processes subsequent to annexation could potentially result in changes; however, that should not affect the current decision process as the outcome of those annexation and planning processes are not known.

Use of dredged sediment as fill material serves at least two beneficial purposes – 1) it avoids excavation of upland soil, protecting existing habitat, and 2) it minimizes use of scarce landfill capacity for disposal. In addition, the Post Office Bar materials provide cover material for previous dredged sediments from T-5 that were minimally contaminated. To protect against long-term impacts from lead and zinc in the T-5 sediments, the ODEQ Beneficial Use Determination for T-5 requires cover material to be placed within 4 years (ODEQ 2010b). As discussed in 3 and 4 below, the sediments are clean enough to support a variety of beneficial land uses, including terrestrial habitat and recreational land uses, in addition to the reasonably likely commercial land use currently envisioned. Therefore, placement of this material does not preclude further planning processes and alternative beneficial uses at the site.

- **Evaluation of adverse impacts (OAR 340-093-0280(3)).** Comparison of the sediment chemistry and other characteristics to hazardous waste standards indicates that it is not a hazardous waste. Prior to being placed for beneficial use, dredging and transportation of the sediments are governed by a comprehensive permitting process involving several state and federal agencies, including a Water Quality Certification (ODEQ 2010a) that insures minimization of releases to the environment or nuisance conditions during dredging, transportation, and placement of the sediments.

The human health and ecological risk evaluations, addressed further in 3 and 4 below, were conducted by DEQ in accordance with standard agency risk assessment guidance documents (ODEQ 2001, 2009) used for a variety of cleanup and evaluation purposes within DEQ programs. Sediments were found to be below risk-

based levels for current or reasonably foreseeable future land uses, or for wildlife. The evaluation included both direct toxicity and bioaccumulation-based risks.

Sediments from Post Office Bar being placed at the site are cleaner than the T-5 material previously placed at the site, and therefore represent a decrease in hazardous substances at the exposure surface, rather than an increase. The Terminal 5 Beneficial Use Determination requires that the existing Terminal 5 sediments be covered with additional dredged material within 4 years (ODEQ 2010b), which this project would accomplish.

In addition, no sensitive habitat will be disturbed, even in an incremental manner, because dredged material has previously been placed at the site. The existing placement site has been operated since the Port of Portland's purchase of the site in 1994 without presenting nuisance conditions and in compliance with federal, state, and local regulations. In addition, this site has been identified in regional planning processes that involved multiagency consultation and environmental impact statements.

- **Need for a final decision.** There is a need to make a final decision on the Post Office Bar sediments in 2011. Normally, sediment quality data may be used for regulatory analysis for 5-7 years after it is gathered. In the sediment evaluation framework, sediments from Post Office Bar are given a higher ranking for regulatory review because the Bar lies within the administrative boundaries of the Portland Harbor Superfund site. Consequently, under the current approach, sediment quality data from the Bar are only considered "recent" for 2 years before the evaluation process starts over again. It is partly for this reason that the shoal has not been dredged since 1989 and presents such a hazard to navigation today. If the dredging cannot be conducted this year, substantial additional sampling costs may be incurred solely due to process requirements.

## 2. The sediments do not pose a significant ecological risk in place.

- **Toxicity standards.** These sediments do not pose risks to the benthic community in their current in-water location. The only reason they need to be removed is for safety and navigational reasons. As noted by the Corps of Engineers (USACOE 2009b), chemical concentrations in the Post Office Bar sediments are all lower than the current 2009 freshwater standards calculated for Washington and Oregon using data from this region, which are in the process of rulemaking by Washington state and subsequent adoption by the RSET agencies (Avocet 2011). While the PRG cannot formally use these new values until they are adopted through the public RSET process, they are much more complete and up-to-date, and include much more data

from the Willamette and Columbia Rivers than the 2006 interim values, and thus are a more realistic estimate of benthic toxicity in this area.

- **Bioaccumulation.** Uncertainties about possible bioaccumulation concerns are the primary reason the Post Office Bar dredged material is not being disposed of in-water. There were detectable levels of PCBs in one sediment sample, although the quality assurance results were poor and the result may not be accurate. The reported concentration is at a level that is non-toxic but could potentially be a bioaccumulation concern to wildlife and human consumers of fish if it remained in the river. The significance of this relatively low concentration is unknown, because bioaccumulation testing has not been done to verify accumulation in tissues, and the timing of permitting and the imminent need for dredging does not allow for these time-consuming but more definitive tests, especially for a single sample. This is an ongoing problem in the Willamette/Columbia Rivers, where the rapidity with which sediments can accumulate in berths and navigation channels greatly exceeds the speed at which confirmation testing like this can be done, along with associated permitting. More streamlined testing and permitting procedures might allow more material to have toxicity and bioaccumulation override testing conducted, which would in turn allow more in-water disposal. PCBs were undetected at low ppb levels in all of the remaining samples.
- **Risks of flooding and release to the river.** The discussion above was provided to address public concerns regarding flooding of the placement facility and/or catastrophic release of the sediments in an earthquake or other large event. While recent events in Japan make it clear that such things can happen, if this type of release did occur, the above assessment indicates that risks of this material in-water would be minimal to none. A very large event would need to occur to breach the dikes and move the sediments any significant distance to the river, and other contaminant releases during such an event would be of much greater concern.

### **3. The sediments will not pose a risk to human health at the West Hayden Island disposal site or to communities on East Hayden Island (OAR 340-093-0280(3)(c)(C)).**

- **Risk evaluations and standards.** The Post Office Bar sediments will not be a threat to human health once placed on West Hayden Island. Oregon DEQ has developed standards for chemical concentrations that are protective of various land uses, such as residential, occupational, recreational, and others (ODEQ 2009). These sediments have chemical concentrations below all of the levels considered safe for reasonably foreseeable current and future land uses, including occupational, construction, recreational, hunting and fishing, and visitors to the property.
- **Residential Risks.** Although DEQ appropriately evaluated risks based on current and reasonably foreseeable land uses when it initially issued the Post Office Bar BUD,



nearby residents have concerns related to windblown dust, proximity to their homes, and possible future residential uses. Therefore, residential risks are evaluated here. All of the chemicals in the sediments were also below residential standards, with the exception of certain carcinogenic polynuclear aromatic hydrocarbons (PAHs) (ODEQ 2009, USACOE 2009b). These chemicals are present in sediments and soils due to combustion of hydrocarbons, such as automobile, train, plane, and ship exhaust. In addition, they are present in road tars, roofing materials, creosoted pilings, wood-burning stoves, and a variety of other common sources.

Due to these sources, most urban soils near roads, bridges, railroads, airports, etc. would have equal or higher concentrations of these chemicals in them, and would also not meet these residential standards. For example, MADEP (2002) found that the background concentration of benzo(a)pyrene ubiquitously present in natural soils in Massachusetts was 2 mg/kg, much higher than DEQ's residential risk-based standards of 0.034 mg/kg. Similar or higher results have been found in New York, Maine, Illinois, and California (Bradley et al. 1994, Environ 2002, EPRI 2002, Mauro et al. 2009). Sediments at Post Office Bar have benzo(a)pyrene concentrations ranging from 0.026 to 0.590 mg/kg, cleaner than the typical soil concentrations that would be expected in urban areas and on East Hayden Island, given the proximity of that community to airborne sources of PAHs. Therefore, it is expected that even if the sediments were to migrate to residential areas (highly unlikely) they would be safe for the community at levels similar to or lower than those of the typical urban soils that are already present there.

- **Actual existing uses and exposures.** The risks from actual site uses are much lower than the risk scenarios used for these calculations, since there is very little access to the site and the sediments are wholly contained within the diked walls of the placement facility and are wet most of the year. Those living nearby, recreating in the area, or hunting or fishing in the area would not be expected to have any exposure to the sediments. Only those who are actually working at the site would be expected to be exposed to the sediments, and the occupational and construction worker scenarios showed no risks to workers.

The only conceivable pathway outside the disposal dikes would be occasional windblown dust from finer-grained materials, if the sediments were to completely dry out between placements. The smallest distance between disposal area of the Post Office Bar sediments and the nearest home is about ½ mile. The sediments are contained by the dike wall, then any dust would need to travel through approximately ¼ mile of forest to the train tracks, then an additional ¼ mile through commercial areas to the nearest residential home. Thus, it is unlikely that residents would be exposed to these sediments through airborne pathways. In addition, these sediments are cleaner than typical urban soils, and therefore any dust traveling away from the placement site would be indistinguishable or cleaner than soils that are already present.

- **Environmental justice.** While it is appropriate to coordinate with, hear, and respond to residents of the island regarding activities in their community, I do not believe that there are substantive environmental justice issues related to placement of Post Office Bar sediments at the West Hayden Island facility. In order for there to be a disproportionate or unequal impact on the community, there must be actual harm or significant risk to human health. These sediments are clean enough that there is no projected risk to human health under either current or future use scenarios – either those planned by the Port or alternative uses proposed by community members. In addition, there are no impacts from this project to habitat on the island that would affect livability or aesthetics to the community, as the area where the sediments would be placed has previously had dredged sediments placed there, and therefore the character of the area would not be altered.

#### **4. The sediments will not pose a risk to wildlife at the West Hayden Island disposal site (OAR 340-093-0280(3)(c)(C)).**

- **Risk evaluations and standards.** Concentrations in the Post Office Bar sediments are below levels protective of wildlife on West Hayden Island. The Oregon DEQ has developed levels that are protective of earthworms, mammals, plants, birds, and other wildlife (ODEQ 2001), and the chemical concentrations in these sediments are below all of these levels. Nearby residents have noticed deer, ducks, hawks, and other wildlife using the dredged material as habitat, and these uses can be considered beneficial, as the chemical concentrations are below levels that would cause harm to these animals.
- **Bald Eagles.** As the only endangered species present in the area, there is some concern among the public about Bald Eagles using West Hayden Island and what the impacts to them might be. Bald Eagles are certainly present on the island. However, Bald Eagles primarily eat fish (USACOE 2009a, USF&W 2011). They are likely attracted to West Hayden Island because of the availability of suitable trees for perching and nesting, and its proximity to the river. It is unlikely that they would be exposed to any sediment or chemicals in sediment at the disposal site. However, if the sediments do contain PCBs that could bioaccumulate in fish, it is better to have them out of the river and disposed of safely upland, to protect the eagles and other fish-eating birds that are the most vulnerable to these types of contaminants.
- **Groundwater and surface water.** Groundwater at the site is not a source of drinking water, and therefore any concerns about concentrations in groundwater would be related to potential impacts on surface water. However, these sediments have been present in surface water and migrating through the river system for at least the last 20 years. Any soluble contaminants originally present in the sediments would have

long since dissolved into the surface water. The process of dredging can also release some minor turbidity and soluble contaminants, which is monitored and regulated through the Water Quality Certification permit to prevent impacts on surface waters.

By the time the sediments are placed on the site, there are very few soluble contaminants remaining. The contaminants currently in the sediments have already been tested for toxicity in the aquatic environment (see 2), and the primary concern is the possibility of PCB bioaccumulation. PCBs bind tightly to organic matter in soils and sediments, and generally do not migrate through groundwater to surface water unless there is an oil phase present, which is not the case here. Finally, as part of the Water Quality Certification, there are requirements that the sediments be subjected to a Modified Elutriate Test to ensure that contaminants will not leach into groundwater, and the permit also states that discharge to surface water during dredged material dewatering and handling at the site is prohibited. Past operations at the facility have been successfully conducted in accordance with these requirements. Therefore, taking all of the above into consideration, there are not expected to be any impacts to groundwater or surface water from the sediments placed at the facility.

## **Summary**

Overall, it is difficult to imagine a scenario in which the Post Office Bar sediments could cause harm to wildlife or humans – either at the dredge material placement site or in the adjacent community east of the railroad tracks. The sediments will not affect the residential community on East Hayden Island, those who recreate on West Hayden Island, the wildlife in this area, or the fish in the adjacent river and the eagles that depend on them. Based on my 20 years of experience with clean and contaminated sediments in the Pacific NW, this should be a fairly straight-forward evaluation of sediments that are cleaner than most sediments and soils in the area. These sediments are certainly suitable for the beneficial use described, as well as any other use to which the area could be put.

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USACOE. 2009b. Willamette River FNC Post Office Bar Reach (RM 2.2) Sediment Quality Evaluation Report. US Army Corps of Engineers, Portland District, Portland OR.

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**TERESA C. MICHELSEN**

## **Areas of Expertise**

Dr. Michelsen is an environmental scientist specializing in the development of sediment and tissue quality guidelines, geochemistry, sediment cleanup and source control, and the development of regulatory programs. She has provided technical assistance and oversight of investigations and cleanups at more than 70 contaminated sediment sites in Washington, Oregon, and Alaska, in addition to developing technical guidance for federal and state agencies on investigation and cleanup of contaminated aquatic areas. Dr. Michelsen is the founder and principal of Avocet Consulting, and provides consulting services in the areas of aquatic site investigation and cleanup, regulatory development, expert witness and consulting services, training, and facilitation.

## **Education**

Ph.D. Environmental Science and Engineering, UCLA, Los Angeles, CA, 1991  
M.S. Geology and Geochemistry, MIT, Cambridge, MA, 1987  
B.S. Chemistry, Caltech, Pasadena, CA, 1985  
120+ hours of facilitation/negotiation/legal training

## **Professional Experience**

8/96 - Present	Principal Avocet Consulting Olympia, WA
9/92 - 1/98	Sediment Cleanup Specialist Washington State Department of Ecology Bellevue, WA
6/89 - 9/92	Environmental Scientist PTI Environmental Services Bellevue, WA
9/85 - 6/89	Research and Teaching Assistant MIT, UCLA Cambridge, MA and Los Angeles, CA

## **Affiliations/Memberships**

Association for Conflict Resolution  
Society of Environmental Toxicology and Chemistry

## **Representative Experience**

### **Development of Freshwater Sediment Quality Guidelines**

**Washington Department of Ecology, Olympia, WA**

**Russ McMillan, (360)407-7536**

**2006-present**

Avocet Consulting is currently in the process of completing an update to the 2003 freshwater sediment quality guidelines for Washington State. The project involved gathering synoptic chemistry and bioassay data and updating the sediment quality database SEDQUAL, quality assuring the data, developing interpretative guidelines for biological data, developing hit/no-hit distributions, calculating AETs and other alternative sediment quality guideline values, and conducting reliability assessments of the resulting guidelines. This project is the first large-scale demonstration of a new method for optimizing sediment quality guidelines developed by Dr. Michelsen, the floating percentile method, which improves the reliability of SQVs by approximately 20%. These SQVs are also in the process of being adopted for use in the tri-state Regional Sediment Evaluation Team dredging manual (NW Region Corps of Engineers).

### **MTCA/SMS Sediment Advisory Group**

**Washington Department of Ecology, Olympia WA**

**Chance Asher, (360)407-6914**

**2010-present**

Dr. Michelsen is an invited member of the MTCA/SMS advisory group for the rule revisions that are underway. She serves on the more technically oriented Sediment Advisory Group and has reviewed, discussed, and provided comments on Ecology's proposed approach to a variety of SMS rule revisions, including bioaccumulative guidelines, background-based sediment standards, integration of cleanup and source control, human health and ecological issues, freshwater guidelines, and reconciliation of MTCA and SMS terminology.

### **SR-520 Bridge Replacement HOV Program, Seattle, WA**

**Herrera/WA Dept. of Transportation, Olympia, WA**

**Rob Zisette, Herrera, Seattle, WA, (206)441-9080**

**2010**

Dr. Michelsen worked with Herrera to identify sediment-related issues involved in a major WA DOT project to construct and replace SR-520 bridge pontoons. Marine sediments with potential dioxin issues were involved in Grays Harbor, as well as freshwater sediment issues in Lake Washington. Dr. Michelsen identified applicable laws, regulations, and permits, reviewed related report sections pertaining to the dredging and cleanup process, and wrote a report section on upcoming legislative changes to the SMS and MTCA that could affect the project or other DOT projects impacting sediments.

### **Development of Bioaccumulation Guidelines**

**Regional Sediment Evaluation Team, Corps of Engineers NW Region, Portland, OR**

**Stephanie Stirling, USACE DMMP, Seattle, WA, (206)764-6945**

**2003-2009**

For 6 years, Dr. Michelsen chaired the Bioaccumulation Committee of the interagency Regional Sediment Evaluation Team, tasked with the development of bioaccumulation-based tissue and sediment quality guidelines for dredging and sediment cleanup projects in OR, WA, and ID. The committee developed a bioaccumulation framework for incorporation into the tri-state

dredging manual and calculated human health, wildlife, and fish protection target tissue levels (TTLs). Dr. Michelsen was responsible for developing the overall framework and writing up the results for inclusion in the dredging manual, as well as presenting the draft approach and responding to public comments. Dr. Michelsen also facilitated a national expert's workshop to discuss appropriate statistical methods for developing background-based bioaccumulation standards when risk-based standards are below background, and wrote a technical report summarizing the recommendations. The recommended approach formed the basis for the new dioxin dredged material standards for Puget Sound.

#### **Dioxin/Furan Workgroup**

**WA Dept. of Natural Resources/DMMP, Olympia WA**

**Dave Kendall, Corps of Engineers DMMP, Seattle, WA, (206)764-3768**

**2007-2009**

On behalf of DNR, Dr. Michelsen participated in the interagency Dioxin/Furan Workgroup tasked with developing dioxin/furan sediment standards for dredged material in Puget Sound. Along with the group, she reviewed existing data, participated in public and interagency meetings, and developed and evaluated alternatives for setting dioxin/furan sediment standards. She wrote the sampling plan for the EPA Bold study of background concentrations in Puget Sound and contributed to the report. As Chair of the RSET Bioaccumulation Subcommittee, she also worked to ensure consistency with the RSET bioaccumulative guidelines that were simultaneously being developed for the WA/OR/ID region.

#### **TCP Sediment RI/FS Support**

**Washington Department of Ecology, Olympia, WA**

**Chance Asher, (360)407-6914**

**2006-2008**

Dr. Michelsen provided sediment study design and data interpretation support to Ecology and prime contractors for various sediment sites in western Washington, including Northlake Shipyard, Seattle, WA; Lower Duwamish, Seattle, WA; Port Angeles Harbor, Port Angeles, WA; Rayonier Mill, Port Angeles, WA; and Oakland Bay, Shelton, WA. Responsibilities include reviewing existing data; identifying data gaps; designing sediment investigations including sediment chemistry, toxicity, bioaccumulation studies, wood waste studies, and hydrological studies; interpretation of data; and preparation of white papers and report sections.

#### **Portland Harbor Superfund Investigation**

**Oregon DEQ, Port of Portland, Lower Willamette Group, Portland OR**

**Bruce Hope, Oregon DEQ, Portland OR, (503)229-6251**

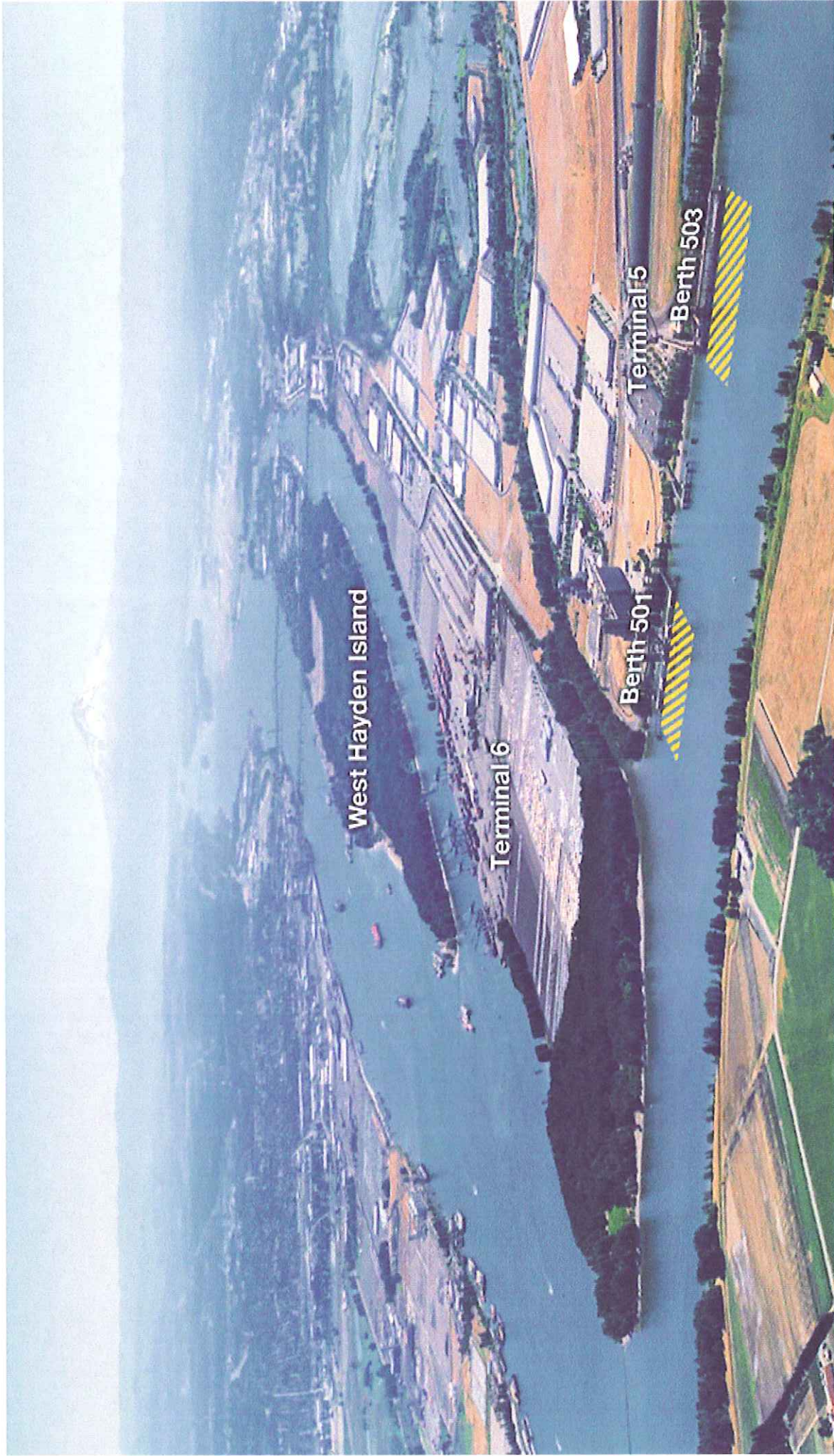
**1998-2007**

Avocet Consulting assisted DEQ with development of a sediment management program, a sediment investigation and risk assessment program, and development of sediment and tissue standards for Portland Harbor. Prior to the start of the formal Portland Harbor process, Avocet Consulting also provided assistance to the Port of Portland on Portland Harbor sediment issues, including evaluation of sediment data, development of a data interpretation framework, assessment of the extent of ecological impacts, and development of regulatory strategies for working successfully with state/federal agencies. More recently, Dr. Michelsen also worked with the Lower Willamette Group to develop a predictive model and sediment quality values for assessing benthic toxicity in the Harbor.





# Terminal 5



# Terminal 5

- Thriving highly-used marine terminal:
  - Grain facility built in 1970's
  - Potash facility built in 1980's
- Columbia River Deepening to 43-feet to be completed in 2010
- By deepening Berth 501 and Berth 503, tenants will be able to load vessels to 43-foot draft:
  - Berth 501: Grain exports by Columbia Grain
  - Berth 503: Potash exports by Canpotex/Portland Bulk Terminals



# Terminal 5 Deepening

## Dredging:

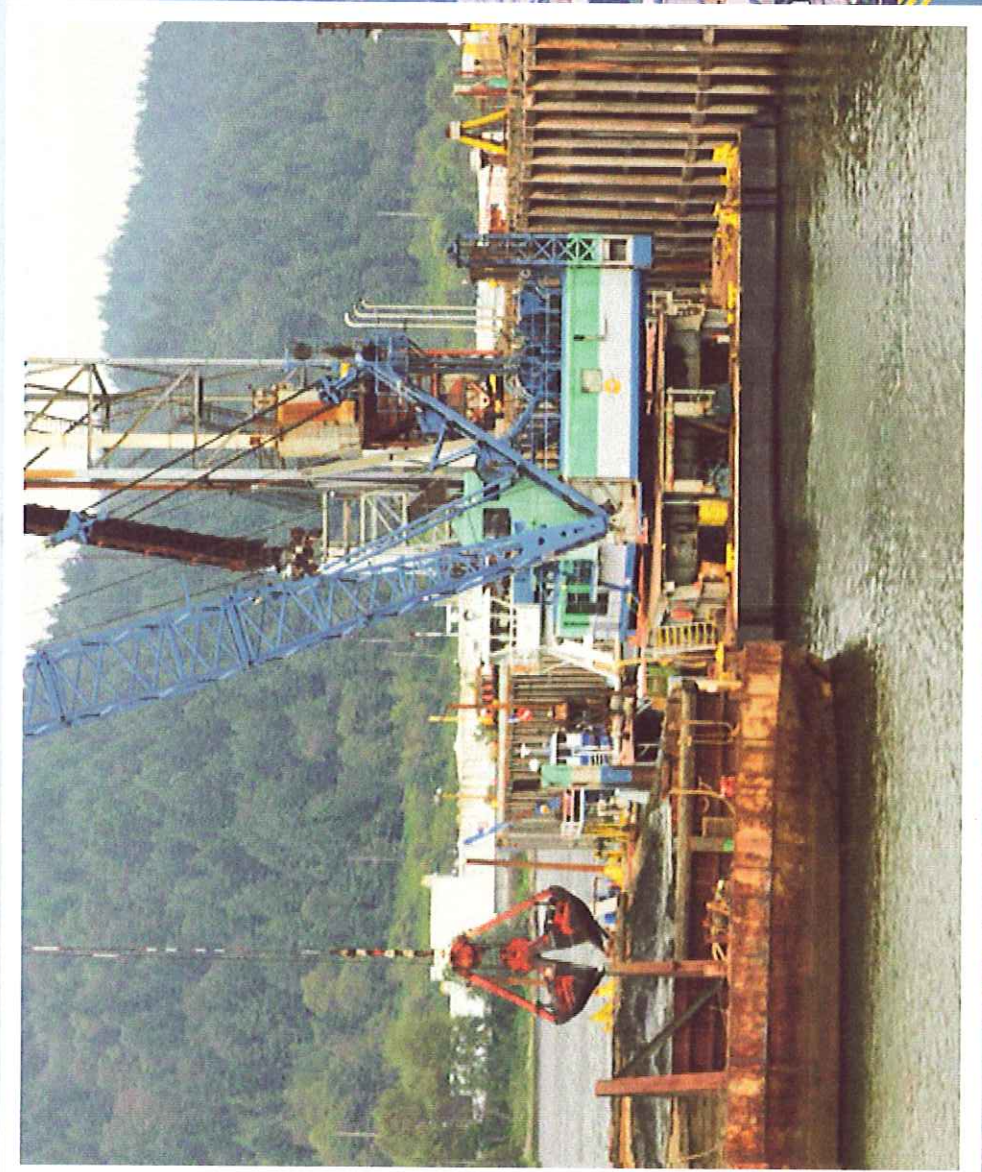
- From 40-foot draft to 43-foot draft
- Removal of approximately 10,000 cubic yards per berth
- By mechanical means, clamshell-bucket, into barges

## Offloading:

- Barges transported to placement site at Hayden Island
- Sediments pumped ashore into placement area
- Same process as T2, T5 and T6 projects in 2007, 2008

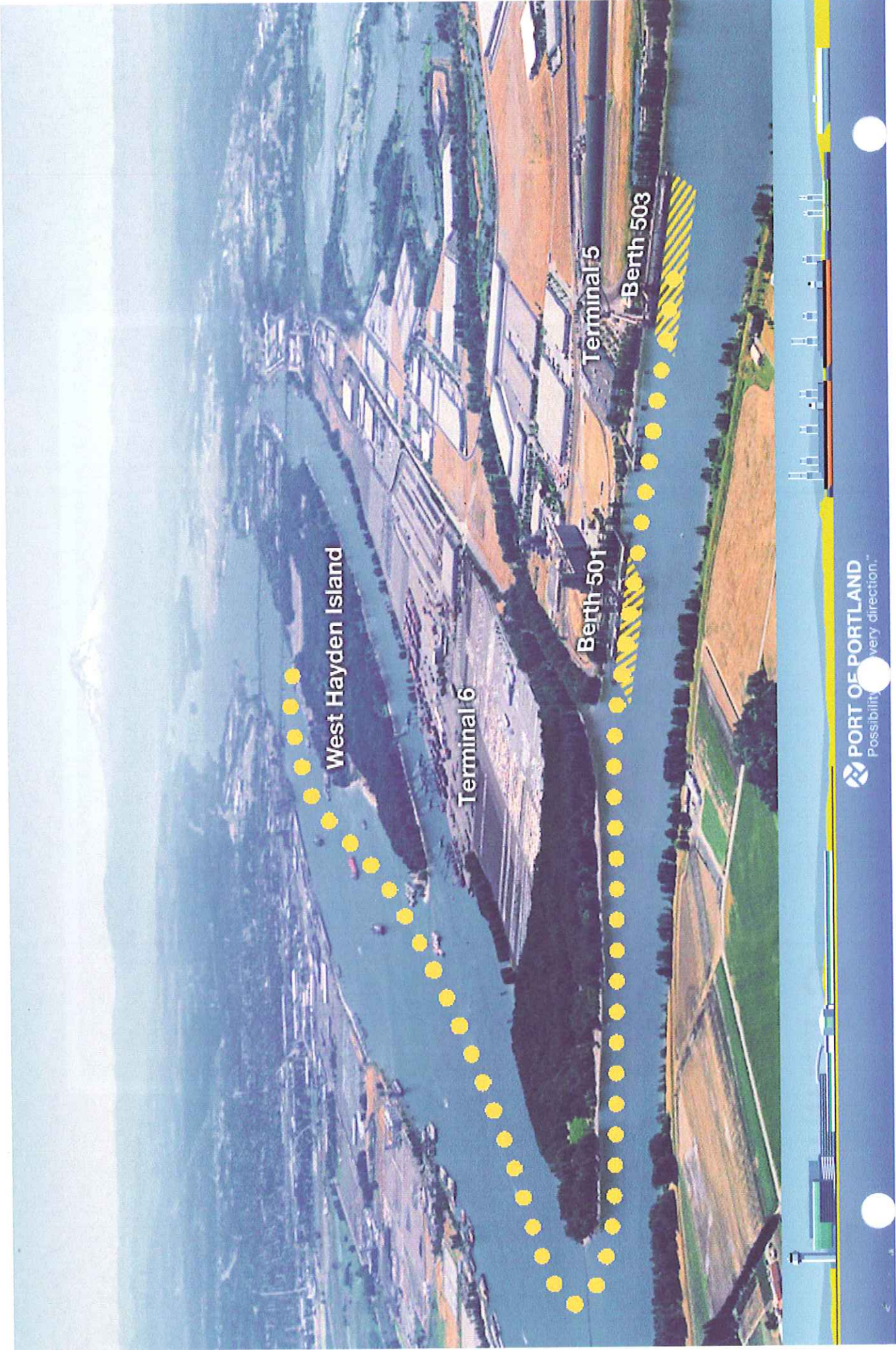


# Terminal 5



Terminal 5  
Berth 503

# Terminal 5



# Hayden Island Placement Site

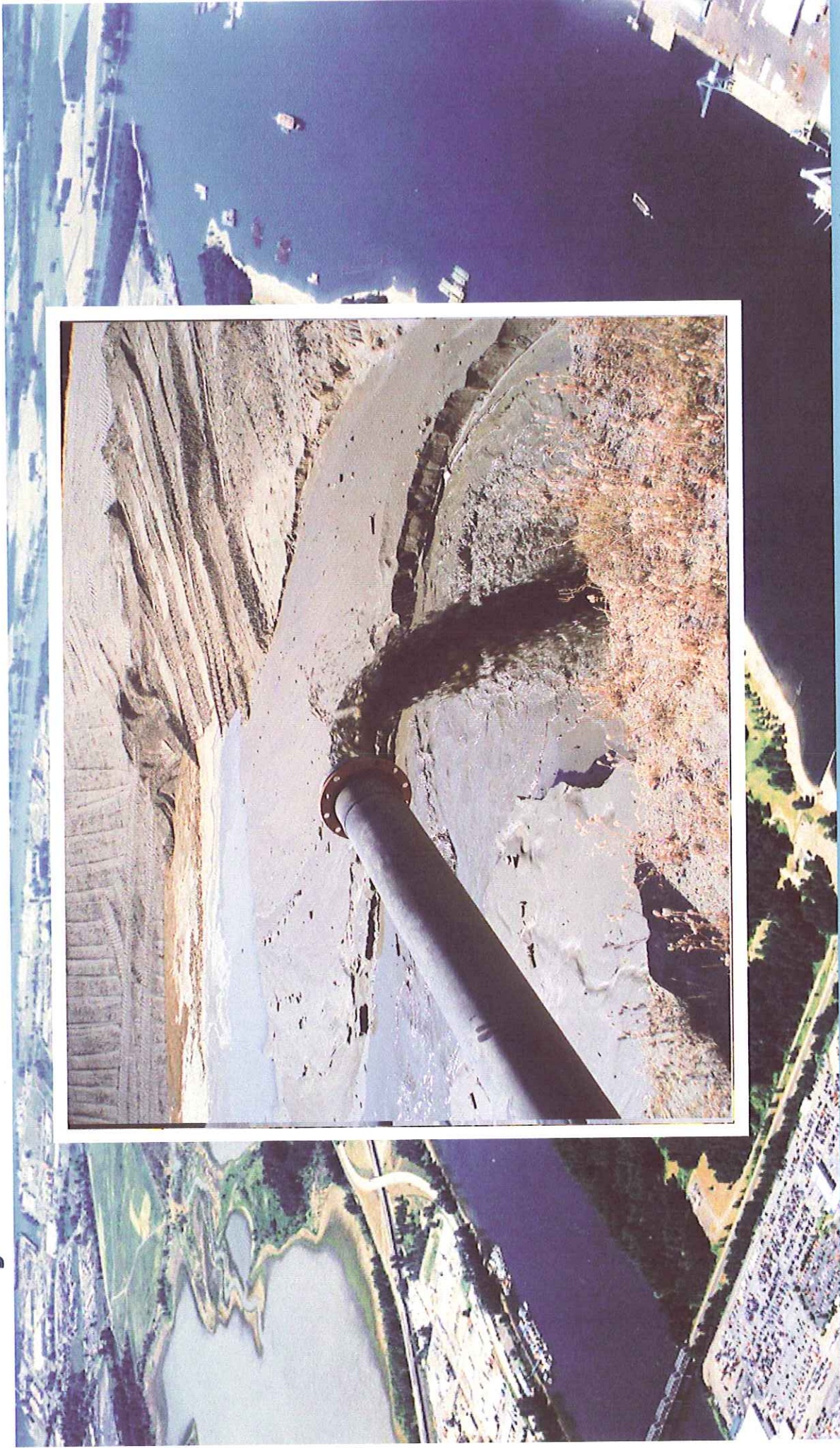


Terminal 5

Terminal 6

West Hayden Island

# Hayden Island Placement Site





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 **PORT OF PORTLAND**  
Possibility. In every direction.™



December 22, 2010

TO: Interested parties  
FROM: Heather Wills, CRC Environmental Manager  
SUBJECT: Topics related to Hayden Island

This memorandum addresses questions about the analyses conducted by the Columbia River Crossing project related to Hayden Island. The primary topics addressed are:

1. Demographic analysis of Hayden Island residents as it relates to environmental justice populations
2. Process to acquire property, including floating homes
3. Federal and state guidance for writing the Final Environmental Impact Statement (EIS)
4. Schedule for development and publication of the Final EIS

## Demographic analysis of Hayden Island residents as it relates to environmental justice populations

Environmental Justice (EJ) acknowledges that the quality of our environment affects the quality of our lives, and that negative environmental impacts should not disproportionately burden low-income or minority populations. The analysis completed for the CRC project identifies and assesses the project impacts that could disproportionately affect low-income or minority populations, also referred to as EJ populations.

The following represent the three major principles of environmental justice:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts, including social and economic impacts, on minority populations and low-income populations.
- Ensure full and fair participation by all potentially affected populations in the transportation decision-making process.
- Prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

The CRC project team assessed impacts to EJ populations based on [Executive Order 12898](#) (1994) and subsequent requirements and guidance from the DOT, Department of Justice (DOJ), the federal highway Administration (FHWA), and the Washington State Department of Transportation (WSDOT).

The project team used definitions provided by [FHWA Guidance 6640.23](#) (1998), "FHWA Actions to Address Environmental Justice Minority Populations and Low-Income Populations." The specific methodology for CRC was developed using the state and national guidance in collaboration with the Environmental Protection Agency (EPA), FHWA, the Federal Transit Administration (FTA), WSDOT, the City of Vancouver and City of Portland, Tri-Met and C-Tran, Metro and the SWRTC and published as the [Environmental Justice Methods and Data Report](#).

The federal guidance provides direction on the identification of EJ households and communities, the assessment of impacts to these EJ households, and the appropriate means of conducting public

information and outreach campaigns to EJ populations. In addition to the analyses, FHWA guidance calls for the provision of public involvement opportunities and meaningful access to public information for minority populations and low-income households. The CRC project team has endeavored to provide a wide range, and a high number of opportunities for public involvement. The CRC project team has also executed specific outreach strategies to communicate with low income groups, minority groups, social service providers, neighborhoods, etc.

There are two steps to the EJ analysis: identifying EJ populations (both individual and clusters), and analyzing the nature of the impacts to these populations. The second step, analyzing the impacts results in a determination of whether an impact is *High, Adverse and Disproportionate*.

### Methods – Identifying Environmental Justice Populations

Executive Order 12898 defines Environmental Justice populations as minority and low income populations. Elderly and disabled individuals are not themselves considered EJ populations unless they are minority or low income. Elderly and disabled individuals are vulnerable populations that are addressed in the neighborhoods section of the Draft EIS and will be addressed in the Final EIS. The CRC project team followed the FHWA definition of minority which states that a minority is a person who is:

- Black (having origins in any of the black racial groups of Africa);
- Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
- American Indian or Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

The project team followed the FHWA guidance which states that a low-income household is one in which the income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. The poverty guidelines are issued each year in the Federal Register by the HHS.

U.S. Department of Health and Human Services (HHS) poverty guidelines.		
Number in household	Annual Poverty Guidelines	
	2000	2008
1	\$8,350	\$10,400
2	\$11,250	\$14,000
3	\$14,150	\$17,600
4	\$17,050	\$21,200
5	\$19,950	\$24,800

In addition to the FHWA guidance related to EJ households, other documents were used to help identify EJ communities, including the ["Guidebook for Identifying, Measuring and Mitigating Environmental Justice Impacts of Toll Roads,"](#) published by the Center for Transportation Research at the University of Texas at Austin. In the report, the authors cite Council on Environmental Quality (CEQ) guidance regarding how to determine if a neighborhood should be considered an EJ community. The [CEQ guidelines](#) (1997) states that an EJ community exists if one of the following conditions is present:

- The minority or low-income population exceeds 50 percent in the impacted area.
- The minority or low-income population percentage in the impacted area is "meaningfully greater" than the minority or low-income population in the general population or other appropriate geographic area.
- There is more than one minority or low-income group present and the minority or low-income percentage, as calculated by summing all minority or low-income persons, meets one of the thresholds presented above.

The project team has assessed each neighborhood within the study area, by working with low income advocacy groups, neighborhood associations, and other organizations to accurately characterize the area. For each neighborhood, census, school lunch, and other data were gathered as well. The following section describes the demographic profile that was developed for Hayden Island.

### Hayden Island Profile

The DEIS provided profiles for each of the neighborhoods within the area of potential impact, which was based largely on data from the 2000 Census. These data are compared to similar data at the city and county level. The demographics of the neighborhood are also compared to that of the surrounding neighborhoods within the CRC study area. Such comparisons are meant to help identify EJ *communities or populations*.

The rate of minority or low income households on Hayden Island was found to be lower than the rate of those households in the City, or the County. The project team also compared these data to the other neighborhoods within the study area. It was found that the rate of Hayden Island minority and low-income households are lower than other neighborhoods which will experience direct impacts from the CRC project. The tables and maps below provide the proportion of minority and low income households within each neighborhood.

### Hayden Island Minorities

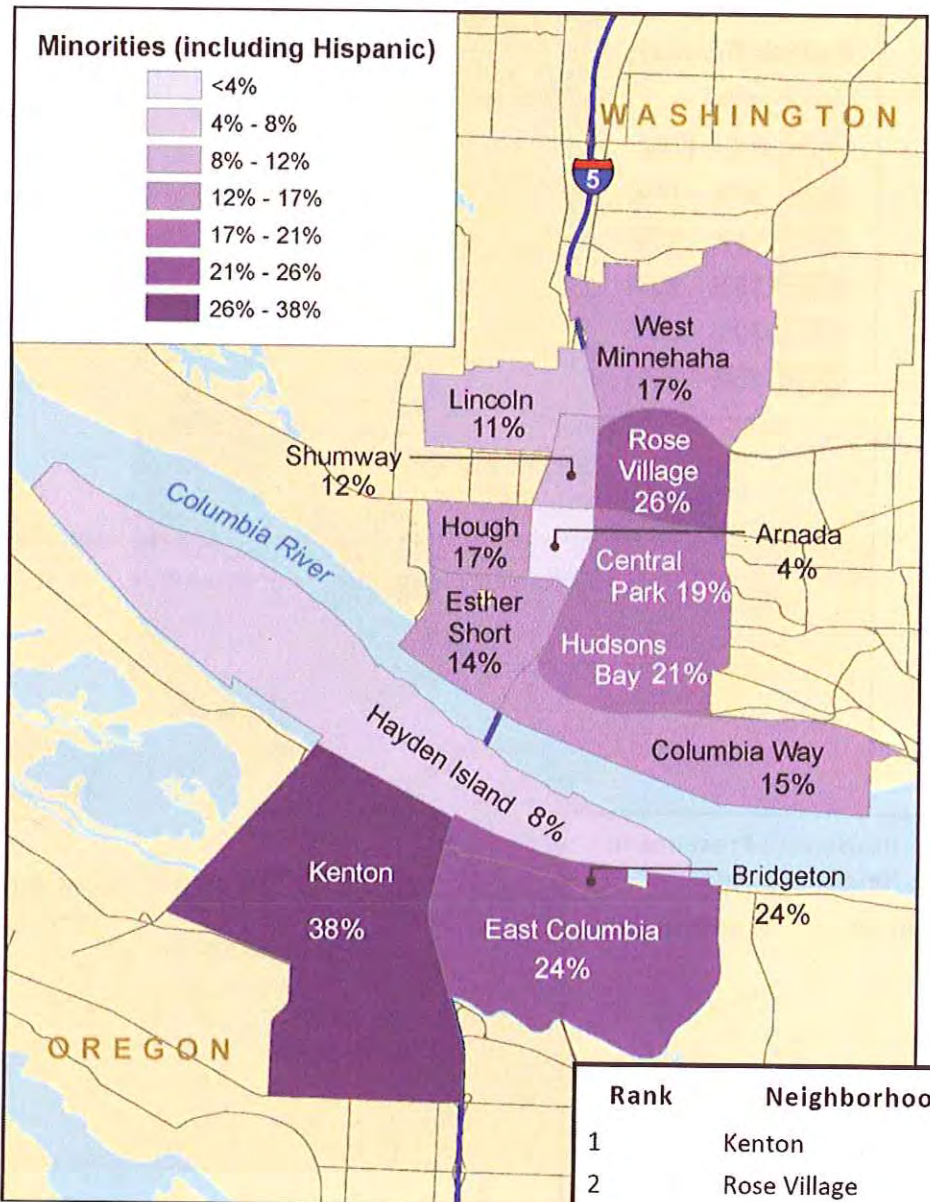
Area	Total Population	Caucasian	African American	American Indian and Alaska Native Alone	Asian	Native Hawaiian and Other Pacific Islander Alone	Some Other Race Alone	Two or More Races	Hispanic or Latino
Hayden Island	2086	92%	2%	0% <sup>1</sup>	4%	0%	1%	1%	3%
Multnomah County	660,486	76%	5%	1%	6%	0%	0%	4%	7%
Portland	529,025	75%	6%	1%	6%	0%	0%	4%	7%

1. Entries of 0% represent values of less than .5%

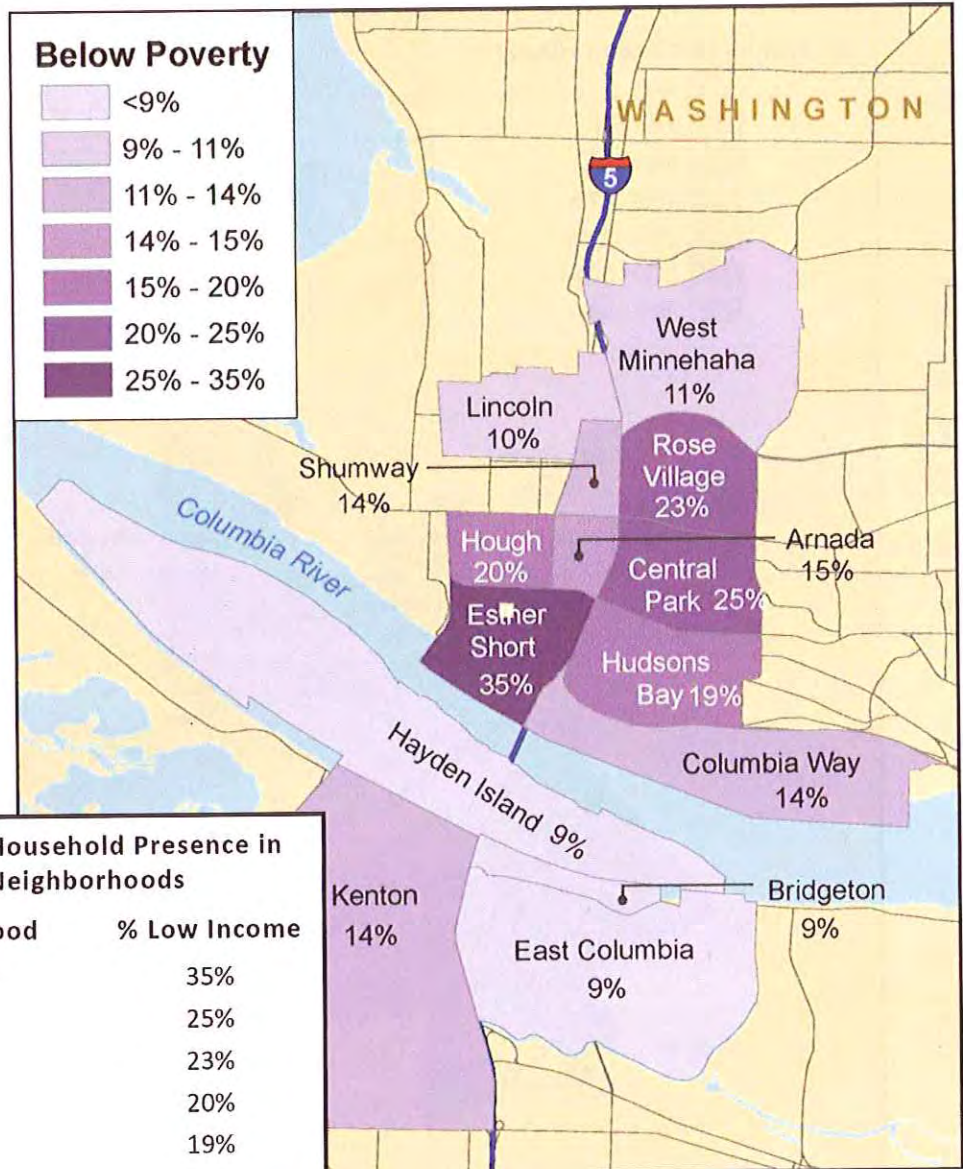
### Hayden Island Low Income Households

Area	% of Population Below Poverty Level
Hayden Island	9%
Multnomah County	12%
Portland	13%

Sources: U.S. Census Bureau, 2000. Summary Tape File 3, Tables H85, P56, P88, P42, P8, H16, H7, and H44.



Rank	Neighborhood	% Minority
1	Kenton	38%
2	Rose Village	26%
3	East Columbia	24%
4	Bridgeton	24%
5	Hudson's Bay	21%
6	Central Park	19%
7	Hough	17%
8	West Minnehaha	17%
9	Esther Short	14%
10	Shumway	12%
11	Lincoln	11%
12	Hayden Island	8%
13	Arnada	4%



**Ranked Low Income Household Presence in Project Area Neighborhoods**

Rank	Neighborhood	% Low Income
1	Esther Short	35%
2	Central Park	25%
3	Rose Village	23%
4	Hough	20%
5	Hudson's Bay	19%
6	Arnada	14%
7	Kenton	14%
8	Shumway	14%
9	West Minnehaha	11%
10	Lincoln	10%
11	East Columbia	9%
12	Hayden Island	9%
13	Bridgeton	9%

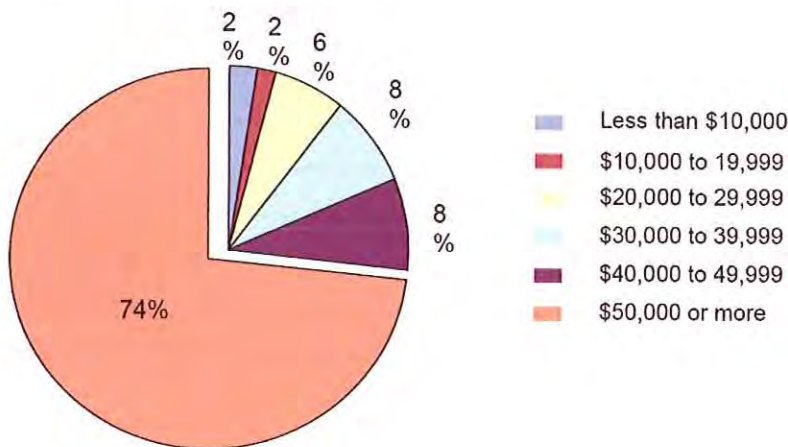
### Jantzen Beach Moorage Demographic Data

To supplement the 2000 Census data, the project team has also used data from Claritas,<sup>1</sup> school lunch programs, affordable housing agencies, and other sources. Additionally, residents of the Jantzen Beach Moorage (JBMI) floating home community asserted that they were not accurately counted in the Census. In order to better understand the impacts to JBMI, additional demographic data have been collected.<sup>2</sup> Surveys were sent to the residents in 2007 and are summarized below.

As of November 8, 2007, a total of 129 surveys were returned. According to these surveys, the JBMI community is predominantly two-person households, but ranges from one to five people. Of the respondents who indicated their race (127 out of 129 returned surveys), 92 percent are White, while the remaining 8 percent includes four mixed-ethnicity individuals, one Native American, one Hispanic, one Pacific Islander, one "American," and two respondents who indicated "Other," but did not specify an ethnicity.

Of the 129 returned surveys, 124 indicated household income in 2006. As shown in the following exhibit, 74 percent of respondents indicated their annual household income is \$50,000 or more, 16 percent indicated it is between \$30,000 and \$49,999, 10 percent indicated it is below \$29,999, and 2 percent indicated that their annual household income is less than \$10,000 a year.

#### JBMI Survey, Household Income



### Displacement Surveys

In addition to the JBMI survey summarized above, the project team surveyed and interviewed specific businesses and residents that have been identified as likely to be displaced by the CRC project. The CRC project developed and conducted this series of location-specific surveys to better refine the analysis of whether there would be a disproportionate impact on environmental justice populations.

A demographic survey was delivered to all potentially displaced residents in Oregon in four specific areas including the Jantzen Beach Moorage (JBMI) and Columbia Crossings Marina. In some cases, such as with the JBMI, the study area included all of the residents of the floating home community. Many of the mailed surveys were followed by an in-person visit, while in other cases the CRC project held meetings with the groups following the mail-out. Below is a brief synopsis of the survey approach used at each of these locations.

<sup>1</sup> Claritas is a private source of up-to-date demographic data and projections

<sup>2</sup> JBMI is the non-profit homeowners association that owns and operates the moorage on the south side of Hayden Island.

The survey and interview responses for residential displacements on Hayden Island reveal two (2) minority households (6.25%) Comparatively, the Portland block groups in the study area have 42% minority households, and the Vancouver block groups have 15% minority households.

Income data were collected in the residential surveys; respondents had an option to choose income in one of nine categories ranging from less than \$10,000 to \$80,000 or more, with a range of \$10,000 each. Income data collected in the survey reflects 2008 levels. In contrast, income levels used for demographic analysis from the census reflects 1999 income levels, and the determination of low-income status for the census data uses year 2000 poverty thresholds. To determine whether any survey respondents would be considered low-income, the more recent 2008 census thresholds were used.

Because the income range responses span the poverty thresholds, an exact determination of low-income status using the Census 2008 thresholds is not possible. Instead, the following table shows an approximation of potential low-income status for survey respondents. The data show a low probability of low income households among the displaced residences. Only two households responded with an income between \$10,000 and \$19,999. Both were single person households. If those two individuals made \$10,764 or less, they would likely be found to be under the federal poverty level.

**Hayden Island Displacement Survey, Low-Income Analysis**

Income Range	Number of Responses	Low-Income Status
Up to \$9,999	0	No
\$10,000 - \$19,999	2	Not likely <sup>3</sup>
\$20,000 to \$29,999	3	No <sup>3</sup>
\$30,000 to \$39,999	1	No
\$40,000 to \$49,999	3	No
\$50,000 to \$59,999	6	No
\$60,000 to \$69,999	4	No
\$70,000 to \$79,999	1	No
\$80,000 or more	8	No
No response	4	Unknown

**Presence of EJ Community and Households on Hayden Island**

The CRC recognizes that there are low income and minority households on Hayden Island. These individual households have the full protection of the Executive Order. The implementing federal and state guidelines on Environmental Justice will guide the project's consideration of, outreach to, and mitigation of impacts for these households.

The US Census data indicate that, as a whole, the Hayden Island neighborhood has a lower proportion of minority and low income households than in the City of Portland, Multnomah County, or in the Project study area. Hayden Island ranks near the lower end of the spectrum in both minority and low income household composition. Based on this data Hayden Island is not identified as an Environmental Justice Community.

<sup>3</sup> These responses came from single family households for whom the poverty level is \$10,764



## Methods – Assessing Impacts

To assess if the project would result in a disproportionately high and adverse impact on EJ populations or individual households, the project considers expected impacts, their area of effect and the potential within that area to result in effects that are predominately borne by EJ populations or would be experienced by EJ populations more severely or greater in magnitude than non-EJ populations. Impacts that meet these criteria are considered alongside expected minimization and mitigation measures to determine the project's overall potential to have disproportionately high and adverse effects on EJ populations.

*Disproportionately High and Adverse Effect on Minority and Low-Income Populations means an adverse effect that:*

- (1) is predominately borne by a minority population and/or a low-income population; or
- (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or non low- income population.

The project team used guidance from the Federal Highway Administration (FHWA) to determine whether the project would have a disproportionately high and adverse impact on EJ populations.

### FHWA Guidance

The project team determined the likelihood that the LPA may have disproportionately high and adverse impacts on EJ populations using six questions based on the FHWA guidance. Following consideration of these six questions, a final determination is made as to whether the LPA would likely result in disproportionately high and adverse impacts on EJ populations. Each of these questions is presented below and followed by Hayden Island specific answers for the questions. These answers have been greatly summarized. Please refer to the [Draft EIS](#) and [Environmental Justice Technical Report](#) for additional explanation.

#### **Question: Would the project result in disproportionately high and adverse impacts on EJ populations?**

No, the CRC Project, with either LPA Option A or B, would not result in disproportionately high and adverse impacts to EJ populations. This is the central question and is answered based on assessing the responses to the questions below. The project will result in commercial and residential displacements and acquisitions. The project's greatest negative impact will be on Hayden Island. The displacements include the Safeway grocery and floating homes. Residents on Hayden Island, much like in the rest of the project area, will also experience construction related impacts. As described herein, these impacts have not been found to be disproportionate; and the project includes many positive benefits, offsets, and mitigation measures.

#### **Question: Does the project affect a resource that is especially important to an EJ population? For instance, does the project affect a resource that serves an especially important social, religious, or cultural function for a minority or low-income population?**

No, the project does not affect resources with important social, religious or cultural functions to minority or low income populations, but it does affect the Safeway Bottle Return Center, which is a resource with economic importance to some low income individuals. The patronage of the bottle return center is assumed to include many low income and potentially homeless individuals. Though this likely serves as a resource for homeless persons in the study area, it is not restricted to island residents, nor is it exclusive to low income users. More importantly, this impact is not *highly adverse*, as there are other facilities where the same service is provided.

**Question: Would the project result in disproportionately high and adverse impacts that would be predominately borne by an EJ population?**

No, the impacts will be experienced by a largely representative cross-section of the population, and will not be predominantly borne by EJ populations. The project team conducted an analysis of the island as a whole and has surveyed the displaced residents and businesses. The results showed the impacts will be experienced by a largely representative cross-section of the population, and will not be predominantly borne by EJ populations. None of these impacts is specific to a predominantly EJ neighborhood or sub-neighborhood.

According to the survey of the Hayden Island displaced households, 26 households are above the poverty level; and two households may (though it is unlikely) be below the poverty level. Four households provided no response. The survey also showed that only two are minority households (representing only 6.25 percent of the displacements on the island). The displacements on the Island constitute a lower percentage of EJ households than the average for the City, County, or study area, thereby not being disproportionate.

**Question: Would the project result in disproportionately high and adverse impacts on an EJ population that would be appreciably more severe or greater in magnitude than the impact that would be suffered by the non-minority and/or non-low-income population?**

No, the impacts will be experienced by a largely representative cross-section of the population, and will not be predominantly borne by EJ populations. The two impacts that were most carefully scrutinized for such a finding include the displacement of the Safeway grocery and the displacement of floating home residents. The loss of the Safeway store may be greatly offset by the planned opening of a new grocery and pharmacy on the Island. Regardless, all island residents would be impacted by the loss of the only full service grocery. This issue is also offset and mitigated by: the availability of delivered groceries; regular transit service access to a full service grocery on the Portland mainland; and, the project's contributions to Hayden Island residents' travel options and travel reliability.

Regarding floating home displacements, the rates of low income and racial minority households are considerably lower than in the broader population, as described above. Also, all of the displaced residents will be provided relocation assistance. If a displaced household needs it (as could be the case if a low income household were displaced), the relocation assistance may include monthly subsidies and other benefits. The FHWA Guidance provides examples of impacts that should be identified as appreciably more severe, such as *if 10 EJ residences and 10 non-EJ residences will each experience noise levels above the federal standard, but noise at the EJ residences will increase by 20 decibels and noise at the non-EJ residences will increase by 10 decibels, there may be a disproportionate impact.*

Therefore, the project will not result in impacts that are appreciably more severe for EJ populations on Hayden Island.

**Question: Does the project propose mitigation?**

Yes, the project is committed to a number of mitigation measures, offsets and community enhancements. Relocation assistance will be provided to displaced businesses and residents. Displaced, low income residents may receive additional assistance. Noise impacts will be also be mitigated. Construction-related impacts will be mitigated and managed to avoid any significant temporary impacts. Hayden Island residents will be consulted in the development of construction-related mitigation.

**Question: Are there project benefits that would accrue to EJ populations?**

Yes, the project will provide significant benefits to EJ populations. Benefits will include the introduction of light rail service to the island, reduced congestion, local arterial access, improved air quality, greatly improved bike and pedestrian facilities, and nearly 20,000 construction related jobs.

## Property acquisition process

The acquisition process for the Columbia River Crossing project will comply with the Federal Uniform Relocation Act in all property acquisitions and relocations (49 CFR Part 24). This holds true for acquisition of floating homes, relocation of residents and acquisition of the upland property held jointly by Jantzen Beach Moorage Inc. slip owners. Each compensation and relocation package will be negotiated individually. For individual homes that need to be acquired, an appraiser will determine the fair market value of the floating home as it would sell, in-place, were it not for the project. This valuation will include the contributory value of slip ownership, where applicable. The project understands that slip ownership and slip location contribute to the market value of the property.

The negotiation process will begin following the receipt of a federal Record of Decision and approval of project financing for property acquisition.

## Federal and state guidance for writing the Final Environmental Impact Statement (EIS)

As required by federal regulations and federal and state guidance documents, the Final EIS will include a section on community-related impacts by neighborhood and an analysis of environmental justice populations and effects. Mitigation plans will also be described.

Upon request, additional compilation of information can be completed separate from the EIS to centralize the description of project effects and mitigation, by neighborhood. In-person conversations between community members and CRC staff are encouraged so that specific community requests may be clearly communicated and understood.

Below are links to documents that describe the guidance being followed when developing the Final EIS.

WSDOT Environmental Procedures Manual: <http://www.wsdot.wa.gov/Publications/Manuals/M31-11.htm>

CRC, Environmental Justice Method and Data Report:  
<http://www.columbiarivercrossing.org/Library/Type.aspx?CategoryID=25>

FHWA guidance on Environmental Justice:  
[http://www.fhwa.dot.gov/legsregs/directives/orders/6640\\_23.htm](http://www.fhwa.dot.gov/legsregs/directives/orders/6640_23.htm)

23 CFR 771 FHWA Environmental Impact and Related Procedures  
<http://www.fhwa.dot.gov/hep/23cfr771.htm>

## Schedule for development and publication of the Final EIS

The following milestones reflect the project's schedule, as of November, 2010. The exact schedule is dependent on conversations with federal regulatory agencies.

Milestone	Schedule
Outreach on final impacts and proposed mitigation	Ongoing with property owners; community meetings in early 2011
Public meetings on FEIS findings	Spring 2011
Gather signatures and publish FEIS; 30-day review period	Spring 2011
Record of Decision	Late 2011

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**MEMORANDUM**

**TO:** Susie Lahsene  
**FROM:** Steve Janik and Dana Krawczuk  
**DATE:** March 30, 2009  
**CLIENT:** Port of Portland  
**RE:** Zoning and Planning Framework for West Hayden Island Annexation

The Port of Portland (Port) and the City of Portland (City) have initiated a process to evaluate annexation, zoning, and development of a District Plan for West Hayden Island (WHI). As part of this evaluation, the City has chartered the Community Working Group (CWG) to advise City Council on how marine industrial, habitat, and recreational uses might be reconciled on West Hayden Island; and, if the CWG determines that a mix of uses is possible on WHI, to recommend a preferred concept plan.

WHI has a long regional and local planning history. You asked us to provide a summary of this planning history and the legal framework that flows from that history as background information to assist Port staff, City staff, and the CWG as you work through the evaluation process.

**Summary**

WHI was brought into 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, Exhibit B at 1. Multnomah County agreed to delay planning and zoning for WHI until a site specific study was completed to evaluate environmental impacts and minimization of those impacts. *Id.* at 5-6. In 2004, Metro designated WHI as a "Regionally Significant Industrial Area" under Title 4 of Metro's Urban Growth Management Functional Plan (UGMFP). Metro Ordinance 04-104B. Finally, Metro adopted its Nature in the Neighborhoods program as a regional approach to Goal 5 for fish and wildlife habitat in 2005. Metro Code (MC) 3.07.1320. Nature in the Neighborhoods requires the City of Portland and the Port of Portland to create a "District Plan" for WHI. MC 3.07.1330.B.4.b.

Metro's previous planning decisions demonstrate an intent to accommodate both industrial development (in the form of a marine terminal) and natural resource protection measures on WHI. Both the Statewide Planning Goals and Metro's Urban Growth Management Functional Plan (UGMFP) provide the framework for how the City of Portland must implement Metro's prior planning decisions. Under the Goals and the UGMFP, the City's task in the annexation and rezoning process is to harmonize Metro's two objectives such that neither is accommodated to the exclusion of the other. This regulatory framework is important because it provides a reference point as planning decisions are made in the planning process.

### Planning History

WHI is located in Multnomah County, and since 1977 it has been zoned Multiple Use Forest 19 (MUF19) with a Significant Environmental Concern (SEC) overlay. Multnomah County Ordinance No. 333. In the early 1980s, Metro and Multnomah County took steps toward urbanizing WHI. Multnomah County amended its comprehensive plan in 1982 to support the eventual development of a marine shipping terminal on WHI. Multnomah County Ordinance Nos. 333-335. These amendments included an "Urban" designation, a Marine Transportation System policy, and additional Growth Management Policies. In 1983, Metro included WHI in the UGB to "satisfy a long term regional need for water-dependent, marine terminal and industrial facilities." Metro Ordinance No. 83-151, Exhibit B at 1. In recognition of the unique importance of WHI for this purpose, the Metro Council found that "alternative sites for deep draft marine industrial facilities" did not exist anywhere else in the region. *Id.* at 6.

Both Metro and Multnomah County also considered the environmental impacts of marine industrial development on WHI. In the UGB decision, Metro determined that the marine industrial development value of WHI outweighed its natural resource protection value, but that both could be accommodated:

There is no question that any large scale urban development of West Hayden Island would impair wildlife habitat. However, the habitat on West Hayden Island is not, in a planning sense, "unique" or "significant," and applicants and the county have established a process for minimizing adverse environmental impacts. Given the great importance of marine industrial facilities to the social and economic growth and vitality of the region, and that there are no alternative sites for deep draft marine industrial facilities, the positive social and economic consequences of an urban designation clearly outweigh the environmental consequences. Metro Ordinance No. 83-151, Exhibit B at 6.

It was determined that the environmental impacts would be addressed by Multnomah County through the requirements of the County's Significant Environmental Concern overlay designation. Specifically, Multnomah County agreed to defer rezoning WHI to a future planning process that would include a study of how to minimize these impacts. *Id.* at 5-6. Neither the study nor the rezoning has yet to occur.

Another component of the 1983 UGB decision was that Multnomah County sought assurances in the form of conditions that both marine industrial and environmental objectives would be accommodated on WHI if the City of Portland assumed the responsibility for urbanizing WHI. *Id.* at 8-9. Metro found that those objectives went to the “fundamentals” of the applications and the commitments made by the applicants. *Id.* at 9-10. If the City failed to carry out those commitments, Metro would provide a forum for the County or other interested parties to object. *Id.* at 10.

The planning and zoning status of WHI remained largely unchanged for over 20 years following the 1983 UGB decision. Over the last five years, Metro has adopted two new policies for WHI that reaffirm the objectives of the 1983 UGB decision and continue to recognize the importance of WHI for both marine industrial development and habitat protection.

First, as part of its 2004 Title 4 update, which refines the 2040 Growth Concept Map, Metro identified WHI as a “Regionally Significant Industrial Area” (RSIA). Metro Ordinance 04-104B. RSIA’s are defined as “industrial areas with site characteristics that are relatively rare in the region that render them especially suitable for industrial use.” Metro Code (MC) 3.07.130. As such, the Metro Code gives RSIA’s the highest level of protection against conflicting non-industrial uses. MC 3.07.420. Metro’s designation of WHI as a RSIA reflects its intent to preserve WHI for industrial uses. Metro’s 2040 Growth Concept Map also depicts a marine terminal on WHI, consistent with Metro’s 1983 UGB decision.

Second, Metro adopted the “Nature in the Neighborhoods” program in 2005 as a regional approach to Goal 5 for fish and wildlife habitat. OAR 660-023-0080; MC 3.07.1320. As part of this program, Metro developed maps identifying Habitat Conservation Areas (HCAs) that are subject to variable levels of conservation or protection based on Metro’s balance of the habitat value of a site against its development value in MC Table 3.07-13a. Metro identified WHI as a moderate HCA because it contained both high development value and high riparian habitat values (Class I Riparian Habitat). Consistent with Metro’s assessment of the industrial and natural resource value of WHI in its UGB decision, Nature in the Neighborhoods requires that the City develop a WHI “District Plan” in cooperation with the Port to address the moderate HCA designation. MC 3.07.1330.B.4.b. A District Plan is a means to implement site specific habitat conservation measures that protect natural resources and mitigate the environmental impacts of industrial development.

The City of Portland must undertake the next steps in the planning process for WHI. As noted above, these steps include annexation, rezoning, and the formation of a “District Plan.” Ultimately, these steps will establish the permissible range of uses and the appropriate level of natural resource protection for WHI.

### **Legal Framework**

The District Plan and associated annexation, zoning and comprehensive plan designations are carried out by the City through the application of the following state land use planning laws and Metro regulations.

## 1. Goal 14

Goal 14 and its implementing rules govern the establishment and expansion of UGBs. In order to expand its UGB, a jurisdiction must demonstrate a need for that category of land based on a long range population forecast. Both the version of Goal 14 in effect when WHI was included in the Metro UGB and the current version of Goal 14 require that WHI be zoned consistent with Metro's UGB decision.

WHI was included in Metro's UGB under a previous version of Goal 14, which did not have any specific implementing rules. Under this previous version, LUBA has held that where a decision to expand a UGB is based on need for a specific use, the local government must ensure that planning and zoning designations applied to the expansion area will accommodate that use. *1000 Friends of Oregon v. City of North Plains*, 27 Or LUBA 372, 383-84, aff'd 130 Or App 406 (1994). Local governments cannot circumvent Goal 14 by justifying a UGB expansion with a need for a particular category of land and then planning and zoning that land for a different category of use.

The current version of Goal 14 was adopted by LCDC in 2006 and includes specific implementing rules at OAR 660 Division 24. The new rules provide that when land is added to the UGB, the planning jurisdiction must adopt comprehensive plan and zoning designations that are consistent with the need determination, or maintain the land as urbanizable land by applying interim zoning that retains the land's potential for urban development until the land is rezoned for planned urban uses. OAR 660-024-0050(5). This is consistent with LUBA's interpretation of the prior version of Goal 14 and ensures that the premise underlying a UGB decision is carried out during later stages in the planning process.

Metro approved the 1983 UGB amendment based on the commitments made by Multnomah County and the applicants to develop a marine industrial terminal on WHI and to adopt environmental protection measures to minimize the impact of that terminal. The decision makes it clear that if the City of Portland ultimately assumed the role of urbanizing WHI, it would be required to "promote the interests that the commitments are designed to protect." Metro Ordinance No. 83-151, Exhibit B at 1. Adopting planning and zoning designations that ensure that both a marine industrial terminal and natural resource protection measures can be accommodated on WHI would be consistent with either version of Goal 14.

## 2. Urban Growth Management Functional Plan

Metro's UGMFP requires cities and counties to adopt changes to their comprehensive plans and zoning ordinances to implement regional goals and objectives adopted by the Metro Council. Title 11 (*Planning for New Urban Areas*), Title 4 (*Industrial and Other Employment Areas*), and Title 13 (*Nature in the Neighborhoods*) of the UGMFP contain important planning and zoning requirements for WHI.

First, Title 11 provides general planning guidance for areas brought into the UGB. Under Title 11, local governments must adopt planning and zoning designations for lands added

to the UGB in accordance with Metro's designated 2040 Growth Concept design type. MC 3.07.1120. The 2040 Growth Concept design type for WHI is identified as RSIA.<sup>1</sup>

Second, Title 4 contains Metro's goals and policies for protecting industrial and employment lands. Similar to Title 11, Title 4 requires local governments to adopt planning and zoning designations for RSIA's consistent with Metro's maps. MC 3.07.420.A. RSIA's receive the highest level of protection from non-industrial uses under Title 4, including specific limitations on employment and retail uses. Title 4 also requires local governments to meet specific criteria in order to amend the designation of RSIA land to allow uses not allowed by Title 4. MC 3.07.450. Thus, the elements of Metro's planning framework established by Title 11 and Title 4 require the City to adopt industrial plan and zoning designations for WHI.

Third, the City must also implement Nature in the Neighborhoods on WHI pursuant to Metro Title 13. As noted above, WHI is designated as a moderate HCA because it contains both high riparian habitat values and high development values. Ordinarily, local governments can choose among four methods to implement Title 13. MC 3.07.1330.B. However, Title 13 specifically requires the City of Portland to develop a "District Plan" for WHI in cooperation with the Port of Portland. MC 3.07.1330.B.4.b. A District Plan is a special planning process that allows local governments to develop alternative approaches to habitat protection that incorporate site specific measures, rather than the region-wide approach created by Nature in the Neighborhoods model ordinance. MC 3.07.1330.B.4.a. The City must demonstrate that the District Plan achieves "substantially comparable" habitat protection to Nature in the Neighborhoods model ordinance. *Id.*; MC 3.07.1330.B.3. Substantial compliance may be demonstrated by the City through implementation of comprehensive plan and ordinances and "use of incentive based, voluntary, education, acquisition and restoration programs." MC 3.07.1330.B.3.b. The District Plan process is consistent with Metro's, Multnomah County's, and the applicant's original commitment to minimize the impact of industrial development on WHI's natural resources.

To effectively meet *both* Metro Title 4 and Title 13, the City must try to accommodate both a marine industrial terminal and natural resource protection on WHI. As long as these two objectives are satisfied, the City will have significant discretion in developing planning and zoning designations for WHI.

### **Conclusion**

Metro's previous planning decisions and the Statewide Planning Goals create an important regulatory framework for the City of Portland to annex and rezone WHI. In essence, this framework directs the City to do two things:

1. To adopt planning and zoning designations on WHI for a functional marine industrial terminal. This was the justification for the inclusion of WHI into the Metro UGB. Both the Statewide Planning Goals and Title 4 and 11 of the

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<sup>1</sup> The most recent version of the 2040 Growth Concept Map was updated on November 4, 2008. [http://www.oregonmetro.gov/files/planning/2040\\_growth\\_concept.pdf](http://www.oregonmetro.gov/files/planning/2040_growth_concept.pdf)



UGMFP require that the marine industrial development commitments made in the 1983 UGB decision are carried out.

2. To develop a "District Plan" for WHI to implement Metro's Nature in the Neighborhoods program under Title 13 of the UGMFP. The District Plan must achieve "substantially comparable" habitat protection to Nature in the Neighborhoods model ordinance. The District Plan process should also carry out the natural resource protection commitments made in the 1983 UGB decision.

To carry out these requirements in the annexation and rezoning process, the City's task should be to try to achieve Metro's two objectives such that neither is accommodated to the exclusion of the other.