



Bureau of Planning and Sustainability

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## Recreation Analysis

In July 2010 the Portland City Council passed a [resolution](#) directing the Bureau of Planning and Sustainability to develop a legislative proposal for the annexation of West Hayden Island to the City. The island is valuable for both its marine industrial potential as well as for the preservation of open space. Council specified that the proposal should designate at least 500 acres as open space and no more than 300 acres for future deep water marine terminal development. City Council also set parameters for further evaluation of nature based recreational uses on the island. They noted that any significant recreational structures or development footprints should be located primarily at the eastern edge of the site and should minimize impacts on the highest value habitat areas. Within the 500 acres of open space, low impact recreational facilities may be considered as a means to direct and manage human access in ways that support habitat objectives. Council specified that more active recreational facilities should be considered east of the railroad bridge<sup>1</sup>.

The purpose of this memo is to summarize local recreational needs and opportunities that have been discussed as part of recent studies and reports done in Phase 1 of this project. In addition, past analysis will be reviewed that discuss ways to reduce impacts of recreation on natural resources, and recreation and marine terminals. The information in this memo will be used as part of the Concept Planning process.

The memo is laid out as follows:

- Description of current planning process
- Description of past work that has been done on and around Hayden Island as it relates to recreational needs and opportunities,
- Parks Bureau sufficiency analysis of Hayden Island,
- A brief description of complementary and conflicting land uses and potential ways to limit negative interfaces, and
- Draft recreation recommendations that the City would like the Advisory Committee to consider during the Concept planning process.

A report which lays out land management options, including ownership alternatives and funding sources, for the 500 acres of open space and natural resources on West Hayden Island

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<sup>1</sup>Portland Parks and Recreation has provided the following definitions for active and passive recreation which should be considered in the review of this memo:

Active Recreation - Active recreation sites recognize a higher level of public use, and will require developed areas for organized or intense recreation. Refers to a mix of uses that include athletic fields, recreational activities at community centers or similar facilities, courses, court sports, children's play areas, dog off leash areas, and bike paths.

Passive Recreation - Passive recreation sites require a lower level of development and provide areas for informal, self-directed activities for individuals and groups. Refers to walking, hiking, human powered craft, and nature viewing.



is being undertaken by the Bureau of Environmental Services with assistance from the Bureaus of Planning and Sustainability and Parks and Recreation. The base assumptions used to produce the land management options report will be provided through the concept planning phase of the project, specifically the preferred concept plan will be used as the base for the research and discussion.

## I. Current Planning Process:

The Council Resolution #36805 contained references to recreational opportunities on West Hayden Island. Some of the main points included:

- Nature based recreation should be analyzed in more detail.
- More significant facilities should be considered only on the east end of the site, and more active uses should be considered east of the railroad.
- Low impact recreation<sup>2</sup> uses may be considered to control impact to the natural area from humans and pets.
- Management options for the long term care of the open space must be analyzed.

In Phase I of the planning project, the Community Working Group (CWG) adopted a set of working principles to aid them in a potential recommendation. Under these principles, the following items are significant to opportunities for recreation.

- A positive contribution to the local community
- Public access opportunities to West Hayden Island.

## II. Summary of Past Work

### *Recreation Participation, Development Potential, and Current Value On and Around West Hayden Island (ENTRIX report: 2010)*

This report provided recreational context and recreational development opportunities on and around WHI. The report describes:

- current recreation on and around Hayden Island and water-based recreation in the greater Portland area, including sailing, motorized boating, kayaking, canoeing and fishing
- Potential future recreation activities for WHI, including enhanced trail system, access to beaches, motorized and non motorized boat launches, and picnic areas.
- general compatibility amongst recreation uses, between recreation and habitat preservation, and between recreation and marine terminal activities, and
- The potential magnitude of economic value of current and potential future recreation activities on and around Hayden Island.

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<sup>2</sup> This memo is equating low impact recreation with passive recreation as defined by Portland Parks and Recreation and described on the previous page.



The report notes that currently, authorized recreation access on WHI itself is limited to the beaches. Land-based recreation activities in the vicinity are concentrated at other public recreation sites both on East Hayden Island and on the mainland. However, there are water-based activities occurring in the Columbia River surrounding WHI, including sailing, motorized boating, kayaking, canoeing, and fishing. There are several marina and other water access points on East Hayden Island (in private ownership), from other points in the Columbia River, as well as access points on the Willamette River in Portland (Appendix B includes a map of the area and water access points).

Potential recreational activities that would further the goals of the City of Portland Parks and Recreation, and are compatible with trends in outdoor recreation and the vision for recreation established by Hayden Island residents include: boat access, trails, picnic areas and other developed facilities, and natural areas. The location and size of potential recreation facilities will need to consider the compatibility of different recreational activities with each other and with potential industrial activities, and wildlife habitat conservation. Appropriate management, including physical separation of potentially conflicting uses, can make multiple uses compatible.

#### *Recreation and Marine Use Examples (Memo produced by Port of Portland, 2009-10)*

This memo summarizes some research done by the Port of Portland at the end of 2009 to find examples of Port owned and maintained parks and open space access adjacent to working harbors. All of the cities reviewed have had some success in integrating park lands in the vicinity of more intensive industrial uses. Many of the parks uses are more active uses such as fishing piers, multi-use trails, picnic areas and marinas. These areas are often reclaimed from the industrial waterfront. Specific examples of these facilities can be found at San Diego and Seattle. There are also examples provided where areas are being set aside or reclaimed for natural areas, some of which may include passive recreation. Oakland has converted some of their deep water harbor and created shallow water habitat while the shoreline contains trails and picnic areas. The Port of Tacoma has purchased 70 acres of a forested ravine which acts as a forest buffer between the port and housing. The land is now under the stewardship of the Cascade Land Conservancy for potential restoration. Portland is also featured with Smith & Bybee Wetlands which provide habitat while allowing limited passive recreation (trail and canoe launch).

The memo does point out areas of potential conflict between industrial and recreation uses, including shared vehicle access and lack of buffers.

#### *Hayden Island Plan (2009)*

The Hayden Island Plan notes that island residents are underserved by parks, and that residents desire public access to the river and beaches for viewing, swimming, and boating. Residents also would like facilities at parks for launching both motorized and non-motorized boats. The community envisions the following recreational settings: additional parks, enhanced trail system with views of the Columbia River and the Cascade Mountains, and protected and conserved open space and habitat including shallow water habitat.



The plan also stresses the importance of environmental protection of natural resources. Protecting the Columbia River habitat for the many animals, birds, fish and plants of Hayden Island and restoring and protecting river banks are goals of the plan. While this planning process focused on East Hayden Island some stakeholders stressed the ecological value of West Hayden Island both locally and regionally and the need to strike a balance between natural resource protection and some level of passive recreation.

### 1999 West Hayden Island Area Plan (Draft)

In the 1999 planning process for West Hayden Island, the recreational focus was on creating a low ecological impact in the areas with a proposed designation of open space. Passive recreational activities such as hiking, running, wildlife observation, nature study, canoeing or kayaking were deemed to be the most appropriate uses for West Hayden Island. Preliminary mapping was done showing approximately 172 acres, west of the proposed new bridge, as a conservation area and mitigation site; no public access or recreational activities were allowed in this area. An area of approximately 60 acres in size, east of the proposed new bridge, contained recreational trails, scenic viewpoints, a limited parking area, natural resource protection areas and wetland mitigation sites.

## **III. Portland Parks & Recreation Park Current Service Area - Spatial Analysis Methodology:**

This summary describes the spatial analysis methodology that was used to quantify and map park service areas across the city. The methodology integrates park access points and pedestrian transportation routes to model service areas around public parks and open spaces.

### Methodology

Park sufficiency was modeled using the concept of service areas. A service area is described as a geographic area around a site that provides a specific measure of access to that site. For most of our service area analyses Parks defined accessible as being within a distance of one-half mile from the site. Since there are many natural and cultural obstacles to movement (e.g. rivers, freeways, private property) it is not sufficient to simply draw a half-mile radius circle around every site. By using a geometric network of public streets and trails Parks model the service area around all sites using the developed public right of ways that actually connect sites to neighborhoods.

The following areas were considered in this model.

### Lotus Isle Park

Lotus Isle Park is 1.7 acres located at North Tomahawk Island Dr. The park includes a new play ground, paved paths, picnic tables and many large trees. Water access is not provided at the park.



### Additional Park Land

The *Hayden Island Plan* (2009) identifies locations for additional active park facilities. A park is identified adjacent to and under the bridge as part of the Columbia River Crossing Project. Additional parkland is shown on the Columbia River adjacent to the railroad bridge, and other small parks on the east end of the island allowing for small boat access and water views. The eastern tip of the island is shown in the plan as a habitat area.

The proposed parks under the Hayden Island Plan and the Columbia River Crossing, if implemented, would meet the local residential need for parks on the island based on the methodology used by the Parks Bureau described above. The expressed needs by residents for beach access, trail connectivity, natural resource protection or motorized and non-motorized boat launches would be addressed through a planning process once the area is purchased. It is also important to note that the final Columbia River Crossing design may have an impact on potential recreational amenities on East Hayden Island.

## IV. Complementary and Conflicting Land Uses

The natural, undeveloped character of West Hayden Island has been described as an asset to Portland through past and present planning processes. It will be important to discuss compatibility issues between some recreational uses, natural resource protection and potential industrial uses moving forward.

In June 2010, ENTRIX produced a Recreation Analysis for West Hayden Island which discussed compatibility of recreation with other uses. Appendix A provides a table which summarizes general use compatibility. Information in the section below is derived from ENTRIX's report unless otherwise noted.

ENTRIX's findings indicate that compatibility between recreation uses is generally high, with the potential exception of motorized and non-motorized boating and potential trail use conflicts between different types of trail users. Recreation activities and marine terminal activities are also found to be generally compatible, provided that there are appropriate physical barriers and buffers in place to separate the activities and prevent safety hazards. The highest level of potential conflict is between recreation and wildlife habitat. The study emphasizes the need for appropriate management of recreation activities to minimize impact to wildlife, which often entails physical barriers and areas that are set aside for wildlife only. Below is a summary of some of the key conflicts that occur and potential management actions to reduce conflicts.

### Wildlife and Recreation

The conflicts between recreation and wildlife are due to disturbance from human presence or from habitat modification. Impacts can vary depending on the species. The level of recreation use as well as the type of recreation activity can have differing effects. The higher the use level and the more intense the level of noise and motion associated with an activity, the greater the impact on wildlife.



Potential management actions: To minimize the effects of recreation on wildlife areas consider:

- concentrating recreation activity in certain areas,
- Providing physical separation and vegetative screening between recreationists and habitat areas,
- Providing habitat sanctuaries completely separated from human use,
- Creating no wake zones and buffer zones that are restricted areas, and minimizing access points.
- Using environmental interpretation to educate users about the natural areas

Parks uses a Habitat Management and Trail Plan for setting the course for habitat restoration, stewardship, and an improved trail system in the natural areas. Plans lay the foundation for habitat protection and passive recreational access and use, and are used to guide stewardship activities. The plan is also a reference document providing background and environmental assessment information.

For natural areas without plans, Park staff (natural resource planner, ecologist, site supervisor) determines management strategies based on vegetation inventory, ecological assessment and desired public use. Management strategies include habitat set aside areas, limited use for education and research and/or passive recreation.

### Marine Terminals and Recreational Activities

Recreational activities such as boating, beach activities, cycling, walking, and the use of developed facilities such as playgrounds, picnic areas, and boat ramps have been paired with Marine Terminals at the Ports of Oakland, Seattle and San Diego. At each of these Ports, there is potential for conflict between recreation and terminal activities, primarily due to safety and operational hazards.

Potential management actions to limit these hazards and ensure compatibility between uses:

- Adequate physical barriers such as fences between recreation areas and port operations.
- “No go” zones created to avoid collisions between cargo vessels and recreational boaters.
- Safe access to recreation areas, with crossing of heavily-used transportation routes minimized.



## V. West Hayden Island Recreation: Preliminary Recommendations:

These are preliminary recommendations based on past studies and available information about recreational needs at the local level. These recommendations will be re-evaluated after the preferred concept plan has been chosen.

### Overarching Recreational Themes:

- Active recreational activities, if planned, should be on the east side of Hayden Island,
- If recreational activities are planned on West Hayden Island they should be passive, and a Habitat Management and Trail Plan developed for the area,
- Local recreational needs and opportunities need to be considered, and
- Pedestrian and bicycle access should be provided from Marine Dr. to West Hayden Island if a new bridge is proposed as part of a future development proposal.

### Recommendations:

#### Boat Launches<sup>3</sup>:

Non-motorized Launches - Non-motorized boats and their boat launches are considered passive recreation. An informal survey conducted by the Office of Healthy Working Rivers during late winter 2011, received almost 1600 responses. Results of the survey indicate that demand for non-motorized boating is significantly increasing in the Portland Metro region, although needs or deficits in the Hayden Island area were not specifically addressed in the survey.

- Consider a non-motorized launch on the south shore of WHI or off Marine Drive on the Oregon Slough (east of Port of Portland's Terminal 6). Ideally there would be a launch between the Kelly Point launch on the Willamette and M. James Gleason Memorial Boat Ramp at NE 43<sup>rd</sup> Ave and Marine Drive<sup>4</sup>. The location of existing boat launches (motorized and non-motorized) along the Columbia and Willamette Rivers can be found in Appendix B.
- A small parking lot (gravel if possible), similar to Smith and Bybee parking will need to be considered.
- Non-motorized boat use of the main channel Columbia River would be challenging given the wind, currents and cargo traffic occurring on the river.

Motorized Launches - Motorized boats and launches are considered active recreation. It will be important to discuss the pros and cons of a motorized launch on WHI or along the Oregon Slough and provide options for reducing or buffering negative impacts on natural resources.

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<sup>3</sup> Generally, it is not advisable to mix non-motorized and motorized boat launches. Non-motorized boating launches can be done from a small floating dock, while motorized launches need a constructed ramp into the water. Parking requirements are different for each type of launch and would need to be factored into either development.

<sup>4</sup> Optimal distances between launches has not been determined; however, in discussion with Alder Creek Kayak and Canoe, they indicated that it takes approximately 2 hours for a fitness paddler and all day for a tourist paddler to get around Hayden Island. This organization's recommendation would be to add an access on Marine Drive across from Smith and Bybee Lakes for human powered craft, and improved access to the Columbia side of Kelly Point Park. They believe that these two improvements/additions would be well utilized by the paddling public.



- Evaluate the need and demand for a motorized launch on or near WHI when the Marine Board completes the evaluation of their 2010 triennial survey<sup>5</sup>. If the evaluation indicates there is a need for an additional motorized launch consider two locations:
  - east side of rail bridge on the Oregon Slough (no wake zones need to be considered in this area), or
  - east of the BES facility on the Columbia River

Soft Surface Waterfront Walking Trails and Beach Access - Walking trails are generally considered passive recreational facilities.

- Consider trail development within the southeastern portion of the island, east of the potential new WHI bridge location.
- Consider soft surface trails to beach access areas. A small parking facility will need to be considered for access to walking trails.
- Separate habitat management areas from trails and beach access ways.

Paved Cycling/Walking surfaces - Cycling is considered active recreation, therefore facilities to support cycling need to be part of any new road network developed on West Hayden Island, and should be included in the 300 acres for marine terminal development. The CRC design includes a local bridge between the mainland and the island which may influence the need for bike and pedestrian amenities on a potential new bridge on West Hayden Island<sup>6</sup>.

- Bike and pedestrian access needs should be reviewed for all new roads and bridges on WHI.
- Consider connecting to the 40 mile loop if a new bridge on WHI is proposed to connect to Marine Drive.
- Separate habitat management areas (defined through the concept planning process) and trails for paved walking/cycling.

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<sup>5</sup> Preliminary data published on the Oregon State Marine Board website, suggests that demand for motorized boat launches in Multnomah County and specifically the Columbia and Willamette Rivers is continuing to increase, and that current demand may exceed capacity.

<sup>6</sup> The City acknowledges that future CRC decisions could influence infrastructure and associated recreational elements that may be considered for West Hayden Island. These recommendations will be revisited after the preferred concept plan is selected and any changes to CRC recommendations will be considered.



## VI. Recreational Opportunities and Recommendations through the WHI Concept Plan

The Concept Planning process involved the creation of two plan options (A & B) each with a distinct set of recreational opportunities. Option A provided active recreation opportunities throughout the remaining 500 Acres while Option B focused on recreational opportunities to the areas east of the BPA powerlines. (See Appendix C for two original concept plans A&B and recreational components)

The recreational features of Option A included a major trail (10 ft. width, crushed rock) extending across the island on the south side of the facility and then north toward Benson Pond to access the beach on the north side. A minor trail extended west and looped around the island with a number of viewpoints and access for boat launches. The recreational facilities were estimated to affect 19 acres of habitat, of which 10.4 was forest and woodland. This concept was the most intrusive to habitat and would potentially affect numerous *At Risk* species.

Option B provided a more limited recreational opportunity, with no trail access to the west end of the island. An access trail (ADA 10 ft. crushed rock) was indicated on the north side of the terminal and extended nearly to Benson Pond. Another trail terminus was indicated on the south side of the island that could be a dual-purpose access point for a non-motorized boat launch and view point.

The Recreation elements in the two options received significant comment during October - December 2011 during the public review process. The general reaction to the proposed recreation features in both was favorable, with stronger support for Option A, among on-line survey respondents. At the same time, opinions differed about the appropriateness and scale of each of the primary recreation features. For example, arguments were made both for and against motorized boat launch facilities, public parking and restroom facilities, and public access to the west end of the island. The WHI Advisory Committee reviewed all of the public input and concluded the following:

- Option A: several concerns were raised in regards to the habitat intrusion that the trail network presented, although the terminal layout of that option was considered the better layout.
- Option B: offered a more scaled back trail system (within existing utility corridors) in comparison to Option A, but still offered beach access which was expressed as very important to the local community. In addition, the potential for a non-motorized boat launch remained a possibility along the slough.

Recreational objectives were further refined through the concept planning process with project consultant Worley Parsons. The final base concept plan (Final Base Concept in Appendix C) that has been developed aligns with City Council's parameters as well as



meeting some local and regional needs for passive recreational activities on the island. Specifically the plan shows:

- A seasonal pedestrian trail to the northern beach that extends to the western tip of the island.
- Access to the eastern end of WHI via optional locations for non-motorized boat launches on the south side of the island (These would occur only in conjunction with the optional bridge for access or if a small access road is built to the southern meadow area where a small parking area could be constructed with access to the slough for the non motorized boat launch).
- A pedestrian trail that extends along the southern edge of the facility to the west side of the terminal and to a viewpoint near Benson Pond.

This concept plan also provides a small parking area and access near the north shore near the existing bridge. The trail configuration and limited non-motorized boat access minimizes the intrusion into the interior of WHI and into the larger patch areas of forest and woodland, thereby potentially reducing impacts to wildlife species. A vegetated buffer is included on the concept plan to help reduce noise and activity of the terminal on wildlife south and west of the terminal, as well as to recreational activities in this area. Costs are estimated to be \$1.6 million for trails, benches, non-motorized boat launch and landscaping, which includes a comfort station (\$600,000) and a parking facility. This cost estimate does not capture annual, ongoing operation and maintenance costs.

These recreational facilities provide additional opportunities for residents of Hayden Island and the surrounding area to access the water and beaches, the potential to view both wildlife and the working harbor, and limit the conflicts between recreational and port uses and the preservation of a large natural resource area. All of these were goals of the Hayden Island plan (2009). In addition to these proposed facilities, the city, along with residents, will continue to explore opportunities for more active recreational facilities on East Hayden Island. Some community members are looking into the creation of a motorized boat ramp and parking lot on the north shore just east of the rail bridge. This work can potentially be carried out in concert or independently of the work on WHI.

## VII. Managing Future Recreational Amenities

The city completed a study of the options to operate and maintain the 500 acres of open space which includes both the recreation areas and the natural resources (Land Management Memo, 2012). The memo explores the options for short and long-term care including the potential for financing. The Port of Portland currently owns the majority of the lands, but land is also owned, or held through easement by the Department of State Lands (DSL), Bonneville Power Administration (BPA), Portland General Electric (PGE), and the City's Bureau of Environmental Services (BES). Potential decisions for the creation



and management of recreational opportunities could involve these agencies if these opportunities cross into land under their control.

Any specific limitations on access, trail development and protection of natural areas will be addressed in future development of a West Hayden Island master plan for the 500+ acres designated as open space. The master plan will also address both natural area and recreational area management and specific details regarding costs to build recreational amenities and timing of future activities.



# Appendix A

**ENTRIX Table:** Summary of General Use Compatibility

	Natural Area, Soft Surface Hiking Trails	Paved Bike Trails	Natural Area, Soft Surface Bike Trails	Paved Walking Trails	Boat Launch	Beach Access	Picnic Area	Sports Facilities	Non-motorized Boating	Motorized Boating	Marine Terminal	Truck Route	Railroad	Aquatic Habitat	Terrestrial Habitat
<b>Recreation &amp; Recreation</b>															
Natural Area, Soft Surface Hiking Trails															
Paved Bike Trails	B														
Natural Area, Soft Surface Bike Trails	A/B	A													
Paved Walking Trails	A	A/B	B												
Boat Launch	A/B	A	A	A											
Beach Access	A	A	A	A	A										
Picnic Area	A	A	A	A	A	A									
Sports Facilities	B	A	A	A	A	A	A								
Non-motorized Boating	A	A	A	A	A	A	A	A							
Motorized Boating	N/A	A	N/A	A	A	A	A	A	A/C						
<b>Recreation &amp; Terminal</b>															
Marine Terminal	B	B	B	B	B	B	B	B	B/C	B/C					
Truck Route	B/C	B	B	B	B	B	B	B	N/A	N/A	A				
Rail Route	B/C	B	B	B	B	B	B	B	N/A	N/A	A	A			
<b>Recreation &amp; Habitat</b>															
Aquatic Habitat	N/A	N/A	N/A	N/A	A/C	A/C	N/A	N/A	A	A/C	A/C	N/A	N/A		
Terrestrial Wildlife Habitat	A/B	B/C	B/C	B/C	A/B	A/B	B/C	B/C	A/B	B/C	B/C	B/C	B/C	A	

Key:

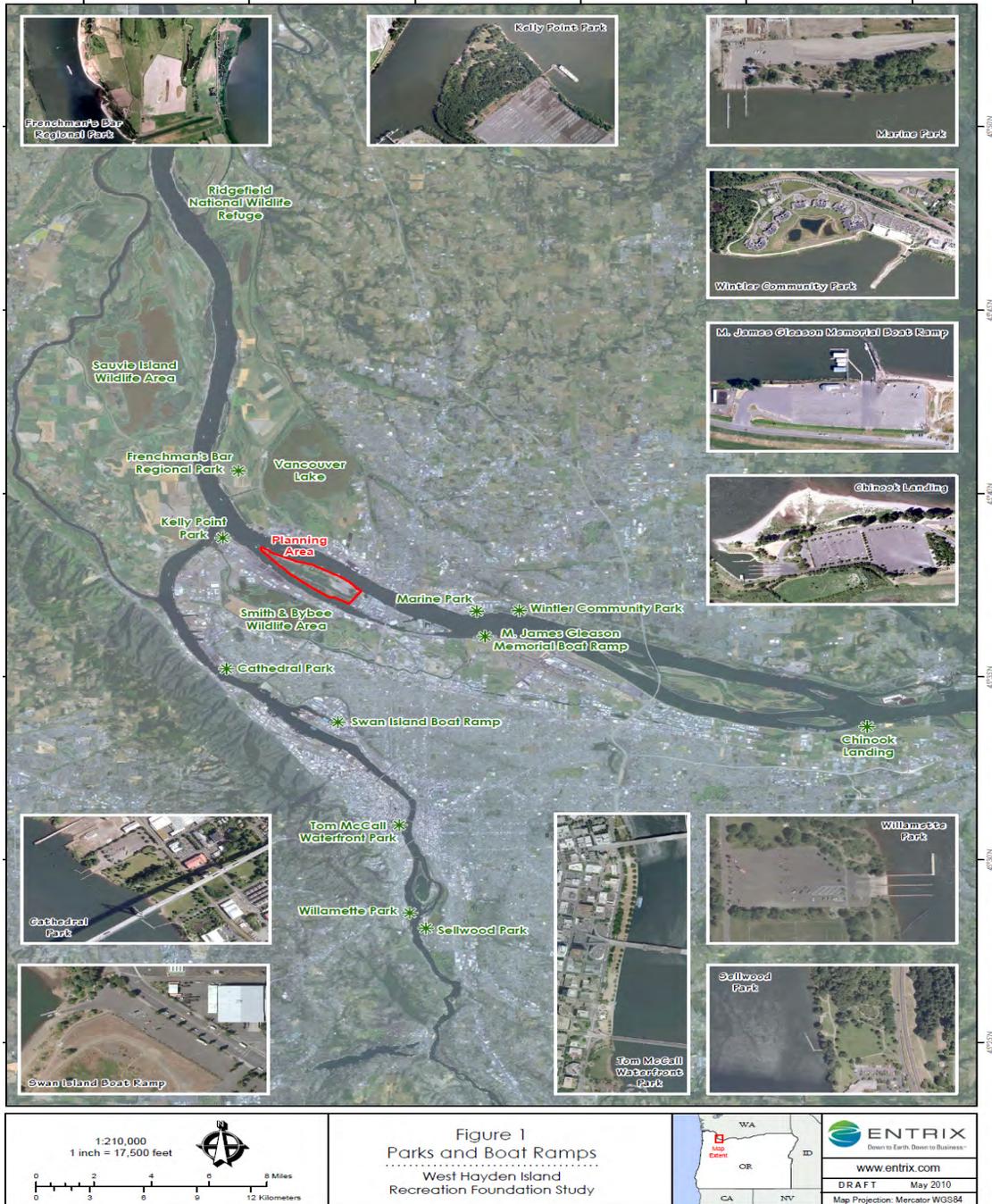
**A**djacent, Compatible Uses (Either co-extensive, or boundaries defined but no physical barrier required)

**B**arrier Desirable (Physical barrier required with fence and/or vegetation to minimize negative effects on use)

**C**onflict Likely (Negative effects on one of the uses very likely unless there is adequate physical separation)

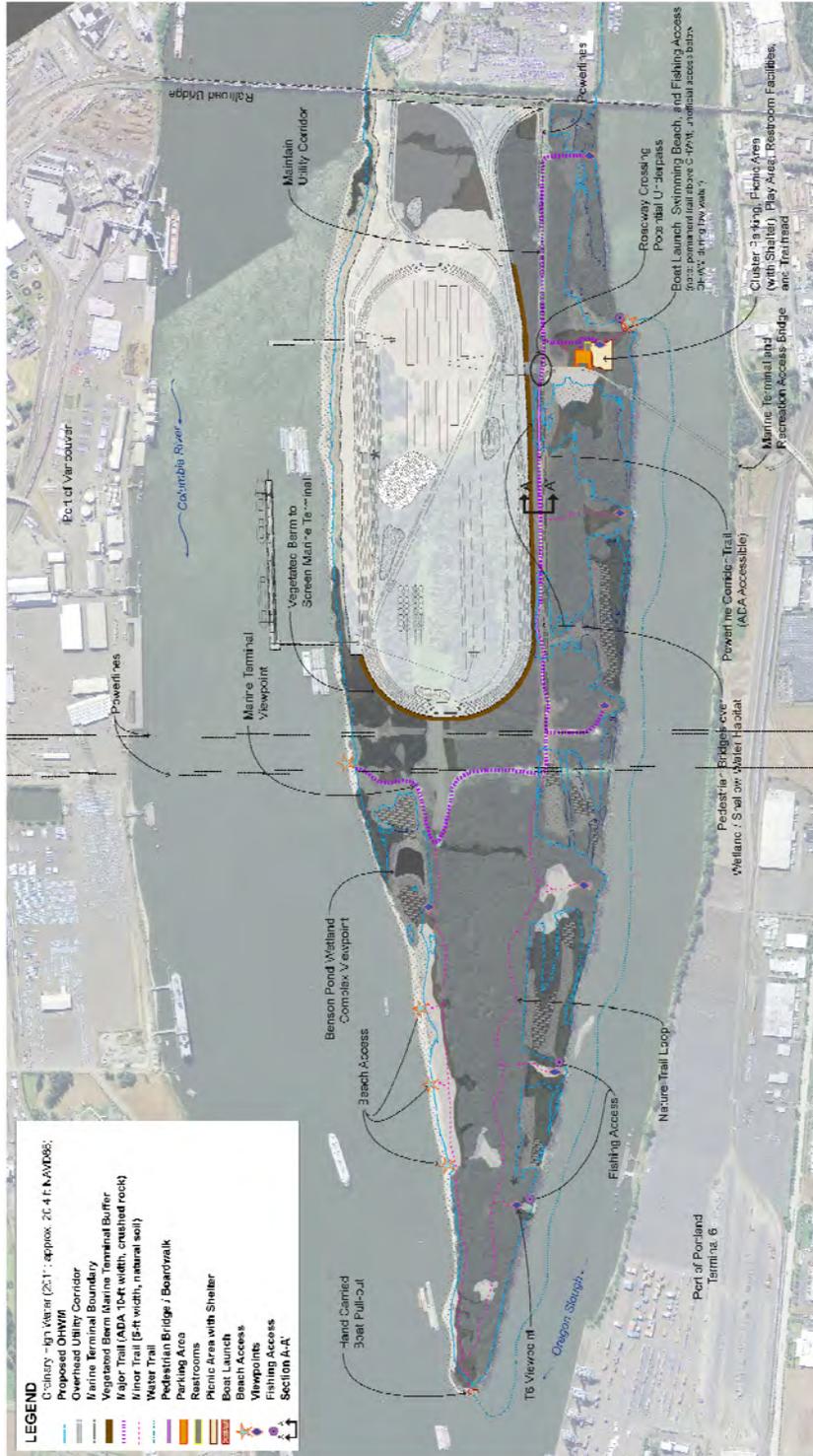


# Appendix B: ENTRIX Boat Launches Map

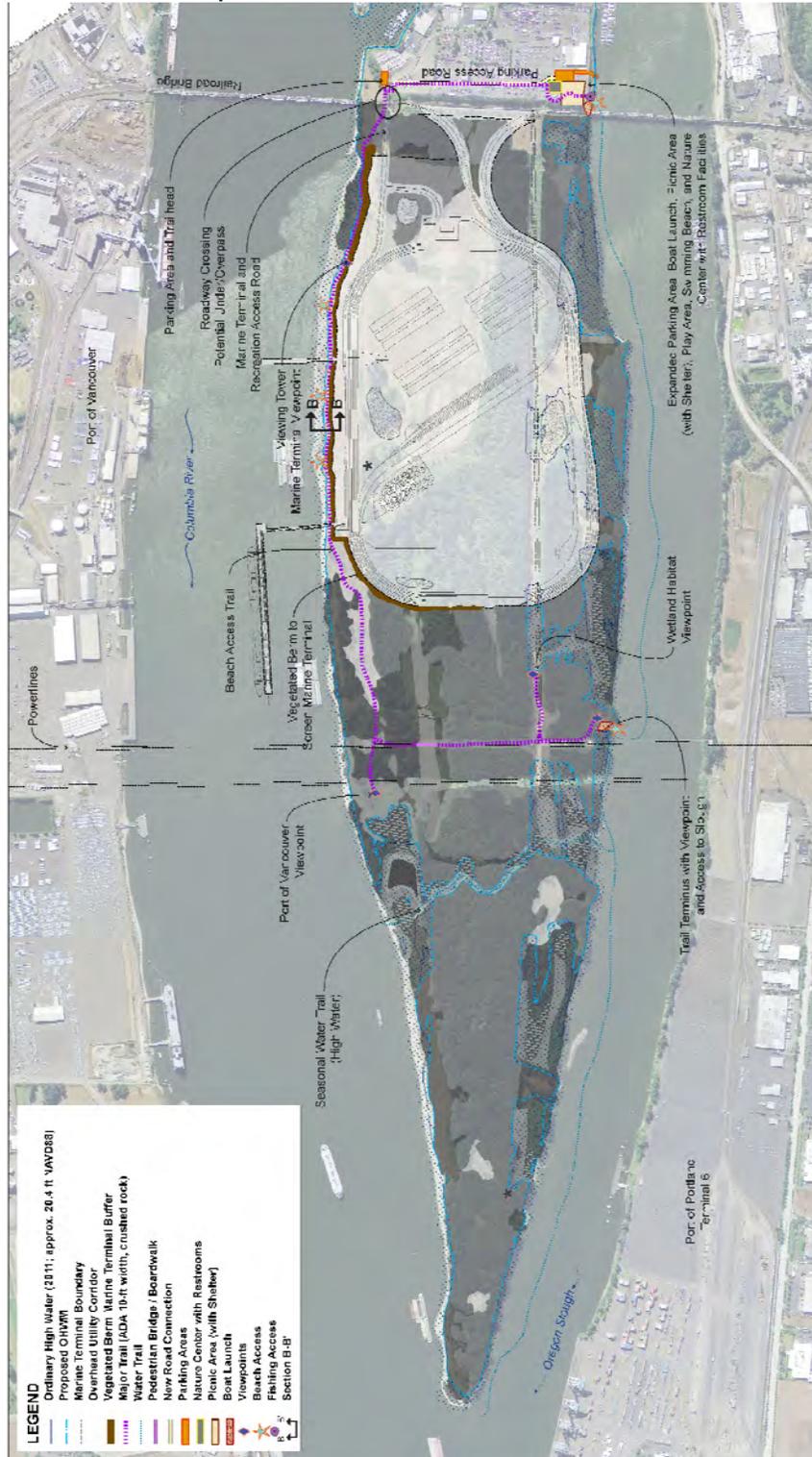


# Appendix C: Concept Planning Maps by Worley Parsons

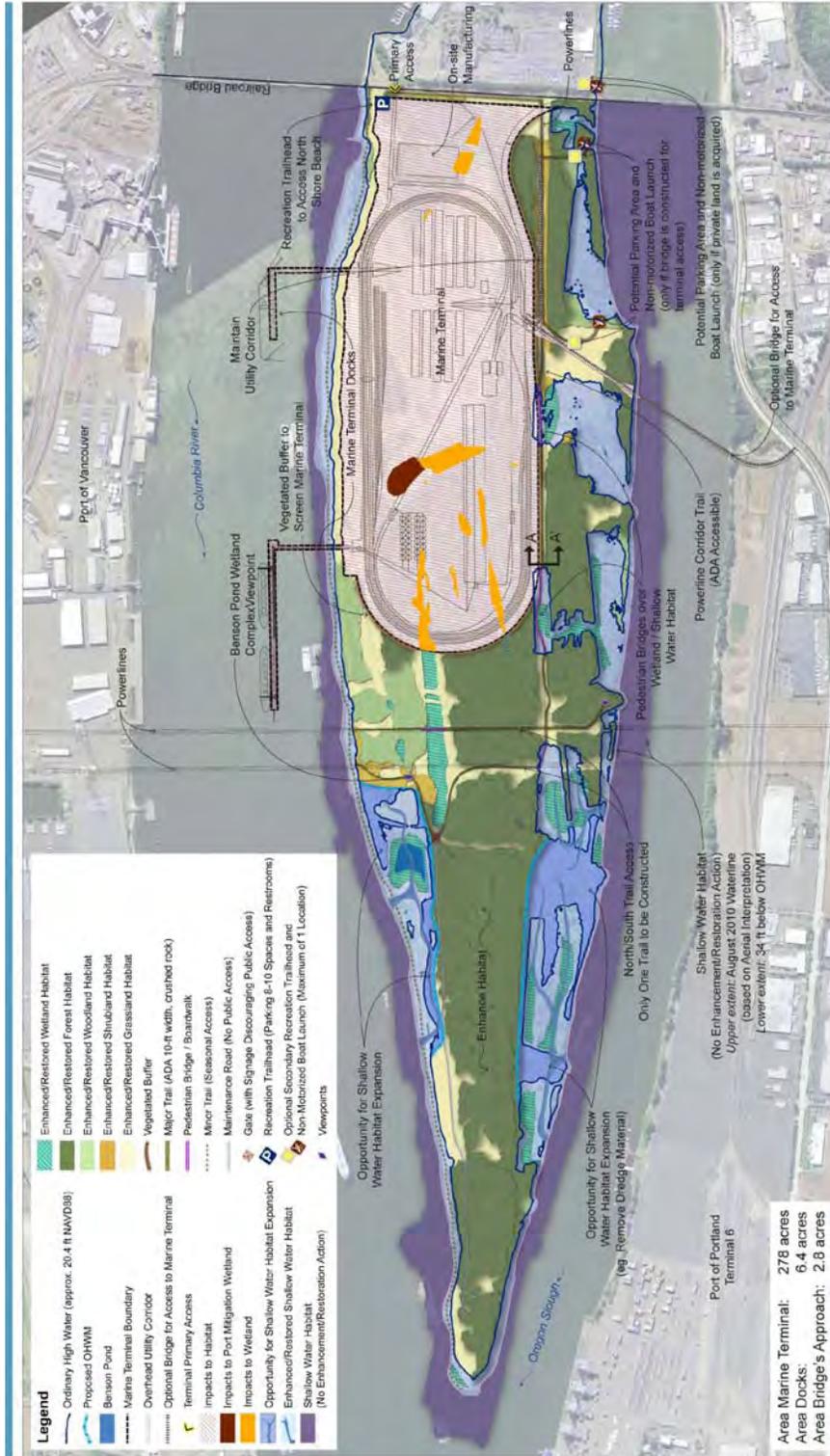
## Option A Recreation Map



# Option B Recreation Map



# Final Base Concept Plan by Worley Parsons



Final Base Concept Plan



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Source: Habitat and wetland locations provided by the City of Portland's Natural Resource Inventory (2011)