BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF APPROVING THE WHITAKER PONDS CONCEPT MASTER PLAN	))))	RESOLUTION NO. 95-2159 Introduced by Mike Burton, Executive Officer

WHEREAS, On July 23, 1992, through Resolution No. 92-1637, the Metro Council adopted the Metropolitan Greenspaces Master Plan which identified a desired system of natural areas interconnected with greenways and trials; and

WHEREAS, Preparing master plans for natural areas is a primary strategy for balancing wise public use of natural areas with protection of the natural values of the area; and

WHEREAS, The Columbia Slough wetlands are considered regionally significant greenspaces; and

WHEREAS, The Whitaker Ponds are wetlands in the Columbia Slough Watershed; and

WHEREAS, In May 1994, Metro and the Portland Public Schools entered into an agreement that called for Metro to lead the development of a Master Plan for enhancing and protecting the Whitaker Ponds area while providing appropriate levels of recreation; and

WHEREAS; The Metro Council approved $12,500 in the FY 1994-95 budget to contract for professional services to prepare a Whitaker Ponds Master Plan; and

WHEREAS; In November 1994, Metro Parks and Greenspaces Department entered into a contract with the consulting firm of Walker & Macy to provide master planning services; and

WHEREAS, Various public involvement activities occurred throughout the development of the plan that resulted in broad public support of the project; and

WHEREAS, many private and public organizations participated in development of the Master Plan and have committed funds and/or support for Master Plan implementation; and

WHEREAS, The draft Master Plan document was presented to the February 28 Metro Council work session; and

WHEREAS, The draft Master Plan was distributed to the public for review and comment and those comments were incorporated into the final Master Plan; now, therefore,

BE IT RESOLVED,

That the Metro Council approves and adopts the Whitaker Ponds Concept Master Plan document in its entirety as shown in Exhibit A.

ADOPTED by the Metro Council this 1 day of June, 1995.

J. Ruth McFarland, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 95-2159, FOR THE PURPOSE OF APPROVING AND ADOPTING THE WHITAKER PONDS CONCEPT MASTER PLAN

Date:19 May 1995 Presented by: Jane Hart

PROPOSED ACTION

Resolution No. 95-2159 requests the approval and adoption of the Whitaker Ponds Concept Master Plan for an area along the Columbia Slough in Northeast Portland.

BACKGROUND AND ANALYSIS

The Whitaker Ponds site is an identified regionally significant greenspace in the Metropolitan Greenspaces Master Plan. The site is located along the Columbia Slough in a park deficient area of NE Portland at approximately NE 47th Ave. and Columbia Blvd.

In May of 1994, Metro and the Portland Public Schools entered into an agreement that called for Metro to lead the development of a master plan that involves all the stakeholders in and around the site in developing a plan that incorporates natural restoration, environmental education and provides appropriate levels of recreational opportunities.

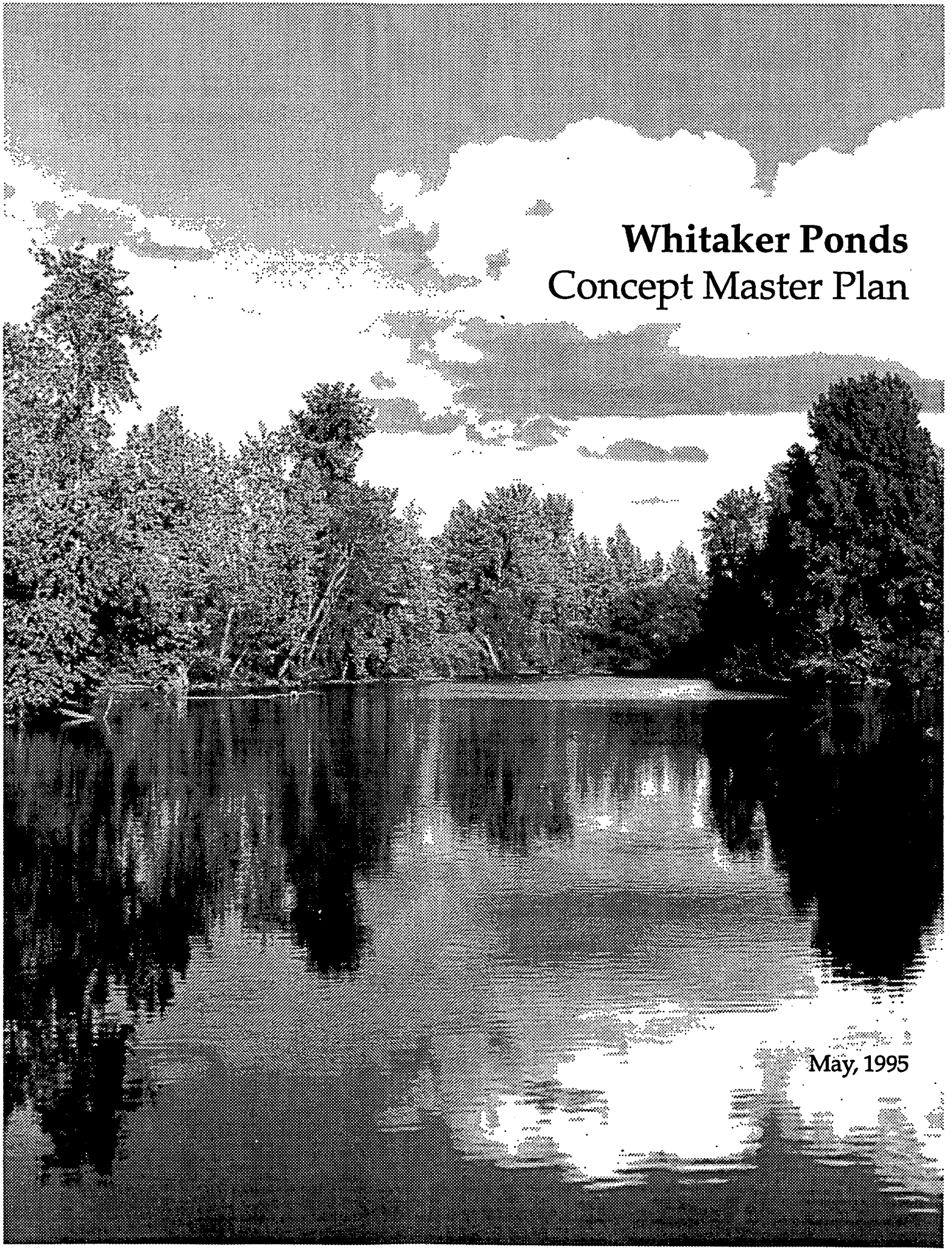
Metro Council approved the amount of $12,500 in the FY 1994-95 budget to use for contracting professional services for preparing a Whitaker Ponds Master Plan. In November of 1994 the Parks and Greenspaces Department entered into a contract with the consulting firm Walker & Macy to provide master planning services for the project.

Public involvement activities that occurred during development of the Master Plan include, creation of an independent project advisory committee, one-on-one meetings with adjacent landowners and stakeholders as requested; two public meetings to receive input on the plan; neighborhood canvassing by EnviroCorps members to inform neighbors about public meetings; distribution of the draft Master Plan for public comment and review.

Organizations that participated in development of the Master Plan, and are committed to providing funding or in-kind support towards its implementation include Portland Public Schools, Multnomah County through its Natural Areas Fund, 26-26 Bond Measure allocation and Drainage District # 1; Bureau of Environmental Services' Columbia Slough Water Quality Improvement Program; the Trust for Public Land; the Oregon Wildlife Heritage Foundation; the Oregon Department of Fish and Wildlife; the Lakeside Little League; EnviroCorps and local neighborhood associations.

EXECUTIVE OFFICER RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 95-2159.



Whitaker Ponds
Concept Master Plan

May, 1995

WHITAKER PONDS CONCEPT MASTER PLAN

Prepared by:
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In Conjunction with
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Funded by:
Metro's Regional Parks and Greenspaces Department
600 N.E. Grand Avenue
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May, 1995

Cover Photo Courtesy of Steve Terrill

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Erwin Bergman
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Kim MacColl, Jr.
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Edna Mae Pittman
Concordia Neighborhood Association

Ned Hayes, Jr.
Whitaker Ponds Property Owner

Kin Daily
Oregon Department of Fish & Wildlife

Sally Creasman
Madison High School

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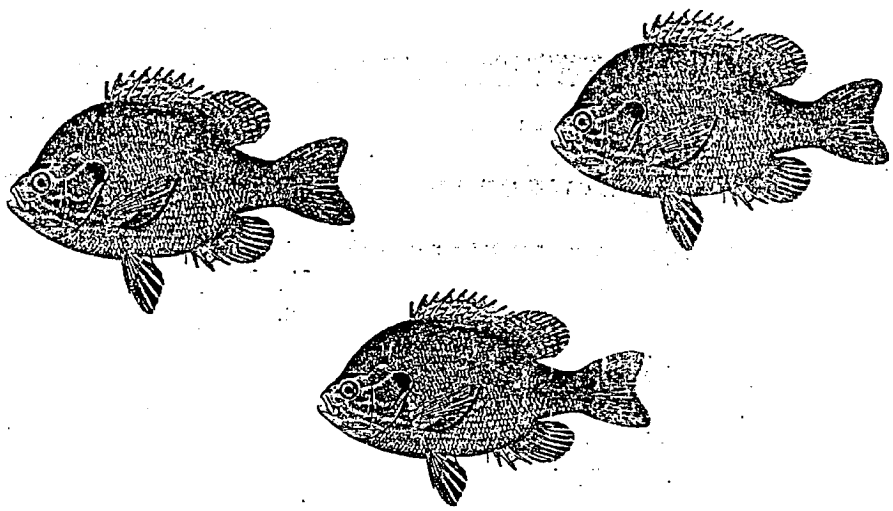


EXECUTIVE SUMMARY

Value of the Master Plan

The Master Plan crafted for Whitaker Ponds establishes a vision for the future which brings together diverse interest groups into a single effort to enhance and protect the ponds and their natural surroundings for passive enjoyment while continuing to provide little league activities. The Master Plan sets forth goals and priorities for implementation and provides direction to project partners, local citizens and service groups who wish to get involved in restoration efforts.

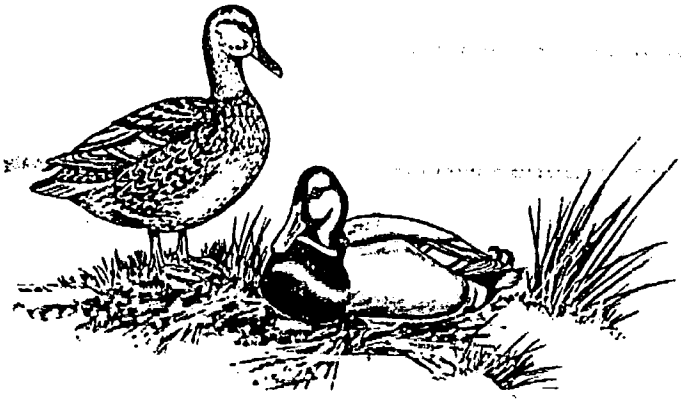
Protection and enhancement of this unique natural resource will provide numerous benefits to the community including: improved habitat for fish and wildlife, water quality improvement, stormwater management, opportunities for recreation, and environmental education and increased awareness and appreciation for natural systems. In addition, the ponds offer an important natural outlet for the park-deficient and densely populated northeast neighborhoods, and can provide local youth and adults with the opportunity to experience nature on a first-hand basis through activities such as fishing, wildlife identification, and site restoration projects.

Components of The Master Plan

The concept Master Plan is described fully in Chapter IV. Key components include the following:

- Provision of a primary access to the site off 47th Avenue.
- Incorporation of water quality enhancement measures.
- Commitment to restoring and enhancing riparian and upland habitats.
- Expansion of emergent wetlands to attract wildlife.
- Provision of environmental education opportunities including signage and wildlife viewing areas.
- Provision of a buffer between industrial properties and recreational public use areas.
- Provision of a range of natural resource dependent recreational opportunities.
- Establishment of a warmwater fishery.
- Incorporation of a canoe/boat launch on the Whitaker Slough and access by the Multnomah County Drainage District for slough maintenance.
- Separation of active recreational uses on the School District property, and the passive uses on the north side of the ponds relating to natural resource enhancement and appreciation.
- Provision of a pedestrian trail system on the northern portion of the site, with viewpoints to the ponds and slough.
- Incorporation of an environmental learning center.
- Provision for an on-site resident ranger to increase security and safety.

II. Introduction



INTRODUCTION

On an early Saturday in July, you and your friend decide to throw the fishing gear and binoculars in the car, put the canoe on top and head to the Whitaker Ponds Natural Area. In a few minutes you arrive at the Whitaker Ponds entrance at NE 47th Avenue and notice the early morning mist rising from the west pond. A family of cinnamon teal is busy searching the edge of the nearby Whitaker Slough for food. Dozens of swallows are swooping over the pond nabbing insects in the air.

The choice you face is to launch the canoe at the ramp and drift east on the Whitaker Slough through the verdant tunnel of cottonwoods and willows, or take the fishing gear and walk down the path to one of the angling clearings along the pond edge. Today the canoe will stay on the car and you head down the pond trail.

Before you know it, an hour has gone by, and the fishing has been pretty good. Across the ponds to the south the little league has started their day and the chatter of the young players and the cheers of spectators drift in and out. It doesn't get much better than this on a Saturday morning.

All of this and more is possible for generations to come if the community and project partners start now to work cooperatively together toward implementing the Whitaker Ponds Master Plan.

Enjoying a summer morning on the West Pond. (Trust for Public Land Photo)

Project Context & Goals

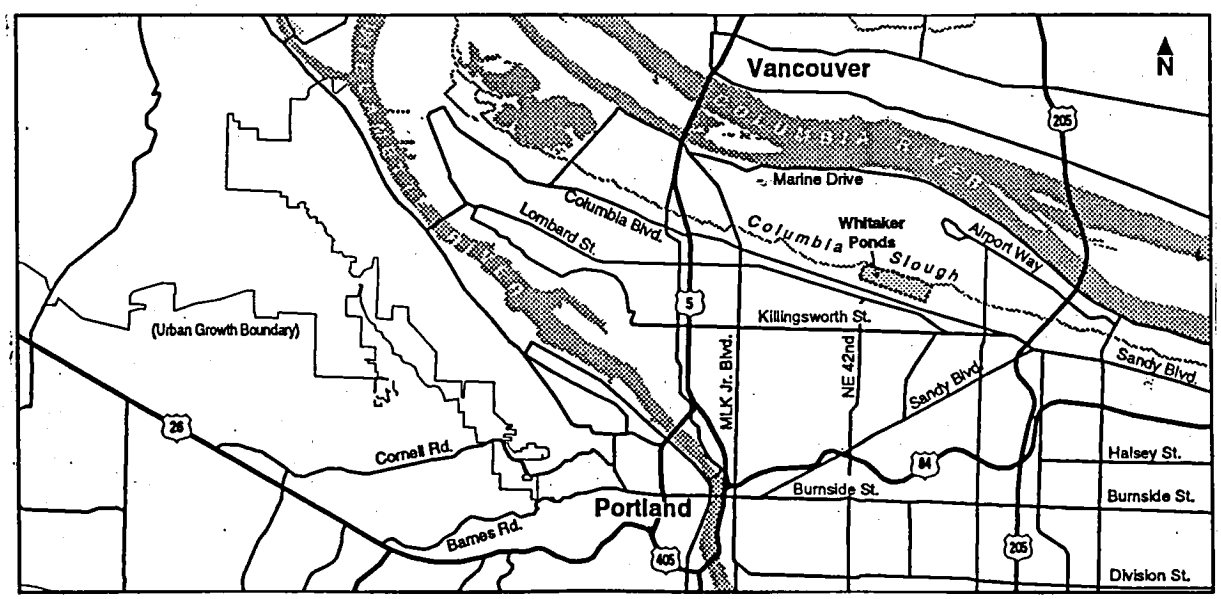
In an age where urban natural areas are rapidly being replaced by shopping centers and parking lots, the Whitaker Ponds site provides a natural jewel for the park-deficient portion of northeast Portland. This regionally significant natural area is unique because it has become surrounded by industrial development, yet is located close to densely populated areas where residents have little opportunity to experience the natural world.

The study area encompasses approximately 90 acres of publicly and privately owned land bordered by the Whitaker Slough to the north, NE 47th Avenue to the west, NE Columbia Boulevard to the south, and light industry to the east. Contained within this study area are two groundwater-fed ponds, five softball fields, the Whitaker Facility, several residential properties, six industrial tenants, and a five-acre scrap metal yard that Metro is negotiating to obtain. Surrounding the ponds is a zone of riparian vegetation and open fields providing valuable wildlife habitat for a host of waterfowl. Although much of this site has become degraded over the years, restoration efforts can turn this area into a valuable natural asset for the community.

Protection and enhancement of this unique natural area will provide the community with opportunities to view wildlife, increase their awareness of natural resources and wetland habitats, and participate in a variety of recreational activities including warmwater fishing. By restoring this degraded site in an environmentally sensitive manner, opportunities also exist to expand wildlife habitat and improve water quality in the ponds.

The following goals can be achieved by implementing this Master Plan:

- Restore the ponds and their surroundings to attract a more diverse and abundant wildlife and fisheries population
- Encourage environmental stewardship through school education programs and an on site environmental learning center
- Improve water quality to maintain a warmwater fishery
- Encourage public access by providing trails and wildlife viewing areas
- Insure compatibility between existing industrial and recreational activities and increased public use by providing permanent separation between the natural area



Vicinity Map

north of the ponds and active recreation and industrial uses to the south

- Negotiate with interested property owners for use of key parcels of land.

Planning Background

A primary mission of Metro's Regional Parks and Greenspaces Department, is to work cooperatively with the public to maintain the quality of life for the region by protecting urban natural areas for wildlife and people. The Metropolitan Greenspaces Master Plan of 1992 targeted the area surrounding Whitaker Ponds as a regionally significant greenspace in the Columbia Slough watershed.

In May of 1994, Metro entered into an agreement with Portland Public Schools, a major land owner in the planning area, that calls for Metro to lead the effort to develop a Master Plan that enhances and protects the Whitaker Ponds area for wildlife, while providing appropriate levels of recreation. The Master Plan will guide future restoration and public use of the ponds, and is intended to provide opportunities for environmental stewardship and education for generations to come. This proposed project is one of many ongoing projects and programs aimed at improving the overall health of the Columbia Slough watershed.

The Trust for Public Land (TPL), the Bureau of Environmental Services (BES), and Multnomah County (through its Natural Areas Fund), are also partners in the project. The Trust for Public Land holds an option to purchase a 5-acre scrap metal yard in the northwest corner of the study area, and BES and Multnomah County have committed to providing the funds necessary to purchase the property. Acquisition of this property serves BES's goal of providing water quality improvement demonstration projects along the Columbia Slough, and meets the goals of Multnomah County's Natural Area Protection and Management Plan. The Board of Multnomah County Commissioners also approved $300,000 for acquisition of lands adjacent to the Whitaker Ponds, contingent upon Metro's Open Space, Parks and Streams Bond Measure passing in May of 1995.

One of the more unique project partners in this planning effort has been the EnviroCorps, the local branch of President Clinton's recently created national program called AmeriCorps. The AmeriCorps program was patterned after the Peace Corps and Vista. Portland's program provides young adults the opportunity to gain work experience and tuition credit through restoration efforts in urban areas. EnviroCorps members have been involved in numerous aspects of this project ranging from neighborhood canvassing and public workshops to site assessment and plan formulation. EnviroCorp's involvement provides an important link between past environmental restoration efforts at the ponds and the future ecological health and stewardship of the area. Members of EnviroCorps will implement components of the plan in the Spring of 1995 including planting, removal of undesirable plant species, and general clean up of the site.

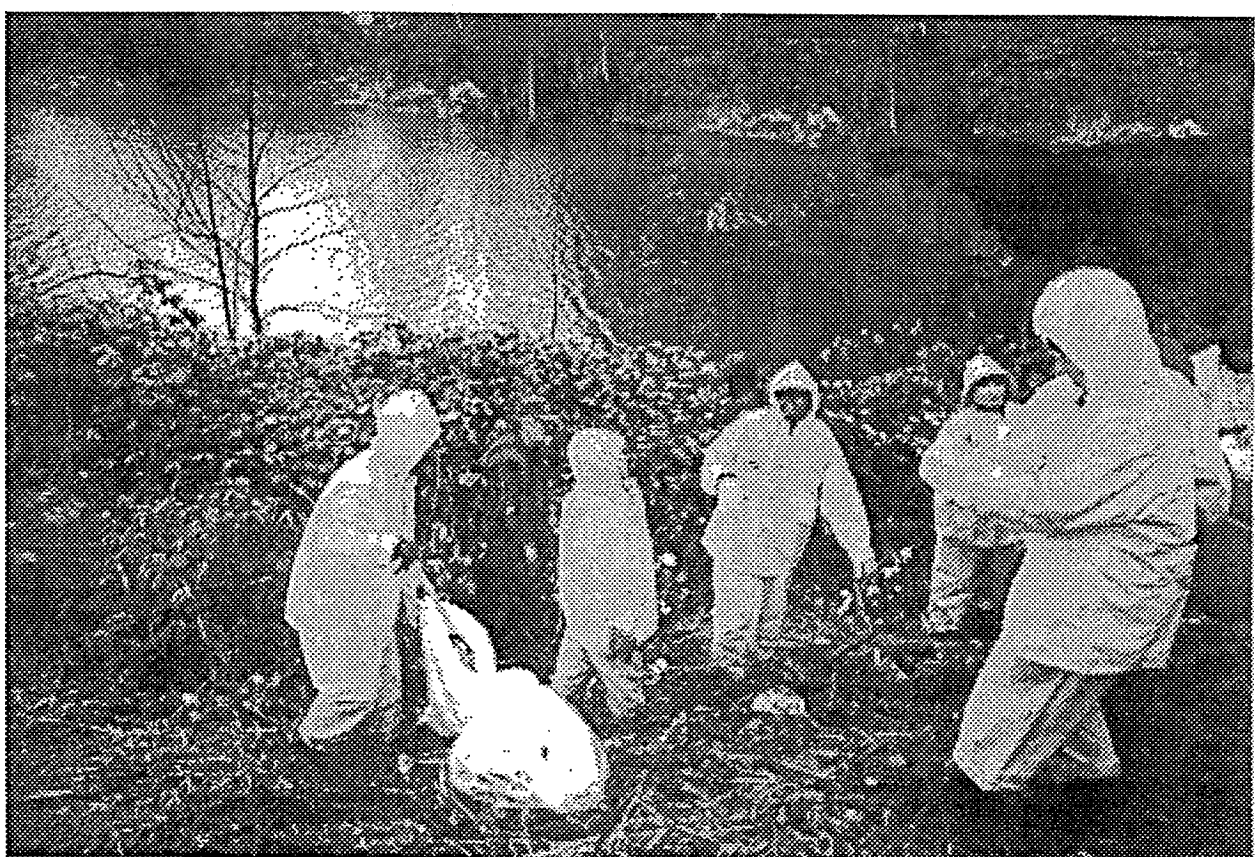
In addition to the aforementioned project partners, several school and youth groups have participated in research or restoration activities at Whitaker Ponds. In the past few years, Metro's Greenspaces Department awarded restoration/enhancement grants to organizations such as Cascadia Quest, with a goal of providing young adults with experience in environmental education. In addition to the Metro funded projects, Grant and Madison high school students (Urban Rangers) and Sabin Elementary School students have conducted environmental education and stewardship projects at the ponds such as wildlife surveys and vegetation inventories.

Public Involvement

A key component of any successful Master Plan is the involvement of members of the public that will be utilizing, enjoying, and managing the area. By incorporating the needs and concerns of all users and land owners, a plan can be formulated which sets an appropriate vision for the future and establishes a sense of pride in the community.

Due to the large number of private land owners within the planning area, it is crucial to obtain consensus among all interested parties and achieve balance between the concerns of industrial land owners and the anticipated increase in public access to the ponds. The planning process has allowed for numerous opportunities for the community, adjacent industrial property owners, and tenants, to express their concerns and desires. Public involvement was encouraged through the following activities:

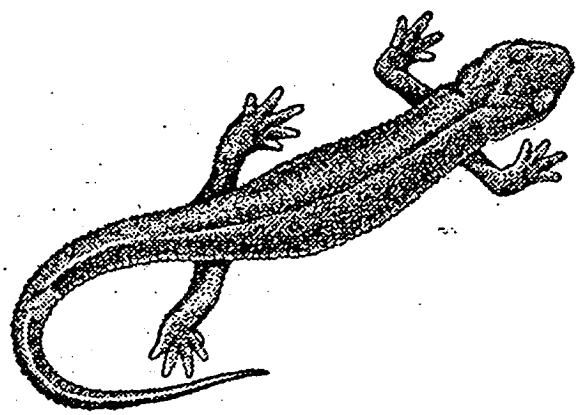
- Creation of an extensive list of stakeholders to involve and inform about the project.
- Meeting notices mailed to stakeholders.
- Neighborhood canvassing of approximately 2000 homes and businesses by EnviroCorps members to inform them of upcoming public meetings.
- Two public meetings to receive input on project goals and concept designs for the study area.
- Individual meetings with property owners, industrial tenants, and recreational users around the ponds to discuss the nature of the Master Plan and to clearly understand their concerns.
- Establishment of a 7-member independent advisory panel consisting of landowners in the area, neighborhood associations, natural



Envirocorps members removing blackberries

resource experts and educators. This panel was involved in all public meetings and provided Metro with their recommendation for a concept to be developed more fully as the final Master Plan.

- Presentations at the public meetings from community organizations and agencies that have a vested interest in the project, including Lakeside Little League, EnviroCorps, the Trust for Public Land, Portland Public Schools, Oregon Wildlife Heritage Foundation, Oregon Department of Fish and Wildlife, Concordia Neighborhood Association, and Cully Neighborhood Association.
- Distribution of the Draft Master Plan for public review and comment.
- Presentation of the final Master Plan to the Metro Council at a public hearing for their approval and adoption.
- Distribution of the adopted Master Plan to interested public.
- Numerous press articles informing the public of EnviroCorps' involvement in the project (see appendices).



III. Existing Conditions

EXISTING CONDITIONS

Location

The Whitaker Ponds study area consists of approximately 90 acres situated behind Portland Public School's Whitaker Facility near N.E. 47th Avenue and Columbia Boulevard. The Whitaker Slough, a branch of the Columbia Slough, forms the northern boundary and the ponds are connected to this waterway at the northwestern end of the west pond.

Zoning

The study area is entirely within a heavy industrial zone. An Environmental Conservation overlay conserves the natural resources and resource values of the area around the ponds. This overlay includes a 40-80 ft. wide corridor surrounding the pond, as well as the area between the Whitaker Slough and the ponds, as illustrated in the zoning map on page 13. The Master Plan has targeted the land falling within the environmental conservation zone for the recommended restoration and enhancement activities. The proposed activities are consistent with the type of uses allowed within a conservation overlay zone.

Project approval will be subject to environmental review by the City Planning Bureau to confirm that the proposed activities are consistent with the Environmental Zone Approval Criteria contained in Chapter 33.430.250 of the City's development code.

Aerial View of the Whitaker Ponds Study Area

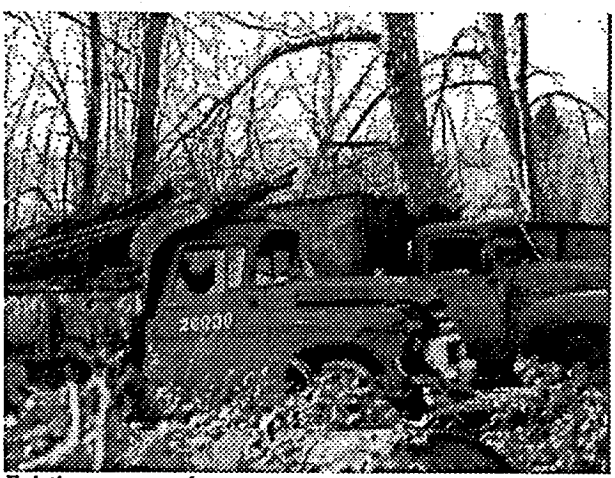
Ownership

The 90 acre study area includes a mixture of public and private properties, along with the ponds and their natural surroundings, which comprise approximately 25 acres. The study area is predominately under private ownership and contains a variety of industrial tenants as illustrated in the ownership map on page 15. However, at the core of the study area lies a 21-acre tract of land belonging to the Portland Public Schools. This parcel contains the Whitaker Facility which is no longer used for student classrooms, and 5 baseball fields that are actively used by Lakeside Little League teams. Portland Public Schools support the use of their land for site restoration, environmental education, and stewardship, natural resource dependent recreational opportunities, and little league activities.

All of the remaining properties surrounding the ponds are privately owned, including one land-locked vacant parcel on the north side of the east pond.

A five-acre privately owned scrap metal yard is located off 47th Avenue between the Whitaker Slough and the northwest shore of the west pond. This operation contains old rusting cars, stacks of miscellaneous metals, creosote treated scrap wood, old tires, other debris, a house and several small storage sheds. Less than 20 feet of bank separates the scrap metal yard from the shoreline. The Trust for Public Land currently holds an option to purchase the property for Metro, pending results of Level I and Level II environmental testing of the soil and water quality. The operator of the scrap metal yard has agreed to remove all debris from the site as part of the sale agreement.

Several owner occupied residential properties lie along NE 47th Avenue just south of the scrap metal yard providing residents with nice vistas of the two ponds. All of the residential properties fronting the west pond offer good possibilities for reuse for environmental learning, picnic areas, or on-site resident park



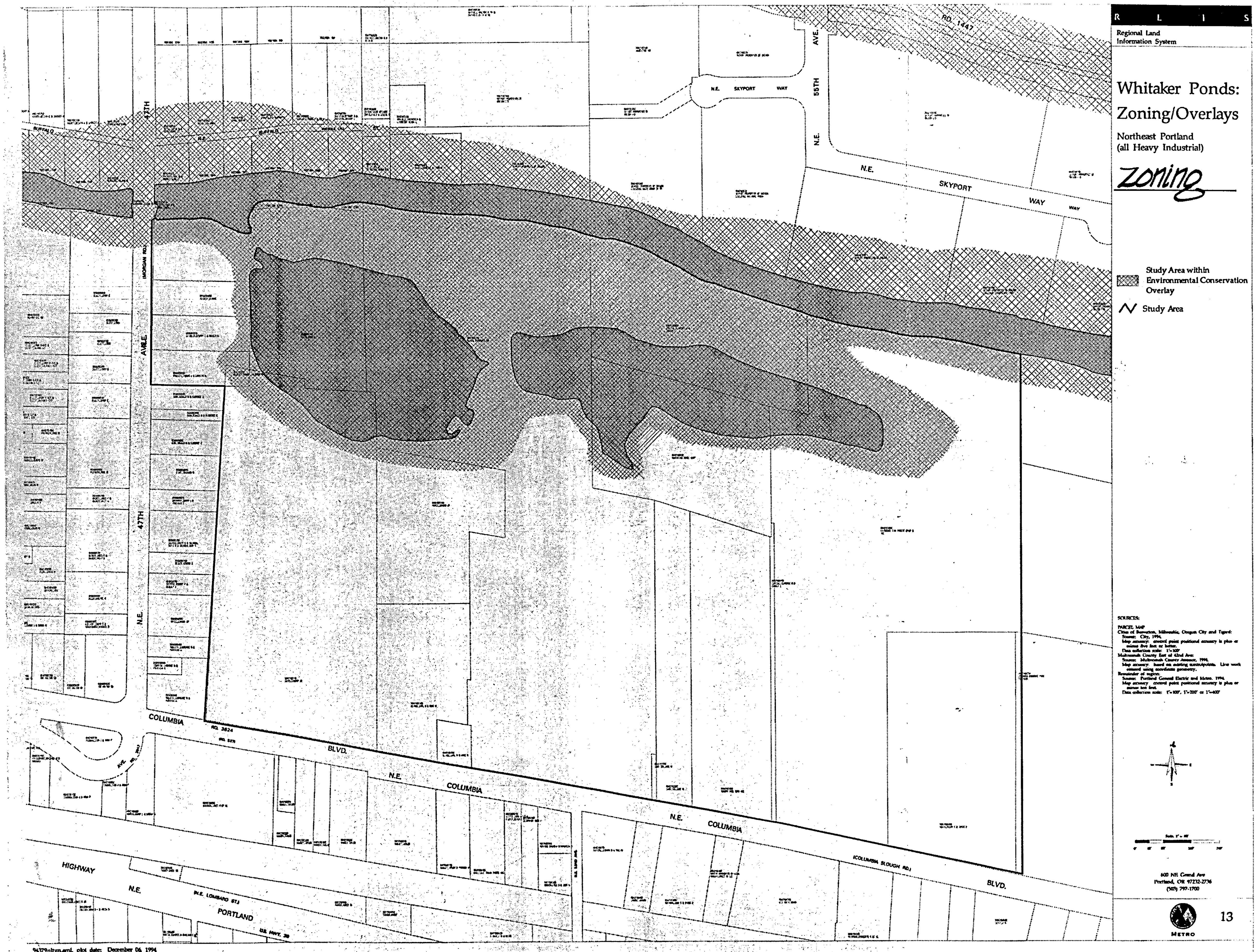
Existing scrap yard

Tires at existing scrap yard

"rangers" facilities. Plans are underway to purchase these properties as they become available, subject to environmental testing.

Special concerns and challenges arise from this unique blend of industrial, residential and public land owners within the planning area. While a goal of the Master Plan is to increase use of the area by the public, industrial owners are justifiably concerned with safety, security, and liability exposure should accidents occur on their property. An important component of the Master Plan for the area is, therefore, to reach an acceptable and appropriate balance between public access, natural resource enhancement, and non-interference with neighboring industrial activities.

To provide for effective management and protection of the ponds and their immediate surroundings, Metro has targeted several key parcels for Master Plan implementation. Highest priority parcels include those immediately adjacent to the ponds and those between the ponds and the Whitaker Slough where riparian enhancement, restoration, recreational activities, screening or buffering is desired. Second priority parcels include properties directly north of the Whitaker Slough. These priority areas are illustrated on page 47.


R L I S
Regional Land Information System
Whitaker Ponds: Zoning/Overlays
Northeast Portland (all Heavy Industrial)
Zoning
Study Area within Environmental Conservation Overlay
Study Area
SOURCES:
PARCEL MAP
Cities of Beaverton, Milwaukie, Oregon City and Tigard:
Source: City, 1994.
Map accuracy: control point positional accuracy is plus or minus five feet or better.
Data collection scale: 1"=100'
Multnomah County East of 42nd Ave:
Source: Multnomah County Assessor, 1994.
Map accuracy: based on existing controlpoints. Line work entered using coordinate geometry.
Remainder of region:
Source: Portland General Electric and Metro, 1994.
Map accuracy: control point positional accuracy is plus or minus ten feet.
Data collection scale: 1"=100', 1"=200' or 1"=400'
600 NE Grand Ave
Portland, OR 97232-2736
(503) 797-1700
METRO
N.E. SKYPORT WAY
55TH AVE.
N.E. 47TH AVE.
BUFFALO
N.E. COLUMBIA BLVD.
COLUMBIA
HIGHWAY
N.E. PORTLAND
94379pltzn.aml, plot date: December 06, 1994

R L I S

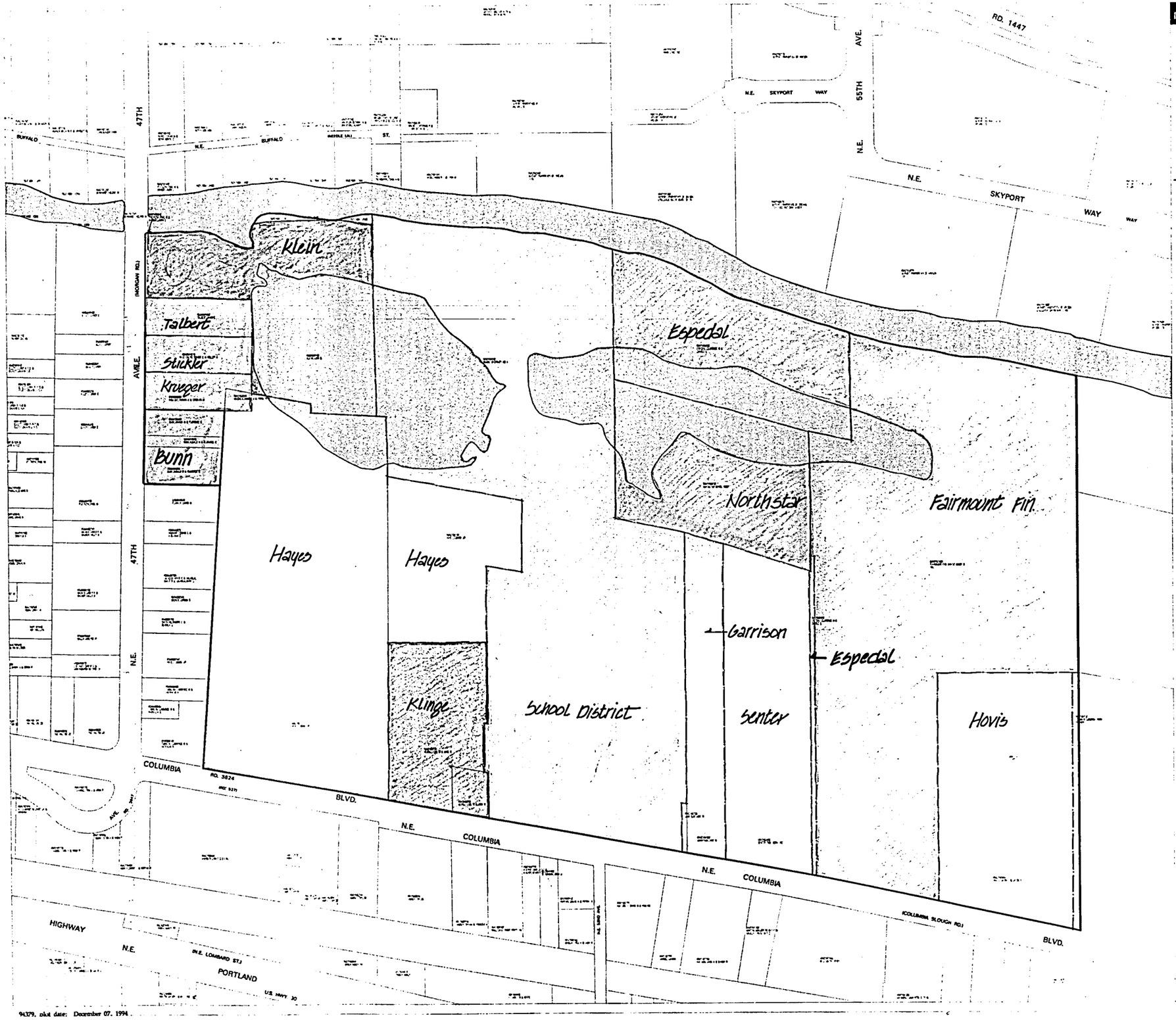
Regional Land Information System

Whitaker Ponds

Northeast Portland

Ownership

Study Area



94379, plot date: December 07, 1994

SOURCES:

PARCEL MAP
Clear of Inaccuracies, Milwaukie, Oregon City and Tigard
Source: City, 1994.
Map accuracy: assessed point positional accuracy is plus or minus two feet or better.
Data collection scale: 1"=100'
Multnomah County East of 42nd Ave:
Source: Multnomah County Assessor, 1994.
Map accuracy: based on existing monuments. Line work assessed using procedural geometry.
Remainder of region:
Source: Portland General Electric and Metro, 1994.
Map accuracy: assessed point positional accuracy is plus or minus ten feet.
Data collection scale: 1"=100', 1"=333' or 1"=400'

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(503) 797 1700

METRO

Land Use

The existing land use patterns, shown in the land use map on page 19, largely reflect ownership type. The Portland School District property contains 5 ball fields that are used heavily by Little League teams in spring through fall. The Little League consists of 28 teams and the fields are used Monday through Saturday for practice or competitions. Tournaments occur in July and August. Intramural games are played by teams from surrounding industries. The Little League maintains the two fields closest to the ponds and the School District maintains the fields closest to the school.

The Whitaker Facility building is held in reserve by the School District in case of emergency closing of another school. The Portland Police Department leases space in the building for training programs, and utilizes the fields for canine training.

The only access to the site occurs off NE Columbia Boulevard through the School District property. This entrance is gated for security reasons. Due to the high volume of traffic and large trucks along Columbia Boulevard, this entrance does not provide a safe access point.

The remainder of the southern portion of the study area is developed for various industrial tenants. With the exception of the scrap yard, and one ball field, the northern portion of the site is undeveloped. However, the open space is generally degraded and has been invaded by nuisance plant species such as blackberries, teasel, and purple loosestrife.

Ballfield north of Whitaker Ponds

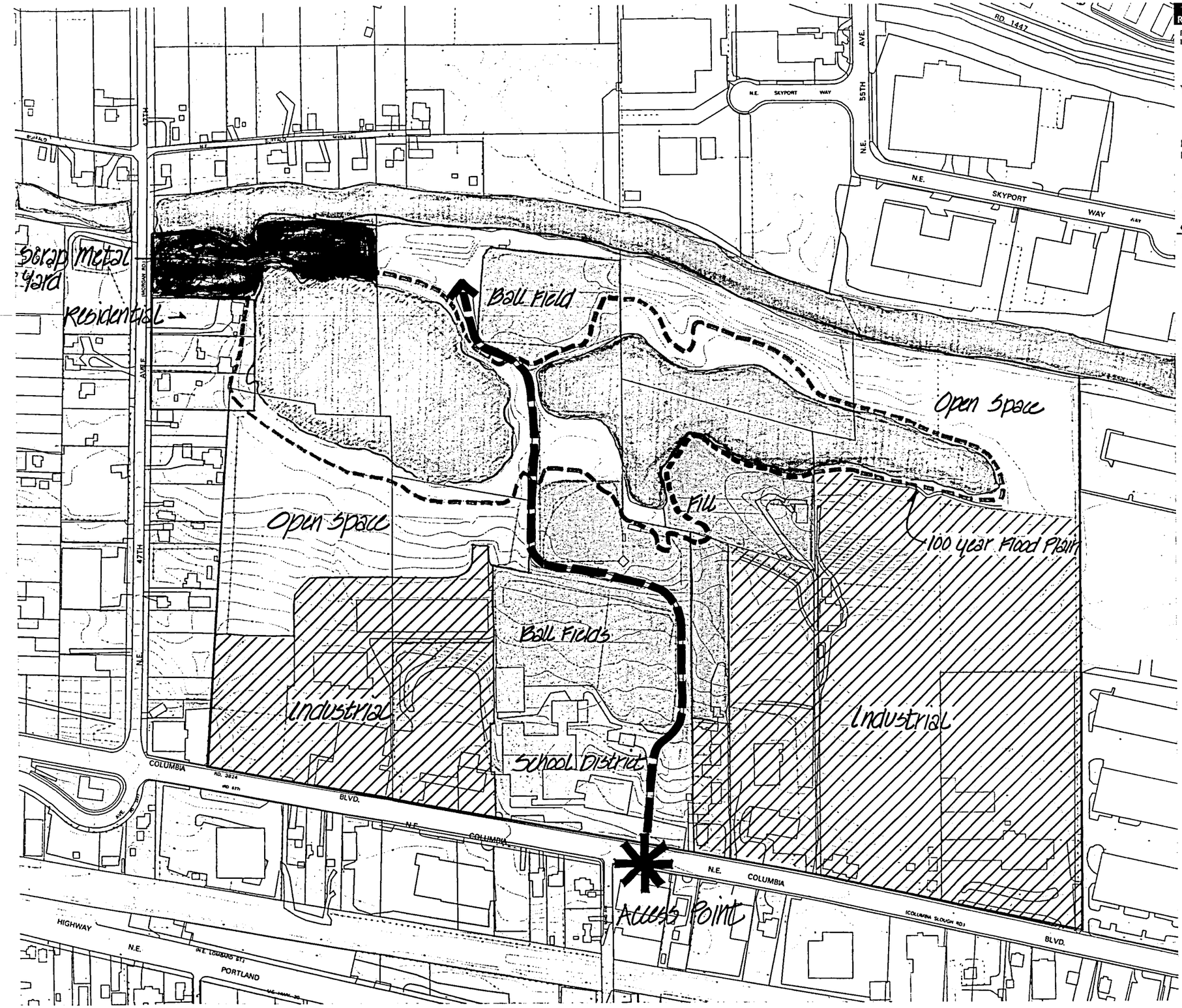
R L I S

Regional Land
Information System

Whitaker Ponds

Northeast Portland
Map #2

Existing Land Use



- Roads
- Trees/Shrubs
- Water
- Buildings
- Contours
- Fence
- Taxlots
- Study Area

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METRO

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Hydrology

The Whitaker Ponds themselves cover an area of approximately 11 acres. The two ponds are physically separated by an unpaved access road, but are hydrologically connected through an 18-inch diameter metal culvert. Water flows from the east to west pond and eventually into the Whitaker Slough through a 60-inch diameter metal culvert located at the west pond's northwest corner. The east pond, except for its culvert connection with the west pond, is isolated. A stream channel, which once flowed into the southern edge of the east pond, no longer exists.

A 1994 study conducted by SRI/SHAPIRO identified the primary hydrologic 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, direct precipitation, and the Columbia Slough also contribute water to the ponds.

Water depths in both ponds are relatively shallow, due primarily to the accumulation of up to 4 feet of sediment. Water levels fluctuate with the season and with the level of the Columbia Slough. The water level in the west pond is directly influenced by its connection to the Whitaker Slough. When water levels in the slough are low due to summer draw-down, the level in the west pond is also low. Observations indicate that water depths in the west pond fluctuate between approximately 2 and 4 feet.

View of Whitaker Slough from NE 47th Avenue

The east pond is shallower than the west pond, with water levels measured as little as 1 foot deep. Water flows year-round through the culvert beneath the access road from the east pond into the west. The constant supply of groundwater maintains the water level in the pond. The height of the culvert connecting the two ponds does not allow the east pond to become less than approximately 1 foot deep.

Water Quality

The water quality of both ponds appears to be relatively low due, in part, to the discharge of stormwater and groundwater which is known to be high in nutrients. Untreated stormwater enters the ponds through pipes draining adjacent roads and parking lots. One such pipe conveys stormwater from a storm drain on Columbia Boulevard into the southwest corner of the west pond. Based on a visual assessment by SRI/SHAPIRO, this contaminated water creates oily sheens on the water surface, lowering the quality of the habitat for fish and amphibians. Sediments carried through the pipes settles to the bottom when it reaches the pond creating shallow water and increasing the water temperature.

Adjacent residences and businesses are on septic systems and are not yet connected to sewage treatment systems. As water from drain fields flow into the ground, nutrients may be contributed to the groundwater. Groundwater high in nutrients flows into the ponds, where shallow depths, high temperatures, and low water flows cause summer algal blooms. Algal blooms indicate water flow levels and may have a detrimental impact on the habitat for warmwater game fish.

The Portland Bureau of Environmental Services (BES) has the responsibility of improving the

water quality of the entire Columbia Slough Watershed. Many water quality improvement projects are underway along the slough in areas like the Whitaker Ponds.

Sediment Quality
Pond sediments were tested in 1994 to investigate the potential for a warmwater fishery. Preliminary results suggest evidence of substances typically found in stormwater run-off.

A recent study by the City of Portland (BES) has determined that various contaminants have been found in the waters and sediments of the nearby Whitaker Slough. More information about Columbia Slough sediment contamination can be found in the Screening Level Risk Assessment Report prepared for BES in February 1995.

Riparian Vegetation

Vegetation Communities

Three main vegetation communities are currently present in the Whitaker Ponds planning area: upland, riparian, and wetland (see map on page 27). All of these vegetation communities have been influenced by human disturbance.

Upland Vegetation
The upland vegetation community includes abandoned pastures and ballfields. The upland community is dominated by herbaceous weedy species and Himalayan blackberry, with scattered trees and shrubs, both native and introduced. The ballfields are seeded with non-native grasses and are regularly mowed. The upland fields are dominated by non-native grasses as well as Himalayan blackberry and teasel. Species present in the upland community of Whitaker Ponds include:

Trees:

Abies grandis	*Grand fir*
Acer macrophyllum	*Bigleaf maple*
Betula papyrifera	*Paper birch*
Chamaecyparis lawsonii	*Port Orford cedar*
Pseudotsuga menziesii	*Douglas fir*

Shrubs:

Amelanchier alnifolia	*Serviceberry*
Berberis aquifolium	*Tall Oregon grape*
Chaenomeles sp.	*Quince*
Corylus cornuta	*Hazelnut*
Gaultheria shallon	*Salal*
Holodiscus discolor	*Oceanspray*
Ilex aquifolium	*Holly*
Prunus sp.	*Cherry*
Prunus laurocerasus	*English laurel*
Rhododendron sp.	*Rhododendron*
Rosa multiflora	*Rose*
Rosa pisocarpa	*Clustered wild rose*
Rubus discolor	*Himalayan blackberry*
Rubus ursinus	*Pacific blackberry*
Salix scouleriana	*Scouler's willow*

Herbaceous:

Achillea filimentosa	*Yarrow*
Agrostis tenuis	*Colonial bentgrass*
Bromus sp.	*Brome sp.*
Chrysanthemum leucan.	*Oxeye daisy*
Cichorium intybus	*Chicory*
Cirsium arvense	*Canada thistle*
Cirsium vulgare	*Bull thistle*
Dactylus glomerata	*Orchard grass*
Daucus carota	*Queen Anne's Lace*
Dipsacus sylvestris	*Teasel*
Epilobium paniculatum	*Tall willow-weed*
Festuca arundinacea	*Tall fescue*
Galium aparine	*Catchweed bedstraw*
Geranium molle	*Dovefoot geranium*
Hedera helix	*Baltic ivy*
Lactuca muralis	*Wall lettuce*
Lathrus latifolius.	*Sweetpea*
Plantago lanceolata	*English plantain*
Polystichum munitum	*Sword fern*
Rumex crispus	*Curly dock*
Trifolium pratense	*Red clover*

Riparian Vegetation

The riparian plant community is located on the banks of the Whitaker Slough and around the perimeter of the two ponds. In general, the riparian plant community contains a mix of tree and shrub species, most of which are native.

The dominant species are cottonwood (Populus trichocarpa) and red alder (Alnus rubra). Steep banks and areas of fill along the pond perimeters preclude the establishment of extensive riparian vegetation in portions of both ponds.

Vegetation in the riparian zone around the west pond is dominated by black cottonwood, which shades the portion of the pond closest to the banks. The west end of the pond lacks riparian vegetation due to residences along NE 47th Avenue. In addition, fill material associated with the junkyard located in the northwest corner of the pond has created banks approximately 10 to 12 feet high. These high, steep banks have limited the amount of riparian vegetation located in this area. In general, the banks around the west pond range from 18 to 42 inches in height.

The riparian area of the east pond is narrow and discontinuous. Large areas of the north and south banks are dominated by Himalayan blackberry, with scattered black cottonwood trees. Steep banks and areas of fill also occur both on the north and south banks of the east pond, which limits the growth of riparian vegetation. In general, bank heights range from 12 to 72 inches.

Native riparian vegetation has been planted on the northwest edge of the east pond. The plants are a mix of trees and shrubs and include species such as willow (Salix sp.), Pacific ninebark (Physocarpus capitatus) and Red-osier dogwood (Cornus stolonifera).

The following is a list of species comprising the riparian community:

Trees:

Alnus rubra	*Red alder*
Fraxinus latifolia	*Oregon ash*
Populus trichocarpa	*Black cottonwood*
Salix lasiandra	*Pacific willow*
Salix scouleriana	*Scouler willow*

Shrubs:

Cornus stolonifera	*Red osier dogwood*
Rosa pisocarpa	*Clustered wild rose*
Crataegus douglasii	*Douglas hawthorn*
Spiraea douglasii	*Hardhack*

Wetland Vegetation Community

The wetland vegetation community is located in isolated areas around the perimeter of both ponds. In the east pond, this community is isolated to the far eastern end and along a small area of the southern edge. In the west pond the wetland areas are located along the eastern edge, and in the southwest corner. These emergent wetland areas generally have gradual banks and water depths less than 12 inches.

This community is dominated by emergent wetland species, both native and introduced. Reed canarygrass (Phalaris arundinacea) and purple loosestrife (Lythrum salicaria) are two introduced species which tend to be very invasive and need to be controlled to prevent them from establishing monotypic stands.

Wetland species observed on-site include the following:

Bidens cernua	*Nodding beggars tick*
Callitriche stagnalis	*Water starwort*
Conium maculatum	*Poison hemlock*
Echinochloa crusgalli	*Barnyard grass*
Eleocharis sp.	*Spikerush*
Epilobium watsonii	*Watson's willow-weed*
Equisetum arvense	*Common horsetail*
Geum macrophyllum	*Large-leaved avens*
Iris pseudocorus	*Yellow flag iris*
Juncus effusus	*Soft rush*
Lemna minor	*Duckweed*
Lythrum salicaria	*Purple loosestrife*
Oenanthe sarmentosa	*Water parsley*
Phragmites communis	*Common reed*
Phalaris arundinacea	*Reed canarygrass*
Plantago lanceolata	*English plantago*
Polygonum sp.	*Knotweed*
Ranunculus repens	*Creeping buttercup*
Rorippa nasturtium-aqu.	*Watercress*
Scirpus validus	*Soft stem bulrush*
Solanum dulcamara	*Bittersweet nightshade*
Sparganium emersum	*Burreed*
Typha latifolia	*Cattail*
Urtica dioica	*Stinging nettle*
Veronica americana	*Speedwell*

Wildlife Habitat

A variety of mammals, birds, and reptiles use the Whitaker Ponds. Species utilizing the area tend to be urban-tolerant, and no Rare, Threatened or Endangered (RTE) species are believed to occur on the site.

Mammals in the area are generally ubiquitous urban species such as opossum, raccoon, mole, squirrel, and nutria. Beaver and turtles have been known to occupy the ponds in the past, and recent beaver activity was observed on the southern bank of the west pond. Mammal habitat in Whitaker Ponds is restricted due to surrounding land use, insufficient cover, and human disturbance. The existing vegetation patterns around the ponds are discontinuous and sparse. The Whitaker Slough, however, provides a migration corridor for some species, though the slough both up and downstream of the ponds is extensively developed.

Approximately 40 species of birds have been observed utilizing the ponds and the surrounding area. The majority are songbirds or waterfowl. A pair of red-tailed hawks have been known to nest in the cottonwood trees along the southern banks of the east pond. Great blue herons are regular visitors to both ponds. As with mammals, cover and nesting areas are limited for bird species. Large trees and snags are utilized by a number of species, but are relatively rare in the Whitaker Ponds riparian vegetation community.

Whitaker Ponds are home to a large population of common carp (*Cyprinus carpio*). Carp, which are native to Asia, were introduced to Oregon in the late 1800s. The ponds are ideal habitat for the carp. They prefer shallow, slow moving water and are very tolerant of adverse conditions, such as high water temperatures, pollution, and low oxygen levels. Carp are prolific breeders and are capable of spawning in as little as 3 to 4 inches of standing water. Carp stir the sediments of the ponds creating turbid water and conditions unsuitable for many warmwater game fish such as bass and crappie.

Another common fish in Whitaker Ponds is the three-spine stickleback (Gasterosteus aculeatus). This small fish is easily identified by the three spines along its back. It lives near the bottom and is often found in large schools. Other species of fish found within the ponds are mosquito fish (Gambusia affinis) and suckers (Catastomus sp.).

The number of amphibians in the ponds has been reduced probably because of water quality degradation. Stormwater runoff from parking lots and roads may have contributed to increased sedimentation and contamination from substances such as oil. Shallow water depths, due to sedimentation, creates conditions leading to higher water temperatures, which adversely affects many species. In addition, the uniformity of the depth of the ponds and the lack of woody debris within the water suitable for cover, also negatively impacts species diversity.

The following is a list of animal species known to utilize the site:

Mammals:
Beaver *(Castor canadensis)*
Mole *(Scapanus sp.)*
Muskrat *(Ondatra zibethicus)*
Nutria *(Myocaster coypus)*
Opossum *(Didelphis marsupialis)*
Raccoon *(Procyon lotor)*

Birds:
American goldfinch *(Carduelis tristis)*
American robin *(Turdus migratorius)*
Barn swallow *(Hirundo rustica)*
Bewick's wren *(Thryomanes bewickii)*
Black capped chickadee *(Parus atricapillus)*
Bufflehead *(Bucephala albeola)*
Bushtit *(Psaltriparus minimus)*
Canada goose *(Branta canadensis)*
Cliff swallow *(Petrochelidon pyrrhonota)*
Common crow *(Corvus brachyrhynchos)*
Common merganser *(Mergus merganser)*
Double crested cormorant *(Phalacrocoraxauritus)*
Downy woodpecker *(Picoides pubescens)*
European starling *(Sturnus vulgaris)*
Great blue heron *(Ardea herodias)*
Hairy woodpecker *(Picoides villosus)*
House finch *(Carpodacus mexicanus)*
House sparrow *(Passer domesticus)*
Killdeer *(Charadrius vociferus)*
Kingfisher *(Megaceryle alcyon)*
Mallard *(Anas platyrhynchos)*
Northern flicker *(Colaptes auratus)*
Northwestern crow *(Corvus caurinus)*
Orange crowned warbler *(Vermivora celata)*
Oregon junco *(Junco hyemalis)*
Red-tailed hawk *(Buteo jamaicensis)*
Red-winged blackbird *(Agelaius phoeniceus)*
Ring-necked pheasant *(Phasianus colchius)*
Scrub jay *(Aphelocoma coerulescens)*
Song sparrow *(Melospiza melodia)*
Spotted sandpiper *(Actitis macularia)*
Stellar's jay *(Cyanocitta stelleri)*
Teal *(Anas sp.)*
Tree swallow *(Iridoprocne bicolor)*
Various gulls *(Larus sp.)*
Willow flycatcher *(Empidonax traillii)*
Wood duck *(Aix sponsa)*

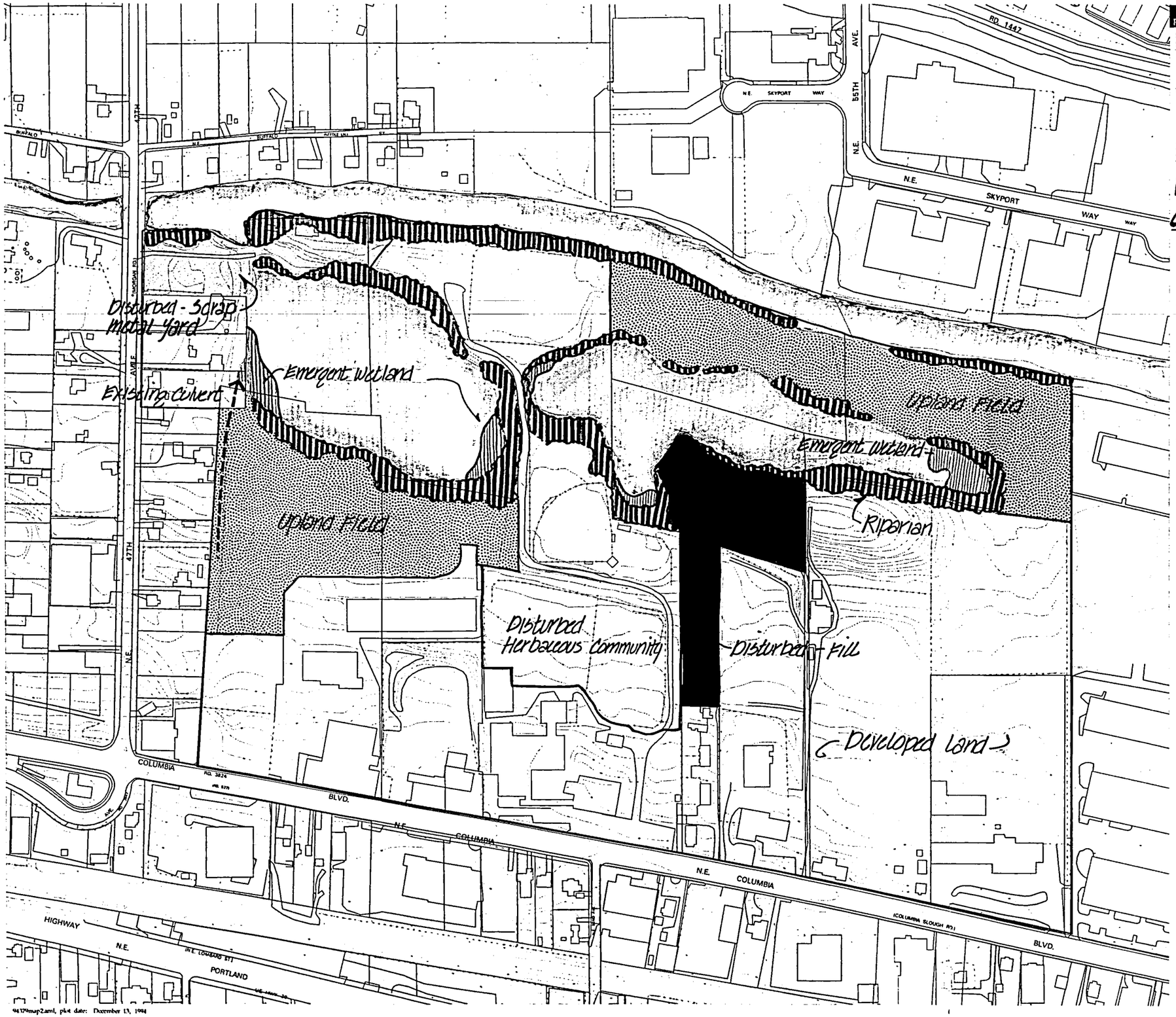
Fish/Amphibians:
Carp *(Cyprinus carpio)*
Mosquito fish *(Gambusia affinis)*
Stickleback *(Gasterosteous aculeatus)*
Sucker *(Catastomus sp.)*
Bullfrog *(Rana catesbeiana)*

Regional Land Information System

Whitaker Ponds

Northeast Portland
Map #2

Vegetation Communities



- Roads
- Trees/Shrubs
- Water
- Buildings
- Contours
- Fence
- Taxlots
- Study Area

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METRO

Project Issues

During the development of the Master Plan many issues affecting plan implementation were identified and discussed in public workshops and in one-on-one meetings with interested landowners and citizens. Key issues affecting plan implementation are discussed above in the Existing Conditions section and are summarized below. Each of these issues are addressed through specific recommended actions identified in Chapter IV, Concept Master Plan and Chapter V, Plan Implementation.

Natural Resources

- Water quality in the ponds is questionable and could be affecting habitat for fish and amphibians.
- Testing of sediments and water samples needs to be undertaken in coordination with the Columbia Slough Sediment Project.
- The site is degraded and in need of clean up and restoration.
- There is a lack in diversity of habitat types. Emergent wetlands and aquatic environments need enhancement.
- Riparian zones need enhancement.
- The banks are too steep in some areas, limiting the amount of riparian vegetation.
- Invasive plant species need to be eliminated or controlled.
- Pollutants/nutrients from stormwater runoff and maintenance of ball fields could be contributing to water quality problems.

Ownership

- Numerous private parcels are contained within the study area, making overall management difficult.
- Industrial neighbors have concerns for privacy, liability, safety and security.
- Existing vehicular access off Columbia Boulevard is unsafe.

Recreation

- The ponds are too shallow to support a warmwater fishery.
- There is no variety in the depths of the pond.
- The feasibility of dredging the ponds needs to be determined based on sediment tests and cost estimates.
- The presence of a large number of carp pose problems to establishment of a fishery.
- Activity generated by the northernmost ball fields conflicts with natural resource protection on the north side of the ponds.
- Little League teams currently operate with 5 ball fields. To replace the northernmost field, existing fields to the south should be upgraded.

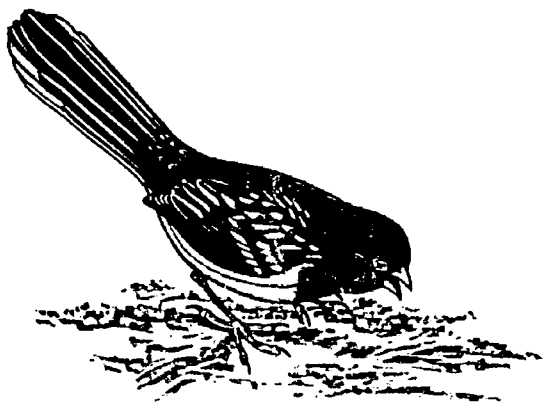
Funding Sources for Plan Implementation

- Limited funding is available to implement the Master Plan.
- Additional funding sources must be identified and earmarked for specific activities such as dredging, property acquisition, canoe/boat launch construction, and relocation of the northernmost ball field.

Project Partnerships

- Project momentum could slow down if committed partnerships are not formed.
- Public and private sector project partners and their roles and responsibilities for short term and long term involvement need to be identified and formalized where possible.
- A list of volunteers and community supporters willing to participate in plan implementation activities should be developed.

IV. Concept Master Plan



CONCEPT MASTER PLAN

Intent

The intent of the Concept Master Plan is to create a vision for the future restoration of a degraded natural resource which accommodates concerns of property owners and offers the combined benefits of wildlife enhancement, water quality improvement, recreational opportunities, educational interpretation, and improved quality of life for present and future generations. The Master Plan is also intended to provide direction for volunteer groups such as EnviroCorps to implement site improvements and restoration activities.

Mission Statement

Restore and enhance the Whitaker Ponds Natural Area and provide appropriate levels of recreational activities for generations to come.

Goals

I. Restore Natural Resources

The existing resources on the site have become severely degraded as the use of the land shifted from an agriculturally based to an industrial based economy. A major goal of the Master Plan is to restore the ponds area to a pre-disturbance condition. This involves removal of non-native plant and animal species, clean up of debris, establishment of native plant and animal species, improvement of water quality if required, and re-establishment of the physical connection between the ponds to maintain a warmwater fishery.

II. Provide Environmental Education and Stewardship Opportunities

By restoring the natural resources of the area and creating more diversity in habitat types, a more complex biological system can be created. As wildlife enhancement is balanced with appropriate levels of public use, numerous opportunities exist to educate visitors about the complex natural system they are participating in. Use of the area for educational and stewardship purposes will be encouraged through:

- Development of a trail system with interpretive signage and view points highlighting specific features of the site.
- Incorporation of an environmental learning center.
- Encouragement of school groups to use the site for environmental demonstration projects.
- Involvement of volunteer groups such as EnviroCorps in restoration projects.

III. Improve Water Quality

Sedimentation and questionable water quality in the ponds may be a result of past agricultural practices, industrial neighbors, the lack of a stormwater sewer system in the area, and hydrological connection with the Whitaker Slough. Water quality and sediment sampling is required to determine the potential for a successful warmwater fishery on site. Potential flow from the Whitaker Slough into the ponds should be eliminated. If feasible, pond sediments could be dredged to create deepwater habitat necessary for a sustainable fishery. The Master Plan also calls for a system of bioswales to be used to treat runoff from impervious areas before release into the ponds.

IV. Encourage Community Access and Use

Natural areas such as Whitaker Ponds are a rare commodity, especially in the densely populated areas of northeast Portland. To encourage greater use and enjoyment by the community, a variety of recreational programs and amenities have been incorporated into the Master Plan, including:

- Development of a warmwater fisheries in the ponds.
- Provision of ball fields for Little League activities.

- Incorporation of picnic areas.
- Incorporation of a canoe/boat launch onto the Whitaker Slough.
- Development of a looped trail system offering views to the ponds and the slough.
- Provisions of parking for 20 cars off 47th Avenue.

V. Incorporate the Concerns of Adjacent Property Owners

The Master Plan developed for the ponds area was based on a series of meetings both with individual land owners and the general public to solicit input on project goals, limitations, constraints, and alternatives to development. These meetings were very helpful in establishing the framework for future restoration efforts. To implement the Master Plan, specific negotiations must continue to allow for purchase or easements of key parcels of land.

VI. Insure Compatibility between Industrial Activities and Recreational Users

As mentioned earlier in this chapter, the land owners adjacent to the pond have very valid reasons to be concerned about liability and security issues relating to increased public use. To address this concern, the Master Plan provides a buffer zone on the south side of the ponds which prohibits public access and which provides for fencing and additional plantings to provide a clear separation. To increase security even further, the entrance to the site will be gated and secured at night, and a resident park "ranger" is recommended to occupy one of the existing private residences as property becomes available.

View of local residences on the West Pond

Components of the Master Plan

The Concept Master Plan for Whitaker Ponds is illustrated on page 39. Key components of the plan are briefly described below.

Public Access and Use
A new primary access to the site is provided off 47th Avenue with parking for 20 cars. This provides a safer vehicular access than can be provided off Columbia Boulevard. This entrance will be gated and secured in the evening. The park gate should be opened early enough and closed late enough to allow ample opportunity for fishing and wildlife viewing when these activities are most productive. Routed off the parking lot will be a canoe/boat launch to the Whitaker Slough. Multnomah County Drainage District is interested in joint use of the boat launch for their dredging equipment and should be a partner in this component. The interior portions of the site will be limited to pedestrian use only. No motorized vehicles will be permitted. The culvert and land bridge between the two ponds will be removed to eliminate the existing access to the south.

To increase protection of the natural resources, the Master Plan provides zones for similar types of activities. For example, active recreation activities such as softball, will be located on the south side of the ponds on School District property. The north side of the ponds will be restored and enhanced for wildlife habitat and passive recreation activities. Picnicking sites will be provided near the parking lot for ease of access and trash removal.

Non-motorized boats and float tubes should not be allowed on the ponds. Use of non-motorized boats and float tubes would conflict with the goals to prohibit public access and protect riparian wildlife habitat on the southern portion of the ponds. In addition, due to the pond size, boats would conflict with pier and bank anglers.

✳ Metro and Portland Public Schools should explore their roles and responsibilities with regard to management of activities north and south of the ponds. An approach worth exploring would be for Metro or another partner to be solely responsible for management of activities north of the ponds, and for the School District to continue as it has to be solely responsible for managing facilities and uses, including Little League, on their property south of the ponds.

Environmental Education
A feature of the environmental education program could be an Environmental Learning Center which includes classrooms, administration offices, and resource library. This Center could be housed in one of the existing residences along 47th Avenue as these parcels become available for purchase. The Center would be a good staging area for field trips by various school programs. Routed from the Center would be a pedestrian trail system leading to a series of viewing areas overlooking the ponds and the slough. Trails and viewing areas would be buffered with vegetation to minimize disruption to wildlife. Interpretive signage would be provided at key points along the trail to inform visitors of the unique aspects of the area.

Buffer Zones
To maximize safety and security and reduce conflict between public use and industrial activity, no public access is proposed on the southern portion of the ponds, with the exception of the School District property. With the cooperation of individual property owners, these buffer zones would be planted heavily to enhance riparian habitats and increase screening of industrial operations. Fencing would also be incorporated along the boundary of the buffer area and industrial property to further increase security.

Water Quality Enhancement
The water quality in Whitaker Ponds needs to be tested and, if necessary, improved to make the habitat suitable for warmwater gamefish, amphibians and other wetland dependent

species. The culvert connecting the west pond with the Whitaker Slough needs to be replaced with a weir to eliminate movement of water and fish from the Whitaker Slough into the ponds system, and to control the water levels in the ponds.

The ponds are currently receiving untreated stormwater from adjacent roads and parking lots. It is imperative that the majority of the stormwater be treated prior to flowing into the ponds. Pipes conveying stormwater to the ponds could be located and directed toward a treatment facility constructed along the southern edge of the west pond. This would assure that stormwater currently flowing from Columbia Boulevard, NE 47th Avenue, and the parking lots of adjacent industrial sites would be treated and the majority of the oil and sediment removed.

The treatment facility could be a combination of biofiltration swales and a sedimentation pond. The vegetated biofiltration swales would remove many of the nutrients found in stormwater. The sedimentation pond would slow the flow of the water allowing sediment to sink to the bottom before sediment laden water can flow into the west pond. The water quality treatment facility would be constructed in areas dominated by upland grasses, with limited removal of native trees or shrubs. Sedimentation ponds would be maintained periodically to assure effective operation. Development of this treatment facility should be coordinated with the City's Columbia Slough Water Quality Improvement Program.

Sediment Removal (Dredging)

Sediment, at least 4 feet deep, currently exists within the ponds. This sediment has contributed to the shallowness of the ponds and the uniformity of the depth. Shallow water depths limit the space for fish production and increase temperature and the likelihood of oxygen depletion. The existing silt bottom limits spawning by warmwater game fish, as well as the diversity of invertebrates available for fish food.

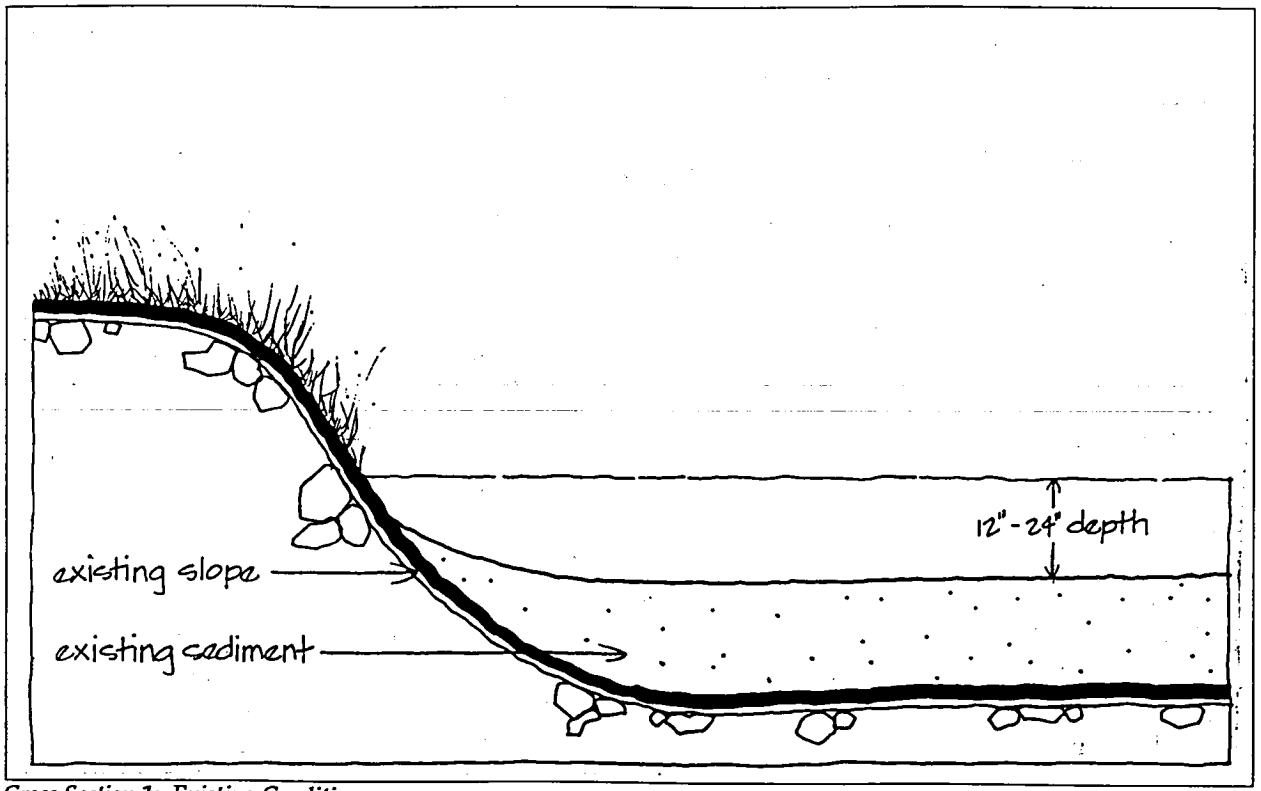
To increase the quality of the habitat of Whitaker Ponds, up to 4 feet of sediment should be removed from portions of both ponds. The sediment must first be tested for possible contamination to determine whether removal is feasible. Sediment testing should be coordinated with the City's Columbia Slough Sediment Program. The removal of the sediments will increase the depth of the water and, along with increased bank shading, will allow cooler temperatures especially near the banks. Cooler temperatures are conducive for the reproduction of fish. The removal of the sediment will create a variety of water depths, increasing the diversity of habitats within the ponds.

The Multnomah County Drainage District should be consulted for their potential role in dredging the ponds as a component of the Columbia Slough Flood Control Program. Dredging funds may also be available from Oregon Department of Fish and Wildlife's Fish Restoration and Enhancement Program.

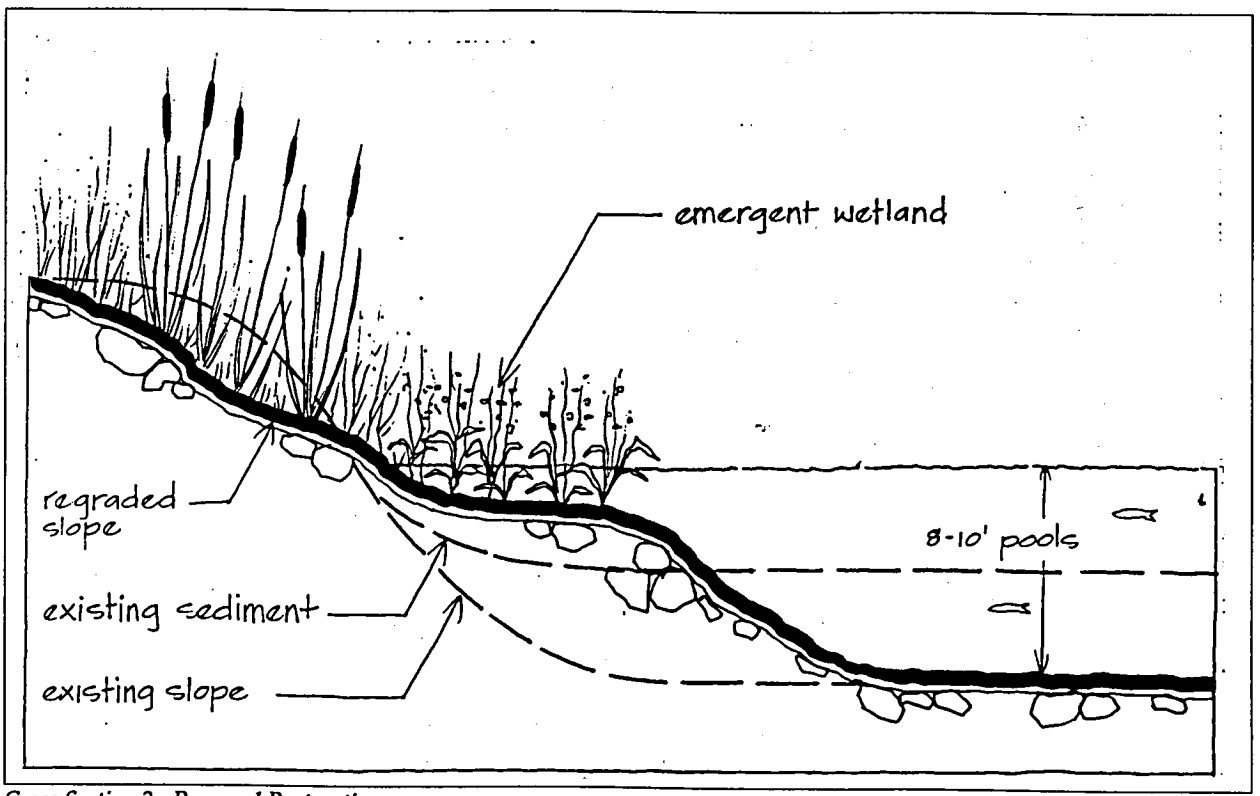
Site Restoration

Emergent Wetland Enhancement. Very few areas of emergent vegetation currently exist within the ponds as illustrated in Cross Section 1. Emergent vegetation is very important for providing food and cover for wildlife and invertebrates and for improving water quality by trapping sediment and removing nutrients. To increase the amount of emergent vegetation within the ponds, it will be necessary to create gentle slopes along the banks of the ponds as illustrated in Cross Section 2. Gentle slopes between 7:1 and 10:1 can be created by grading the pond banks.

Although the water depth in the east pond is shallow, emergent vegetation has not become established. More suitable substrate in the east pond could be created by raising and lowering water levels, using the proposed west pond weir to simulate seasonal fluctuations. Water level fluctuations would need to be within a range that would not adversely affect a warmwater



Cross Section 1: Existing Condition



Cross Section 2: Proposed Restoration

fishery. A proposed enhancement plan involving fluctuating water levels would require close coordination with the Oregon Department of Fish and Wildlife. These newly created areas could be planted with a variety of native vegetation.

A list of native herbaceous species suitable for an emergent area are as follows:

Bidens cernua	*Nodding beggars tick*
Carex rostrata	*Beaked sedge*
Carex obnupta	*Slough sedge*
Eleocharis sp.	*Spikerush*
Juncus ensifolious	*Dagger-leaf rush*
Oenanthe sarmentosa	*Water parsley*
Polygonum sp.	*Knotweed*
Rorippa nasturtium-aqu.	*Watercress*
Scirpus validus	*Soft stem bulrush*
Scirpus acutus	*Hard stem bulrush*
Sparganium emersum	*Burreed*
Typha latifolia	*Cattail*

Riparian Zone Enhancement. Riparian vegetation along the margins of the ponds and the Whitaker Slough has many benefits for wildlife and the water quality of the ponds. Riparian vegetation provides travel corridors, cover, nesting areas, and an abundant food source for many species of wildlife. The roots of riparian vegetation binds soil particles which stops erosion. Overhanging vegetation shades the water, lowering its temperature, and tree limbs falling into the water provides cover for fish and substrate for macro invertebrates.

Riparian vegetation can be enhanced around all portions of the ponds and along the Whitaker Slough. Areas currently lacking significant riparian vegetation include the northern edge of the east pond. This area should be planted with species tolerant of dry soil conditions, such as Douglas fir and Big-leaf maple. Riparian vegetation is also needed along the southern edge of the east pond, which is currently dominated by a dense growth of blackberries. This area should be planted with species such as Red alder and Black cottonwood that can provide shade and woody debris to the ponds, which are important for fish.

The following list of trees and shrubs are appropriate for planting in the Whitaker Ponds area:

Trees:

Acer macrophyllum	*Bigleaf maple*
Alnus rubra	*Red alder*
Fraxinus latifolia	*Oregon ash*
Thuja plicata	*Western red cedar*
Populus trichocarpa	*Black cottonwood*
Pseudotsuga menziesii	*Douglas fir*

Shrubs:

Amelanchier alnifolia	*Serviceberry*
Berberis aquifolium	*Tall Oregon grape*
Cornus stolonifera	*Red osier dogwood*
Corylus cornuta	*Hazelnut*
Crataegus douglasii	*Douglas hawthorn*
Gaultheria shallon	*Salal*
Holodiscus discolor	*Oceanspray*
Rosa pisocarpa	*Clustered wild rose*
Salix scouleriana	*Scouler's willow*
Salix lasiandra	*Pacific willow*

Native trees and shrubs should be planted in a random manner to simulate natural conditions. Plants should be clustered and not planted in a defined pattern. The eventual height of the trees and shrubs should be estimated and the moisture requirements of the plants should be known to determine the most suitable location for planting.

Non-native Plant Control

The growth of selected non-native plants needs to be controlled within the emergent wetland and riparian areas. Many non-native species within both vegetation communities will continue to grow despite attempts to control their growth. Species such as purple loosestrife and reed canarygrass are capable of forming large monotypic stands. These monotypic

stands not only preclude the growth of native species, they decrease habitat suitable for many birds, fish, and invertebrates.

English ivy and Himalayan blackberry are two non-native species which need to be controlled within the riparian areas. English ivy is common on many of the trees growing adjacent to the ponds. Himalayan blackberry is common in all areas surrounding the ponds. While Himalayan blackberry does provide habitat for wildlife, it easily outcompetes native plant species.

Initial control of all non-native species should be by hand. If this method is not effective, other control strategies could be used, including the application of chemicals. However, chemical applications should be viewed as a last resort.

Warmwater Fisheries

The Oregon Wildlife Heritage Foundation and Oregon Department of Fish and Wildlife strongly support a put and take fishery for the short term, and development of a warmwater fishery for the long term, at Whitaker Ponds. These activities will provide local youth with fishing, outdoor recreation, and educational opportunities. The Oregon Wildlife Heritage Foundation is committed to assist with funding for fish stocking and angling education.

Initially, a put and take fishery could be available to the public by simply raising the water levels of the ponds. The depth of the water in the ponds would need to be increased an additional two feet to a maximum depth of between 5 and 6 feet with the installation of a control weir in the west pond. The weir, which will be a box culvert capable of supporting vehicle traffic, will replace the 60-inch diameter corrugated metal culvert in the northwest corner of the west pond. This box culvert will contain stop boards, which can be placed at various heights to control the water depth. The year-round flow of groundwater in the ponds will ensure that the water level is maintained at a stable level.
The weir will be designed to ensure that the water quality and warmwater fish population in the Ponds are kept totally separate from the Whitaker Slough System. Water would flow in a direction from the Ponds to the Slough only, and fish from the slough could not migrate to the Ponds.

Suitable warmwater gamefish habitat within the ponds is limited due to many factors. These include: shallow water, high water temperatures, turbid water, and lack of food and cover. Shallow water is exasperated by the large amount of sediment within both of the ponds. When this sediment is eventually removed, it will increase the variety of water depths within the ponds. The ideal depth for a pond capable of providing suitable conditions for warmwater fish reproduction is between 8 and 10 feet. Depths shallower than this can support fish populations, but they may have to be stocked periodically to maintain a viable population for fishing.

In addition to shallow water, the sediment is stirred into the water column by the large number of carp found within the ponds. This creates turbid water conditions which is not suitable for many species of gamefish. It will be necessary, therefore, to remove the carp from the ponds prior to stocking with gamefish such as bass, bluegill, and crappie. Any fish removal will be conducted with Oregon Department of Fish and Wildlife oversight.

The culvert beneath the access road should eventually be removed to allow water to flow freely between the two ponds. An opening of approximately 20 feet will be sufficient to allow fish passage between the two ponds. The location of the opening should be chosen to minimize the loss of large trees along the access road.

Larger fish will probably inhabit the west pond because of the deeper water and cooler water temperatures. The east pond, with the enhancement of emergent wetland areas, will provide habitat and refuge for smaller fish. Piles

of woody debris can be placed in both ponds to provide habitat for fish and other aquatic species.

In order to provide a fishery program, the Master Plan, illustrated on page 39, proposes to:

- Upgrade the culvert between Whitaker Slough and the west pond to allow raising of the west pond by 2' to allow for a put and take fishery. Residences on the Pond would not be affected by this minimal increase in water level.
- Remove the carp in the ponds.
- Connect the two ponds into one water body by removing the existing culvert and road between the ponds. This also creates a physical barrier between the natural surroundings north of the ponds and the more developed and active area to the south.
- Dredge the west pond and a channel to the east pond if determined to be feasible.
- Enhance areas along the north shore of the west pond for angling activities.
- Incorporate two fishing piers on the north side of the west pond.
- Explore an agreement with the School District that would remove them from liability of placing fish piers on the north side of the west pond.

Active Recreation

The Little League has utilized the existing ball fields for years through a joint-use agreement that the School District has with the Portland Parks and Recreation Bureau. The Little League receives a use permit from the Portland Parks and Recreation Bureau. The Master Plan provides for continued Little League participation but proposes concentrating sports activities to the south side of the ponds. The northernmost ball field would be removed and the area restored to a native plant community. One of the existing fields could be upgraded to a tournament level field and provided with temporary fencing to allow for shared use of outfields during practice times. An issue to be explored further is whether or not Metro should be responsible for financing the removal of the northernmost ballfield and upgrading one of the existing practice fields to a tournament field. The Lakeside Little League should be consulted and involved in the ballfield relocation process. Their involvement will have a positive affect on the project.

Security

As in most urban areas, security is always a concern. To provide for increased security, the Master Plan proposes gating the entry to the site, and providing accommodations for an on-site resident park "ranger" to keep watch over the area during all hours of the day or night. An ideal location for the park ranger would be near the entrance to the park along 47th Avenue where traffic to and from the park can be easily observed. Control of access would be improved by the removal of the existing culvert and road between the ponds.

PROPOSED AMENDMENT

On page 38 delete the sentence that reads "An issue to be explored * * * tournament field" and insert instead:

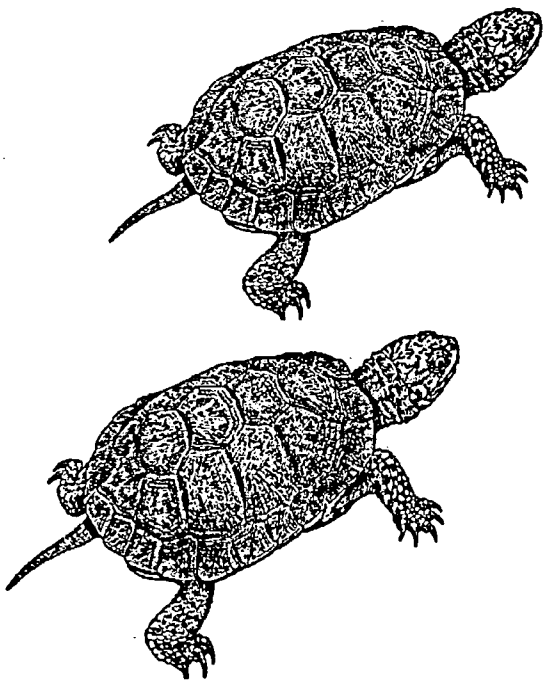
"Phased implementation of this plan shall be done in such a manner so as to assure that a replacement ball field is available for use prior to removal of the existing field located north of the ponds, replacement costs will be part of plan implementation.

Furthermore, in relocating the northern field, every effort will be made to relocate it on property south of the ponds, proximate to the existing ball fields and in a manner that maintains the number of fields on the site at 5."

rpj
1233


R L I S
Regional Land Information System
Whitaker Ponds
Northeast Portland Map #3
Concept Master Plan
Water
Buildings
Taxlots
Study Area
Canoe Launch
Pedestrian Trail
Parking (20 cars)
Upland Restoration
Fishing Pier
Viewpoint
Environmental Learning Center
Park Ranger Facilities
Connect Ponds
Upland Meadow
Bioswale
Buffer Zone
Dredge Ponds
Emergent Wetlands
Buffer Zone
Existing Ballfield
Upgraded Ballfields
Old Whitaker School
Existing Access
47TH AVE.
N.E. 55TH AVE
N.E. SKYPORT WAY
RD. 1447
COLUMBIA BLVD.
HIGHWAY
PORTLAND

V. Plan Implementation



PLAN IMPLEMENTATION

The concepts presented herein establish the desired vision for the project. Committed partnerships, energy and funding will be necessary to bring the plan to fruition. At present, limited funding is available and those funds are targeted for easements and/or land acquisition, not site improvements. However, easements and/or land acquisition is an important first step, since plan implementation can only occur on publicly owned land or where clear legal agreements have been negotiated with adjacent property owners. Priority lands for implementation are shown in the map on page 47.

Priority Tasks

Due to the conceptual nature of this plan, several unknowns concerning water quality, dredge feasibility, permitting, implementation costs, and funding sources need further attention. Many of these items will directly affect the timing, scope and phasing of plan implementation and, therefore, must be addressed as a first priority. These top priority items include:

1. **Conduct Level I and Level II environmental testing for all parcels optioned for purchase.** These tests are crucial to determine the suitability of the parcels for Master Plan activities.

2. **Determine the potential of a warmwater fishery.** Test sediment and water quality in the west and east ponds to determine potential for a short term put and take fishery and a longer term, more sustainable fishery.

3. **Determine the feasibility of dredging.** Based on the results of environmental testing concerning sediment condition in the ponds, the feasibility and cost of dredging must be investigated. This is important to address early since dredging operations could impact large areas of the site. Dredging may also provide fill material to reshape the shoreline. It will, therefore, be important to coordinate all restoration, facilities improvement, and riparian enhancement with the dredging plans.

4. **Prepare more detailed designs, cost estimates, and construction documents.** As issues concerning water quality and dredging become resolved, more detailed designs, cost estimates, phasing plans and construction specifications need to be prepared to guide site improvements.

5. **Obtain approvals and permits from necessary agencies.** After the design has been finalized and approved, permits will be necessary from agencies such as the Corps of Engineers, Division of State Lands, Oregon Department of Fish and Wildlife, and City of Portland Planning Bureau for all work affecting the ponds or slough.

6. **Seek private and public funding and partnerships to assist in the implementation of the plan.** Possible sources include:

   - The Bureau of Environmental Services (land acquisition, for restoration and water quality improvement; committed to partially funding purchase of the Klein property)
   - Oregon Wildlife Heritage Foundation (committed to funding components of the fishery program)
   - Trust for Public Land (holds option and negotiating for purchase of the Klein property)
   - Multnomah County Natural Area Fund (committed to contributing $75,000 for land acquisition)

- Metro's 1995 Open Space, Parks and Streams Measure (if passed in May of 1995, $300,000 would be available for land acquisition of natural areas and open space in the Whitaker Ponds area)
- Portland Public Schools (explore possibility of conveying ponds area to an appropriate agency)
- Oregon Department of Fish and Wildlife/Fish Restoration and Enhancement Program for dredging funds.
- Urban League of Portland (Urban Parks Program)
- Portland Parks & Recreation (coordinate with Urban Parks & Open Space Strategy)
- Pacific Power Employee Volunteers (continue partnership for involvement in project implementation)
- Metro's Regional Parks and Greenspaces Department fiscal year 1995-96 proposed budget includes $11,000 for restoration projects
- Seek partnership with Multnomah County Drainage District for
  1. dredging funds from the Columbia Slough Flood Control Program
  2. funds to construct a boat ramp for joint use
- Federal grants for restoration
- Seek educational support from the Portland Public Schools and community colleges for outdoor school programs

The Priority Tasks table on page 43 illustrates a general sequencing of the Master Plan. This sequencing is based on undertaking Level I and II Environmental Testing, ongoing negotiations with property owners for the acquisition of key easements or parcels of land, and analyzing the feasibility of dredging. While most components of the plan are contingent upon fund raising over a 5-10 year time horizon, immediate site restoration activities can be undertaken by EnviroCorps members. The Oregon Wildlife Heritage Foundation has also expressed a desire to establish a put and take fishery prior to dredging the ponds.

Cost Estimate

The Cost Estimate for Site Improvements table on page 45 identifies a range of estimated costs required to implement the Master Plan. The cost estimates are for facilities development and do not include costs for land acquisition, operation, and maintenance activities, or stocking the ponds for a put and take fishery. An operation and maintenance budget should be developed when a site managing agency is identified. Costs for stocking the ponds for a put and take fishery could range from $6,000 to $10,000 a year (pers. comm. Al Smith, ODFW).

Priority Tasks

Priority Tasks	Related Master Plan Recommendations
1. Conduct Level I & II Environmental Assessment on the Klein property.	• Clean up debris on parcel.
2. Purchase Klein property	• Explore appropriate owner/manager • Design and construct parking lot • Incorporate picnic areas • Build canoe/boat launch
3. Establish put and take fishery	• Test the ponds for dredging and fishery potential • Upgrade culvert to weir on Whitaker Slough to raise water level by 2' • Remove carp • Clear zones in the north bank for fishing access • Establish trails from parking area to fishing areas • Establish fish stocking program
4. Identify immediate activities for EnviroCorps	• Prepare detailed site design for initial site improvement activities • Clean up debris on the site • Clear blackberries • Enhance upland areas • Enhance buffer zones upon agreement with owners • Enhance riparian zones in areas not impacted by future dredging
5. Determine feasibility of dredging.	• Perform dredge feasibility study • If dredging is feasible, collaborate with Multnomah County Drainage District to implement task.

Priority Tasks	Related Master Plan Recommendations
6. If dredging is feasible, establish work plan and implement.	• Upgrade one field on the south side of the pond for tournament play • Connect ponds by removing culvert and road • Remove north ball field • Dredge ponds • Create emergent wetlands • Enhance riparian zones • Build fishing piers • Stock ponds with appropriate species of fish
7. Purchase residential properties as they become available, subject to environmental testing	• Determine feasibility of renovating properties for an Environmental Learning Center, and residence for a Park Ranger
8. Continue negotiations with property owners for purchase or easements	• Enhance riparian and buffer zones as permitted • Extend trail on north side as permitted
9. Explore and identify appropriate owner/ management/partnership for each task	• Continue discussions between Metro and Portland Public Schools • Explore the roles, responsibilities and other appropriate project partners for plan implementation

Cost Estimate for Site Improvements

Proposed Site Improvements	Estimated Cost Ranges
Dredge Feasibility Study	$20,000 -$30,000
Design & construct parking lot & picnic area	$20,000 - $25,000
Design & construct canoe launch at Slough	$10,000 - $25,000
Design & construct (2) fishing piers (floating pier $25/sf)	$40,000
Design & upgrade weir on Whitaker Slough	$1,000 -$3,000
Remove carp from Ponds	$200
Remove Culvert between Ponds and dredge Ponds to establish longterm warmwater fishery	$150,000
Remove north ballfield • regrade • remove fencing and backstop • 15 trees replanted	$20,000 - $25,000
Design and construct trails, viewpoints, interpretive signage • crushed rock paths • 5 signs @ $350 ea. • 3 benches @ $700 ea.	$10,000
Design and create emergent wetlands, enhance riparian buffers and upland areas	$30,000
Upgrade ballfield on South side of ponds to tournament level • regrade/fill • fine grade • seed • reuse existing fence • 2 new backstops and dugout	$50,000 - $54,000
Upgrade existing residence for Environmental Learning Center	$50,000 - $75,000
Upgrade existing residence for Park Ranger residence	$10,000
Design & construct bio-swale including stormwater pipe disconnect	$45,000 - $60,000
Total	**$406,200 - $557,200**

The above site improvements do not include land acquisition costs or annual operations and maintenance costs. Site improvements would only occur after the associated lands were in public ownership.

R L I S

Regional Land Information System

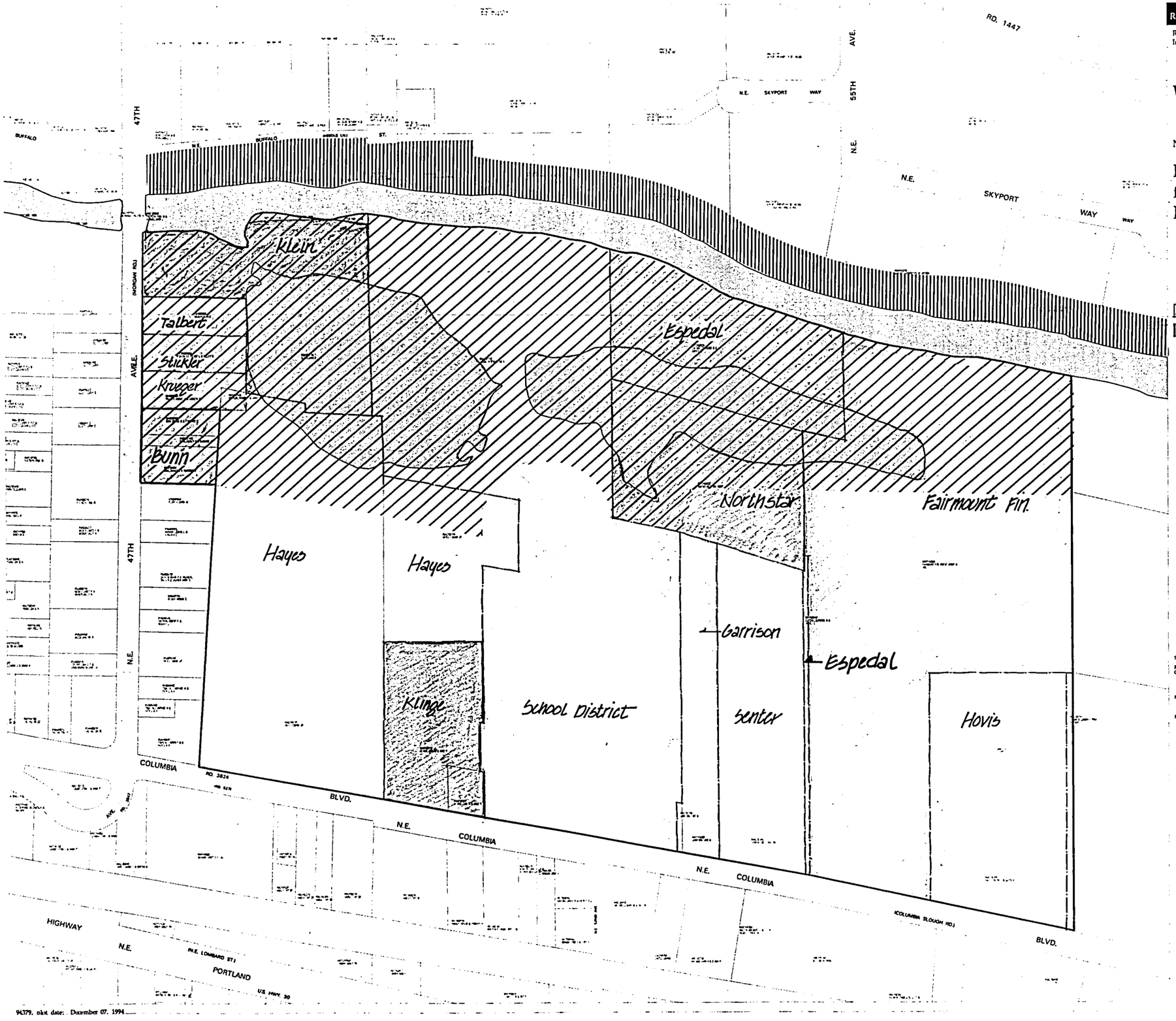
Whitaker Ponds

Northeast Portland

Priority Lands for Plan Implementation

High Priority

Secondary Priority



SOURCES:

PARCEL MAP
Cities of Beaverton, Milwaukie, Oregon City and Tigard.
Source: City, 1994.
Map accuracy: assessor parcel positioned accuracy is plus or minus five feet or better.
Data collection scale: 1"=200'

Multnomah County East of 42nd Ave.
Source: Multnomah County Assessor, 1994.
Map accuracy: based on existing encumbrances. Line work entered using coordinate geometry.

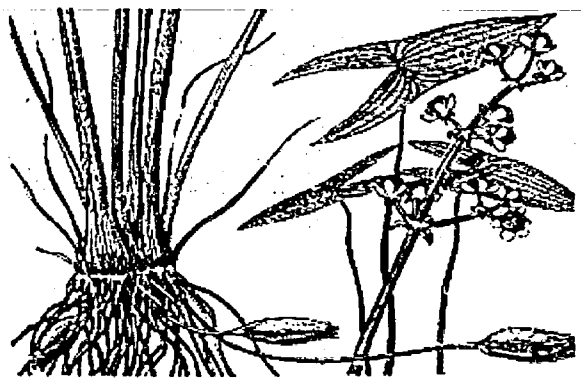
Remainder of region:
Source: Portland General Electric and Metro, 1994.
Map accuracy: assessor parcel positioned accuracy is plus or minus ten feet.
Data collection scale: 1"=100', 1"=200' or 1"=400'

600 NE Grand Ave
Portland, OR 97232 2736
(503) 797-1700

METRO

94379. plot date: December 07, 1994

VI. Appendix



Wapato *Sagittaria latifolia*

Contents of Appendix

Agreement Between Portland Public Schools and Metro

Metro Council Resolution Approving the Whitaker Ponds Concept Master Plan

(To be provided at a later date)

Public Comment Letters on Draft Master Plan and Metro's Response Letters

Public Involvement Information