



**PORTLAND PARKS & RECREATION**

Healthy Parks, Healthy Portland



## Whitaker Ponds Master Plan

May 2006

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## Purpose of the Master Plan

The Master Plan for Whitaker Ponds Nature Park updates the 1995 Master Plan and addresses issues that are unresolved or have emerged over the last ten years. The plan outlines a set of policies and a development concept which are intended to guide improvements at the site over the next 10 years. It also outlines a strategy to fund these improvements.

In general, the master plan focuses on four major issues:

1. Development of an environmental education center;
2. Restoration of the park's vegetation to be consistent with Portland Parks and Recreation's (PP&R) Ecosystem Management Strategy;
3. Improved circulation and access within the park and from adjacent neighborhoods; and
4. Restoration of several areas within the park.

An update of the 1995 plan is needed because over the last decade many of that plan's recommendations have been carried out. One of the key achievements is that the park is now actively used for environmental education, which was a fundamental idea of the original plan. Other specific accomplishments include:

- removal of the junked cars and cleanup of contaminated areas;
- construction of the outdoor shelter and floating dock;
- improvement of the Talbert house as office space and an indoor classroom;
- replanting of native vegetation in many areas around the site;
- improved access through a fence and gate along NE 47th Ave.;
- acquisition of the Bunn property;
- donation of the land for the Pollution Reduction Facility (PRF) and pond;
- construction of the PRF, resulting in a subsequent improvement in water quality in the ponds; and
- construction of the informal canoe launch.

This master plan focuses on broad policies and a general concept that provides an outline of recommended strategies and activities. Detailed plans will be prepared as funding allows and as more information is assembled. What is critical is that these future activities be consistent and support the values and policies in this plan.

### Location and Context

The Whitaker Ponds site comprises approximately 25 acres in the Cully Neighborhood in northeast Portland (see photo at right). The site includes part of a larger parcel (20.6 acres) currently owned by Portland Public Schools (PPS) which also includes Whitaker/Lakeside School. Approximately 11 acres of this PPS property is generally considered to be part of the Whitaker Ponds site, as defined in an easement granted to PP&R by PPS (see map on page 10).

The site is one of very few parks north of Columbia Boulevard and provides a rare opportunity for visitors to enjoy two freshwater ponds. The closest park is Fernhill Park, south of NE Columbia Boulevard and about .6 mile to the southeast. It is the largest park site in the immediate area and the only park within a one-mile radius of Whitaker Ponds.

The site is bordered on the west by NE 47th Avenue and on the north by Whitaker Slough and single-family residences. On the south, the site abuts the Whitaker/Lakeside School site (now closed), the Halton Company parcel, and a vacant lot that is part of an undeveloped parcel owned by a private party, Metro Metals, and other landowners.

The primary access into the site is from the west, from NE 47th Avenue. On the south, access is from a road off of NE Columbia Boulevard. This road winds its way through the school and the baseball fields, terminating at the Lakeside Little League field next to Whitaker Slough and ponds.

A black cottonwood forest stretches eastward from NE 47 Avenue between the two ponds and the Whitaker Slough. While the westernmost pond, adjacent to the interpretive center, is more accessible and scenic, it is the eastern pond that typically produces more wildlife sightings. Sightings of Great Blue Heron, Osprey, Brown-headed cowbirds, Willow flycatchers, Bewick's wrens, and numerous other birds are all common around the ponds. In addition, coyotes, deer, and otter also are occasionally seen at the ponds.



AERIAL PHOTO OF THE WHITAKER PONDS AREA



### A Contemporary History of the Site

Over the last 15 years, Whitaker Ponds has come to represent an example of what collaborative partnerships can achieve. Up to the early 1990s, Whitaker Ponds was what can best be described as a “jewel in the rough”. Despite the beauty and pastoral nature of the two ponds, they were surrounded partly by a junk yard full of scrap metal, concrete, old cars, and 2,000 tires.

Former Metro Councilor Ed Washington first brought the site to the attention of Metro as part of its nascent Metropolitan Greenspaces program. His efforts resulted in the ponds’ acquisition with the passage of a \$135 million Metro bond measure in May, 1995 that enabled Metro to purchase several of the parcels that now comprise the park. The Bureau of Environmental Services (BES) also purchased two tax lots to increase public ownership around the ponds.

The first master plan was prepared in 1995 by Metro and over the next 10 years, many of the plan’s recommendations were implemented. Junk was removed and the site restoration began with the installation of thousands of native plants. In the mid-90s, the Talbert house was converted into an environmental center and offices for the Columbia Slough Watershed Council – enabling the site to be used for environmental programs. The outdoor classroom structure and floating dock were constructed in the late 90s, funded by BES.

*The north bank of the west pond was cluttered with junked cars, scrap metal, and tires when Metro acquired the property.*





Around the same time, the pond's management committee (consisting of representatives from various agencies and organizations) was established to coordinate management of the site.

Over the last ten years, much of the site has been replanted and restored with native vegetation. Restoration has been concentrated in three areas – north of the west pond, north of the east pond, and along the edges of the west pond. These projects have been conducted by a variety of groups and schools and continue under the auspices of the Whitaker Ponds Management Committee, which provides oversight of activities and restoration.

The park was expanded significantly with acquisition of two key parcels in 1997 and 2004. A two-acre parcel that included land along the southern edge of the west pond, as well as portions of the pond, was donated by Ned Hayes in 1997. Then in 2004, Ron and Florence Bunn sold their property along NE 47th Avenue to the City of Portland, which greatly increased the park's frontage along the street.



*About 20 years later, the same area has been cleaned up and restored with native vegetation.*

### The Planning Process

The master plan process began in March 2005 with the formation of a nine-person Project Steering Committee (PSC). The PSC began its meetings in April and met six times over the next five months, ending in October 2005. The committee's composition reflected the project's stakeholders, with representatives from the site's neighborhood groups, interested citizens, and city staff. The list of PSC members is on the inside cover.

In May and September 2005, two open houses were held to provide information and updates to the general public. In addition to the PSC meetings, city staff also briefed the Cully Association of Neighbors and the Columbia Slough Watershed Council in December 2004 and in August 2005.



*Steering committee members and open house visitors confer over a map of the ponds at an open house for the project.*

# Existing Uses

*Although the site has a relatively modest level of improvements, Whitaker Ponds Nature Park includes a variety of uses, programs, and activities that take place throughout the year. Environmental education programs are most intense from September through May while the baseball league draws players and visitors during the spring and summer. Ownership of the park's properties is divided among three agencies (BES, Portland Parks, and Metro), which requires a high level of coordination and management. Moreover, the park has several structures, including rental houses, that also need constant attention for maintenance and landlord-tenant issues. The following section describes these activities.*

## An Overview of Existing Uses

The Whitaker Ponds site now consists of four general areas – (1) an environmental education site, (2) a habitat area, (3) baseball fields, and (4) property with an undetermined use, which includes the newly acquired Bunn property.

### Environmental Education

The site is now used primarily for a variety of environmental education programs sponsored by the Bureau of Environmental Services, the Columbia Slough Watershed Council (CSWC), and Portland Parks and Recreation. As a result, many of the site's improvements have been built to support this mission. The main structure in the park is a small white house (formerly known as the Talbert house) which serves as an indoor education classroom and also includes office space for CSWC staff. A floating dock and covered shelter also provide space for educational activities.

### Habitat Area

About one-third of the site's upland area comprises wildlife habitat, much of which has experienced extensive revegetation over the last decade. The primary habitat area is around the east pond and along the edges of both ponds, particularly between the slough and the ponds.



*Environmental education programs are now an essential part of the park's activities.*

### Baseball Fields

Two baseball fields are located within the general boundaries of the park and have a long history (50 years) at the site. Both are used for organized games sponsored by Lakeside Little League, whose season runs from April to August. More information on the league and its operations are on pages 17.

### Bunn Property

The recently acquired Bunn property includes two former residences. One of the houses has been razed and will be used for a small BES pump station and stormwater swale. A larger structure is now vacant. North of the Bunn house is a small, red residence that is owned by the city and rented as a residence.

**Summary of Ownership by Tax Lot**

<b>Tax Lot</b>	<b>Owner</b>	<b>Size (ac)</b>	<b>Notes</b>
R506001080	Metro	0.64	Environmental center on this lot
R506001020	Metro	0.64	
R506000960	Metro	0.56	Rental house on this lot
R506001140	Metro & City of Portland	4.86	Includes west half of western pond
R942183540	Metro	0.09	
R942183960	Metro & City of Portland	2.08	
R506000920	City of Portland	0.34	Bunn Property
R506000940	City of Portland	0.14	Bunn Property
R506000880	City of Portland	0.47	Bunn Property
R942181220	Portland Public Schools	20.61	Includes Lakeside/Whitaker School and fields
Easement	Portland Public Schools	---	Includes north baseball field
<b>Total</b>		<b>30.43</b>	



## Ownership & Management of the Ponds

Whitaker Ponds Nature Park is generally considered to include all of the properties owned by the City of Portland and Metro, and a portion of land owned by Portland Public Schools (mainly the northern half of its tax lot). As shown on the previous page, .95 acre is owned by the City of Portland, 1.93 acres are owned by Metro, 2.08 acres are owned jointly by Metro and the City of Portland, and 20.6 acres are owned by Portland Public Schools (PPS).

The boundaries of the park are generally fixed and explicit except for the parcel in the middle of the two ponds. (see map on next page). This tax lot has not been subdivided and there is no clear boundary that marks the southern edge of Whitaker Ponds Nature Park. For purposes of the master plan, the park includes the north ball field.

### EASEMENT FOR BASEBALL FIELDS

In April 2002, Portland Public Schools (PPS) granted a temporary and exclusive easement to Portland Parks and Recreation for the area, approximately 11 acres, occupied by the two formal baseball fields (the north field and Falbo Field) operated by Lakeside Little League. It also included a temporary and exclusive easement for access to the fields from NE Columbia Boulevard. The access easement is approximately 10' in width and generally follows the current access road. The easement's expiration date is established as the earlier of: (a) five years from the date the easement is recorded (3 May 2002), or (b) 30 June 2007.

One of the key elements in the easement concerns the lot line adjustment to create a legal lot per the city's subdivision regulations. Under terms of the easement, PP&R must (1) use "its best efforts to obtain access to the Easement Property" from adjacent properties and (2) must "obtain a final decision regarding the lot line adjustment, subdivision, or partition of the Easement Property."

Under the terms in the easement, if the school district decides to sell its property (which includes the baseball field's site), PP&R will have one year to create a legal lot or the easement will be terminated. PP&R will have an option to purchase the Easement Property for \$1.00 if: (a) a legal lot is created, and (b) the lot "has access to a public street that does not entail crossing property owned" by the school district.



*The north baseball field.*

## Existing Uses

*The easement area for Lakeside Little League.*



The easement also stipulates that Portland Parks and Recreation “shall be solely responsible for maintaining and repairing the Easement Property in a safe, clean, and orderly condition.” Furthermore, “the cost of all maintenance and repairs shall be borne exclusively by Parks.” Over the last few years, plantings in the environmental zone have been removed when the baseball field’s outfield fence was moved out. BES and PP&R are now working with Lakeside Little League to correct these violations.

### MANAGEMENT

Because several agencies own, manage, or are involved at Whitaker Ponds Nature Park, a multi-agency team is responsible for overall management and operations. This group generally includes about ten people and meets monthly to coordinate activities and events. Current members represent Portland Parks and Recreation, Bureau of Environmental Services, and the Columbia Slough Watershed Council.

## Access, Parking, and Trails

### ACCESS

Access to the site is generally difficult, especially for pedestrians, because of the traffic volumes, speed, and width of NE Columbia Boulevard, which separates the park from adjacent residential areas. Also, the lack of sidewalks along NE 47th Avenue requires that pedestrians use the unimproved shoulder.

Many of the park's visitors are students who come by Tri-Met bus. Most of these students enter the site after walking along NE 47th Avenue from NE Columbia Boulevard. Although this part of the route is relatively short (1,100' or one-fifth of a mile), conditions are less than ideal because of the heavy truck traffic, high speeds, and lack of sidewalks on NE 47th Avenue.



*NE 47th Ave. does not have any sidewalks on either side.*

Vehicular access to and parking in the park is from two points along NE 47th Avenue and from a road from NE Columbia Blvd. The Columbia Blvd. entry is open during the baseball season and is locked at other times. The western entry along NE 47th Avenue is large enough to accommodate school buses and also includes a gate for pedestrian access. The pedestrian gate is always open while the gate for vehicles is closed in the afternoons and on weekends, unless there are special events. The other entry is an unimproved road to the canoe access launch. Use of this entry is limited to special events and activities.

### PARKING

Parking is limited to on-street parking along NE 47th Avenue, a few spaces next to the environmental center, and two spaces next to one of the park entry off of NE 47th Avenue. A paved parking space for visitors who are disabled is provided next to the environmental center.

### TRAILS

The site's only paved trail connects the environmental center with the floating educational platform and the covered shelter. The trail is designed to meet ADA guidelines and is also linked to a paved parking space next to the office. Other trails in the park are bark chip and dirt paths and tend to be very informal. As a result, access is limited to the western half of the park and the ball field. There is no formal access to the area north of the east pond. A soft surface trail connects the center to the baseball fields in the middle of the site. The trail is informal and varies in width and surface material.

## Existing Uses

An informal bark chip trail borders the western pond along its southern edge. A large portion of this trail section is on private property outside the legal boundaries of the park. There is currently no easement or agreement for use of the property for the trail.



*The former residence now used as the offices for the Columbia Slough Watershed Council.*



*The private residence now used as a rental.*



*The Bunn House*

## Structures

### CSWC OFFICE & ENVIRONMENTAL EDUCATION CLASSROOM

The structure (formerly known as the Talbert House) is now used as office space for three Columbia Slough Watershed Council staff. It is also used for environmental education programs and for small meetings.

A red house located in the southwest corner of the park, along NE 47th Avenue, is rented as a private residence. Portland Parks and Recreation is responsible for renting and managing the property, which generates \$770/month. The garage on the Bunn property is rented for \$200/month to the CSWC. Revenues from these rentals are directed to a separate trust account which is used for maintenance and management projects at the site.

### BUNN PROPERTY AND HOUSES

One of the more recent and significant acquisitions was the purchase of a .95 acre parcel formerly owned by Ronald and Florence Bunn, who lived on the property for many years. The property was acquired in 2004 by the City of Portland for a new pump station. Part of the property is needed for the pump station, with the remainder dedicated for park purposes. The acquisition includes two residences and a three-car garage.

### EDUCATIONAL FACILITIES

The site includes several facilities that were built specifically for education activities. A floating dock, built in 2000, provides opportunities for students to take water and bug samples easily and safely. The dock measures approximately 625 SF, is accessed from a boardwalk, and is often used in tandem with a covered outdoor shelter, which was built at the same time.

The shelter was designed to specifically work as an outdoor classroom. It can accommodate a class of about 30 students and includes lockable storage. A paved path connects the shelter with the house and the floating platform.



### CANOE LAUNCH

An informal canoe ramp was built around 2000 and now provides the primary access point for visitors who canoe and kayak on Whitaker Slough. Access to the launch is from an informal trail, which is not accessible for visitors who are disabled.

### BES PUMP STATION

BES will be constructing a small pump station north of the rental house and east of NE 47th Avenue. The pump station will be hooked into the main sewer system and will lift sewage south to a gravity sewer system near NE 47th Avenue and Portland Highway (Lombard). A system of pump stations in the area will be built to provide sanitary sewer service to all developed properties within the project area boundaries. Work first started on the project in April 2004 and will be completed in 2007.

### POLLUTION REDUCTION FACILITY (PRF)

In 2000, BES completed a pollution reduction facility on about a one-acre site just south of the west pond. The PRF consists of an underground structure that collects and treats stormwater from NE Columbia Boulevard and channels it into a series of above-ground ponds. The underground structure allows sediments from the stormwater to settle out and accumulate. Stormwater is then filtered through several small settling basins and eventually infiltrates into the western pond.



*The canoe launch on Whitaker Slough*

## Environmental Education Programs

The Whitaker Ponds Environmental Learning Center is now used by a variety of classes and groups from throughout the city. Despite the rather modest facilities, the site is extensively used and is one of the most popular destinations for environmental education in the city. Over the last ten years, the Whitaker Ponds Environmental Learning Center has averaged approximately 2,500-3,000 contacts/year, most of whom live in the Columbia Slough watershed. Visitors also drop in for unscheduled visits – in 2004, approximately 225 people were counted in this category.



*The existing classroom in the former Talbert house.*

Educational programs are now provided by three organizations – the City of Portland Bureau of Environmental Services (BES), the Columbia Slough Watershed Council (CSWC), and Portland Parks and Recreation (PP&R). Most of the education programs at Whitaker Ponds are provided by BES and the CSWC. The educators for the two programs work together to coordinate their activities and to ensure that all of the schools in the watershed have access to the ponds. Through this coordinated approach, the center's programs enable students to also visit other field sites in the slough watershed, i.e. Johnson Lake, Smith & Bybee Lakes, and Salish Ponds.

- BES's educational activities are part of the Clean Rivers Education Program, which offers free classroom and field-based water

### Summary of Environmental Education Programs

Sponsor	Program	Target Audience	Annual Attendance*	No. of Staff
Bureau of Environmental Services	Clean Rivers Education Program	K-12 students within the city		1
Columbia Slough Watershed Council	Slough School	K-12 students within Columbia Slough watershed	4,500**	1.5
Portland Parks and Recreation***	Spring Break programs Summer programs	5-12 years old		1**

\* for most recent year

\*\* includes classroom and field trip contacts combined; figure is for last three years

\*\*\* Educator is responsible for many other programs and activities in the city

programs for K-12th grade students within the city. Education programs for the Columbia Slough watershed are provided by one educator, who focuses on stormwater issues, human impacts on the watershed, and what individuals can do to protect rivers, streams, and sloughs. Clean Rivers Education programs and community service projects are offered during both the academic year and summer months.

- The Columbia Slough Watershed Council's educational programs are broader in scope than and complement those of BES by focusing on the area's natural resources. The council's primary vehicle for delivering youth programs is Slough School, which was initiated in August 2002.

Started in August of 2002, Slough School began with a two-year grant from the Oregon Watershed Enhancement Board (OWEB). Slough School partners include BES, PP&R, PSU–Center for Science Education, Portland Public Schools/21st Century SUN Program, and City of Gresham Environmental Services.

The program grew out of an unmet need to expand the reach of what BES and PP&R could serve in the watershed. It was created to provide hands-on programs for students to learn about the history and ecology of the watershed and its organisms as well as human impacts on the area. Slough School programs are offered to students in grades K-12 who attend schools or are part of communities within the Columbia Slough Watershed. This includes schools and communities in the St. Johns area, North Portland, and parts of Northeast Portland, Parkrose, Gresham and Fairview. Slough School programs include classroom activities, field studies, extended-day programs, watershed and community action projects, summer camps and service projects at sites along the Slough.



*Students collecting water samples on the floating dock.*

## Existing Uses

Students in grades K-12 who attend schools or are part of communities within the Columbia Slough Watershed are the principal recipients of Slough School programming. During the 2002-03 and the 2003-04 school years, the Slough School program worked with over 8,800 student contacts from 41 different area schools for four school districts. Slough School has also worked with over 1,288 adult contacts during that time period and had the help of over 908 volunteer hours. Many Slough School students visit Whitaker Ponds Environmental Learning Center for field trip experiences. The value of these programs was recognized in 2004 with the Governor's Award...

Slough School has received another two-year grant from OWEB for the 2004-05 and 2005-06 school years and has some additional funding from Spirit Mountain Community Fund and the City of Gresham Environmental Services.

- Portland Parks and Recreation's programs occur at specific times, such as during spring break or the summer when a one-week education camps are held. These sessions are generally for children 5-12 years old and are limited to 14 students. In the summer, the camps are held from 9:00 AM – 3:00 PM and cost \$130.

In addition to these programs, Whitaker Ponds is the site for several events such as:

- "Canoe the Slough" – an annual program in which students canoe the waters of the Columbia Slough to see their watershed from a new perspective. In 2004, 219 students participated in the school paddles. In addition, over 35 adults participated in an evening community paddle, which was a collaboration between BES and CSWC.
- "Explorando el Columbia Slough" – an annual bilingual event of the Columbia Slough Watershed Council which attracted 438 participants (plus 57 volunteers, 15 presenters and five translators) in 2004.
- "Eyes on the Slough" – a volunteer monitoring program.
- other CSWC community educational events such as Soup on the Slough, Canoe the Slough paddles, etc. In 2004, these events drew over 140 people.



## Lakeside Little League

Lakeside Little League has used the five fields (two within the park area of the ponds and three behind the school) for many years. The league was first organized in 1958 and has been operating continuously for almost 50 years. Falbo Field (see photo) is the centerpiece of the field complex at Whitaker Ponds and has been used since the league's inception. The fields next to the school have been used since 1958 and the field closest to the slough was built in 1968.

In 2003, 225 players were registered, increasing to 250 in 2004. In 2004, the league included 14 teams and offered organized softball and baseball for boys and girls from the t-ball level (6-8 year old) to "big league" level (16-18 years old). The fields are used Monday through Saturday for practice or games. League play begins in early April and ends in mid-June, with tournaments to determine championships for the different divisions in July.



*The north field which is directly south of Whitaker Slough.*

## Existing Uses

The fields are generally used every day of the week, from 3:00 PM to 8:00 PM on weekdays and from 8:00 AM to 6:00 PM on weekends, except for the northern field (between the ponds), which is used from 5:00 PM to 8:00 PM on weekdays and from 9:00 AM to 7:00 PM on weekends. In addition to this use, the Southeast Babe Ruth baseball program uses the north baseball field for their fall season, from August to the end of October.

In addition to the fields at the Whitaker Ponds and Whitaker School site, the league coordinates their schedule with other leagues in north and northeast Portland to use 14 other fields at area schools and parks. The league's boundaries, which are established through Little League District 1 guidelines, extend from NE 42nd Avenue east to NE 92nd Avenue and from NE Sandy Boulevard north to the Columbia River. According to PP&R's Sports Office, the fields are at capacity. Other users have asked about using the fields but have not been successful, due to the field's intense scheduling.

Portland Public Schools maintains the fields behind the schools while Lakeside Little League maintains the two north fields. Over the last several years, PP&R has assisted Lakeside with field preparation and maintenance through the season, in addition to providing materials for minor improvement projects.

## Natural Conditions

### TOPOGRAPHY

The Whitaker Ponds site occupies a flat area directly adjacent to Whitaker Slough, where a slight berm separates the waterway from the rest of the park. Most of the site is located within the 16 - 20' elevation with higher elevations along the berm at 24' above sea level. The park includes two large freshwater ponds and a series of small stormwater detention ponds in the southwest corner of the site.

### SOILS

Soils on the site are classified by the USDA Soil Conservation Service as Sauvie-Rafton-Urban land complex (47A). It is typically found on the broad flood plains of the Columbia River and are generally long and narrow. This type is characterized by “very deep, poorly drained Sauvie soils and very poorly drained Rafton soils.” Other characteristics include slow-moderate permeability, a rooting depth of 60”, slow runoff, and water table within 12” of the surface from December to July.

### HYDROLOGY

According to the 1995 master plan, the two ponds at the site account for about 11 acres. Although physically separated by a gravel road, the ponds are connected hydrologically with an 18” metal culvert. Water flows from the east pond to the west pond, then eventually into Whitaker Slough through a 36” culvert at the west pond’s northwest corner. A stream channel that once flowed into the southern edge of the east pond was filled illegally about 1996 and no longer exists.

A 1994 study by SRI/Shapiro identified the primary source for the ponds as groundwater, which flows into the ponds year-round from the south and east. Several springs are located along the southern banks of both ponds and at the eastern end of the east pond. Stormwater runoff, precipitation, and the Columbia Slough also contribute water to the ponds. The constant supply of groundwater maintains the water level in the west pond, which is also directly influenced by its connection to Whitaker Slough.

Both ponds are relatively shallow, due primarily to a layer of sediment that is approximately 4’ thick. Water levels fluctuate seasonally and with the level of the Columbia Slough. Observations indicate that water depths in the west pond fluctuate between two and four feet. The east pond is shallower than the west pond, with depths sometimes



*The gravel road that separates the east and west pond. The culvert is under the road.*

## Natural Conditions

measured at one foot. Water depths in the east pond do not drop below one foot because the culvert elevation connecting the two ponds does not allow for water movement from one pond to the next.

The CSWC is now working with Concordia University on an informal sediment study of the ponds. In September 2005, the study team's sampling of 15 sites revealed that depths in the ponds vary between 1.5 to 3.5 feet.

### WATER QUALITY

The Columbia Slough and Whitaker Ponds receive both groundwater (from springs in the water bodies) and stormwater. The ponds and the adjacent Whitaker Slough are relatively shallow, and flows are limited by topography because the elevation changes less than one inch per mile (from east to west) in this historic floodplain. The Whitaker site is located in the area protected from flooding by levees. Water flow in the slough and the ponds depends on drainage district pumping and the operation of levee floodgates, constructed in 1918.

In general, water quality in the Slough and Whitaker Ponds is improving. The PRF captures about 90% of the runoff to the west pond and intercepts significant quantities of sediment, oils and roadway pollutants that previously were deposited directly into the pond. The east pond does not have a stormwater treatment system, but it also does not receive significant stormwater from adjacent areas, as the west pond does.

The presence of algae is a significant factor in how people perceive the quality of the Slough and Ponds. The warm nutrient rich water provides ideal conditions for many types of algae and abundant algal growth. Neighbors and others who use the Slough and Ponds notice the thick algal growth and react to the odors as the algae dies. Additionally, Slough and Pond users are advised to wash their hands after water contact as bacteria from pet and wildlife feces can be present in the water.

Urban pollutants are found in the Slough and Whitaker Ponds sediments. Studies have shown that the Slough sediments do not pose an immediate human health risk, however there may be possible chron-



ic impacts to wildlife and aquatic life. However, only students from Concordia University have done testing.

## VEGETATION

The results of a vegetation assessment conducted by PP&R Natural Resources staff described nine categories, which are described on the next page (the full report is in the Appendix). Some of the main findings of the assessment are: (a) most of the site is divided between deciduous forest (4.46 ac.) and deciduous woodland (5.17 ac.) vegetation, and (b) the presence of invasive species is the primary management concern for these vegetation units, with almost all exhibiting either a moderate or high level.

**Summary of Vegetation Assessment**

Unit No.	Size (ac)	NVCS Subclass	Ecological Health	Management Concerns
001	3.20	Deciduous Forest	Fair	Moderate level of invasive species
002	1.53	Deciduous Woodland	Poor	Moderate level of invasive species
003	2.13	Perennial Graminoid* Vegetation	Severely degraded	Heavy level of invasive species, trampling, soil compaction
004	1.44	Deciduous Woodland	Poor	Heavy level of invasive species
005	.49	Perennial Graminoid* Vegetation	Fair	
006	0.93	Deciduous Woodland	Fair	Moderate level of invasive species
007	1.27	Deciduous Woodland	Fair	Moderate level of invasive species
008	1.26	Deciduous Forest	Poor	Moderate level of invasive species

\* Grasses and grasslike plants, such as sedges.

## Population, Planning, and Land Use Conditions

Population trends and land use regulations describe another aspect of changes that can be expected in the area. The neighborhood's population demographics are changing as they are throughout the city. This impact is already evident in the programs that are being offered at the park. Industrial uses will likely continue to be the predominant use, making the ponds a more important reminder of what the area once was.

### POPULATION CHARACTERISTICS

According to population statistics, the Cully Neighborhood appears to have changed mainly in the ethnic composition and age group profile since 1990. While total population and other aspects have experienced only modest changes in this period, the percentage of Hispanic residents has quadrupled from 4% of total population to 17% of total population. The other significant changes are the decrease of white residents (from 81% to 52%) and a slight decrease in the percent of residents 65 and over, which dropped from 14% to 9% of total population. Overall, the percent of non-white residents represents about

Total Population	1990*	2000**
	11,272	12,959
<b>Population by Race (Percent of Total)</b>		
White	81	52
Black	9	9
Asian/Pacific Islander	7	7
Hispanic	4	17
Other	2	13
<b>Tenure of Housing Units</b>		
Homeowner	58%	61%
Renter	35%	39%
<b>Ave. Household Size</b>	2.56	2.77
<b>Population by Age Group</b>		
Under 5	8	8
5-17	18	19
18-64	59	64
Over 65	14	9

Source: \* City of Portland Office of Neighborhood Association, Neighborhood Social Profiles (1990 Census)

\*\* Portland Maps Detail Report/Profile of the Cully Neighborhood (Census 2000)

48% of total population in the neighborhood, compared to 20% for the City of Portland.

The percent of homeowners increased slightly from 58% to 61% as did average household size, from 2.56 to 2.77 persons/unit. Between 1990 and 2000, the age distribution ratio remained generally similar except for a decrease in the over 65 age group, which dropped from 14% to 9% of total population.

### PORTLAND PARKS AND RECREATION 2020 PLAN

Whitaker Ponds Nature Park is referenced in two PP&R planning Portland Parks and Recreation 2020 Plan. The 2020 Vision Plan notes that in the northeast sub-area, the Cully-Parkrose area “has only one small, undeveloped park and one large site that cannot be developed for many years...”. The specific recommendation is to “Acquire Metro’s property at Whitaker Ponds for an environmental learning center.”

### ZONING AND LAND USE

The entire Whitaker Ponds site has a base IG2 zone with portions of the site also including an Environmental Conservation zone overlay (Ec).

The *IG2 General Industrial zone* is intended for sites that are “less developed, with sites having medium and low building coverages and buildings, which are usually set back from the street.” Under this designation, “parks and open areas” are allowed outright though structures and buildings have additional limitations and regulations.

The *Environmental Conservation overlay (Ec)* “conserves important resources and functional values in areas where the resources and functional values can be protected while allowing environmentally sensitive urban development.” Activities that are affected by the Environmental Overlays regulations include “development, all land divisions, removing, cutting, mowing, clearing, burning, or poisoning native vegetation listed in the Portland Plant List; changing topography, grading, excavating, and filling; resource enhancement; and dedication and expansion of rights-of-way.”

### TRAFFIC AND PEDESTRIAN CLASSIFICATION

The streets around Whitaker Ponds Nature Park have several traffic and pedestrian classifications that need to be considered in the planning process. These classifications are from PDOT’s Transportation

## Population, Planning, and Land Use Conditions

System Plan and are described below. The designations do not represent current conditions but are meant to indicate future improvements. As noted earlier, NE 47th Avenue is unimproved and is difficult to use for pedestrians and cyclists because of heavy truck traffic, fast speeds, and because there is no side-walk or bike lanes.

The Whitaker Ponds site is accessed mainly from NE 47th Avenue, which will likely continue to be the primary point of entry. NE 47th Avenue is classified as a *Community Transit Street*, which is “intended to serve neighborhoods and industrial areas and connect to citywide transit service. They typically carry feeder bus service. They also provide safe and convenient pedestrian and bicycle access along Community Transit Streets and to transfer points and stops.”

NE 47th Avenue and NE Columbia Boulevard are designated as a *City Bikeway*. These are “intended to serve the Central City, regional and town centers, station communities, and other employment, commercial, institutional, and recreational destinations.” They are also both classified as a City Walkway, which “are intended to provide safe, convenient, and attractive pedestrian access to activities along major streets to recreation and institutions; provide connections between neighborhoods, and provide access to transit.”

The only capital project listed in PDOT’s Transportation System Plan (December 2020) is Project 40009, described as follows:

47th/Cornfoot, NE: Intersection Improvements: Widen and re-configure intersection to better facilitate truck turning movements to the cargo area located within the airport area. Project includes sidewalks and bikeway improvements. Cost was estimated to be \$3,132,162 and implementation in Years 1-5.

One of the site’s critical traffic issue concerns future improvement of NE 47th Avenue as one of only three access roads to Portland International Airport (the other two are from NE 82nd Avenue and from I-205). The improvement of NE 47th Avenue was initially classified by the Port of Portland as an “A” list project but has since been moved to a lower priority and is now on the 5-10 year construction list.

## Park and Recreation Needs

Whitaker Ponds is classified by Portland Parks and Recreation as a nature park. As a result, the analysis of recreation needs is based largely on activities and facilities that are appropriate to this category – (a) parks and recreation and (b) natural parks and related activities. A description of the demand for baseball fields also is included, to provide a context for the discussion of the long-term future of baseball fields in the area.

### PARKS AND RECREATION

The Cully Neighborhood has long been recognized as a park-deficient neighborhood, with very few parks to serve a relatively large area. Within the neighborhood's boundaries are two park sites, Sacajawea Park and Cully Community Park. Sacajawea Park is a 1.54-acre developed site next to Sacajawea School. There are no recreation facilities but the school has play equipment, a baseball field, a soccer field, and a basketball court. The owners of a 6.6-acre parcel north of the park have committed to the donation of a 3.38-acre portion of that property to the City for park purposes. The donation is contingent upon the owner's success in rezoning the remaining 3.32 acres and an adjacent 9.4-acre parcel of land.

The agreement for donation and acceptance is now being prepared (since the beginning of 2005). The timing of the donation depends on other actions – the zone change approval, legal description of donated parcel, property line adjustments and zone map amendments, execution of a street development agreement, ordering and reviewing title report, preparation and delivery of survey reports, and environmental review. It appears that the actual transfer of title could occur in 2007, if the donor is successful in securing approvals and other decisions.

The Cully Community Park site is an undeveloped parcel slightly more than a mile to the east of Whitaker Ponds. The site is 24.96 acres and was formerly used as a landfill. The 2020 Refinement Plan recommends that it be developed as a regional athletic facility. A preliminary site review concluded that the site is large enough and is well sited to function as an active recreation park. Acquisition of additional adjacent land for parking would increase the site's utility and development potential. At this time, it appears that redevelopment of the site could be initiated as soon as conceptual design and/or construction plans are created, submitted and approved by DEQ and all other potentially interested parties (BDS, BES, PWB, METRO etc.).



*The Cully Community Park site is flat and includes views of Mt. Hood and the Columbia River floodplain.*



## Park and Recreation Needs

The park that is closest to Whitaker Ponds, Fernhill Park, is about .6 mile (straight line distance) to the southwest and is technically in the Concordia Neighborhood. Fernhill Park is 24.15 acres in size and includes softball, baseball, football, and soccer fields, 2 tennis courts, volleyball court, horseshoe pit, playground, wading pool, picnic tables, an off-leash area, and restrooms.

### SCHOOLS

One public school – Faubion Elementary School – is within a mile of the Whitaker Ponds site. The school has one baseball field, one soccer field, and two outdoor basketball courts. Three other schools are within one mile of Whitaker Ponds. In addition, Fernhill Park includes a running track that is one of the most popular sites for walking and running.

### 2020 REFINEMENT PLAN

The Refinement Plan highlights some of the sub-area's distinctive needs – for a new community center/aquatic facility, improvements at the many developed parks in the district, and the development of new park sites. Because NE Columbia Boulevard and N. Portland

### Summary of Park and Schools in the Vicinity of Whitaker Ponds

Parks Within A One-Mile Radius of Whitaker Ponds							
Site	Size	Facilities					
		Play ground	Softball/ Baseball	Soccer/ Football	Basket ball	Tennis	Rest rooms
Fernhill Neighborhood Park	24.2	yes	1 softball 1 baseball	2 soccer 1 football	0	2	1
Whitaker Lakeside Middle School	21.5	yes	3 softball	0	2 indoor	0	NA
Scott Elementary School	5.7	yes	2 baseball	1 soccer	0	0	NA
Meek Elementary School	5.5	yes	1 baseball	2 soccer	1	0	NA
Rigler Elementary School	8.8	yes	1 baseball	1 soccer	0	0	NA
Faubion Elementary School	7.8	yes	1 baseball	1 soccer	2 outdoor	0	NA

Source: 2020 Refinement Plan, Portland Parks and Recreation, 2003.

Boulevard divide the neighborhood from the Whitaker Ponds site, it is unlikely that it can be seen as a way to alleviate need for more developed parks. Furthermore, site conditions and overall direction do not lend themselves to its use as a de facto neighborhood park. With its natural character, Whitaker Ponds will mainly provide informal opportunities to enjoy the outdoors, observe wildlife, and canoe on the slough.

The plan does not include many references to Whitaker Ponds, other than a recommendation to “Acquire Metro’s property at Whitaker Ponds for an environmental learning center.” The plan also cites the need to “Improve Thomas Cully Park as a regional athletic facility for soccer, softball, baseball, volleyball, and extreme sports.”

### PP&R SYSTEM PLAN AND SETTINGS

PP&R’s System Plan provides a broad guide to the improvement of the city’s parks. The plan is based in part on the goal of providing a variety of recreation experiences and settings. The physical characteristics of different parks and habitat areas are the settings in which people enjoy recreation activities. When people enjoy recreation activities, their experience is a product of their interaction with the environment, or setting, in which it takes place.

Settings are physical areas or spaces and can be thought of as different scenes in the same play. A park may have many settings or just one or two. The experience of one recreation activity, such as walking, will be very different depending upon the distinct features of the setting in which it takes place. Walking in Forest Park for example, is a very different experience from walking with dozens of others along the Eastbank Esplanade on a warm summer evening.

Three general settings are described for the PPR System Plan:

**People – People:** Settings where human interaction is encouraged and accommodated. It is in this area where the highest level of park improvements are found. Examples include the city’s urban parks (e.g., Pioneer Courthouse Square) and specific facilities such as sports facilities within parks.

**People – Nature:** Settings where human interaction occurs within the context of a natural resource area, a botanical garden, or other areas in which ecological values are just as important. Examples include Laurelhurst Park and Pier Park, both of which are devel-

oped parks that accommodate high levels of human activity.

**Nature – Nature:** Settings where the primary purpose of the setting is healthy functioning eco-systems and a diversity of wildlife. These are places with few accommodations for people activities. People participate by managing or restoring habitats or studying particular plants or animals. Examples include Powell Butte Nature Park and Forest Park, sites where natural resource values have priority over human use.

Whitaker Ponds Nature Park includes all three settings. The People setting generally includes the area between NE 47th Avenue and the roadway separating the two ponds. Most of the park's human activities will be concentrated in this zone, which includes environmental education facilities, parking, and other support functions.

The People - Nature setting comprises the area in the middle of the park, including the north ball field and the existing roadway between the ponds. While this zone has high natural resource values, it also is intended to accommodate some human use, mainly for educational activities for small groups and individuals.

The Nature – Nature setting includes the area around the eastern pond. This zone has high natural resource values, with human access limited to maintenance and restoration activities. Some access for educational purposes will be allowed but not at the same level as in the People – Nature setting.

## Natural Areas and Related Activities

In general, Portlanders visit natural areas such as Whitaker Ponds at a relatively high level, compared to other facilities. In the most recent PP&R survey, four of ten respondents visited “natural wildlife areas” either daily, weekly, or monthly – a frequency that is comparable to playground use. This frequency also ranks third of the eight activities queried, behind “parks and facilities” and “trails for hiking, walking, or running”.

Based on the survey, most people visit these sites a “few times a year” (29%) and “monthly” (25%). Public support for natural areas appears to be significant as well. The 2004 citywide survey reported that 52% of all respondents said there should be more natural wildlife areas, the highest of the 13 facilities listed.

### Trails

The trails at Whitaker Ponds will likely be a feature that exhibits a high level of use. In general, the use of trails for hiking, running, or walking is high, compared to the use of other park improvements, according to the most recent park survey in 2004. Approximately 52% of all respondents used trails either daily, weekly, or monthly – a frequency that is exceeded only by the use of parks and/or facilities, with 65%. What is particularly notable about trail use is how balanced frequency is – weekly, monthly, and few times/year use is about the same, between 21-23%. Seven percent of respondents use trails daily.

### Interpretive and Educational Facilities

The Whitaker Ponds site is considered by some area educators to be one of the best sites in the region for environmental education. This is due to several factors – the site’s resources (two freshwater ponds, Whitaker Slough, and several acres of forested areas), the variety of habitat types, the diversity of wildlife, its accessibility by foot, bike, and Tri-Met, proximity to area schools, availability of parking, a canoe launch, and outdoor shelter, an indoor, covered facility, and the availability of a full-time educator and other support staff. Very few, if any, other environmental education facilities in the area have these improvements. As a result, the ponds will likely continue to be a popular educational site.

Other sites that rate highly as environmental education sites within PP&R’s system are Powell Butte (51 acres), and Oaks Bottom Wildlife Refuge (163 acres). Neither has an educational facility or even basic

## Natural Areas and Related Activities

improvements such as a covered shelter. Comparable sites with education facilities are located at four sites: Tryon Creek State Park, Jackson Bottom Wetlands, Audubon Sanctuary, and Tualatin Hills Nature Park in Beaverton, Oregon.

**Participation in Organized  
Leagues by Sport**

Soccer	24.0 %
Softball	23.6
Baseball	17.5
Basketball	15.8
Flag Football	2.7
Tennis	2.0
Lacrosse	1.4%
Volleyball	1.3%
Swimming	1.0%
Rugby	0.7%
Ultimate Frisbee	0.7%
Other	8.2%

Source: Survey of  
Residents and Park  
Users, Portland Park  
and Recreation,  
2004.

### Baseball

Previous studies by PP&R have pointed to a great demand for sports fields in general, and for soccer fields in particular. According to the most recent PP&R survey in August 2004, about 23% of Portland residents (or someone in their household) participated in organized sports league over the previous 12 months. As shown in the table at left, baseball ranked third of the 12 activities listed, behind soccer and softball.

Of the total number of participants for all organized sports, the greatest percentage are from the northeast and southeast sub-areas (further analysis to determine how participation in baseball in particular was divided among sub-areas cannot be done because of the insufficient sample size). Because there is little reliable quantitative data on participation in organized baseball, it is difficult to accurately assess participation trends.

Discussions with PP&R Sports Program staff indicate that participation in baseball on a citywide basis has been increasing slightly over the last few years. Some of this growth may be due to the increasing popularity of Junior Baseball programs. Also, there appears to be some growth in adult baseball leagues, which has increased the demand for fields.

The development of new baseball fields could be directed to the Cully Community Park, which is described in a previous section. The improvement of fields at school sites could also be explored, as a way of meeting greater demand



## Desired Future Condition (DFC)

The Desired Future Condition is a systematic process to guide ecological restoration and is part of PP&R's Ecosystem Management Strategy. Ecosystem Management is an organized approach to improve the quality of habitat for fish and wildlife and other natural resource functions and values. It consists of the following steps: (1) Inventory, (2) Determination of Desired Future Condition, (3) Assessment, (4) Prescription, (5) Intervention (if needed), and (6) Monitoring. Applied over time, the sequence of steps forms a recurring cycle that we call an adaptive management loop. Using consistent protocols and GIS technology, Ecosystem Management will enable PP&R's natural resources staff to qualify and quantify the condition of natural resources on its portfolio of responsibilities.

### HABITAT TYPES AT WHITAKER PONDS

Four primary habitat types are recommended for Whitaker Ponds Nature Park: (1) Black Cottonwood Forest, (2) Freshwater Emergent Marsh and Aquatic Bed, (3) Willamette Valley Prairie, and (4) Upland Prairies and Savanna.

#### Black Cottonwood Riparian Forest

This is a deciduous forest that occurs on terraces along the Willamette and Columbia Rivers on elevations ranging from sea level to 100 meters. Stands are found along broad floodplains or along streams with steep slopes. Soils typically overlay river gravel and/or cobbles and are coarse-textured. Water tables usually drop below one meter of the soil surface in summer, but can remain moist.



*A Black Cottonwood Riparian Forest*

## Desired Future Condition

Vegetation is characterized by an open to moderately dense tree layer that is dominated by black cottonwood (*Populus balsamifera* ssp. *trichocarpa*). Other tree associates include red alder (*Alnus rubra*), Oregon ash (*Fraxinus latifolia*), and several species of willow (*Salix* spp.). A shrub layer is usually present and may be dominated by red twig dogwood (*Cornus sericea*), black hawthorne (*Crataegus douglasii*), elderberry (*Sambucus racemosa*), ninebark (*Physocarpus capitatus*), Rose (*Rosa* spp.), and snowberry (*Symphoricarpos albus*). The herbaceous layer is usually relatively sparse and is dominated by either forbs or graminoids. Common species include horsetail (*Equisetum* spp.), mint (*Mentha arvensis*), and several composites such as Aster.

### Freshwater Emergent Marsh and Aquatic Bed

Freshwater marshes and aquatic beds are found along the shores and sloughs of the Willamette and Columbia Rivers. In the Portland metro area, marshes are mostly small patches confined to limited areas in suitable floodplain or basin topography. They are mostly semi-permanently flooded, but some marshes have seasonal hydrologic flooding. Water is at or above the surface for most of the growing season. Soils are muck or mineral, and water is high-nutrient.

By definition, freshwater marshes are dominated by emergent herbaceous species, mostly graminoids [sedges (*Carex* sp.), bul-rushes (*Scirpus* and/or *Schoenoplectus* spp.), spike rush (*Eleocharis*), rushes (*Juncus* spp.), cat-tail (*Typha* spp.), bur-reed (*Sparganium* spp.), and forbs such as beggars-tick (*Bidens* spp.) and monkey-flower (*Mimulus* spp.).

*Freshwater Emergent Marsh*



Marsh ecosystems are typically found with wetlands along the borders of ponds, lakes or reservoirs that have more open basins and a permanent water source through all or most of the year. They are also found adjacent to riparian woodlands where functional floodplains remain. In deeper water, plants that might be found include duck weed (*Lemna* sp.), pond weed (*Potamogeton*), knotweed (*Polygonum*), pond lily (*Nuphar* sp.), water shield (*Brasenia* sp.), and wapato (*Sagittaria* spp.). A consistent source of freshwater is essential to the function of aquatic bed ecosystems.

### Willamette Valley Prairie

*Wet Prairie:* Historically, wet prairies covered large areas of the Willamette Valley (including the lower Tualatin River Valley and the Columbia River floodplain) where they were maintained by a combination of wetland soil hydrology and frequent anthropogenic burning. They have been reduced to tiny fragments of their former extent; currently this grassland ecosystem is largely restricted to the southern Willamette Valley of Oregon and southwest Washington.

Wet prairies are high-nutrient wetlands that are temporarily to seasonally flooded. They are dominated primarily by graminoids, especially tufted hair-grass (*Deschampsia caespitosa*), camas lilies (*Camassia quamash* and *C. leichtlinii*), several species of sedge (*Carex* spp.), and many forb species.



*Willamette Valley Prairie*

*Upland Prairie and Savanna:* This grassland system is endemic to the Willamette Valley, the Puget Trough and southwestern British Columbia. Upland prairies comprising wet prairies and riparian forests once covered much of the Willamette Valley during the pre-European settlement era. In the Willamette Valley, prairies occur on well-drained deep soils and was maintained historically by frequent burning by Native Americans.

Dominant vegetation is perennial bunch grasses, especially the fescues (*Festuca roemerii*, *F. occidentalis*) and, to a lesser degree, California oatgrass (*Danthonia californica*), and June grass (*Koeleria micrantha*) with abundant and diverse forbs. Scattered Garry oaks (*Quercus garryana*) and/or conifers such as Douglas fir (*Pseudotsuga menziesii*) and ponderosa pine (*Pinus ponderosa*) trees are rarely found now, but such savannas historically covered about one-third of the total acreage. In the absence of regular disturbance (fire, mowing, etc) many prairies have succeeded to forest and shrub dominated landscapes.

## Summary

### OWNERSHIP AND MANAGEMENT

- Ownership and management of the park is complex, with ownership distributed among several jurisdictions and organizations.
- Permanent improvements are limited, with the exception of the floating dock, shelter, and baseball fields, which have occupied their present location for many years.
- Access to the park for pedestrians is poor, limited to two busy streets.
- The baseball fields are used from February to October. Use of the land on which the fields are located is granted to PP&R through an easement that expires in 2007.

### NATURAL CONDITIONS

- The ponds are fed mainly through groundwater, with some water contributed through stormwater runoff, precipitation, and the Columbia Slough.
- Water levels fluctuate seasonally and with the Whitaker Slough.
- The east pond is shallower than the west pond, which varies in depth from two to four feet.

- Most of the upland area of the park is composed of deciduous forest or deciduous woodland. The primary management concern is the presence of invasive species, which are prevalent through all vegetation units.

#### POPULATION TRENDS

- The population around the site has changed mainly with a significant increase in Hispanic residents and a decrease in elderly residents.
- Improvements at the site will have to comply with the regulations and requirements of the Environmental overlay zone that covers almost all of the site.
- City funding of street and sidewalk improvements along NE 47th Avenue now appears to be a long-range project

#### POPULATION AND RECREATION NEEDS

- *Trails and natural area sites are typically popular among Portland residents*, with visitation rates that have historically been among the highest of all park uses by residents. Use of the site for this purpose will likely increase in the future as it is improved and there is greater public awareness.
- *The neighborhoods around Whitaker Ponds, particularly the Cully Neighborhood, have been and continue to be deficient in parks and open spaces.* However, Whitaker Ponds cannot fulfill the functions of a neighborhood park.
- *Cully Community Park provides a future site for the baseball fields.* As a closed landfill site that is now being monitored, the site is projected to be a 25-acre park designed as a regional athletic facility.
- *The demand for baseball fields is difficult to quantify or assess accurately* because of the lack of reliable data. Participation appears to be increasing in some segments of the sport and it ranks third in participation of 11 sports surveyed in 2004.
- *The site has significant value as an outdoor environmental learning site* because of its resources, location, site conditions, size, and bus access for students. The nature and scale of additional facilities and improvements is a major issue that will have to be addressed in the design process for a new educational center.





# Recommendations



## A Vision for Whitaker Ponds

*Whitaker Ponds Nature Park is envisioned as a very special place in the region.* As a remnant of the ponds and wetlands that were once common along the Columbia River floodplain, the park will serve as a peek into the city's past. But it will also look to the future, as a place where adults and students will learn how to be better stewards of the environment.

*A new environmental center* will provide educational opportunities that are found nowhere else in the city. Students will participate in a variety of activities in both the field and in the classroom. Because of the center's location next to the ponds and slough, students will enjoy the benefits of a field-based science education throughout the year. This new center will express a commitment to responsible building design, set back from the water and nestled among the trees and plantings in the park's southwest corner.

*Because the site is both an education facility and a nature park,* it will draw students who come with their classes and other visitors who come from the Cully neighborhood and other neighborhoods throughout the city. They may come as birders, hoping to see the osprey nesting in the trees surrounding the pond, or they may come to see firsthand what the floodplain might have looked like in the 1850s. Other visitors may come just to enjoy the trails that encircle the west pond or to enjoy a moment of tranquility on a bench over-looking the water.

*Canoeists and kayakers* also will be frequent visitors. A new dock along the Whitaker Slough provides easy access for watercraft and an adjacent parking area makes it an ideal spot for people to launch or load canoes, kayaks, and other non-motorized boats. During the summer, the park will also host small community events that are designed to introduce new audiences to the park. In addition, summer environmental education programs and camps will ensure that the park provides year-round opportunities for learning.

*It is as a place to learn* that Whitaker Ponds fulfills its highest potential. Over the last ten years, the site has returned to life thanks to the hard work of many people, agencies, and organizations. As a result, the park is now filled with both wildlife and people. The focus for the next ten years will be on creating a place where people can enjoy and be good stewards of this nature park.

## Guiding Principles

The Master Plan is based on a set of fundamental principles that provide a foundation for the plan's recommendations and can guide future actions and activities at the park. The principles are based on the long-term vision for the park.



### Overall Character and Purpose of the Park

- Improve and maintain the park to function as a wildlife habitat, an educational facility and as a naturalistic representation of the Columbia Slough floodplain habitat.
- Provide facilities and improvements that support the park's purpose and integrate these into the park's natural features and landscape.
- Promote activities and programs that encourage visitation by the general public, at a level that is appropriate for the site.

### Environmental Restoration

- Maintain and enhance the park as habitat for fish and wildlife.
- Use Portland Parks and Recreation's Desired Future Ecological Condition strategy as a guide to environmental restoration activities.
- Improve habitat values through an ongoing program of invasive species removal, replanting of native vegetation, and restoration of degraded areas.
- Ensure that protection of the site's natural resource values is always considered when improvements are planned and carried out.
- Manage human access and activities at the site to maintain the park's habitat value and to minimize impacts on the site's natural resources.

### Environmental Education

- Maintain the site as a center for environmental education programs and activities.
- Provide an appropriate level of facilities that can serve students from throughout the region and which can be used for neighborhood functions.
- Provide a range of environmental education programs that focus on watersheds, the Columbia Slough, and the impacts of human activities on the watershed.

### Integration with the Community

- Develop stronger and safer connections between adjacent residential areas and the park.
- Establish partnerships as a key strategy in the park's management, operations, programs, and improvement.

## Overall Site Concept

A variety of improvement and development projects are proposed for the Master Plan. The section below highlights the major actions that are recommended. These represent both short- and long-term actions which provide a framework for future development and improvement at the site.

- Improve and maintain Whitaker Ponds Nature Park as a site that is intended mainly as a nature park and for environmental education programs and activities. The park is also intended to function as a location for community activities such as meetings and events that do not generate unacceptable impacts on the site's resources.
- Develop a new environmental education facility (see next page for a more complete description) along with parking and other support functions. The parking should be designed to accommodate at least two school buses, bicycle parking, and spaces for visitors who are disabled.
- Improve and maintain the park so that human use and activities are concentrated in the western third of the park, with decreasing access and use towards the eastern third of the park, around the east pond.
- Manage the area around the east pond as primarily a habitat area with limited human access. Trails will be limited and access will be limited to small school groups, maintenance or replanting activities, and other similar activities.
- Restore and revegetate the park to improve habitat value and per Portland Parks and Recreation's Desired Future Ecological Conditions strategy.
- Develop a pedestrian circulation system that connects the park to adjacent neighborhoods, is accessible for visitors who are disabled, and direct human activities into appropriate areas.
- Provide an appropriate level of improvements (benches, trails, etc.) that can accommodate casual visits by the general public.
- Improve the canoe launch so it can accommodate greater use. Develop an access road for the canoe launch as part of the overall circulation plan for the educational center.
- Acquire additional land around the east pond to provide public ownership of all property around the pond.

## Access and Circulation

The circulation system is a key part of managing the site in a positive way. It defines the various areas and character zones of the park, directs park users to appropriate locations, and provides opportunities for park visitors to enjoy the beauty of the park. Improving access into the park can also be integrated into the overall system of paths and trails such as the 40 Mile Loop and the city's bikeway and pedestrian network.

- Improve the trail system so it provides a connection to the 40 Mile Loop, conforms to ADA guidelines, and provides designated view-points and other areas for small groups.
- Develop a new access point for vehicles and pedestrians into the park from NE 47th Avenue. The design of this new access should be done as part of the plan for a new environmental center to ensure that circulation and facility development is coordinated.
- Improve access to the park from the Cully Neighborhood. If possible, develop a pedestrian connection between the park and NE Columbia Boulevard in the vicinity of the existing school.
- Actively advocate for a sidewalk along NE 47th Avenue which would connect NE Columbia Boulevard to Whitaker Ponds. Encourage PDOT and the Port of Portland to make this project a priority in their respective capital improvements lists.
- Develop a path system that can be linked to the 40-Mile Loop and the Columbia Slough when the specific routes for that system are identified.
- Develop a pathway system that integrates the park's entry points and provides access to its educational facilities. The path system should be designed and sited to be as visually unobtrusive as possible by using appropriate materials and by locating them at the edges of open areas, wherever possible. The path system will consist of two trail types:

*Hard Surface Paths:* These paths will be built of asphalt or other "hard-surface" such as chip-seal that meets ADA requirements, and will be approximately 5 - 8' wide (the specific width will be defined during the design phase).

*Soft-Surface Paths:* These can be built of bark mulch or gravel



and will be used in natural resource areas where there will be relatively less use and where the material will be more compatible. Trail widths will likely vary between 4' and 6' wide. In some areas, boardwalks can be used to straddle intermittent wet areas.

- Provide a series of viewing areas overlooking the ponds and the slough. Trails and viewing areas should be buffered with vegetation to minimize impacts to wildlife.
- Maintain and enhance the existing canoe/kayak launch into Whitaker Slough.
- Discourage access into high quality natural areas around the east pond, limiting it to maintenance functions and special educational tours.
- Limit the interior of the park to pedestrian use and maintenance vehicles only.

## Environmental Education – Programs

Interpretive and educational programs will continue to be an integral part of the park, as it has been for the last ten years. Any growth to environmental education programs and projects will depend on the development of a more functional facility and the continued presence of program partners such as the Columbia Slough Watershed Council and the Bureau of Environmental Services.

- Continue to use the site for environmental education programs and projects.
- Develop and maintain a coordinated approach to education and interpretation at the site, especially when several organizations provide educational programs.
- Limit the number of student groups and sizes to current policies, which define two classes as the maximum to be accommodated at one time.
- Provide programs and improvements that support the park as a demonstration site for environmental education.
- Maintain the current focus of education programs on the area's habitat, natural resources, stormwater and surface water issues, riparian areas, human impacts on the watershed, and what individuals can do to protect rivers, streams, sloughs, and riparian areas.
- Include projects that restore habitat areas to remove invasive species, replant native species, and improve overall quality of these areas.
- Develop and maintain a coordinated system of interpretive signs and educational materials. Interpretive signs and materials should be consistent in form and message and should be part of an interpretive system throughout the Columbia Slough.

*On-site educational programs will continue to be an integral part of Whitaker Ponds Nature Park.*



## Environmental Education – Facilities

One of the primary areas of emphasis in the Master Plan is on the improvement of environmental education facilities. Because of the park's natural resource values and its relatively small area for facilities, it is imperative that all of the structures be sited carefully and designed to blend into the landscape. The structures must also exhibit the highest level of design quality, reflecting not only the qualities of the site, but its location in the Pacific Northwest.

- Site and develop an environmental education facility in the area southwest of the west pond. The facility should be set back from the pond but should provide views of the west pond from its classroom(s).
- Design the park's environmental education facilities to respond to its specific context, the Pacific Northwest vernacular, and to reflect the city's commitment to sustainable practices.
- Locate classroom and support facilities in the area between NE 47th Avenue and the western edge of the west pond. Structures should be located and designed to work with any existing structures that will remain.
- Develop a new environmental education facility in the general area of the current building (see diagram on next page.) The facility should be built in phases, with the first phase comprising one classroom, an outdoor teaching area, and office space. Subsequent phases include the addition of a multi-purpose room, an additional classroom, larger outdoor teaching area, and maintenance and nursery/growing area.
- Design structures with a size, scale, and massing that is appropriate to their site and function. Structures should be designed to complement the naturalistic qualities of the park.
- Site classroom facilities to provide views of the west pond while also maintaining an appropriate setback from the edge of the pond, as a way of minimizing the visual impacts of the structure to the pond.
- Design new educational facilities to meet LEED guidelines and to serve as a model for other facilities of this type.
- Improve the existing canoe/kayak launch and provide supporting facilities. The launch should provide easier access into watercraft and be accessible for visitors who are disabled. Space for offloading/loading and for vehicle parking also should be provided.



*The floating dock is used often for water sampling activities.*



*Outdoor seating areas to accommodate groups can be simple in design and built to blend into the landscape.*

### Environmental Ctr. Diagram and Phasing

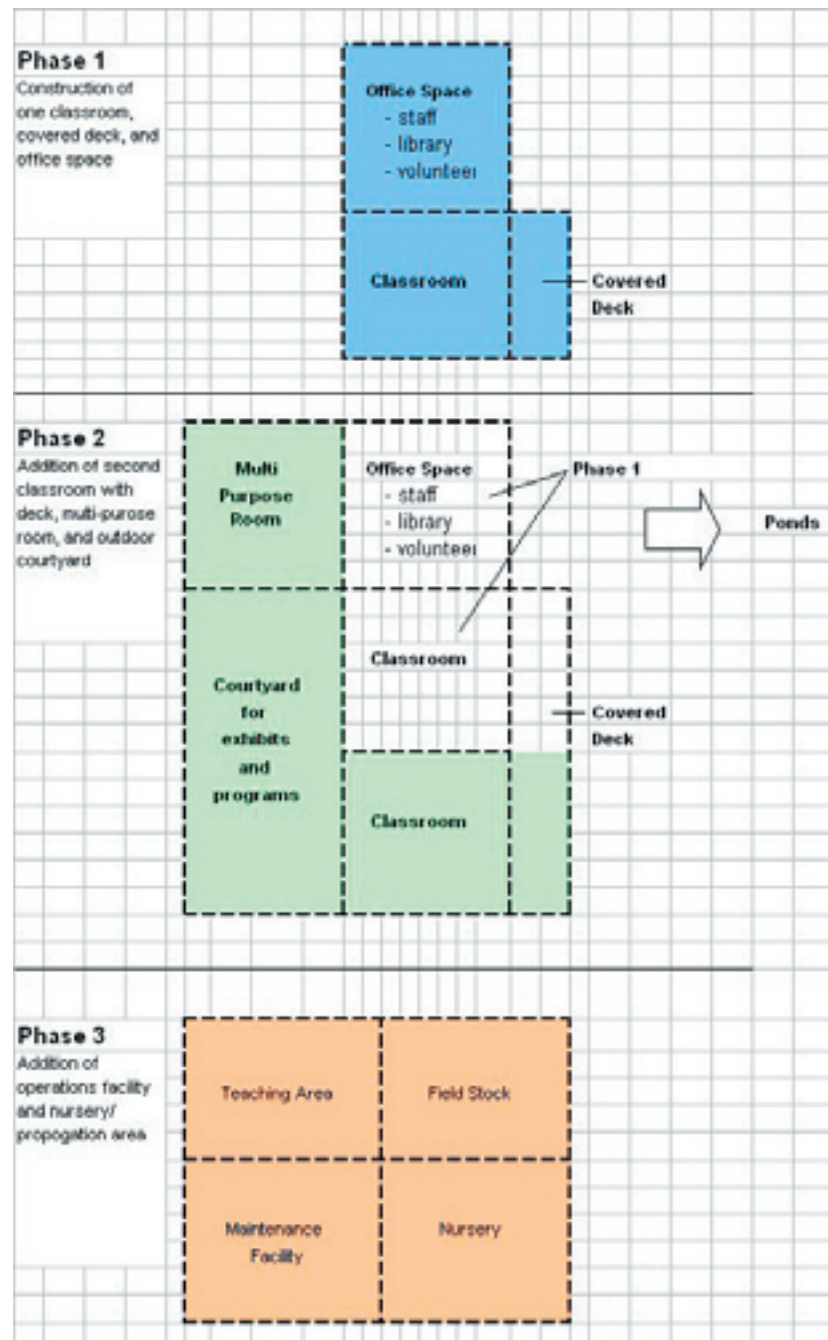
The diagram below illustrates the basic elements of the proposed environmental center and how construction could be phased. In addition to the classroom facility, it also shows an adjunct facility for maintenance and for the propagation and care of field stock for restoration activities.



*An example of a classroom dedicated to environmental education.*



*An outdoor seating area can be used for lectures.*



## Wildlife, Vegetation, and Ponds Management

The recommendations in this section are based on the Desired Future Condition (DFC) strategy, which is part of PP&R's Ecosystem Management approach. The DFC is envisioned as a long-term program that requires adaptive management and monitoring activities.

In some areas, ball fields will have to be removed before revegetation can be initiated. Removal should not occur before replacement fields are developed.

### Wildlife Enhancement

- Use Portland Parks and Recreation's Ecosystem Management Plan and the Desired Future Condition as guides to restore and maintain natural resource areas.
- Improve the diversity and abundance of wildlife food sources within the park by enhancing native plant communities.
- Increase habitat function through the provision of snags, brush piles, basking logs, and other natural features.
- Minimize human access and activity in designated natural resource areas such as around the east pond. Provide trails in these areas that are used only for maintenance and restoration activities.
- Identify and define bird and wildlife species appropriate to the site and design restoration improvements to meet their needs. Conversely, nuisance and pest species also should be identified and strategies to control them should be prepared.
- Apply the principles of PP&R's Ecosystem Management Program to habitat areas, such as development of a desired future condition statement, an assessment of how the quality of habitat area can be improved, planned interventions, and follow-up monitoring.
- Continue to prohibit domestic pets from the park (even on-leash).

### Vegetation Management

- Establish Riparian Forest, Emergent Marsh, Deep-water Aquatic Bed, and Willamette Valley Prairie habitats on site.
- Establish a *Willamette Valley prairie* on the current site of the north ball-field to provide a small amount of native grassland habitat for butterflies and terrestrial insects (including pollinators) and enhance opportunities



for teaching park visitors about this habitat.

- Reconnect forest fragments by establishing a *Black Cottonwood riparian forest* plant community around the perimeter of the ponds.
- Remove non-native and invasive weeds in habitat areas and replant with native species. Initial control of all non-native species should be done by hand. If this is not effective, other control strategies could be used, including the application of chemicals.
- Maintain the ongoing vegetation management plan (as part of the BES revegetation program) to address invasive plant species.

### Ponds Management

The Whitaker Ponds are a part of the Columbia Slough system, which is under DEQ regulation for temperature and eutrophication and other water quality parameters. Management of hydroperiods and water regimes can affect temperature and eutrophication. Temperatures generally exceed requirements during the spring, summer and fall. Removing constrictions in the waterway may slightly lower water temperatures. Impounding water may raise water temperatures.

- Maintain the broad views of the open water in the west pond. The view of the open water is one of the most treasured aspects of the park and should be maintained from several areas and view-points around the pond.
- Improve the hydrologic connections between the east and west ponds and the west pond and the slough by:
  - removing the culvert and roadway currently separating the east and west pond and replacing it with a bridge, and
  - considering a modification of the culvert connecting the west pond to the Slough or changing the invert elevation to improve water flow.
- Establish an *emergent marsh* on the perimeter of the west pond and throughout the east pond to provide habitats for avian and mammalian species not currently found on site. A marsh could also enhance opportunities for educating/interpreting about the functions and values of wetlands and contribute to improving pond water quality by reducing sediment transport.

- Establish *deep-water aquatic bed* vegetation such as wapato and pond lily in the open water areas of the west pond to enhance the pond's aesthetic appeal and provide opportunities for park visitors to view a regionally significant habitat.
- Improve the waterway edges with riparian plantings and native plant materials.
- Discourage human access to the pond's edges, except in designated access points.
- Continue to prohibit use of the ponds for recreational purposes by boats, tubes, or other watercraft and for wading or fishing (by the general public).
- Improve water quality in Whitaker Ponds and the Columbia Slough by working with Multnomah County Drainage District (MCDD), Bureau of Environmental Services (BES), and other agencies. With the cooperation of these organizations, explore the modification of the hydroperiod of the ponds to favor the habitat requirements of native aquatic species such as fish, turtles, and native freshwater mussels, etc.

## Implementation Strategy

The following is an outline of recommended actions for the next 10 years. Many of the tasks focus on improving habitat, restoring disturbed areas, improving existing infrastructure (such as paths and the canoe launch), and development of the environmental center. Once a more certain scope and schedule for the environmental center project is prepared, other projects may also be identified.

The actions below are listed either as ongoing activities or a Priority 1 (highest) or Priority 2 (activities that are less urgent or depend on other actions and opportunities).

### MANAGEMENT

#### *Ongoing*

- Continue to coordinate projects and activities through the Whitaker Ponds Management Committee.
- Continue to use the existing rental for that purpose until a more detailed plan for all of the site's structures is prepared.

#### *Priority 1*

- Prepare a Whitaker Ponds Nature Park Management Plan that defines roles and responsibilities for all of the existing agencies and organizations. The plan should also define management policies that address community events, vegetation policies, and other issues that affect the long term and day-to-day management of the site.

#### *Priority 2*

- Conduct a feasibility study for the use of the Bunn house (the structure closest to the PRF) as a facility for education programs or as a temporary office for the CSWC while a new environmental center is built.
- Prepare a Site Restoration Plan that lists restoration projects (such as creation of the Willamette Valley Prairie) along with responsible organizations for those tasks.

## RESTORATION AND PARK MANAGEMENT

### *Priority 1*

- Improve trails around the west pond, especially those used by school groups.

### *Priority 2*

- Improve the canoe launch area to improve safety and accessibility and to provide pedestrian connections to other trails.
- Initiate the first phase of the DFC program.
- Prepare a feasibility study for the Cully Community Park site to identify development options, preliminary costs, and acquisition options.

## ENVIRONMENTAL CENTER

### *Ongoing*

- Continue to use existing building for environmental programs, with improvements limited to basic repairs.

### *Priority 1*

- Prepare a Memorandum of Understanding between PP&R and the Columbia Slough Watershed Council that acknowledges the commitment to develop an environmental center and defines the responsibilities of each organization.

## ACQUISITION

### *Priority 1*

- Purchase the lot now designated as an easement by Portland Public Schools to provide continuous public ownership between the east and west ponds.

### *Priority 2*

- Acquire properties adjoining the east pond. The acquisitions are intended to provide continuous public ownership around the entire east pond.

## Summary of Costs

This estimate is meant to provide a general idea of the project's magnitude of costs. Because the estimate is based on a concept plan, many assumptions were made in preparing the cost. Note also that the estimate includes a 20% contingency, which can be reduced once there is more information. A more detailed estimate will be developed when construction drawings are being prepared.

The costs on this page will likely be higher depending on when construction occurs. A 30% contingency applied to the estimate shown on the next page amounts to \$ 1.1 - 1.3 million.

A "Partnership Opportunity" is a project where donations, contributions, or volunteer assistance can be used to defray costs. These projects tend to be discrete in scope and/or manageable by volunteers.



Item	Cost	Sub-total	Totals	Notes
<b>■ SITE DEVELOPMENT COSTS</b>			<b>\$1,902,520</b>	
<b>Site Design &amp; Project Mgmt.</b>		<b>175,000</b>		includes public involvement expenses
<b>Paths</b>		<b>236,000</b>		
Soft-surface	17,600			Limited access trail north of east pond.
Main loop	129,600			Trail around west pond.
Link to NE Columbia Blvd.	62,400			If accessr provided through PPS property.
40 Mile Loop	26,400			If trail is located on south side of slough.
<b>Canoe Launch</b>		<b>68,500</b>		
Canoe launch	15,000			Partnership opportunity
Access road	36,000			
Parking (5 stalls)	17,500			
<b>Roads and Parking</b>		<b>495,500</b>		
Parking (12 cars/3 buses)	60,000			When new environmental center built.
Roadway	33,000			
Culvert removal	33,500			Culvert between east and west ponds
Pedestrian Bridge	25,000			Between east and west ponds Partnership opportunity
Landscape restoration	344,000			
<b>Park Improvements</b>		<b>31,200</b>		
Benches & tables	5,000			Partnership opportunity
Drinking fountain & trash can	6,200			
Porta potty & concrete pad	20,000			
<b>Right of Way Development</b>		<b>557,120</b>		NE 47th Ave. improvements
Curb & sidewalk	37,800			Along east side of NE 47 Ave.
Street trees	16,000			20 street trees
Driveway apron	3,500			
PDOT right-of-way design	490,700			
PDOT Inspection	9,120			
<b>Miscellaneous</b>		<b>364,200</b>		
Demolition	20,000			Existing Talbert house
E-zone application & review	172,000			
Preparation of application	147,200			
Survey	25,000			Area between west pond & NE 47th Ave.
<b>■ ENVIRONMENTAL CTR. STRUCTURE</b>			<b>\$1 - 1,500,000</b>	Cost will vary depending on size and scope Partnership opportunity
<b>■ ENVIRONMENTAL CTR. - OTHER COSTS</b>			<b>\$902,895</b>	
Utilities	54,800			
Permits & inspection	12,750			
Construction management	13,000			Materials testing, construction signs, etc.
Design costs	159,000			15% of environmental ctr. cost
Percent for Art	22,345			2% of environmental ctr. cost
Other	641,000			Contractor overhead/profit (8%), bonding & insurance (3%), contract administration (8%), & mobilization (8%). Costs are based on \$1 million cost for education ctr.
<b>TOTAL ESTIMATED COSTS</b>		<b>\$ 3,805,415 - 4,305,415</b>	<b>Does not include contingency cost.</b>	
<b>30% Contingency</b>		<b>1,100,000 - 1,300,000</b>		