

Columbia Children's Arboretum Management Plan

Portland Parks & Recreation



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A new era is about to begin for the Columbia Children’s Arboretum site. The park has always been an undiscovered gem, tucked away among the other open spaces, pockets of housing, and the industrial uses that are scattered in the lowlands next to the Columbia River. After a burst of activity in the 1970s and 80s, use of the site decreased though it continued to be the place where area residents visited as a place of quiet and respite. With increasing development and more people moving into the community, however, it is time to plan more deliberately for the future, to ensure that the park provide places of solace while also addressing the need for the recreational opportunities of a growing population.

Purpose of the Management Plan

The Management Plan provides an outline of policies and development concepts for the Children’s Arboretum site. The plan outlines a long-term vision for the park and is intended as a guide to prepare construction drawings, once funding is secured. In general, the plan focuses on protecting the site’s natural resources while providing recreational opportunities that are needed in the city.

Because it focuses on broad policies and a general concept, the plan does not detail all of the projects that will be carried out in the future. Consequently, more refined plans and designs will have to be prepared. What is critical is that these future activities be consistent and support the values and policies in this plan.

A secondary, but very useful role, of the plan is to serve as a reference document for future activities. To this end, the plan includes a variety of background information such as acquisition ordinances, newspaper articles, an environmental assessment, and a short history of the site in Appendix C.

Location and Context

The Children’s Arboretum site comprises 28 acres in the East Columbia Neighborhood in northeast Portland (see map on page 4). It is the largest park site in the immediate area, which consists mainly of a mixture of industrial and residential uses. Other

open spaces located in the neighborhood are typically wetlands, such as the Brandwein wetlands site just north of the Children’s Arboretum site.

The site is bordered on the north by single-family residences and undeveloped land (see photo on page 5) On the west, the park is bordered by NE 6th Ave. Industrial uses abut the park on the south side, which also includes a narrow waterway that feeds a wetland mitigation site. A newer single family development with 30 homes (Arboretum Terrace) borders the park along its southeast edge.

Access into the site is from NE 6th on the west and from the east NE Meadowbrook Lane. An unimproved road with a chain link gate at the east end of the park acts as the main entrance.

A Brief History of the Site

At the turn of the 20th century, the Columbia Children’s Arboretum site was farmland that flooded every spring. In summer and fall, water remained in the shallow lakes and sloughs. These sloughs defined the edges of large meadows which were dotted by large cottonwood trees.

The area around the site was proposed as a park in 1904 by landscape architect John Charles Olmsted, who envisioned activities such as picnicking, strolling, fast driving, horse racing, and golfing. At the

time, the area to the south of the Children's Arboretum site included Switzler's Lake, a large water body which extended south almost to the Columbia Slough.

Because of an influx of families over the next two decades, the Columbia School District was formed around 1920. Subsequently, an elementary school was built (at the corner of NE 6th and Marine Dr.) with plans for a high school at the Children's Arboretum site. The high school was never built and the site remained vacant.

In 1964, the site and the Columbia School District were annexed by Portland Public Schools (PPS). By that time, the elementary school had evolved into a middle school. The school had a large percentage of transient students which resulted in achievement levels that were below the city's average.

In response, Principal Bill Warner and Betty Campbell, one of the school's teachers, initiated an innovative program that integrated gardening and other outdoor education activities with the traditional curriculum. This GROW program (Growth through Research, Organization and Work) used the Children's Arboretum as an outdoor classroom, thus beginning the tradition of environmental education at the site.

Photos below, from the 1970s, show students planting trees and shrubs in the meadow (below left) and around the newly created moat (below right).



Starting in 1965 and for the next two decades, the site was planted with many trees and a community garden was developed at the west end. Other schools such as Whitaker Middle School began to use the site for education programs after Columbia School closed in 1983. At one point, the construction of a covered outdoor shelter in the meadow was initiated with a concrete foundation. The project did not progress beyond that but the foundation remains on the site. School use of the park began to decrease after the early 90s when Whitaker Middle School dropped its programs.

In April, 1999, the site was acquired by the City of Portland (Ordinance No. 17352) for \$690,000, as part of an overall purchase of six PPS properties considered "surplus". As part of this transfer, PPS negotiated a perpetual easement for bus parking lot at the paved area along NE 6th Ave. Both of the ordinances authorizing the acquisitions are included in Appendices D and E.

Neighborhood interest in the park continues to be high. In August, 2003, neighbors organized a picnic that drew over 300 people to the open area at the east end of the park. The event featured live music, displays, and a cosmopolitan buffet of homemade dishes prepared by residents.

The active involvement of the area's citizens has always been a hallmark of the neighborhood. This is a part of its legacy and will continue to guide the work of the next generation.



The Planning Process

Planning for the park began in August 2003 with the formation of an 11 person Project Advisory Committee (PAC). The committee's composition attempted to reflect the project's stakeholders, with representatives from the sites' neighborhood groups, interested citizens, and city staff (the list of CAC members is on the inside cover).

In October and November, 2003, two open houses were held to provide information and updates to the general public. A questionnaire also was sent out at the project's outset to ask residents for their ideas and concerns about the project; results are shown in Appendix B. The PAC began its meetings in September and met six times over the next four months, ending in March 2004.

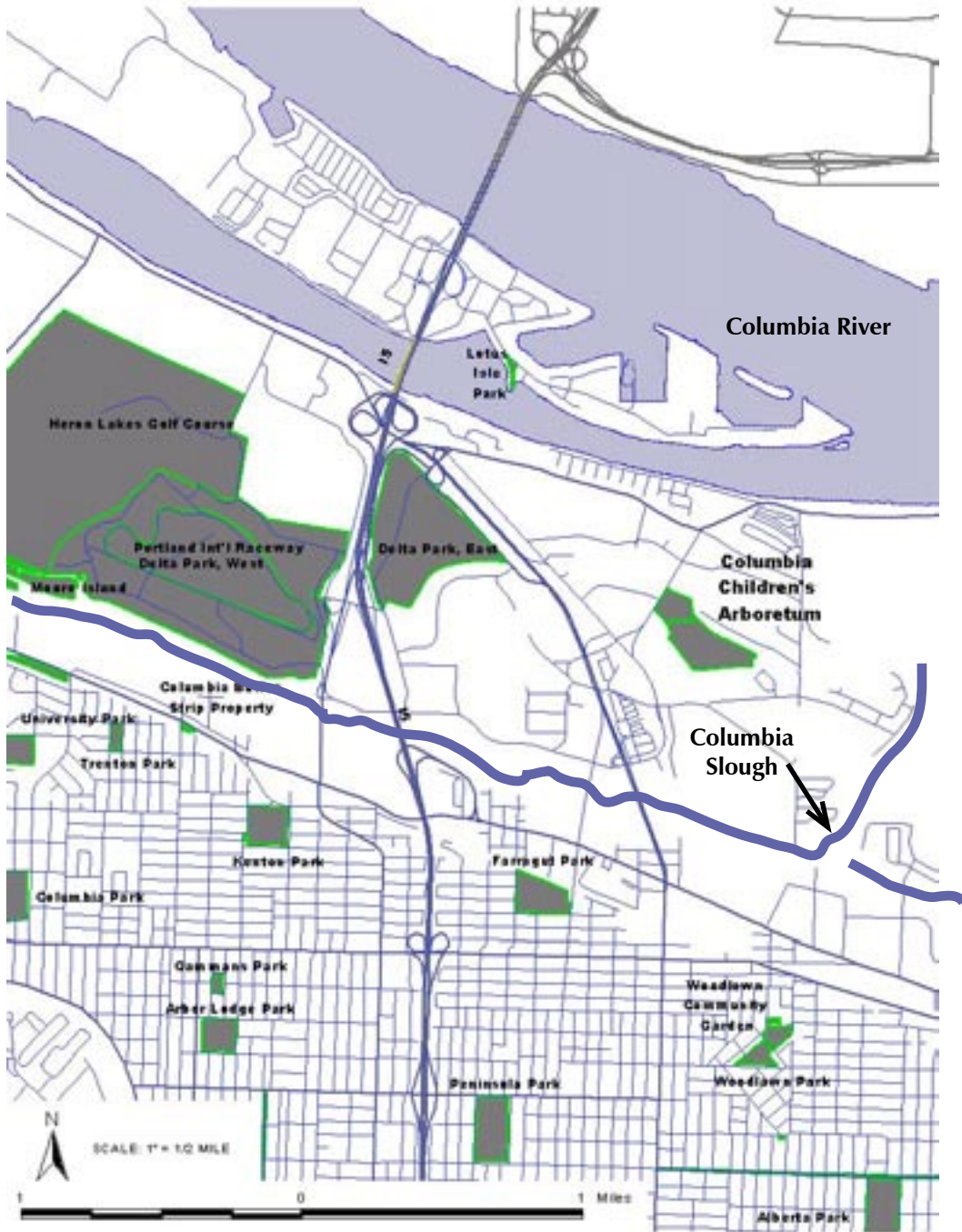
Some of the more common concerns about the park's future focused on the protection of the site's natural resources, "over improvement" of the site, whether sports fields are appropriate, and impacts from traffic generated through park development. Suggestions included revegetating the areas adjacent to the waterways, especially in the northwest corner of the site and coordinating street improvements with development that generated more visitors.

In addition to the PAC meetings, city staff also briefed the Urban Forestry Commission (October), the Bridgeton Neighborhood Assn. (November), and the Columbia Slough Watershed Council (November).

The PAC, Portland Parks staff, and visitors meet at the site for a field trip in the fall.



Location and Context Map



Aerial Photo

Bus Parking Lot

NE 6th



Jubitz Pond Mitigation Site

NE Gertz Rd.

EXISTING CONDITIONS & SITE ISSUES

The Columbia Children’s Arboretum site is a complex property that includes a variety of environmental conditions and land use issues. It includes wetlands, riparian zones, cottonwood forests, open grassy areas, and such urban intrusions as a bus parking lot. Governing the site’s future are several layers of environmental zoning, land use plans, and legal instruments that address two specific areas.

An Overview of Natural Conditions and Character

Some of the key findings and conclusions concerning the site’s conditions are noted below.

- The park has a gentle terrain amid mature trees and native vegetation. The scale and length of the central meadow create dramatic views throughout the park. These multi-faceted views of nature are a key part of the park’s beauty. Several parts of the park, including the forested areas along the waterways, have relatively high percentages of non-native and invasive plants.
- Environmental conditions are typical for a Columbia River floodplain site, with a high water table, predominance of trees found along waterways, and a rich mixture of wildlife species.



- Human population growth and composition has changed dramatically over the last 10 years, with an increase in number, household type, and ethnic diversity.
- Use of the site is governed by a variety of general and specific land use plans such as the East Columbia Neighborhood Natural Resource Management Plan, the city’s zoning code, and the city’s Transportation System Plan.
- The park is important to residents as the only site in the area where they can enjoy basic recreation opportunities. The closest neighborhood park is Farragut Park, which is one mile to the southwest. The trend to smaller lot sizes, as evidenced by the latest residential project, also portends a greater reliance on public parks for outdoor recreation.
- The site has value for environmental and cultural interpretation but a more comprehensive strategy must first be prepared to guide future projects and programs and to ensure coordination.
- Street improvements will be needed before significant levels of park use can be accommodated. The lack of parking and improved access roads to the site will limit development of future park improvements.

Population Characteristics

The area around the site has changed dramatically over the last 30 years, when the first round of improvements were begun. Between 1990 and 2000, population grew in the East Columbia neighborhood by 59 percent, from 474 to 753 (see table above). Since 2000, the area has continued to see more population growth through the development of new residential areas.

	1990	2000
Total Population	474	753
Population by Race (Percent of Total)		
White	95%	69%
Black	0	11
Asian	4	15
Hispanic	0	2
Other	0	2
Tenure of Housing Units		
Homeowner	58%	80%
Renter	35	20
Household Size	1.99	2.67
Population by Age Group (by number)		
Under 5	28	58
5-17	71	115
18-64	322	510
Over 65	43	77

Source: Office of Neighborhood Involvement
Neighborhood Profiles

This population growth likely fueled a dramatic shift in the racial composition of the neighborhood. The percent of white residents declined from 95 percent to 69 percent, while both black and Asian residents increased by 11 percent. Overall, the percent of non-white residents represents about 31% of total population in the neighborhood, compared to 20% for the city of Portland.

With this growth has come an increase in the percent of homeowners. In 2000 homeowners com-

prised 80 percent of residents, up from 58 percent in 1990. Household size has also increased from an average of 1.99 in 1990 to 2.67 in 2000.

In terms of age distribution, the ratio among the various age groups remained relatively constant but the numbers increased. As an example, the number of under 17 children grew from 99 in 1990 to 173 in 2000.

Zoning and Land Use Regulations

The Children's Arboretum site now comprises two basic zoning classifications: Open Space (OS) and Industrial (IG2). Almost all of the site (with the exception of the bus parking) also includes an "overlay" Environmental Conservation Zone.

The Open Space Zone is intended to "preserve public and private open and natural areas identified in the Comprehensive Plan." Under the zone's regulations, some uses may require a conditional use review, such as "facilities that draw spectators to events in a park". Open Space regulations also define development standards for building setbacks, parking, street trees, and other related improvements.

The Environmental Conservation Overlay (c) "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."

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".

Traffic and Pedestrian Classification

The Children's Arboretum site is accessed from two streets -- NE 6th and NE Meadow Dr. via NE 13th Ave. Both of these streets have several transportation designations that portend a greater opportunity for pedestrians and bicyclists to visit the site from the Bridgeton neighborhood and East Columbia Neighborhood.

NE 6th has three specific designations according to the city's Transportation System Plan – Local Service Traffic Street, Community Transit Street, and City Walkway.

Local Service Traffic Streets are intended to distribute local traffic and provide access to local residents or commercial uses¹. Their function is to provide local circulation for traffic, pedestrians, and bicyclists and (except in special circumstances) should provide on-street parking in some form.

Community Transit Streets are 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.

City Bikeways are intended to serve the Central City, regional and town centers, station communities, and other employment, commercial, institutional, and recreational destinations.

City Walkways 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.

NE 13th has three specific designations according to the city's Transportation System Plan – Local Service Traffic Street and City Bikeway.

In addition, the site is linked with a City Walkway along NE 6th Ave. to the Bridgeton Pedestrian District. These districts are intended to give priority to pedestrian access in areas where high levels of pedestrian activity is planned.

One of the critical traffic issues focuses on access into the site and how park uses will affect traffic volumes and safety on NE 6th Ave. The intersection of NE 6th and Marine Dr. is particularly problematic, according to area residents, who believe that park improvements that generate significant increases in volume should be tied to a redesign of that intersection.



NE 6th Drive, looking north. The bus parking lot is at right.

Topography

The Children's Arboretum site occupies a flat area that is part of the Columbia River floodplain. Elevation ranges from 0 to 18' above sea level. Low areas are found along the waterways with the most dramatic difference in elevations found along the waterway in the northwest corner of the site.

One of the most striking features of the Children's Arboretum site are the long vistas across a meadow framed by large canopy trees. It's a view not unlike those seen in the Long Meadow in Prospect Park in Brooklyn, New York. These views in the Children's Arboretum are notable because these are not commonly found in the city's parks and is clearly one of the site's most treasured features.



The long meadow in Prospect Park, Brooklyn, with its expanse of lawn edged with large trees.

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" from December to July.

Hydrology

The site is bordered and bisected by narrow and shallow waterways to the north and south. These waterways originate in the area northwest of the site and flow southeast where they are pumped over a dike and into the Columbia Slough.

The site includes two waterways that eventually empty into the Columbia Slough. One waterway cuts through the northwest corner of the site as part of the drainage system managed by the Multnomah County Drainage District (MCDD).

The drainage district is experimenting with a new technique called "meandering channels" to enhance the natural environment of sloughs and man-made drainage ways. It already have transformed several channels into deeper, wandering streams, shaded by vegetation to keep water temperatures cool and improve wildlife habitat.

A technique called "benching" widens the steep ditches to create wetlands next to water channels. Both approaches create new land for native plants.

Vegetation

A vegetation assessment was conducted by Portland Parks Natural Resources staff which described five categories -- Closed Canopy Forest, Open Canopy Woodland, Deciduous Shrubland, Deciduous Woodland, and Grassland (The full report is in the Appendix). Some of the main findings of the assessment are:

- There are several areas with high percentages of non-native species such as the orchard and the "island" and moat;
- The landscaped area with the lowest percentage of non-native species is in the restored wetland in the southeast corner of the site; and
- Invasive species consist mainly of reed canary grass, Himalayan blackberry, English ivy, along with several non-native tree species (Black locust, cherry, and hawthorn).

One of the cultural remnants of the site is the "Grove of 50 States", envisioned in the mid-70s as a collection of trees from all of the states in the country. The idea was initiated as part of the site's early education programs and resulted in the planting of several trees. In the mid 90s, many tree identification posts were installed to mark the location of future trees in this collection, as part of a Boy Scout Eagle project.

Columbia Slough Characterization

The Bureau of Environmental Services is now preparing a study of habitat and biological communities in the Columbia Slough watershed. The draft report does not specifically mention the Children's Arboretum site but does include statements that provide an environmental context.

The study's conclusions identifies several high-value habitats for migratory birds, waterfowl, American beaver, northern river otter, and painted turtle. Although the Children's Arboretum site is not mentioned, an adjacent wetland, the Brandwein Wetlands, is listed.

The increase in non-native vegetation and decrease in native species has perhaps the greatest impact on species composition.

Despite these changes, biological communities have managed to survive. Over 175 species of birds live, nest, over-winter, or migrate through the watershed.



East Columbia Neighborhood Natural Resources Management Plan

This plan was prepared in 1980 and is the first Natural Resources Management Plan (NRMP) prepared in the city. As stated in the plan, "The purpose of the plan is to promote a consistent approach to development within the environmentally sensitive areas of the neighborhood. Many of the neighborhood residents placed a strong priority on maximizing the educational and recreational value of these areas." Several of the NRMP's policies address the Children's Arboretum site. These are listed along with excerpts from the relevant policy.

Policy 1: Education

Promote the knowledge of the environment within the East Columbia area and the historical events that have occurred in the area.

Policy 2: Recreation

Increase the opportunities for access to recreational areas within the neighborhood area.

Policy 3: Conservation

Promote conservation efforts which replace lost wetland and wildlife habitat values.

Policy 6: Protection of Wetland/Natural Resource Areas

Protect significant resource areas by discouraging filling and development of sensitive and unique habitats in the neighborhood, and requiring buffering of new development adjacent to these sites.

Policy 7: Wetland/Natural Resource Mitigation Areas

Provide quality wetland/natural resource mitigation areas which are of comparable size and design for maximum environmental value.

Policy 8: Wildlife Corridors

Provide a wildlife corridor for birds and other wildlife for movement through the neighborhood area to link up to existing open spaces, wetlands, and wildlife habitat areas.

Policy 9: Buffering

Separate existing and new wetlands from new residential, commercial, and industrial uses with setbacks and buffer areas.

The East Columbia NRMP also included a set of maps that graphically described several features. On

Map 1, the Jubitz pond area is shown as the only site delineated as a wetland on the site. Map 3 describes Potential Mitigation Areas. Three sites are proposed - north of the Jubitz pond, west of the moat, and northeast of the pedestrian bridge that connects the bus parking area with the meadow. Map 4 outlines Wildlife Corridors, which are concentrated along the waterway that flows along the northern edge of the site.

Recreation Needs

The importance of the Children’s Arboretum as a recreational site for the neighborhood is seen by examining its context. The park is located within a patchwork of industrial and residential development with few other open spaces that can be used for general recreation.

The closest park is Delta Park, .50 miles to the west. This park is mainly a regional sports facility, consisting of four soccer fields, an all-weather artificial turf field, and a tournament level softball complex. The park also has a small playground to the east of I-5. Access to the park requires crossing a major intersection just east of Delta Park.

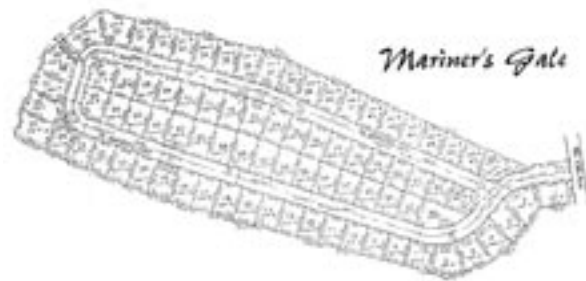
The closest neighborhood park, Farragut Park, is one mile (straight line distance) to the southwest. Farragut Park is 14 acres in size and includes a softball field (lighted), basketball court, playground, wading pool, picnic tables, rest rooms, and trails. Access to this site requires crossing NE Columbia Blvd., a major highway through the industrial corridor. The former Columbia School site is also located within the area and like Delta park, is used mainly for soccer fields.

The Need for Basic Recreation Opportunities

From a recreation planning perspective, the neighborhoods around the Children’s Arboretum site suffer from a shortage of basic park amenities such as a playground, open lawn, accessible walking paths, and benches and picnic tables. At present, children in the Arboretum Terrace subdivision, for example, have no playground or other recreation facilities. This need will only increase as vacant parcels are developed for residential use.

Exacerbating this demand is the smaller lot size of some new projects, which minimizes the amount of personal open space for each household. As an example, the new Mariner’s Ridge subdivision comprises 80 lots of which most are about 3,000 square feet. (See plan below)

Furthermore, Portland Parks 2020 Refinement Plan identifies a need for about 3.4 acres of developed parkland in the East Columbia Neighborhood. The plan also identifies a need to address park deficiencies in the Bridgeton Neighborhood and that for the larger northeast sub-area, there is a need for additional basketball and soccer facilities.



The Service Area for the Park

The service area for the park will, at a minimum, include residential areas north of Columbia Blvd., east of I-5, and west of the dike that ends at Marine Drive. Conservative estimates for this area indicate a current residential population of approximately 1,600 people¹.

People within this immediate area will likely use the park for general recreation opportunities -- using the playground, picnicking, playing in the open areas, etc. If the west end includes athletic fields (it can accommodate two under-8 fields), visitors will likely be drawn from other parts of the city.

¹ (This is based on the following counts and estimates)

East Columbia Neighborhood	753
Bridgeton Neighborhood	593
Mariners Ridge (80 units x 1.5)	120
Trailer Park (125 units x 1.5)	187
Total	1,653

Visitors who wish to enjoy the park's natural areas will also likely come from outside the service area mentioned previously. The site's beauty and accessibility will draw people from several miles away, especially because it is more accessible than other natural areas such as Kelley Pt. Park and Smith and Bybee Lakes.

Use of the site for future environmental education could also attract students from schools outside the initial service area. The service area for public school environmental education programs will depend however, on funding levels for transportation and staff and a higher quality natural resource area .

Interpretive Programs

As noted earlier, the park has evolved out of an environmental education mission and it continues to have this potential, though conditions have changed. Columbia School, which furnished many of the program's students, is closed and school funding for transportation has dropped. Also, other sites in the area are being used for environmental education, such as Whitaker Ponds.

Despite these circumstances, the Children's Arboretum site has the potential to be used for environmental and cultural interpretation programs and projects, especially those that do not require extensive facilities. Waterway corridors have to be replanted with riparian vegetation and much of the forested area includes non-native or invasive plant materials which must be removed. These kinds of activities are often performed as educational programs and can involve students, adults, and neighbors.

Other kinds of programs can be initiated at the site, such as tree identification, wildlife observation, and wetland studies, site history and the children's legacy. The city's Urban Forestry and Community Gardens program now conducts clinics at the site and this could be continued, providing a field lab for homeowners who are interested in proper care of trees and orchards.

Several issues will have to be addressed before formal education programs are reinstated at the site. One concern will be impacts from buses and groups of people, especially along the northern boundary of the park. To this end, programs should be coordinated to ensure that an acceptable number

of people are present on the site in relation to on-street parking and impact to neighbors. Relatedly, an overall strategy for environmental and cultural interpretation programs should be prepared to guide the development of future programs and projects, to promote consistency in content, and to efficiently allocate parks staff resources.

A Vision for the Children's Arboretum

One of the defining features of the Columbia Children's Arboretum site is its beauty as a pastoral landscape that is shaped by the large trees that line its waterways and the central meadow. It is this quality that forms many of the recommendations in the Management Plan. It also is an essential piece of the park's ultimate vision and future.

In this future, the site will continue to function as a landscape that is shaped by its natural features -- the trees, the central meadow, and the waterways. The meadow will continue to be the "heart of the park", a large open space that provides refuge and quiet. The site will also serve as valuable habitat in the Columbia Slough, as part of a network of wetlands and forested corridors. Consequently, the natural resource areas in the park will be managed to maintain their environmental integrity and health.

In other part of the park, most notably the east and west ends, people and recreational activities will be part of the landscape. Recreation improvements that are typically found in neighborhood parks will be provided, integrated into their surroundings and the landscape. Neighborhood children will have a place to run, to play, and to enjoy being around other kids. Adults also will find lots to do. They can walk or run on the paths, observe wildlife, work in a community garden, watch their children at a playground, or sit on a bench and contemplate the beauty of the meadow.

At different times during the day, the park will be visited by small groups of adults and children on educational field trips. On these outings, students will remove ivy and blackberry, plant native trees, or conduct field research. Adults from the neighborhood also will work in the park on weekends, helping to maintain the park and planning neighborhood events.

In short, the park will be a place for both people and wildlife.

Core Values & Guiding Principles

The Management Plan is based on five fundamental values about the Columbia Children's Arboretum - what makes it special, its inherent character, and how it can be managed to preserve what is best about the site. These values provide a foundation for the plan's recommendations and define basic principles that will guide future improvements and actions.

Recreation needs

- Meet recreation needs of existing and future area residents.
- Provide a variety of spaces and facilities that are appropriate to the site and its designation as a hybrid park

Environmental restoration

- Improve habitat values through an ongoing program of replanting, invasive species removal, and restoration.
- Improve water quality in the waterways by improving water flow and other bank improvements.
- Control human access into restoration sites and natural resource areas.

Interpretive Programs

- Provide a variety of opportunities for students and citizens to learn about the site, its natural resources, its history, the Columbia Slough, and the neighborhood.
- Provide restoration involvement opportunities for school groups and citizens.

Beauty and character of the site

- Enhance and improve the park's visual character through a vegetation management program that improves views, defines open spaces, and maintains a unified palette of plant materials.

A legacy of neighborhood involvement

- Develop partnership with the neighborhood or a Friends group for programs and maintenance.

Park Use & Character Zones

The Columbia Children’s Arboretum (CCA) site is an unusual part of the city’s portfolio of parks. The site includes natural areas, waterways, many large trees, open grassy areas, and a large meadow that evokes images of pastoral landscapes found often in Olmsted parks. The site is truly unique and the policies in the park’s Management Plan are intended to enhance those qualities that make it a special place. The following sections address specific zones and issues of the park. The map below delineates these different character zones.

- Improve and maintain the CCA as a “hybrid” park which includes uses and activities typically associated with neighborhood parks and natural resource sites. It also will be used for cultural and environmental interpretation programs and projects that involve neighbors, students, and other groups.
- Provide for a balance of recreation and education uses within the park, with an explicit consideration to maintaining the central meadow and habitat areas as places of refuge and quiet.
- Minimize the impacts of active recreation by concentrating these areas at the eastern and western ends of the park, where access from adjacent streets and neighborhoods is relatively easy.
- Maintain the pastoral qualities of the park and of the central meadow. This can be done by carefully placing park features and facilities to minimize visual impacts, managing the number, species, and location of trees which define the views and edges of the meadow.



Access & 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.

- Develop a circulation system for the park and to connect the site, to adjacent neighborhoods, and to the 40 Mile Loop.
- Improve access to the park for pedestrians and vehicles. Provide limited parking areas where needed for automobiles and school buses. Parking areas should not be located within the current park boundaries but should instead be sited on existing right of ways or at the bus parking lot, with the approval of Portland Public Schools.



- Develop a pathway system that integrates the park's access points. The system should include a loop within the central meadow and eastern recreation zone.

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: Most of the 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 or creeks.

- Access into high quality natural areas should be discouraged but not limited to maintenance functions. Consequently, public paths should be limited to the recreation zones and Central Meadow.

Interpretive Programs

Interpretive Programs will continue to be an integral part of the park, as it has been for the past two decades. Any growth to environmental education programs and projects will depend on the presence of program partners such as the Portland Public Schools, Columbia Slough Watershed Council, Bureau of Environmental Services, and Portland Parks and Recreation.

Because these organizations have limited resources, it is now unclear how extensive any future environmental education program would be. As a result, the policies noted below are intended to guide environmental and cultural interpretive projects and programs that can be done with existing levels of staff and funding.



- Continue to use the site for environmental and cultural interpretive education programs and projects.
- Ensure that projects and programs are consistent with the policies of the Management Plan and the Stewardship Agreement (to be developed).
- Provide interpretive education programs and projects that are consistent with Portland Parks' overall strategy for the CCA site, Whitaker Ponds, and similar sites in the area.
- 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 approach to education and interpretation at the site to avoid duplication and to ensure the use of common themes. These could include:

- Geomorphic location of the site as part of the Columbia River floodplains
- Native vegetation and wildlife typical of the waterways along the river;
- Waterways that make up the Columbia Slough system; and
- Urban development in the floodplain.

In addition, classes on tree pruning, tree identification, and overall tree maintenance could be held, as part of the city's Urban Forestry and Community Gardens program.

- Develop and maintain a coordinated system of interpretive signs and educational materials. Interpretive signs and materials should be consistent in form and message.

Habitat Areas

A large part of the park comprises natural resource areas, which contribute visually and functionally to the park. These areas should be maintained and enhanced to ensure that the park continues to function as high-quality habitat.

- Identify and define wildlife species appropriate to the site and design habitat improvements to meet their needs.
- 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.



- Reduce fragmentation of the habitat areas by strengthening connectivity between habitat islands and by minimizing human intrusion.
 - Trails and habitat viewing opportunities should be placed along the developed edge and should not be located very far into the Habitat Area.
 - The trail around the island should not be a complete circle.
 - The east boundary that abuts the residential area should have a wider native plant buffer.
 - The habitat area in the southwest corner could be enlarged somewhat.
- Remove non-native and invasive weeds in the Habitat Area and replant with native species. Volunteers should work with PP&R Natural Resources staff to identify priority invasive species and to coordinate efforts.
- Develop and implement an ongoing maintenance and management plan to address invasives.
- Investigate modification of the swale or ditch around the island to secure an improved hydrologic connection to the local slough system. Identify water quality and wildlife habitat benefits that could result from such an action.
- Redesign the "moat" area so it becomes dry during the summer to discourage non-native species.

Central Meadow

The heart of the park is the meadow, a 4.5 acre open space between the large area between the east recreation zone and the waterway. The meadow is an essential element of the park's character and must be maintained as an informal open space bordered by large trees.

- Maintain the meadow, through appropriate plantings and vegetation management, as an open and “naturalistic” landscape which transitions easily into the habitat areas.
- Manage the meadow for informal recreational activities such as kite-flying, frisbee, and informal games involving small numbers of people.
- Within the meadow area, individual benches and picnic tables can be installed. Picnic tables, which will be limited to single units, will be sited to minimize grading and visual impacts. Trees and shrubs may be planted around the picnic tables to provide shade and to integrate them into the landscape.
- Allow non-native plantings within the meadow zone to maximize the aesthetic values often found in the Olmstedian parks.



Recreation Areas

One of the main functions of the park will be provide recreation opportunities for area residents. Because the site includes many environmentally sensitive areas, recreation areas must be carefully sited, designed, and managed. Two zones to accommodate more active recreation uses are proposed, each in proximity to the primary access points into the park. It is expected that use will be concentrated in these two zones, leaving the central part of the park as a place for quiet and tranquility.



East Recreation Zone

- Improve and manage this zone to accommodate recreation uses and facilities such as group picnics, a playground, educational programs, and other small group functions.

This area could include a sports field, which would be located within the open lawn area just east of the parking lot.

- Design the improvements to promote visibility and security of the area. Park improvements should be located to minimize impacts on adjacent residents.
- The construction of park facilities that would significantly increase auto traffic along NE 6th Ave. should be coordinated with the improvement of the NE 6th/Marine Dr. intersection. Because the intersection is considered to be dangerous, increases in traffic volume along NE 6th are not encouraged by residents.

West Recreation Zone

- Improve and manage this zone to accommodate recreation uses and facilities such as an education area, demonstration garden, open lawn area with children's sports fields, a community garden, and playground.
- Convert the existing bus parking lot to a parking lot for park and recreation use. In the short term, discuss the partial use of the lot for park purposes with the Portland Public School District.

Waterways

The waterway system in the park will continue to function as integral parts of the Multnomah County Drainage District's network. Through restoration of the banks along the waterway, these corridors will have greater value as habitat areas. The water quality of these channels can also be improved through widening and deepening, as proposed by MCDD.

- Improve water quality through projects that increase water flow in the waterways on the site.
- Coordinate the design, timing, and funding of restoration programs and projects with waterway improvements proposed by MCDD.
- Improve the waterway corridors with riparian plantings and native plant materials.
- Discourage human access to the waterways until adequate development can provide safe access.
- Exceptions should be made for maintenance and restoration projects.



Wildlife & Vegetation Management

The park provides the East Columbia neighborhood with one of its few significant public spaces. The character of the park is defined in large part by the many trees that define the central meadow and frame the long views through this space. In addition, the trees also contribute to the habitat values of the park, which have been noted by area birders. The management policies are intended to build upon and enhance the qualities now provided by these areas.

- Establish and maintain a complete inventory of specimen trees in the park.
- Establish and maintain a regular program of arboricultural inspection and maintenance works by Urban Forestry staff.
- Consider the replacement, over time, of more recent incongruous planting within the park with species more appropriate to the park's management policies.
- Maintain the park's "naturalistic" appearance through the careful location of large trees and understory plantings.
- Maintain and enhance the park as habitat for wildlife. Actions that can increase habitat value include removing non-native vegetation, planting native species, restoring hydrologic connections to the slough, and connecting habitats with a continuous riparian corridor.
- Use Portland Parks and Recreation's Integrated Pest Management Policy as a guide to restore and maintain natural resource areas.
- Improve the diversity and abundance of food sources within the park by enhancing native plant communities.
- Increase habitat areas through the provision of snags, brush piles, and other natural features.
- Minimize human access and activity in natural resource areas. Provide trails in these areas that are used only for maintenance and restoration activities.



Implementation Strategy

Although no funds have been allocated for improvement and development of the two sites, there are several things that can be done in the interim. Some tasks address the need for restoration; others focus on correcting existing problems; and yet others are concerned with establishing an organized group of neighbors to advocate for the parks. If funding is secured, it may be helpful to review and revise the list below.

The following is an outline of recommended activities. Tasks that are considered to be a high priority are in bold type. It is expected that these high-priority tasks will be initiated between January - June 2004. Subsequent projects and tasks that are reasonable and practical will be prepared by the park's Management Committee.

Administrative Tasks

- Prepare a Stewardship Agreement that outlines the roles and responsibilities, approval process, and protocol for projects initiated by the Friends group, other neighborhood groups, organizations, and others seeking to initiate restoration or maintenance projects.
- One of the elements in the Stewardship Agreement will be a committee comprising representatives from Portland Parks, BES, other agencies, and the neighborhood. The purpose of the committee is to promote coordination of activities, ensure that the Management Plan's goals are being followed, and to provide a forum for the discussion of site issues.

- Initiate talks with Portland Public Schools regarding the long-term future of the bus parking area and easement.
- Continue to work with Multnomah County Drainage District to coordinate park projects with waterway improvements.

Restoration and Park Management

- Develop a Maintenance Program that identifies a schedule of activities (mowing, pruning, brush clearing, etc.), responsible parties, and opportunities for volunteer projects.
- Initiate restoration of selected areas, including the removal of invasive species, based on discussion between BES, Portland Parks, and the neighborhood. Priority areas include the areas defined in the vegetation assessment (see Appendix) with high percentages of invasive plants.
- Remove and/or relocate paths in habitat areas where they not appropriately sited.
- Prepare a complete assessment of all specimen trees in the park including research into their age and source, their current state of health and life expectancy.

Park Improvements

- Install two park signs near the primary access points.
- Provide primary access points into the park from both NE 6th and NE 13th Ave. These entries should be signed and marked. If appropriate, parking for cars, school buses, and bicycles should be provided.
- Explore acquisition of additional land to improve access and visibility around the NE Meadowbrook St. entrance.

- Install park signage at the east and west access points into the park.
- Explore the development of a shelter (that could be temporary or permanent) that could be used for group picnics, education programs, or other activities.

Interpretive Programs

- Work with Portland Parks and Recreation to develop a schedule of education projects and programs. These projects should identify funding sources, project partners, maintenance required, consistency with the park's education program goals, and other relevant factors.

Cost Estimate

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 may be higher or lower, depending on when construction occurs. Also, some features, such as the playground, can be enlarged or reduced in size and scope. The number of trees and shrubs also can be modified.

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.

Playground		150,000	Partnership opportunity
East end	75,000		
West end	75,000		
Plantings		66,500	
Street trees	3,600		
Park trees	20,000		
Play area trees	16,000		
Shrub beds	16,400		
Lawn	10,500		
Revegetation of natural resource areas		40,000	Partnership opportunity
Paths and Trails		136,500	
Hard surface	131,000		
Soft surface	5,500		Partnership opportunity
Open Lawn Area (west end)		74,000	
Community Garden		32,000	Partnership opportunity
Pedestrian Bridge		90,000	Partnership opportunity Includes abutments & supporting structures
Kiosk		10,000	Partnership opportunity
Site Furniture		52,200	
Picnic tables (10 at \$3,000 each)	30,000		Partnership opportunity
Benches (15 at \$1,200 each)	18,000		Partnership opportunity
Trash Cans (2 at \$ 1,500 each)	3,000		
Bike Racks (4 at \$300 each)	1,200		
	<i>Sub-total</i>	651,200	
	Contractor Overhead & Profit (12%)	78,144	
	<i>Sub-total</i>	729,344	
	Contingency @ 20%	145,869	
	Total	875,213	
Street Improvements (west entry road)		\$90,000	

Concept Sketch



MANAGEMENT CONCEPT

PORTLAND PARKS + RECREATION

ATION AREA

WATERWAYS PER MOOD PLAN

W AREA (ATHLETIC FIELDS)

RF

VE CULVERT + REPLACE WITH NEW BRIDGES

MAINTENANCE TRAIL (LIMITED ACCESS)

DEVELOP MAIN PATHWAY LOOP

INCREASE VEGETATIVE BUFFER BETWEEN HOUSES
+ RECREATION AREA

PARKING ALONG ENTRY ROAD

ENTRY @
MEADOW DR.

RECREATION
AREA

PLAYGROUND

R7

Legend:
Portland Parks
Zoning
Taxlots

