SCRIBER LAKE PARK MASTER PLAN

City of Lynnwood, Washington

Prepared for:

City of Lynnwood
Parks, Recreation, and Cultural Arts
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TANGRAM DESIGN

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PREFACE

In the summer of 2003, the City of Lynnwood assembled a team of planners, landscape architects, engineers, geologists, biologists, and lake specialists to develop an updated Master Plan for Scriber Lake Park, in the City of Lynnwood, Washington. The team began work in February 2004, and included:

- David Evans and Associates, Inc. – lead consultant for planning, engineering, and biology
- JA Brennan Associates, PLLC – landscape architect and public process
- Douglass Consulting – master planning and public process
- Tangram Design – wayfinding and signage design
- HWA Geosciences, Inc. – geology

Tetra Tech, Inc. and Smayda Environmental Associates (SEA) contributed to the team for lake restoration science.

ACKNOWLEDGEMENTS

The City of Lynnwood Department of Parks, Recreation and Cultural Arts and the Master Plan team would like acknowledge the many participants in the Master Plan process that gave generously of their time, knowledge and resources to make the Master Plan a true community vision. A special thanks to the following contributors:

Tricia Shoblom, Washington Department of Ecology

Eric Pentico, Washington Department of Fish and Wildlife

Gene Williams, Snohomish County Surface Water Management

Heidi Reynolds, Snohomish County Surface Water Management

David Mach, City of Lynnwood Public Works Department

T.J. Brooks, City of Lynnwood Police Department

Elena Victorine, City of Lynnwood Parks, Recreation, and Cultural Arts Department

Ruth Eggers, City of Lynnwood Senior Center

The neighbors, citizens, and visitors to Scriber Lake Park who attended and contributed generously in the public meetings.

Community Meeting for the Master Plan

TABLE OF CONTENTS

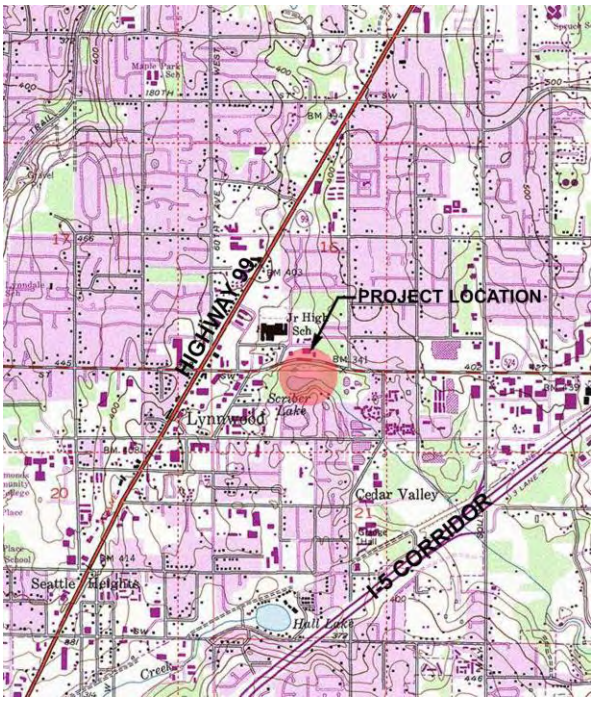
List of Tables

Appendicies

Vision Statement

Scriber Lake Park is an urban oasis where the community comes to enjoy the rustic beauty of the lake, stream, wetlands, forest, and park through recreation, community gathering, stewardship, and education.

INTRODUCTION



Vicinity Map

Scriber Lake Park is a cool green oasis in the heart of downtown Lynnwood. With 22 acres of wetlands, lakes, streams, trails, and hillsides, Scriber Lake Park provides a haven for wildlife, and a respite from the urban environment for the visitors to the park. We have an extraordinary opportunity to preserve and restore this very special park in the heart of Lynnwood, and to highlight the unique natural features at Scriber Lake Park. This updated Master Plan describes the park from the formation of Scriber Lake and peat bog development in glacial times, through the early days of Lynnwood's development, the rich coho fishing in Scriber Creek, to today's revitalization of our downtown neighborhoods and parks.

PROJECT NEED

Scriber Lake Park is in need of revitalization to restore health to the lake, and to make the park safer and more welcoming for visitors. The park has safety and accessibility issues, water quality problems in the lake and creek, and diminished wildlife and fish habitat. In 2003, the City of Lynnwood included the renovation of Scriber Lake Park in its 2003-2008 Capital Facilities Plan (CFP). A goal of the Scriber Lake Park Master Plan is to improve the sense of security and safety at the park by improving public access and visibility within the park, and providing active play elements to increase park use. The water quality and function of the lake are also addressed. Creating more community ownership and a sense of stewardship of Scriber Lake Park is paramount to the new Master Plan.

Scriber Lake existing overwater walkway

The updated Master Plan is a great opportunity to preserve the natural environment of the park while making the park more inviting to a broader spectrum of the community. The new Master Plan uses design features such as view

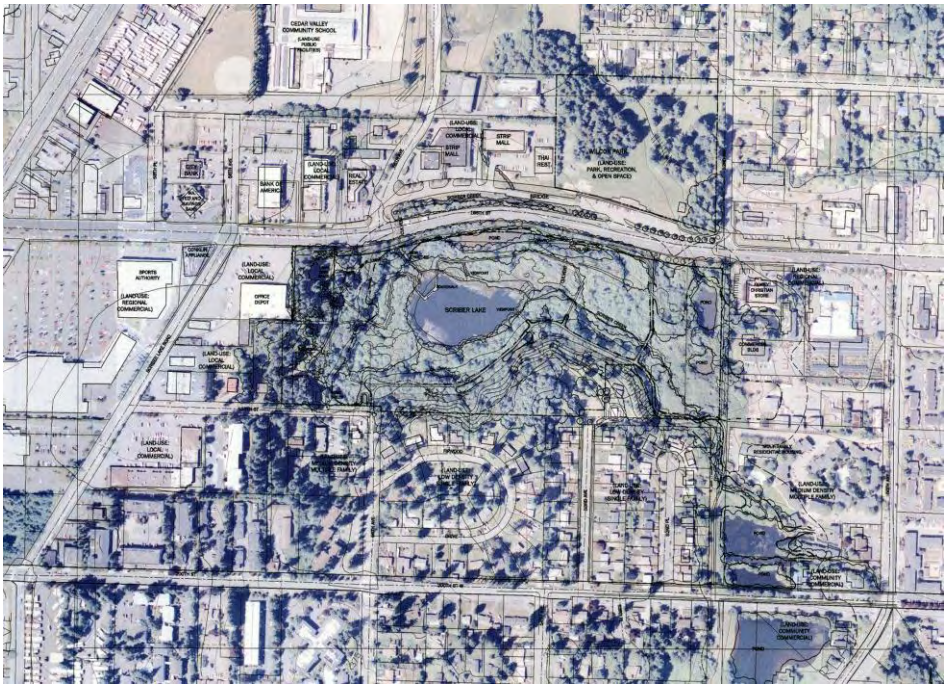
corridors, access control, and increased accessibility to promote safety at the park. Taking on the challenge of restoring the natural resources of Scriber Lake and Scriber Creek are central stewardship features of this Master Plan.

PROJECT CONTEXT

Scriber Lake Park

Scriber Lake Park is a rustic, natural park. This character is strongly supported by city residents. The new Master Plan preserves this defining quality and builds on the rich natural history of the park. Lynnwood is experiencing a revitalization of its urban core. A new city center is planned in the downtown area directly east of Scriber Lake Park. The updated Master Plan is designed to create an inviting green corridor along 196th Street SW connecting the new city center to the park, and providing an urban oasis in the City.

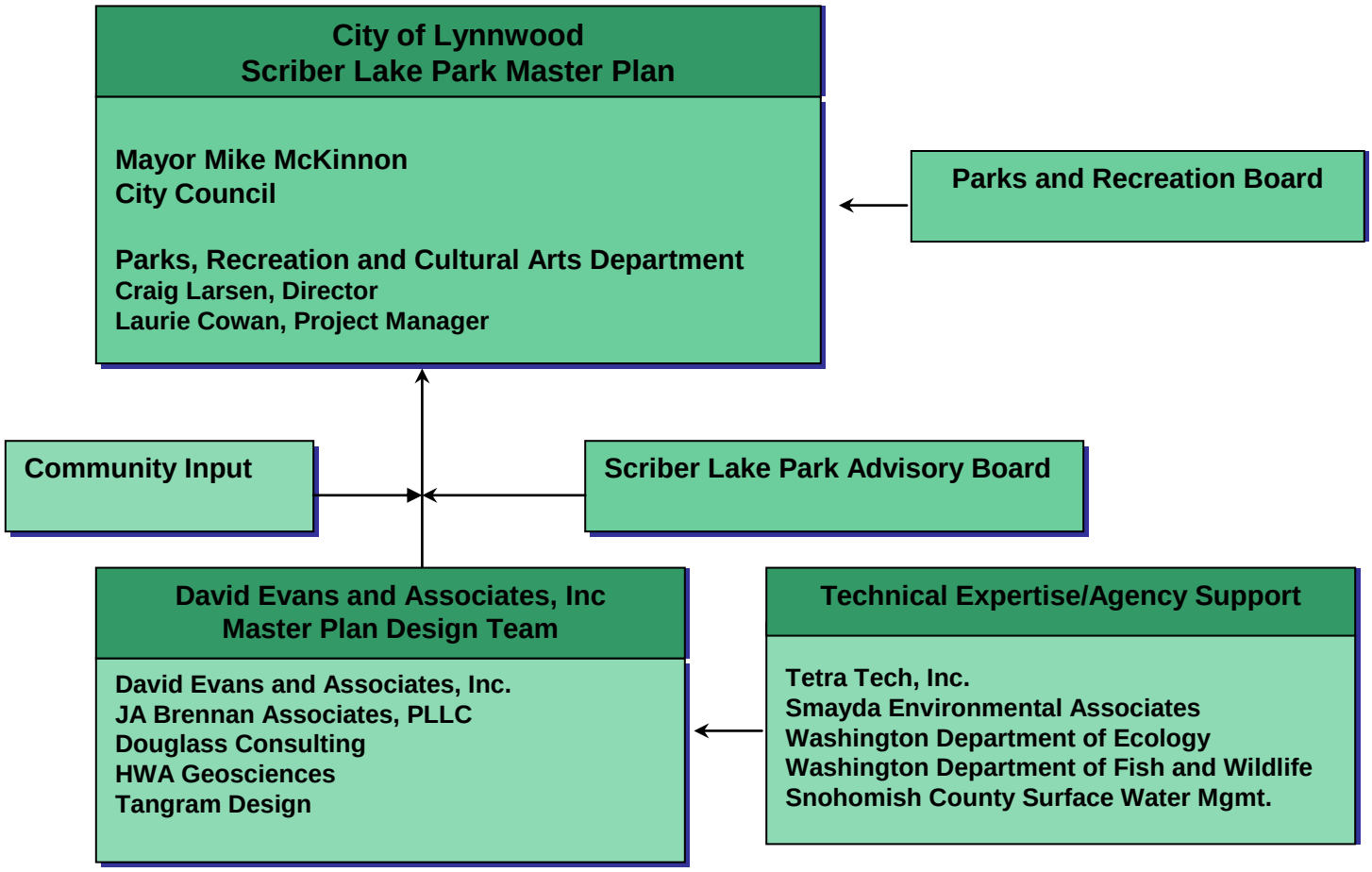
The City is considering the purchase of several properties immediately west of Scriber Lake Park for a new community center. The park and the community center together would provide a new meeting and recreation facility for Lynnwood, and would further the goals of increasing positive public uses of Scriber Lake Park. Lynnwood Parks and Recreation has developed a network of pedestrian and bicycle paths in the southern, western, and northern portions of the City. The trail design for Scriber Lake Park includes key linkages between these urban trails, expanding the City's recreational trail system, and connecting neighborhoods. Revitalizing Scriber Lake Park is a key component to providing recreation and natural environment resources to the citizens of Lynnwood.



MASTER PLAN PROCESS

The City of Lynnwood Parks, Recreation, and Cultural Arts Department (City Parks) recommended the City Council fund an update to the Scriber Lake Master Plan to achieve the goals discussed above. The City Council agreed, and in 2003, City Parks retained the David Evans and Associates, Inc. team to work with the City, the public and stakeholders to develop a new Master Plan for Scriber Lake Park. The planning process involved affected government agencies, the Parks and Recreation Board, consultants, stakeholders, and citizens.

First Community Meeting for the Master Plan



A project timeline was developed that organized the project in four elements:

1. Site Inventory and Analysis
2. Public Involvement and Agency Coordination
3. Master Plan Design
4. Master Plan Production

The Master Plan process began in February 2004 by conducting a site inventory of the natural and built features in and adjacent to the park. This included researching natural and cultural information, and coordinating with City Public Works and Police Departments on infrastructure and safety issues at the park. This work was completed in August 2004.

In May 2004, the design team initiated agency coordination and public outreach meetings to encourage public and agency input to the project and Master Plan design. Between May and November 2004, three public meetings, several Parks and Recreation Board meetings, two City Council meetings, one agency meeting, and a lake restoration workshop were held. Neighbors, interested citizens, and community groups were notified of the public meetings via newspaper postings, mailed and e-mailed invitations, and hand-delivered notices, as well as notices on the City's website.

Scriber Lake Restoration Workshop

The design team assessed the information gathered during the site inventory, and the community input given throughout the first public meeting, and prepared alternative Master Plan concepts. These concepts were shared with the Parks and Recreation Board, the City Council and the public through a second public meeting and city staff meetings. The public meetings were organized as interactive design charrettes where the participants reviewed and commented on each proposed element of the Master Plan. The concepts team then refined the designs to develop a draft Master Plan design which was presented at a third public meeting in November 2004. Information regarding the Master Plan and draft and final Master Plan concepts were also available for review and comment on the City's website.

A significant outcome of the public process was the support and agency partnerships that were developed, especially related to restoring Scriber Lake. The Master Plan process is summarized in Table 1, below. Minutes from the Master Plan meetings are attached as Appendix B.

Table 1. Master Plan Process		
Process	**Date**	**Attendees**
Site Inventory and Analysis	2/04 – 8/04	Master Plan Team (MPT)
City and Team Meeting/Site Tour	3/3/04	City Parks, Public Works, MPT
Agency Meeting and Site Tour	3/30/04	City Parks, City Planning, WDOE, WDFW, MPT
1st Public Meeting	5/10/04	City Parks, WDOE, City Police, Community
Develop Vision and Goals	6/15/04	City Parks, MPT
Development Suitability Analysis	6/15/04	MPT
Scriber Park Advisory Board	6/8/04	City Council, City Parks, MPT
Lake Restoration Workshop	6/30/04	City Parks/Public Works, WDOE, Snohomish County, MPT
City Council Presentation	9/15/04	City Council, City Parks, MPT
Alternative Master Plan Design	9/30/04	Master Plan Team
2nd Public Meeting	9/30/04	City Parks, WDOE, MPT, Community
Parks & Rec Board Presentation	10/05/04	Park Board, City Parks, MPT
City Council Presentation	11/1/04	City Council, City Parks, MPT
Draft Master Plan Design	11/10/04	MPT
3rd Public Meeting	11/10/04	City Parks, WDOE, MPT, Community
Final Master Plan	2/1/05	MPT
Park Board Presentation	2/1/05	City Parks, Park Advisory Board
City Council Adoption	3//05	City Council, City Parks, Park Advisory Board

BACKGROUND

SITE HISTORY AND BACKGROUND

Scriber Lake Park is located in the north-central portion of the Puget Sound Lowland. The Puget Sound Lowland has periodically been occupied by a lobe of the Cordilleran Ice Sheet, one of two continental glaciers that developed during the ice ages of the Quaternary Period, which began about 2 million years ago. Experts believe that a giant dagger-shaped ice formation was deposited by glaciers in the current location of the lake. As the ice melted, a deep lake was formed. As the glaciers receded to the north, the broad depression situated along the western margin of Scriber Creek developed into Scriber Bog. Scriber Lake is essentially a bog pond, although unlike most typical peat bogs, it continues to receive water flows from Scriber Creek.

Scriber Lake and Scriber Creek are named for a Danish immigrant named Peter Schreiber. Schreiber homesteaded the land around the lake in the early 1890s and settled on the high ground west of the lake. There is no evidence of the original Schreiber homestead at the lake, now known as Scriber Lake. Urban legends describe the depth of Scriber Lake and the peat bog. One tale tells of state employees who were attempting to measure the depth of Scriber Lake and ran out of measuring line. Other anecdotes refer to the lake as "bottomless."

Wilcox Family at Scriber Lake - 1928

As the City of Lynnwood developed around the lake and the creek in the early decades of the 20th century, several families including the Carlson, Nyman, and Wilcox families all settled in homesteads around the lake and creek. The Nymans owned a large dairy farm. In 1933, the Wilcox family built a home on a knoll where Wilcox Park is today. In 1961, Eugene Wilcox turned over the lease on the land to Snohomish County, who deeded it to the City of Lynnwood in the 1970's, creating the park bearing his name.

Betty Munson of Edmonds, Washington has kept a historic account of the lake during the 20th century. Betty grew up in the Wilcox family 50 years ago in a house overlooking Scriber Lake. The Wilcox family moved to the area in 1926 when Betty was 10 years old. In her account, Betty described the lake as a popular place to swim. She recalled a family named Barclay that built a resort at the west end of the lake, complete with swimming pool and dance hall. People would come from the city and stay in cabins at the resort. At some point around 1928 or 1930, she recalled that someone had brought dirt and sand to the lake to create a beach. A family named Henam bought the resort at Scriber Lake from the Barclays.

The original 196th Street SW was constructed around 1932 and used a pilings and causeway method of construction for the two-lane highway. Mrs. Munson observed the effect that its construction had on the lake. Her account verifies the changes that have taken place in the lake since construction of 196th Street and urbanization of the surrounding area. Mrs. Munson said "It was a good lake until that time. They drew water out and it pulled the algae up. Oldtimers said it used to be much larger."

Construction of 196th Street SW in the 1960's

Before the new road was paved, it began to settle, pushing peat toward the lake, creating gaping holes below the level of the lake which is indicated by the arrow. The holes were filled with broken wood and sand.

Reports by Jones and Jones, Architects and Landscape Architects, Ltd. (1981), indicate that the lake remained in relatively good biological and aesthetic health until the late 1960s when the Washington State Department of Transportation (WSDOT) constructed the new four-lane 196th Street. It is interesting to note that in the mid-1960s, prior to the construction of 196th Street, the Scriber Lake Park site was considered for a new civic center for the City of Lynnwood. The lake and bog environments were profoundly affected by the construction of 196th Street as a

four-lane highway. A landfill method of construction was used instead of expanding the original 196th Street causeway. The new road sank, displacing deep peat layers and forcing a massive peninsula of peat, with trees still rooted, to move sideways, thus creating the peat-laden "North Lagoon" along the south side of 196th Street. Scriber Lake's size was reduced by an estimated 50 percent due to the expansion of 196th Street.

Construction of 196th Street SW in the 1960's

This photo shows reconstruction of the road bed and the resultant north lagoon formed by the settling.

Since the construction of 196th Street, the area around Scriber Lake Park has become increasingly urbanized.

The lake functions as part of the city's stormwater system, and therefore receives sediment loads and pollution from the upstream portions of Scriber Creek. The vegetation has been altered by the clearing for road construction, and invasive species such as Himalayan blackberry and reed canarygrass have overgrown portions of the park.

Efforts to improve water quality were made in the 1980s and 1990s, as well as new trail construction to create better access through the park. These improvements increased the number of visitors to the park, but many residents still do not use the park, or do not perceive the park as a welcoming or safe place to visit. The current low-level of use at the park has, in part, made it an attractive place for illegal activities. The complex unmarked trail system and the heavy undergrowth adds to visitors' discomfort.

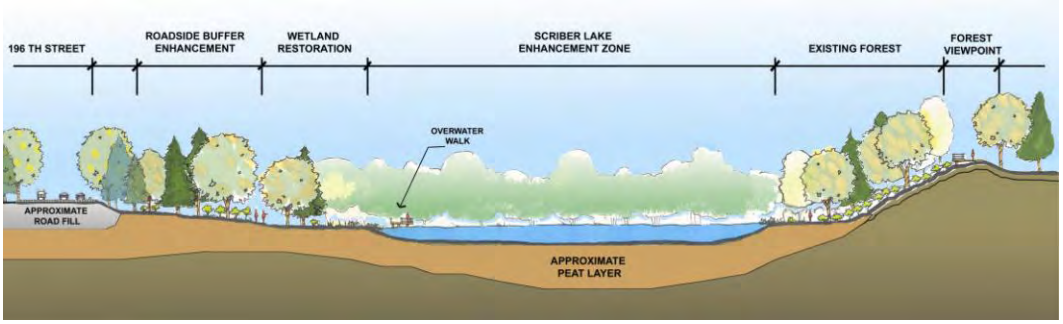
The updated Master Plan for the park will help revitalize the park and create a welcoming and safe environment for a broad spectrum of visitors.

SITE DESCRIPTION

The first task in developing the Master Plan alternatives was to inventory and map the major features in and around the park. The Master Plan team prepared a Site Inventory Technical Memorandum (Appendix C) and other illustrations depicting these features (Appendix A, Figure E). This section addresses three categories of features: Land Form, Habitat, and Built Environment.

Land Form

The Scriber Creek corridor was formed by glaciers that formed a broad plain and then melted. Scriber Lake itself formed approximately 15,000 to 18,000 years ago by a large piece of glacial ice that penetrated the earth and then melted. This type of formation is known as a glacial kettle. Scriber Lake was originally much larger than it is today. Over time, decaying plant material accumulated within the lake and formed peat deposits. These deposits now fill the majority of the lake's former boundaries, and today the lake is part of a larger peat



North-South Site Section of Scriber Lake Park

bog system and is surrounded by wetlands under-lain by these deep peat deposits. The peat bog system occupies much of the Scriber Lake Park area and extends north under 196th Street into Wilcox Park.

The park topography consists of the lake, stream channel and wetlands, surrounded by slopes on all four sides of the park. The most significant slopes are located in the vicinity of a fill mound in the northeast portion of the park, near the southeastern park entrance, and along the southern boundary of the park. There is one designated landslide hazard area along the southern park perimeter north of Firwood Drive. A second landslide hazard area is shown immediately outside park boundaries between the southeast entrance path and the adjacent residential development. No other landslide hazard areas are documented in the vicinity of the park.

Habitat

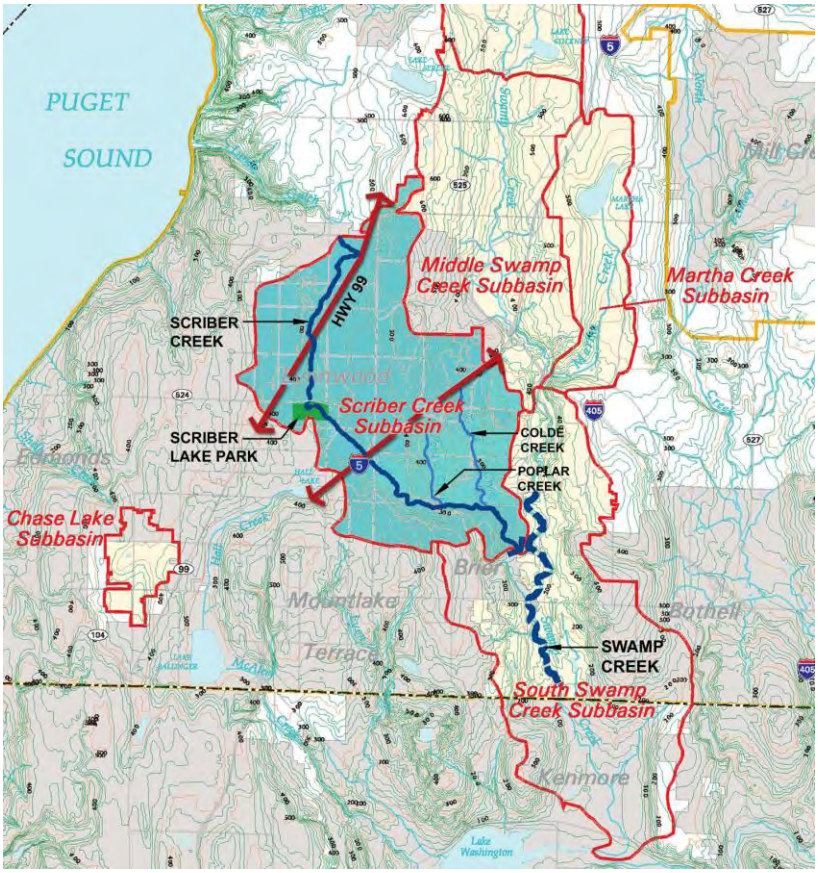
Scriber Lake, Scriber Creek, and Wetlands

Note cattails, a potentially invasive species, in the foreground

Scriber Lake and Scriber Creek are a sub-basin of the Swamp Creek watershed (Appendix A, Figure B). They ultimately lead to the Sammamish River and Lake Washington. Scriber Creek is a Category I creek, as defined by the Lynnwood Municipal Code. In addition to the lake and creek, there are several small ponds in the park. The largest of these ponds is located north of Scriber Lake and is known as the North Lagoon. The lake, creek, ponds, and surrounding wetlands form a large wetland/peat bog complex within Scriber Lake Park and extend north to portions of Wilcox Park. The lake, creek, and ponds currently provide several benefits including: limited habitat for fish, sediment and nutrient retention, water storage, flood control, and wildlife habitat. In addition, the lake, creek, and wetland complex provide passive recreation and educational opportunities for the community.

The watershed of the lake and creek system is heavily urbanized. High levels of sediment, nutrients, and pollutants enter the lake and are causing the lake to become highly eutrophic (rich in mineral and organic nutrients and low in dissolved oxygen). This condition results in the increase of plant life and loss of aquatic

species such as fish. In addition, the lake is rapidly decreasing in area due to sediment deposits entering the lake.



Scriber Creek SubBasin

Eventual filling of lakes are natural processes in peat bog lake systems. However, in Scriber Lake, this natural progression has been intensified by the construction of 196th Street and upstream urban pollutants. A four to five foot thick layer of mucky sediment was identified at the bottom of the lake in the 1980s. Nutrients and pollutants present in the sediments are released annually when the lake turns over in the fall. Lake turnover is the process of redistribution of water as seasons and temperatures change. Temperature dictates water density, thus influencing the lake's water stratification. Water is at its highest density at 39 degrees. In the fall, as water cools towards 39 degrees, its higher density causes it to sink to the bottom and forces the water at the bottom of the lake to be displaced up to the surface. At the surface it is in turn cooled, continuing the cycle until the water is at a uniform temperature and density.

Developing a sound approach to lake restoration is a key component of the Master Plan process. A day-long Lake Restoration Workshop was held on June 30, 2004, to develop long-term strategies for restoring the lake habitat. Participants in the workshop included lake experts, Dr. Harry Gibbons (Tetra Tech, Inc.), and Tom Smayda (SEA), who conducted studies of the lake for several years; public agency staff; City Parks and Public Works staff; and the Master Plan design team.

The workshop discussions confirmed the significance of urban stormwater runoff impacts on the lake and the historical beneficial uses of the lake, including coho rearing habitat. Anecdotal reports of historical fishing use of the lake were discussed. Tricia Shoblom of the Washington State Department of Ecology (WDOE) Lakes Division stressed that a primary goal of any activity related to Scriber Lake should be compliance with the 2013 WDOE water quality goals. Workshop attendees worked together to develop approaches and strategies to restore the health of the lake environment (Appendix B). Potential approaches for lake restoration are presented in the Master Plan Description under "Restoration Measures for Scriber Lake and Ponds."

Fish and Wildlife

Scriber Lake Park provides habitat for a variety of fish and wildlife. Beavers, as well as their dams and lodges, are observed around the lake. Park personnel have reported seeing bald eagles and turtles in the park. Although Scriber Lake Park functions as an important wildlife refuge within the larger urban environment, the habitat has been degraded due to human impact and lack of vegetative diversity. In addition, predatory animals including bullfrogs and domestic cats are a threat to the survival of small mammals, amphibians, and birds in the park.

Scriber Lake Park – Beaver Lodge

Both Scriber Lake and Scriber Creek historically had healthy populations of fish, including salmonids. Scriber Creek currently contains salmonids, especially downstream of Scriber Lake. Scriber Lake is no longer ideal salmonid habitat due to limited or blocked fish passage, water quality problems, and high temperatures caused by urbanization of the watershed. Pollutants of concern include nitrogen, phosphorous, toxins, and bacteria. The lake also has low dissolved oxygen levels.

Upstream of Scriber Lake, the creek flows into the lake through a culvert under 196th Street. This culvert has been described as completely blocked or nearly completely blocked to fish passage. There have been recent observations of juvenile coho salmon upstream of Scriber Lake. It is unknown whether these coho found passage upstream through the culvert under 196th Street or were released into the creek during elementary school fish education projects. Downstream of the park, Scriber Creek flows through long culverts under the Interstate 5 freeway where 196th Street crosses Interstate 5. This culvert is not completely blocked to fish passage, but presents a significant impediment to fish movement upstream into Scriber Lake. Fish habitat and accessibility in Scriber Creek would be improved by addressing water quality in the creek and lake and improving fish passage through both of these culverts.

Scriber Creek flowing out of the culverts under 196th Street

Vegetation

A survey of plant species in Scriber Lake Park was conducted in February 2004. The survey identified significant habitat trees and snags, plant communities, and the presence of invasive species. The majority of the park consists of wetland habitat with upland areas located primarily along the edge of the park. Vegetation communities within the park are herbaceous, scrub-shrub, and forested. Plant diversity in the park is generally low, and non-native noxious species including Himalayan blackberry and reed canarygrass occur throughout the park.

Typical Shoreline Vegetation

Wetland habitats in the park are dominated by a few species, including red alder, Douglas spirea, salmonberry, and red-osier dogwood. The margins of the lake are vegetated with marsh, bog and scrub-shrub wetland species. The vegetation within the open water portion of Scriber Lake includes rooted and floating aquatic vegetation such as Indian pond lily, pondweed, duckweed, water parsley, and broad-leaved cattail.

Forest on West Side of Park

Upland plant communities are limited to the perimeters of the park. Patches of mixed deciduous and coniferous forest primarily occur along the western and southern park boundaries. These forests are dominated by Douglas fir, big-leaf maple, and western red cedar.

Significant habitat features include a stand of conifer snags and six additional single snags. Nineteen individual trees were identified as significant features. These trees had diameters at breast height ranging from 24 to 40 inches and included Western red cedar, Douglas fir, Western white pine, and big-leaf maple.

Built Environment

Surrounding Zoning and Land Use

The comprehensive plan designates the site as “Parks, Recreation and Open Space.” The site to the west of the park is designated as “Local Commercial,” and is being considered for siting of a new community center. Other

surrounding land uses include low density single family residential, medium density multi-family, and regional commercial. (See Zoning Map in Appendix A, Figure B1).

Utilities

Public potable water supply is provided by the City of Lynnwood via water mains located to the north of Scriber Lake Park along the north side of 196th Street or to the southwest along 198th Street. The park has no existing irrigation infrastructure and landscape plantings planned for the area, will only require irrigation for initial establishment. Sanitary sewer service is available in a 15-inch line to the west of Scriber Lake Park or in an 18-inch line that passes through the southerly portion of the park. This line currently serves the park restrooms located in the southwest corner of the park. Lighting is only anticipated to be required at the parking areas and entries to the park, as Lynnwood City parks are typically open from dawn to dusk. Any proposed lighting at the park will be shielded to limit glare and to reduce impact on wildlife species that are active at night.

Stormwater and Hydrology

The Scriber Lake and Creek system has functioned as a major stormwater conveyance system for a heavily developed portion of the City of Lynnwood. Much of this development occurred prior to current understanding of the value of and the need to protect natural system corridors within our urban environments. The water quality degradation and sedimentation impacts to the lake and creek caused by upstream stormwater runoff are well documented.

The benefits of the lake for surface water runoff control have not been determined, but it is clear that the lake is a major source of groundwater recharge necessary to maintain the hydrology of the peat system that encompasses Scriber Lake Park and portions of Wilcox Park. A significant loss of groundwater recharge to the peat system could cause drying of the peat and potentially major settlement of any features built over the peat soils, including portions of 196th Street and the Wilcox Park playground area. Maintaining hydrology to the peat system is a key consideration in developing a new Master Plan for Scriber Lake Park.

Circulation and Parking

Vehicle access to the park is via 198th Street SW to the parking lot located in the southwest corner of the park. The existing parking lot provides twenty spaces, including one handicapped accessible space. 53rd Avenue W comes to a dead end at the south boundary of the park. No parking facilities are provided on 53rd Avenue. 52nd Avenue W, which is aligned with the east boundary of the park, has not been developed.

Parking Lot at Southwest Entrance

Sidewalk along 196th Street

The major arterial serving Scriber Lake Park is 196th Street SW. 196th Street carries four lanes of through traffic and is controlled by signals at 58th Avenue and at 52nd Avenue. Vehicular speeds and volumes on 196th Street are high and create undesirable conditions for pedestrian and bicycle travel along the arterial. The best opportunities for safe access across 196th Street are at 58th Avenue W and at 52nd Avenue W.

Pedestrians and bicycles approaching the park from Cedar Valley Community School have access across 196th Street at a signal and crosswalk at 60th Avenue. This route takes users through a heavily developed commercial area prior to entering the park. The northern boundary of the park is served by a pedestrian walkway along the southern side of 196th Street. This walkway has no curb and gutter and consists of uneven asphalt surfacing. A guardrail provides the only separation between pedestrians and high traffic volumes on 196th Street.

Additional pedestrian connections exist on 196th Street, 53rd Avenue, and via the trail along Scriber Creek to the southeast. Internally, Scriber Lake Park includes existing paved and wood chip surfaced trails, primarily designed to serve pedestrian traffic. Important access and safety improvements for pedestrians and bicyclists entering the park are proposed in this Master Plan.

Trails

A diverse trail network exists in Scriber Lake Park. Trail types include asphalt, crushed rock, wood chip, and floating dock sections over the lake. A soft trail system surrounds the lake and creek. The trail system is a wood chip path through most of the park. A floating boardwalk constructed over Scriber Lake is located in the northwest corner of the lake. There are also un-official user trails throughout the site.


Typical Wood Chip Trail

In general, many of the trails are in poor condition, and require frequent maintenance. In some cases the trails are sinking in the peat. The wood chip trails are constructed on peat soils and are prone to sinking, washing away, or degradation, and require the addition of more wood chips to maintain the trails. The floating boardwalk is near the end of its life and requires high maintenance. The Master Plan recommends that some of these trails be improved and others permanently closed.

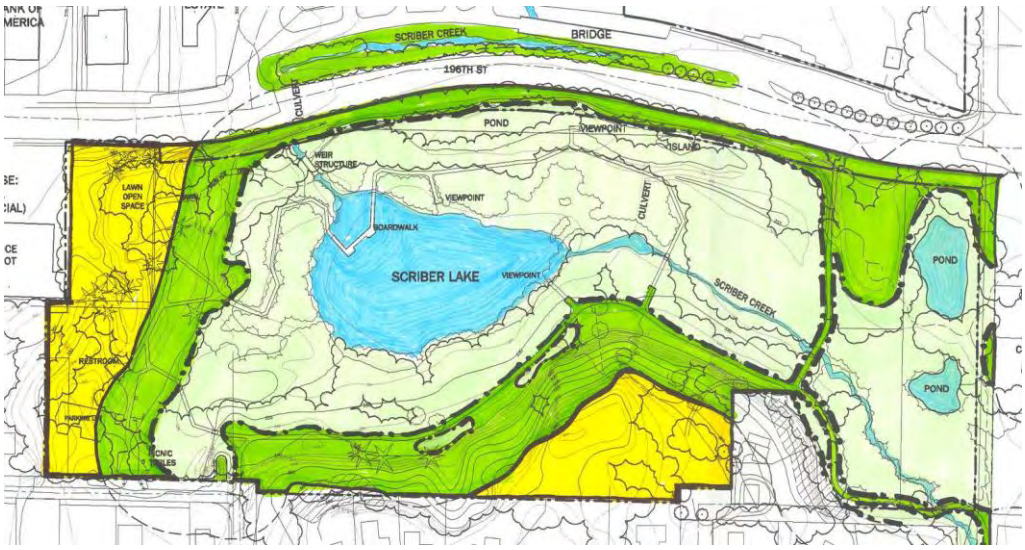
Views

Views to the lake from the surrounding neighborhoods and streets are limited in the winter and nearly non-existent in the summer. This lack of views reduces public awareness of the park and lake. However, the dense screening vegetation greatly enhances the feeling of being immersed in nature for visitors in the park. From the floating walkway, you can believe you are in a wild area while only standing several hundred feet from 196th Street. Improving views, while preserving the natural character of the park, were important considerations in developing the new Master Plan.

Scriber Lake Shoreline View of Boardwalk

SITE SUITABILITY

The Master Plan team used the information collected during site reviews and document searches to identify appropriate park improvement options. The Site Suitability Map (see Appendix A, Figure F for entire map) shows how differing levels of development could occur relative to sensitive areas (such as streams and wetlands), general landscape characteristics (such as topography and vegetation), and zoning on adjacent properties. As noted in the Site Suitability Map legend, any development in light green colored areas would require wetland preservation or enhancement. Some improvement or replacement of existing facilities, and some low intensity new park development is possible. Dark green colored zones may have moderate level park development. Any proposed development in the dark green areas would require mitigation for impacts to wetlands and/or wetland buffers. Yellow colored zones may have the most intense development, such as picnic shelters, playgrounds and parking related to the proposed community center. The Master Plan team then created an Issues and Opportunities Map (Appendix A, Figure H) to show the areas in the park needing renovation, and where there was potential for enhancement of the park's features.



Scriber Lake Park - Site Suitability Map

MASTER PLAN

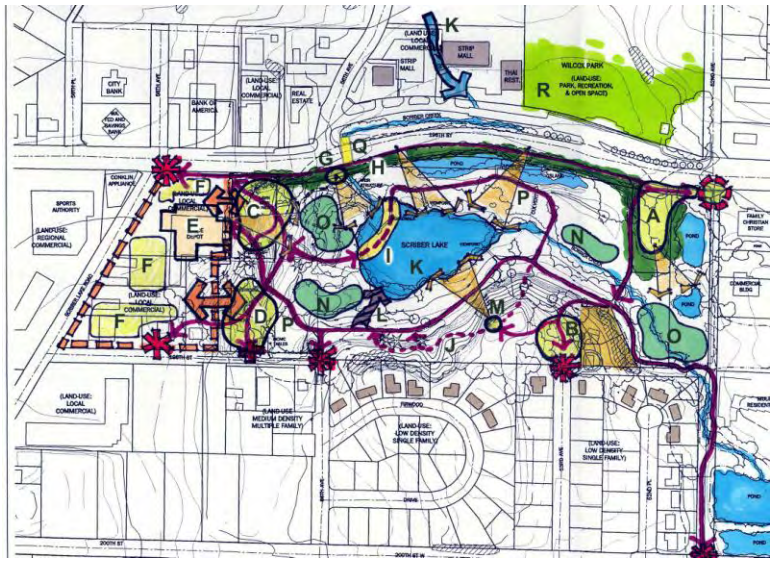
VISION AND GOALS

Scriber Lake Park is an urban oasis where the community can enjoy the rustic beauty of the lake, stream, wetlands, forest, and park through recreation, stewardship, and education. This vision is achieved by accomplishing the following goals:

- ❒ Foster a sense of community through stewardship of the park, lake, wetland and creek.
- ❒ Provide safe, family-friendly, attractive places to gather; passive recreational opportunities; exploration and educational opportunities; and improved ADA access.
- ❒ Restore and protect the lake, creek, and peat bog environments.
- ❒ Create safe community linkages to the civic center, the potential community center, and the pedestrian and bicycle trail system.
- ❒ Develop partnerships with agencies and funding sources to create support for the Master Plan.

MASTER PLAN ALTERNATIVES

With input from city staff, stakeholders, and the community at the First Public Meeting, the design team developed two alternative concepts for the Master Plan. While both concepts preserved the rustic nature of the park, Alternative 1 presented a more active approach to developing a community park and Alternative 2 was a more passive design. However, the design elements for the two alternatives were interchangeable, creating a cafeteria-style selection for park elements. The community, the Parks and Recreation Board, the Scriber Lake Park Advisory Board, City staff, and City Council reviewed and provided comments that were used to select the design elements for the final Master Plan design. The two alternatives are described briefly below. Preservation of the natural environment is a key element in both.



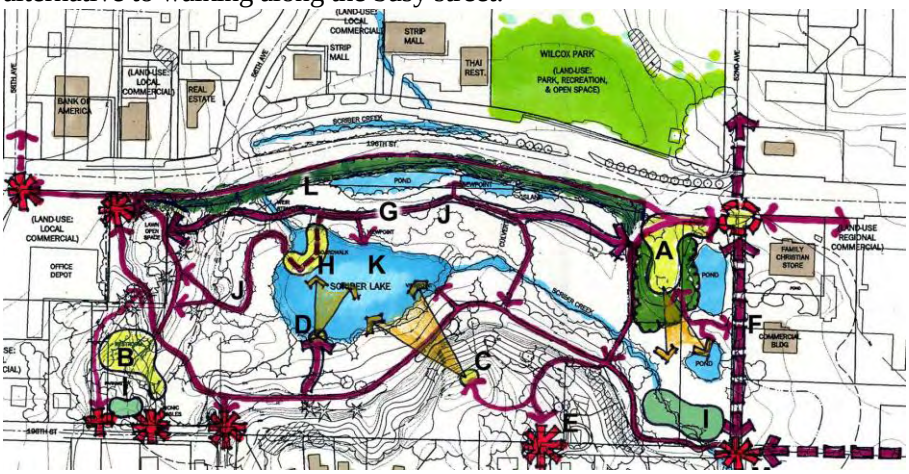
Alternative 1 – Community Center Park

Alternative 1: Community Center Park

Alternative 1 proposes more additions to the existing park (Appendix A, Figure I). This alternative still limits development to uses, which are appropriate to this sensitive site. It includes four major entryways to the park. Each entry would have enhanced opportunities for low intensity community gathering, passive recreation, education, and the enjoyment of nature. Creating additional views to the lake from 196th Street was included in this option, as were trail links to the potential community center to the west and to the city center to the east. Lake restoration is an important component of the plan to enhance water quality, fish habitat and increase the life span of the lake. Active measures would be taken to maintain and restore the peat bog environment.

Alternative 2: Natural Oasis

This alternative proposes more modest additions to the park, than Alternative 1. Instead of four major entry points, Alternative 2 (Appendix A, Figure J) focuses on the two entries at the intersection of 52nd Avenue and 196th Street, and the main park entry off of 198th Street. Alternative 2 also incorporates a regional trail connection at 52nd Avenue and potential connections to the west and to Cedar Valley School. A feature unique to Alternative 2 is a new east/west trail connection that generally parallels 196th Street to allow pedestrians to easily leave 196th Street and walk through the park, as an alternative to walking along the busy street.



Alternative 2 – Natural Oasis

MASTER PLAN DESCRIPTION

Park Character

The Scriber Lake Park Master Plan would preserve and enhance the natural character of the site, while reflecting both recent and geologic history of the neighborhood and park. Central to the Master Plan is the restoration of the health of Scriber Lake and Scriber Creek. Within the forested wetland and bog environment, the community can find solace from hectic urban life, and opportunities for all ages to engage in park stewardship activities and exploratory education.


SCRIBER LAKE PARK MASTER PLAN
LEGEND
A. N.E. Park Pedestrian Entrance (Glacier Knoll)
B. 200th St. Pedestrian Entrance
C. Neighborhood Gathering Area (53rd Ave.)
D. N.W. Park Pedestrian Entrance (Community Glade)
E. S.W. Park Entrance
F. Potential Community Center
G. Over Water Walk At Scriber Lake
H. North/ South Pedestrian and Bicycle Connection to 52nd Ave (Scriber Creek Trail)
I. Enhanced East West Pedestrian / Bicycle Path
J. Lake Restoration
K. Restoration of Dredge Access Point
L. Culvert Replacement Under 196th
M. Neighborhood Entry
N. 196th Streetscape Enhancement
Vegetation Management
Wetland Boardwalk
Path
Viewpoint
Park Entry/Wayfinding Element
Scale: 1"= 80'
0 80 160
SCRIBER LAKE PARK MASTER PLAN
CITY OF LYNNWOOD PARKS DEPT.
DAVID EVANS AND ASSOCIATES INC.
119 Grand Avenue, Suite D
Bellingham Washington 98225
Phone: 360.647.7151
Fax: 360.647.7160
DOUGLASS CONSULTING
j.a. brennan associates PLLC
DATE: 01-24-05
FIGURE: K
SCRIBER LAKE
WILCOX PARK
(LAND USE: PARK, RECREATION, & OPEN SPACE)
196TH ST
198TH ST
200TH ST
200TH ST W
56TH AVE
58TH AVE
58TH PL
52ND AVE
53RD AVE
52ND PL
54TH AVE
53RD PL
SCRIBER LAKE ROAD
FIRWOOD
DRIVE
GLEN HAVEN
PRIVATE DRIVE
MINI PARK AT SPRAGUE'S POND
CITY BANK
BANK OF AMERICA
REAL ESTATE
STRIP MALL
THAI REST.
CONKLIN APPLIANCE
SPORTS AUTHORITY
OFFICE DEPOT
FAMILY CHRISTIAN STORE
COMMERCIAL BLDG
(LAND USE: LOCAL COMMERCIAL)
(LAND USE: REGIONAL COMMERCIAL)
(LAND USE: MEDIUM DENSITY MULTIPLE FAMILY)
(LAND USE: LOW DENSITY SINGLE FAMILY)
(LAND USE: COMMUNITY COMMERCIAL)
MULTI FAMILY RESIDENTIAL HOUSING
POND
BRIDGE
BOARDWALK
VIEWPOINT

Conceptual Entry Design

Gateways/Entries

The Scriber Lake Park Master Plan would improve the entries to the park, thereby increasing visibility and to enhance connections to the surrounding community and encouraging neighborhood, and particularly family use of the park. Current access to the park is primarily for pedestrians and bicyclists. A park entry design is proposed that would readily identify the entries to Scriber Lake Park. Typical elements included in the park entry design are a trail gateway kiosk with wayfinding signs and a list of park amenities, several glacial erratics (large boulders) to recall the geologic history of the site, and a signature planting of trees and shrubs that recall the bog environment. Other potential park entry elements include viewpoints, seating, and/or bike racks.

Community Linkages

Existing Linkages

Improved linkages to the community surrounding Scriber Lake Park are proposed using the following techniques to improve park visibility, pedestrian access to the park, and safety.

- Create a green corridor along 196th Street within the urban core between Wilcox Park and Scriber Lake Park. Improve sidewalks, landscaping, and intersections on both sides of 196th Street, including signature park entry designs for Wilcox Park and Scriber Lake Park at the intersection of 196th Street and 52nd Avenue (Appendix A, Figure K).

- Allow for a few narrow view corridors into Scriber Lake Park from 196th Street, while protecting the experience of nature in the park.

- Connect the park to adjacent uses such as Wilcox Park, the Senior Center, Cedar Valley Elementary School, and the potential Community Center, through sidewalk and crosswalk improvements.
- Plan for future acquisition of properties adjacent to the park as these become available.
- Improve wayfinding and trails within the park by reducing informal trails and adding signage.
- Connect Scriber Creek Trail through the park as a north/south pedestrian and bicycle connection along the 52nd Avenue right-of-way, linking to the regional Interurban Trail southeast of Scriber Lake Park (Appendix A, Figure A1).
- Increase the use of the park as a bike route by improving the existing discontinuous asphalt trail to a continuous asphalt and boardwalk trail.

Existing Bench Adjacent to Path

Trail System and Trail Experiences

Trails within Scriber Lake Park bring the user into the unique bog environment that the peat substrate has created. Landscape areas consisting of scrub shrub thicket habitat, open water features, stands of swamp forest structure and upland regions with well established mature forest canopy offer a range of experiences for park visitors. The trail system will capture vistas to Scriber Lake, provide integrated educational opportunities and minimize impacts to the sensitive landscape habitat of the Scriber Lake Park. Appropriate placement and planning and design of proposed trails will ensure better management of landscape habitat and limit erosion problems.

Trails will provide opportunities for nodes of activity. At trail intersections, users will discover interpretive signage elements, wayfinding signage and small gathering areas for meeting. Trails will bring users to interesting viewpoints where spaces may be created to accommodate larger groups for classroom gatherings.

Existing Wood Chip Path

Trails need to be accessible to people of differing abilities. Hard-surfaced trails such as asphalt and boardwalks will provide disabled visitors easier passage through the park site. Soft-surfaced crushed rock paths also provide accessible routes. Bark mulch paths would be considered less ADA-accessible. The Federal Access Board's draft report on Accessibility Guidelines for Outdoor Developed Areas provides general guidance on trail accessibility.

The proposed forest trail development in the southern area of the park will largely be on the sloping ground at the edge of the upland area to the south. This area is underlain by glacial till, and stability of the trail will depend on the amount of surficial erosion and slope saturation. These processes could give rise to localized

sloughing and instability of the looser soils on the slope. Any applicable critical slope ordinances that may govern development on the slope areas will have to be addressed.

With a large portion of the site having a substrate consisting of peat, trail design and construction will address the structural quality of the peat, and what alternatives can create a long lasting trail system that requires minimal maintenance. Removal of existing path headers and bark mulch, and construction of new boardwalks is planned as part of this enhancement. In general, current sections of footpath developed with bark mulch overlie peat deposits within the Scriber Lake Basin. The thickness of peat deposits may generally be expected to increase toward the open water, and the compressibility of the peat will similarly increase.

Existing Asphalt Path

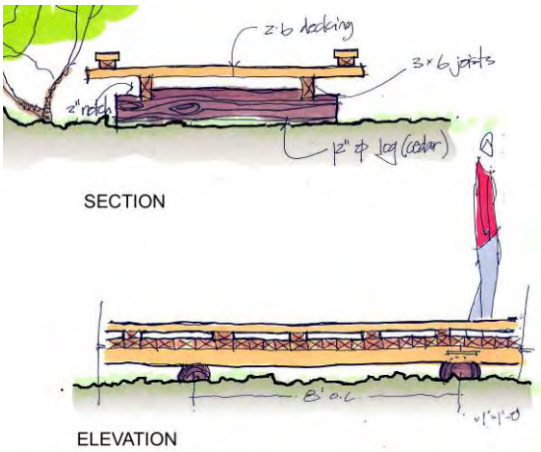
Trail Types

Asphalt Paths (Upland)

Upland trail areas within the park may be surfaced with asphaltic concrete. The surface will offer a multi-use trail for walking, jogging, skating, bicycling, roller blading and service access. Asphalt provides an ADA-accessible surface that is easily maintained. Trails will be 6 feet wide minimum.

Crushed Rock Paths (Upland)

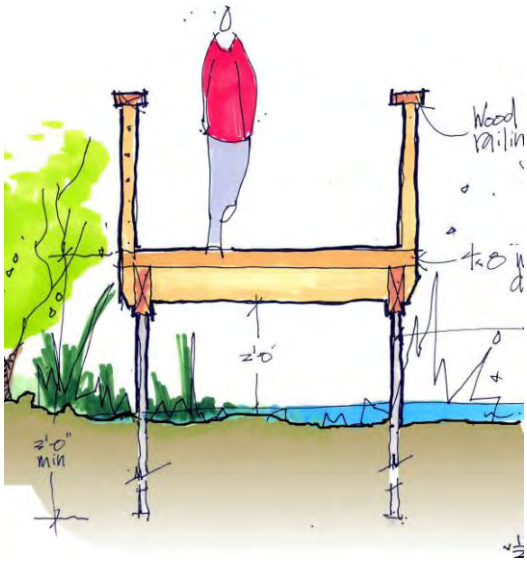
The crushed rock surface would be a 5/8 minus crushed rock material that when compacted in place offers an ADA accessible surface. Edging material will be required to keep the crushed rock material in place. Primary uses of the crushed rock surface include walking, bicycling and access for service vehicles. Crushed rock Paths will be minimum 6 feet wide and up to 8 feet wide maximum.



Boardwalk on Sleepers (Over Marsh)

A sensitive approach to maintaining existing vegetation within the marsh area is the construction of a boardwalk on sleepers**.** Construction consists of tread planks attached to joists that are resting on sleepers or grade beams. The sleeper is placed in a shallow trench at right angles to the trail centerline. A second sleeper is prepared and placed in another trench 6 to 9 feet away. Boardwalk on sleepers will be a minimum of 6 feet wide.

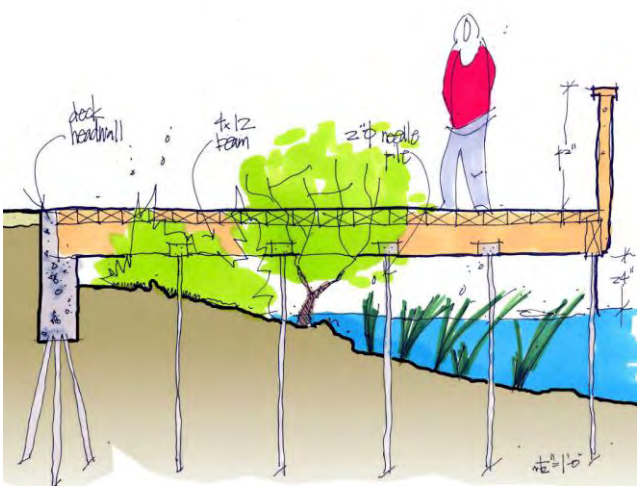
Pin Pile Boardwalk (Over Marsh)



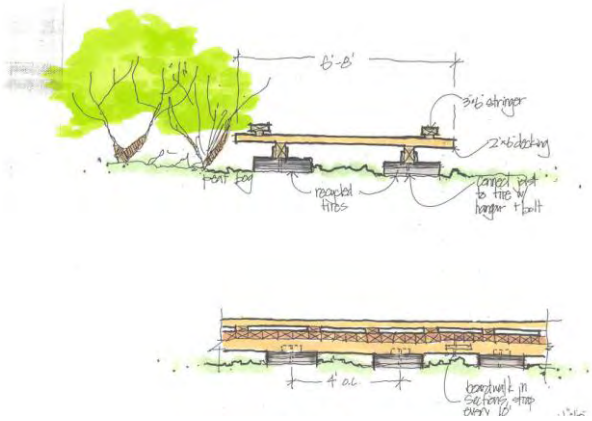
Depending on the structure of the substrate, it might be possible to incorporate a pin-pile supported boardwalk. Elevated boardwalk sections may be constructed and supported on pin-piles driven to refusal in competent underlying glacial till and outwash sediments. Foundation costs will vary, with the pile-supported boardwalk options likely to be the most expensive. Development of cost estimates for the various walk options is beyond the scope of this conceptual evaluation, but pin-piling of the size anticipated to be needed for this project typically costs $10 to $15 per foot of pile installed. Mounting hardware and pile bracing/stiffening elements would be additional costs. Construction consists of tread planks attached to joists that are supported with pilings. A bull-nose rail would also be incorporated at the edges of the boardwalk construction for pedestrian safety. Timbers may be pressure-treated wood or recycled plastic. Three types of suitable piles are end-bearing piles, friction piles and helical piles. When piles are used, the planks may be up to 2 feet above the ground or water. Boardwalk widths will be a minimum of 6 feet wide over sensitive marsh areas.

Pin Pile Boardwalk (Over Water)

Construction consists of tread planks attached to joists that are supported with pilings. Hand rails would also be incorporated at the edges of the boardwalk for pedestrian safety. Pilings might be employed to permanently support the walk at a level above high water. Pilings would be driven into stable glacial till or advance outwash, which is expected to be encountered beneath the accumulated fine-grained sediment and organics that have been deposited within the lake basin in recent time. Initial construction costs could be higher depending on the depth of peat encountered. Bathymetric surveys and geotechnical probing will be required to identify the depth and nature of the deposits. Pin-pile construction provides more latitude in the design and could improve the aesthetic character of the boardwalk. Pilings may take the form of small diameter pin-pile elements for light load support conditions, or larger pipe or timber piles where loading is more substantial and/or greater pile lengths are required. In the former case, light hand-portable equipment operating from a boat or small barge would be the mode of construction, whereas one or more large barges would be necessary for support of cranes and pile driving equipment if larger pipe or timber piles are selected for foundation support. Boardwalk widths will vary between 6 to 10 feet wide. The 10-foot wide portion of the boardwalk will accommodate pull out areas providing rest areas to view the shoreline and water fowl.



Floating Boardwalk (On Marsh)



To preserve the quality and character of the marsh habitat a floating boardwalk would be the most cost effective and more sensitive option. The floating structure would also be flexible, enabling it to move with the inundation of the water. An advantage to a floating boardwalk is the ability to move the walkway in the future to adjust to natural changes in the habitat. Higher overall maintenance costs might be associated with this form of boardwalk. Floating boardwalk widths will be a minimum of 6 feet wide over sensitive marsh areas.

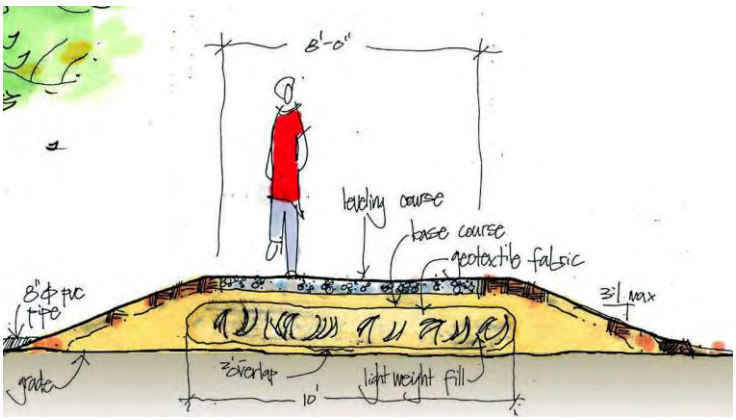
Floating Boardwalk (Over Water)

Floating boardwalks could be constructed in areas, where lake levels are anticipated to increase seasonally and/or in response to major storms and short-term runoff. Such floating boardwalk elements would be expected to be designed much like floating dock structures, employing a variety of foundation support/flotation systems. For safety a handrail would be incorporated into the construction. The floating boardwalk would allow for movement with changing water levels. Boardwalk widths will vary between 6 to 10 feet wide. The 10-foot wide portion of the boardwalk will accommodate pull out areas providing rest areas to view the shoreline and water fowl. Users would also have a different sense of the water surface as they would be closer to the water and would experience the movement of water under their feet more readily on the floating boardwalk.

If a floating walk is selected, geotechnical design and construction considerations are limited to suitable anchorage development for dock ends, and possibly for structural elements such as piling that provide lateral stability but permit the structure vertical freedom of movement in response to water level changes. Higher overall maintenance costs may also be associated with this form of boardwalk over water.

Wood Chip Wrap Path

The wood chip wrap path material is light weight and will permit trail construction above grade of the peat substrate. Although peat is typically weak and highly compressible, experience shows that some minor over-consolidation commonly exists in the near-surface zone due to fluctuations in water levels. Consequently, minor thicknesses of fill, particularly of a light-weight nature such as bark mulch or wood chip, can often be placed without inducing large settlements, or resulting in failure of the soft subgrade due to over-loading. The wood chip wrap path option enables a path to be created with minimal excavation. Rather than excavating earth to incorporate a trail the wood chip path option builds the trail on top of existing grade. The wood chip wrap forms the core of the path around which the other



material is placed to form the profile of the path. Soil is placed to build up around the wood chip wrap, providing a planting medium. The final walking surface, whether crushed rock or asphalt is placed above the wood chip wrap. Advantages to the wood chip wrap path include a trail that is more cost-effective, with less possibility of the path sinking into the wet marsh substrate. Geotextiles and geogrids can often also provide for subgrade strengthening and or encapsulation of fill materials, if required, but will not reduce settlement potential. The trail width for the wood chip wrap path will vary between 6 and 8 feet wide.

Wood Chip Paths (Engineered Wood Chip Fiber)

The engineered wood chip fiber creates a surface that can be compacted to accommodate wheelchair access that is biodegradable as well as permeable. Appropriate for this surface are single track trails that bring the user into more sensitive upland areas, providing a more natural woodland experience. Widths for the wood chip path will vary from 2-4 foot wide and will be limited to pedestrian users.

Scriber Lake Park Trails

Northern Park East-West Trail/Bog Plant Walk

This trail provides a stronger and more direct east-west connection within the park offering pedestrians a refuge from traffic on 196th Street. The central portion of this trail is an extension of the existing trail through the scrub/shrub bog that passes between the North Lagoon and Scriber Lake. The path moves through a series of wetland bog plant groupings with tags identifying the plants ethnobotanical use, or use by wildlife. This trail also leads to a viewpoint of the North Lagoon, with low plantings along the edge of the boardwalk to allow views from the Bog Plant Walk to the lake.

East-West Pedestrian/Bicycle Path

This Pedestrian/Bicycle Path is an upgrade of the current partially paved path in this location. By creating a continuously paved path from the northwest entry through to the southeast entry, the path becomes more inviting for bicycle use. In order to create a continuously paved path, a 240 lineal foot segment of trail across the existing wetland will need to be upgraded, possibly through the construction of a boardwalk on sleepers with rough surfacing, or a similar design. A small bridge over Scriber Creek is also necessary along this segment of the trail.

North/South Pedestrian and Bicycle Trail

This trail link to the regional Interurban Trail is located along the eastern edge of the park, extending the Scriber Creek Trail to the north along the undeveloped 52nd Avenue right-of-way. The proposed trail would be within the wetland boundary and will be traversing some very wet areas. A portion of the 600-foot long, 6 to 8 foot wide crushed rock path, would require the construction of approximately 140 lineal feet of boardwalk. Trails from the businesses and landscaped pond to the east of the park boundary may connect into the North/South Pedestrian and Bicycle Trail, connecting the neighborhood to Scriber Lake Park. A modest amount of landscape enhancement is proposed along the southern half of the trail. Single trees and small groves of trees line the path, and north of the creek crossing, tree and shrub plantings and an open wooden railing soften views of the adjacent apartment parking lot.

Overwater Boardwalk at Scriber Lake

The overwater boardwalk curves gracefully leading the visitor across the open water of Scriber Lake and then snakes towards the marshy shore where tall marsh plants hug one side of the walk. Views across the lake may allow one to enjoy ducks swimming by, and views into the marsh plants may give visitors sneak peaks at redwing blackbirds or amphibian eggs adhering to sedge stalks. The overwater boardwalk ends in a path across the enhanced and scrub/shrub wetland plant community and connects to the Grand Cedar Story Circle, the Drumlin Amphitheatre and the Peat Bog Natural History Plaza.

Lake Overlooks

The two existing lake overlook locations are enhanced, one on the north side and one on the southeast end of the lake. Each overlook is improved by building boardwalk approaches across the wetland and a centered viewpoint at the end of the boardwalk. The dense thickets adjacent to the paths are thinned, and more diverse bog plant species are planted for added interest. A bench is located centrally at each overlook.

Scriber Creek Beaver Dam Overlook

Similar to the lake overlooks, the Beaver Dam Overlook provides a view of the existing beaver dam located in Scriber Creek just east of the lake. This viewpoint will replace the existing path that crosses the creek. Removal of the existing trail and creek crossing allows for a greater extent of uninterrupted wetland habitat, thereby improving wildlife habitat in the wetland.

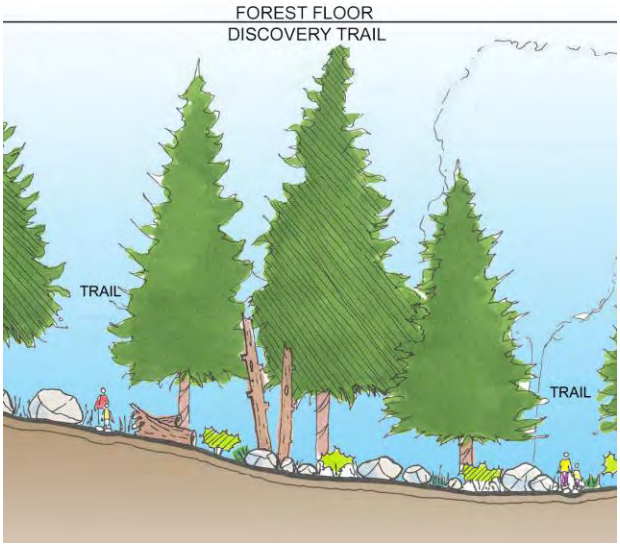
Pond Overlooks

Four overlooks provide views of the northeast pond from each side of the pond. Extensive vegetation enhancement along the perimeter of the pond and the east slope of the Glacier Knoll, in addition to installation of loafing logs and snags in the pond, improve the habitat quality. Another boardwalk and overlook is created in the 52nd Avenue right-of-way with views of a landscaped pond within Scriber Creek.

Forest Canopy Walk

This trail will be an elevated walk that brings the visitor's experience up into the forest canopy. The intent of using an elevated walkway in this location is to protect the slope and existing trees in the northwest corner of the park. The elevated boardwalk will transition into a paved path that will meander through the existing trees high on the park's west slope. Views from this slope will be of the forest canopy with glimpses of the lake beyond. This path will be a handicapped accessible walk connecting the neighborhood west of the park to the park and lake.

Forest Floor Discovery Trail



The Forest Floor Discovery Trail will offer a number of different educational play elements. Boulders and habitat logs will create natural play structures for children to explore and climb on. Snags with interpretive panels will educate children about wildlife and natural systems found in the park. Stones inscribed with images and text will be found along the trail.

Environmental Play Trail

This section of trail will offer a rich tapestry of play and interpretive elements that are appropriate for children in an older age group (8-12). Play structures interwoven with interpretive elements will offer opportunities for experiencing the natural habitat of the bog and forest systems. Rope mesh climbing structures elevated in the forest canopy will provide children with challenging and strength building play opportunities that also bring them in closer contact with the forest. Hollowed out tree cavities will offer opportunities to play hide and seek, while a sinuous path through the trees promotes exploration of the forest. Natural interpretive elements such as a vertical log with hidden educational panels and stones with inscribed images and words will give children opportunities to learn through discovery and exploration.

Park Identity and Signage

Signage Program design

Scriber Lake Park's signage program will adopt many of the National Park Service's design standards. The proposed signage design will preserve the natural rustic character that Lynnwood residents have grown to appreciate. The signage program will create a positive environment in the park by incorporating a new logo, typography, and thematic colors into the signs. The new park signs will help create a boundary and establish visual markers to identify the park to the neighboring community. The signs will also improve circulation in the park and direct visitors to the designated parking area.

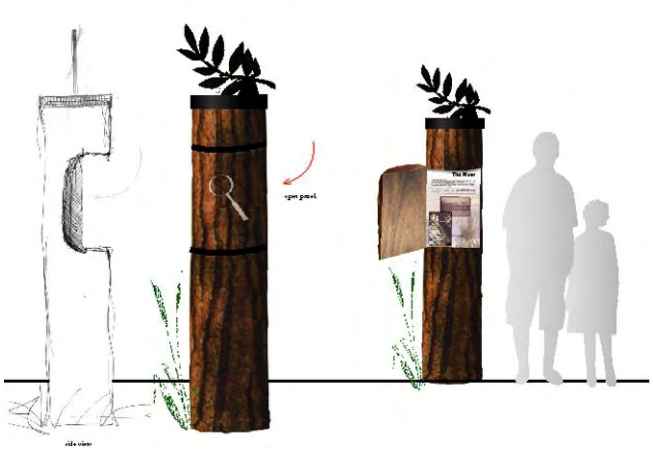
The signage program will be designed and implemented to blend with the unique landscape of the park, and reflect the history of Scriber Lake and the social and cultural make-up of the community.

Conceptual Logo

The proposed Signage and Wayfinding Program includes:

(1) Main entry sign
(3) Secondary entry signs

(4) Welcome/informational kiosks
(8-10) Directional signs
(4) Pedestrian and bicycle access signs
(2) Main parking area signs
(6-8) Parking signs
(4) Building and related structures signs
(2) Picnic and play area signs
(6-8) Trail and walkway marker signs



Additional recommended supporting signage includes:

Safety signage within the park to indicate exit routes and telephones

Directional signage at freeway exits and main streets leading to the park

Interpretive and Educational Signage

The interpretive and educational signage for Scriber Lake Park will introduce visitors to the history, and to the vegetation, fish and wildlife components of the park. An interpretive program will encourage the community to explore and discover the history of the park, from its glacial origins to the present. This community involvement will encourage positive stewardship, which will help keep the park a clean, fun and safe place to be.

The program will also Introduce educational elements into the park that will encourage community participation. Surrounding schools will have the opportunity to utilize the park as an educational tool to be included in their curriculum. This educational component will bring many user groups into the park and increase the park's activity level. The more secluded areas of the park will open up with activity, and the increased use will help deter criminal behavior in the park.

Proposed Interpretive and Educational Signage includes:

- Pond (2)
- Swamp (2 - Spiraea and Alder)
- Forest (1)
- Open Zone (1)
- Vegetation Panel (1)
- Fish and Wildlife Panel (1)
- History Panels (2- Land Form and Site History/Background)

Community Gathering Areas

Community gathering is encouraged through welcoming seating areas and spaces for learning and discovery. The Drumlin Amphitheatre/Outdoor Classroom area in the northwest Community Glade area is a unique community gathering space. The name "Drumlin" recalls the glacial origins of the landforms in the park and refers to a smooth oval hill of glacial drift, elongated in the direction of the movement of the ice that deposited it. This area could be easily connected to activities occurring in the proposed Community Center, if the Center is constructed on the property to the west of Scriber Lake Park (Appendix A, Figure I and Figure I1).

The Peat Bog Plaza adjacent to the existing restroom is an area where visitors can rest on benches and seating walls, or browse the interpretive peat bog planting beds, and learn about the bog ecosystem (Appendix A, Figure N). The northeast Glacier Knoll area is an educational outdoor gathering space with an interpretive shelter, picnic pavilions and an informal picnic meadow (Appendix A, Figure M). A smaller more informal neighborhood gathering area is located at the foot of the 53rd Avenue street end, and provides a small picnic meadow, trail and viewpoint (Appendix A, Figure O).

Habitat Preservation and Restoration Opportunities

There are numerous opportunities for habitat restoration and preservation at Scriber Lake Park. The Master Plan team conducted an assessment of the park to identify key areas for preservation and restoration. Central to the park's ecological system are the lake, the ponds, and the peat bog wetlands. Recommended restoration and preservation activities, and phasing, are summarized below.

Vegetation Restoration Measures

Removing invasive species and planting native vegetation within all areas of the park will enhance wildlife habitat. Invasive species could be partially controlled by use of an Integrated Pest Management (IPM) program in the park. Management techniques for invasive control need to be appropriate for the sensitive aquatic environments. Recommended plant species are chosen for their ability to provide additional food sources and refuge areas. Tall shrubs and trees will provide additional shading and cooling of the lake (See Appendix C: Vegetation Restoration Plant Lists.)

Phase 1:

- Preserve significant trees and habitat features, including cavity trees and snags to provide perching, foraging, and refuge opportunities for wildlife.
- Remove invasive species, such as Himalayan blackberry and Japanese knotweed from the knoll in the northeast corner. Plant more diverse species to improve the structure and habitat in this area. Investigate the underlying soils and asphalt rubble in the knoll and bring in topsoil as necessary to establish a stable soil structure and healthy growing medium.
- Plant more diverse species along the south side of Scriber Lake to improve habitat and structure. This will require some thinning of the existing plantings, especially red alder. Planting of more conifers is recommended, especially Western red cedar and Sitka spruce.
- Plant more peat bog species along the west side of Scriber Lake to emphasize the unique peat bog wetland environment.

Phase 2:

- Remove Himalayan blackberry and English ivy in the northwest corner of the park.
- Diversify plantings north of Scriber Lake to improve habitat and enhance peat bog plantings. This will require some thinning of the existing plantings, especially red alder. Create view corridors with selective thinning in this area.
- Remove invasive species in the southeast corner of the park, including Himalayan blackberry. Plant more diverse species to replace some of the red alder and to improve the habitat and structure in this area.

Phase 3:

- Remove invasive species along the 196th Street frontage, diversify native plantings, add street trees to the east and west end of the park, and create viewpoints along the 196th Street corridor.
- Remove invasive species and planting native vegetation within the upland areas of the park and along the creek corridor to enhance wildlife habitat.

Restoration Measures for Scriber Lake and Ponds

Phase 1:

- Implement a program to meet the 2013 Washington Department of Ecology water quality goals in the lake, including: phosphorus reduction; possibly using aluminum sulfate to inactivate nutrients; and increase oxygenation by aerating the hypolimnetic layer.
- Improve water quality in the lake by implementing a basin-wide Best Management Practices (BMPs) program to control inputs of sediment, nutrients, and pollutants into the lake. BMPs could include: upstream stormwater facilities; upstream sediment and

oil traps; marking storm drains along Scriber Creek; public education about the Scriber Lake ecosystem, stormwater management, low-impact landscaping methods, elimination of illegal dumping. A BMP program can be coordinated through the City of Lynnwood, neighborhood stream steward groups, and local fisheries enhancement groups.

- Remove invasive species such as reed canarygrass along the lake shoreline using shallow dredging of vegetation and root structures. This measure is recommended to control further spreading of reed canarygrass in the lake system.
- Plant trees along the east, south, and west shorelines to increase shade over the lake, control water temperature, and to provide a future source of large woody debris (LWD) for the lake.
- Maintain separation between the North Lagoon and Scriber Lake to preserve water quality in Scriber Lake.

Phase 2:

- Construct floating log structures on the lake to increase shade over the lake, provide refuge for fish and habitat for the resident turtle populations.

Phase 3:

- In Phase 3, further measures to restore Scriber Lake and Creek water quality will be developed. Basin-wide analysis and planning is required to determine which additional measures are appropriate to improve water quality in Scriber Creek, Scriber Lake, and the associated wetlands.
- One possible measure could be to dredge excess sediments in Scriber Lake to remove sediment, nutrients, and pollutants in the lake. A four-to-five-foot thick layer of mucky sediment was identified at the bottom of the lake in the 1980s. Up to another four feet of sediment is estimated to have accumulated in the lake since the 1980s creating a total of up to eight or nine feet of sediment on the bottom of the lake. These sediments have trapped pollutants and nutrients that impact the water quality of the lake. In addition, the sediments have decreased the water depth in the lake, resulting in increased water temperatures in the lake. If implemented, dredging would be a one-time event and would only be implemented in conjunction with other sediment-reduction measures such as a basin-wide BMP program. Due to the impact and expense of dredging, the timeframes for permitting, and other factors, dredging of the lake should only be considered as part of Phase 3, after other lake restoration measures have been implemented.

Scriber Creek Restoration Measures

Phase 2:

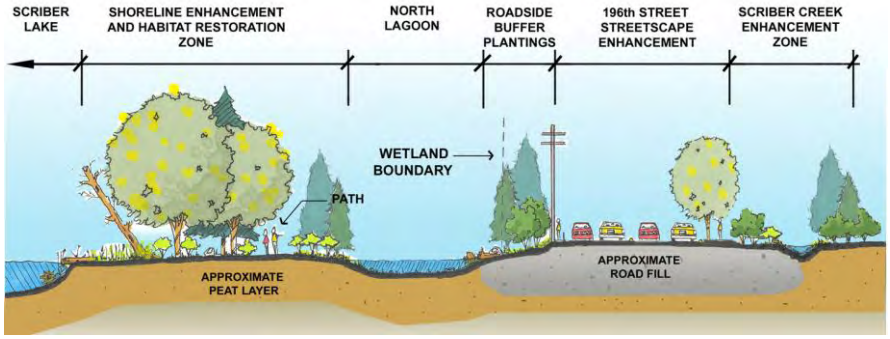
- Plant trees along Scriber Creek where it flows in the 52nd Avenue right-of-way to increase shading of the creek, control water temperature, and provide a future source of large woody debris (LWD) in the creek.

Phase 3:

- Restore the portion of Scriber Creek upstream of Scriber Lake Park.
- Improve stream passage upstream of Scriber Lake by constructing a larger culvert under 196th Street.

Phase 4:

- Plant trees along Scriber Creek downstream of Scriber Lake to increase shading of the creek, control water temperature, and provide a future source of large woody debris (LWD) in the creek.



- Add LWD to Scriber Creek.
- Improve stream passage downstream of Scriber Lake Park by identifying passage barriers and correcting, especially at the intersection of 196th Street and Interstate 5.

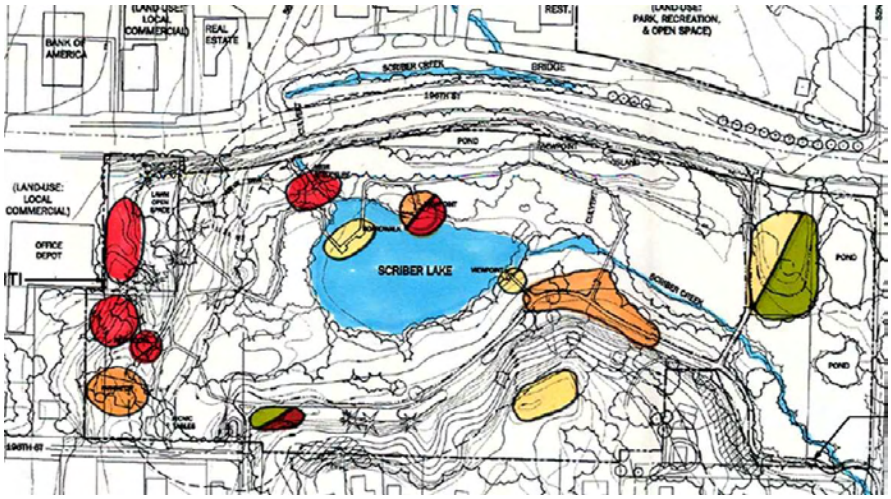
Wetland Preservation and Restoration Measures

Phase 1:

- Enhance vegetation diversity within the wetlands. Establish buffers around the wetlands and enhance vegetation within the buffers as recommended under Vegetation Restoration above and as detailed in Appendix C - Vegetation Restoration Plan and Plant Lists.
- Identify methods to keep water flowing into the wetlands and the peat bogs. Potential methods include: upgrading trails through the wetlands to allow for water movement under the trails; maintain vegetation in wetland areas; and increase connections between the lake, creek, and the surrounding wetlands.

Crime Prevention Through Environmental Design

The technical team conducted a park site visit with local law enforcement officials and City staff to establish what kind of crime occurs in the Park and in which locations certain kinds of crime are most prevalent. The Crime Prevention Through Environmental Design (CPTED) approach was taken to facilitate reducing crime in Scriber Lake Park. The full description of the CPTED process is included in Appendix B: Site Inventory and Analysis Technical Memorandum. See Appendix A, Figure G for map with legend.



The environmental design strategies used to deter crime include:

- A sense of community ownership is fostered through signs, attractive landscaping, good

maintenance, art and well-defined spaces. Improvements in park furniture, boardwalks, rustic fences, and railings and increased definition of spaces will help to improve a community sense of ownership for Scriber Lake Park.

- Natural surveillance at Scriber Lake Park is improved by: allowing for views of the parking lot from condominium housing on the south side of 198th Street; opening views from the pedestrian entrance on 196th Street to the Drumlin Amphitheatre area; improving views from the primary paths to the viewpoints through vegetation diversification; redesigning the northeast entrance into the park at 196th Street; creating an east/west through-trail along the northern side of the park; and allowing for views from adjacent residences and businesses into the pond areas on the east side of the park.
- Positive activity is increased at Scriber Lake Park by developing areas for children to play, picnic areas, community clean up and restoration planting days, bog ecosystem education, and the addition of the East/West Bicycle/Pedestrian Trail. Connection of the park to a potential future community center via the Amphitheatre/Outdoor Classroom would further increase positive activities at the park and reduce crime.
- Access control is improved at Scriber Lake Park by locating entrances, exits, fencing, and landscaping to direct foot traffic and automobile traffic in ways that discourage crime. Improvement of the entrances into the park from the busier 196th Street and improving the connection between Scriber Lake Park and Wilcox Park will help to improve access control. A railing and planting is added along the parking lot adjacent to the Scriber Creek Trail, directing access to street ends where natural surveillance is better. A loop exit drive is proposed at the southwest parking lot to improve police access and surveillance.

The Master Plan by Geographical Area

Glacier Knoll - Northeast Park Pedestrian Entrance – "A"

The northeast park pedestrian entrance at the corner of 196th Street and 52nd Avenue is developed into a park entry plaza that attracts motorists' and pedestrians' attention to the park as they pass by on 196th Street. By placing the standard entry design elements at this intersection (a trail gateway kiosk, benches, a bike rack and signature bog-association plantings) the entry will become the signature entry to Scriber Lake Park. Adjacent to this entry area, a sign announces the beginning of the Scriber Creek Trail and regional trail connection.

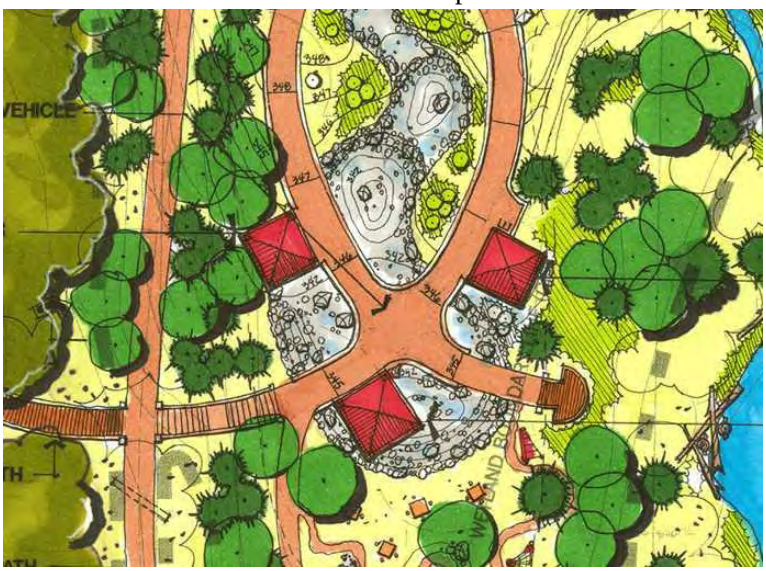
Wilcox Park is visually connected to Scriber Lake Park through the development of a small entry plaza at the Wilcox Park side of the 196th Street and 52nd Avenue intersection that is raised to meet the grade of the adjacent sidewalk and includes similar park entry elements, such as a bench, kiosk, glacial boulders, and signature plantings.

The entry sequence leading the visitor into Scriber Lake Park would also be enhanced. A viewpoint is located at the park entry plaza allowing for a view across the north pond. To immerse the visitor into the park, the sidewalk is relocated away from 196th Street to become a meandering path with street trees between the path and the street. This path leads to the Glacier Knoll Picnic Area, Glacier Story Interpretive Pavilion and landscape,

and also to a handicapped accessible trail into the heart of the park. The paths entering the site at this location will also accommodate maintenance vehicle access to the pavilions.

As park visitors enter Scriber Lake Park at the northeast corner, they are above the remainder of the park on what was once a dumping site of unwanted fill soil and asphalt. With some re-grading and the addition of topsoil, the mound can be transformed into a community gathering space. Atop the mound, park visitors will experience a landscape that is modeled after the shape of an alpine glacier valley. This character is created through development of a gravel stream, edged by a ridge (reminiscent of a moraine) that steps down as it flows into the site, forming several miniature kettle lakes within the gravel streambed. Pockets of bog plants ring the edges of the miniature kettle lakes and the gravel streambed with small signs identifying the plants. The story of glacial influences on the site and how these glaciers created today's Scriber Lake and bog is described in the Glacier Story Interpretive Pavilion. Park visitors will move through the space on a path that is slightly elevated above landforms that suggest the remnants of a glacially formed landscape.

Two additional pavilions located at the top of the mound provide opportunities for group gatherings and picnicking. Two of the three pavilions are elevated on post and piers allowing the alpine glacier valley to flow beneath them. Also on the knoll is a picnic meadow in the shelter of existing trees, a nature play path and a viewpoint that offers views to North Pond. The Nature Play Area provides educational play opportunities for children. Climbing boulders, interpretive snags, habitat logs and climbing structures will connect children with the site and educate them about natural habitat values.



Wetland buffer enhancements and habitat restoration are proposed along the perimeter of the glacier knoll and along the edges of the North Pond to improve habitat values on site and reduce or remove the invasive plant material prevalent in this area. The existing vegetation consists primarily of red alder and Himalayan blackberry. The restoration goal is to retain a large number of the alders where feasible, and add a diversity of native trees and shrubs to improve the habitat and prevent blackberries from re-invading the area. For buffer and habitat plantings to perform well and become established, additional topsoil will be required on the mound. Views to the ponds and Scriber Lake from Glacier Knoll will be improved through selective removal of vegetation.

200th Street Pedestrian/Bicycle Entrance – "B"

The 200th Street Pedestrian/Bicycle Entrance is a secondary park entry. It is a part of the regional trail along the 52nd Avenue right-of-way, and it is the south entry to the proposed North/South Pedestrian and Bicycle Trail (Scriber Creek Trail) and the southeast end of the East/West Pedestrian and Bicycle Path. This trail entry would receive the standard entry design with signage on a Trail Gateway Kiosk, placement of a large glacial boulder, signature planting elements, and a bike rack. The character of this gateway to Scriber Lake Park will assist in drawing community attention to the park and trail entry. This location is also a connection to the Mini Park at Sprague's Pond. Some vegetation enhancement is proposed, however, the focus will be on invasive plant removal and diversification of vegetation, as well as vegetation management, to open up view corridors for improved security.

Neighborhood Gathering Area (53rd Avenue) – "C"

The proposed neighborhood gathering area at the 53rd Avenue street end would have the standard entry design (as described above under the 200th Street Pedestrian/Bicycle Entrance), and provide the community with a woodland walk loop and a unique bluff overlook to view Scriber Lake Park. This area of the park, which was once a home site, still contains a number of ornamental trees and garden features. The Master Plan proposes to clear an existing thicket of shrubs and small trees, and extend the existing path through this open meadow with its beautiful large trees to connect it with the 53rd Avenue street end. A small picnic area with several tables is proposed along the woodland walk.

Peat Bog Plaza and Southwest Park Entrance – "E"

The Southwest Park Entrance is the existing main park entry and sole public vehicular entrance to the park. A Trail Gateway Kiosk along with the other typical entry design elements of a glacial boulder, signature plantings and a bicycle rack is located close to 198th Street. A walkway connecting to the 198th Street sidewalk leads into the Peat Bog Plaza.

Proposed improvements to the parking lot include the addition of an exit drive to allow through access for vehicles and ease of police patrolling. A pedestrian sidewalk is proposed along the perimeter of the parking lot to improve pedestrian access from 198th Street. Plantings are proposed along a portion of the parking lot to enhance the beauty of this already attractive grove of conifers, and a small meandering path is proposed cutting diagonally across the planting island. An improved picnic area is proposed with more picnic tables provided

adjacent to the parking lot, as well as picnic areas located in the forest understory, north and south of the restroom.

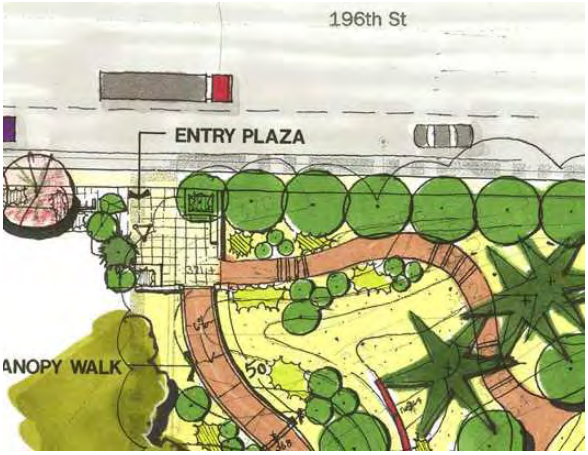
Entry to the park from the existing parking area is via the Peat Bog Plaza that offers an interpretive kiosk, raised planters exhibiting a variety of bog plant communities with interpretive signs providing information about the ethnobotanical uses of the plants and the natural history of peat bogs. The plaza also provides seating and gathering opportunities for park users. The existing restroom will be retained in its current location, while being enhanced by a diversity of plantings around its perimeter. Restoration plantings are proposed throughout this area to improve habitat values and reduce or remove the invasive plants that have become established.

The Peat Bog Plaza is located along the East-West Pedestrian/Bicycle Path. Bicycles will be induced to slow down as they cross the plaza by offsetting of the path heading to the Northeast Entry from the East/West path. A portion of the East/West Path to the east of the plaza will be improved through the construction of a log-stringer boardwalk where the path crosses the wetland.

A Nature Play Area provides educational play opportunities for children. Here children will discover the Forest Floor Discovery Trail, which will offer a number of different natural play elements. Boulders and habitat logs will create natural play structures for children to explore, climb on, and hide around. Snags with interpretive panels will educate children about the park site.

The City of Lynnwood is considering the development of a community center on the adjacent property to the west of the park. If this were to occur, there may be an opportunity to share parking on the community center site, and remove the parking area from Scriber Lake Park. This would allow for increased habitat restoration. In addition, children and adults at the community center would be drawn into the park through the availability of activities planned for all ages in the Community Glade area.

Adjacent to the northern portion of the East/West Pedestrian Trail, a large ancient cedar tree can be found. The space at the 'Grand Cedar' will be designed to accommodate a small-scale story circle with seating and interesting flagstone paving. The different paving surface will lead the user from the main path to the story circle. Entry paths in this area are also designed to allow police and emergency access to the site to monitor the day-to-day activities in the area, in addition to maintenance vehicle access.



Community Glade and Northwest Park Pedestrian Entrance – "D"

The Northwest Park Pedestrian Entrance is relocated to the very northwest corner of the park, directly adjacent to the potential community center site. An entry plaza is

developed with good visibility from 196th Street and with the typical entry design elements: benches, a Park/Trail Gateway Kiosk, a bike rack, glacial boulder and signature plantings. A retaining wall may be necessary to create a level plaza here.

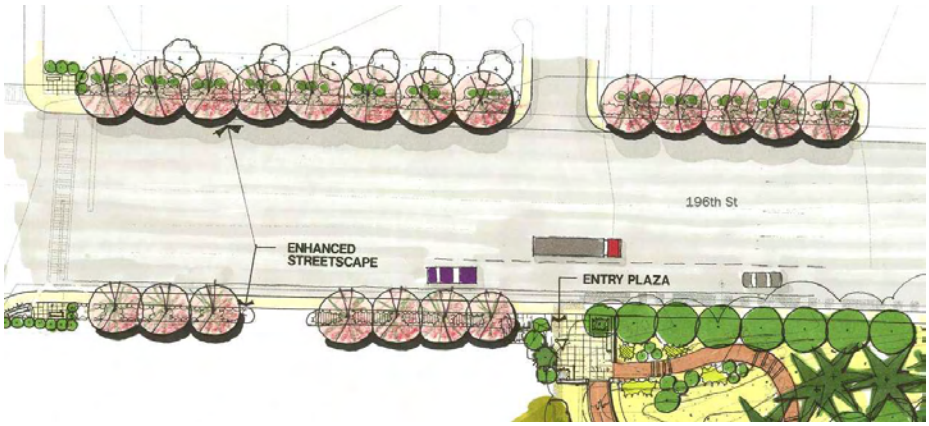
The Forest Canopy Walk leads the visitor into the park. The intent of the Forest Canopy Walk is to sustain existing grades in the corner and to preserve significant existing vegetation by developing an elevated walk that brings the visitor's experience up into the forest canopy. The elevated walkway will protect the slope and existing vegetation. It touches ground, transitioning into a paved path that meanders through the existing trees high on the park's west slope. Views from this slope will be of the forest canopy with glimpses of the lake beyond. This handicapped accessible path will connect the neighborhood west of the park to the park and lake. The Forest Canopy Walk will also serve as the bicycle entry into the park and as the northwest beginning of the East/West Pedestrian/Bicycle Path.

Central to the Community Glade is the Drumlin Amphitheatre/Outdoor Classroom, which is located in the existing open meadow space, surrounded by magnificent large conifers. The amphitheatre area is an outdoor gathering space with informal stone seating set into the sloping landform that will hold a moderate sized group of up 60-100. A stage is included to allow for theatrical events or outdoor classroom educational sessions.

If the proposed community center is constructed on the property west of Scriber Lake Park, consideration should be given to constructing a split-level type structure to allow for an entrance or a series of spaces to open into the park. The Community Glade would benefit from the greater liveliness that would be created from being connected to community center programs and activities. Development of the community center should also emphasize the connection between the built and natural environments, potentially including low impact development design elements. Trail Gateway Kiosks are located at the beginning of the Northern East/West Pedestrian Trail and the beginning of the trail to the Overwater Boardwalk.

Native plants typically found together in plant communities are grouped along a couple of small soft trails and identified with tags to introduce users to local plant communities. Northwest native plants traditionally used for medicinal purposes are grouped along a small loop trail and identified with small signs. Additional native plant restoration is proposed along the paths and where invasive plant removal will occur.

An enhanced streetscape is proposed along 196th Street from the intersection of Scriber Lake Road to the Northwest Park Pedestrian Entrance. A planting strip is created with low understory plantings and a row of street trees. Additional vegetation enhancement is proposed along 196th Street between the two park entries on the north side of the park. Areas of invasive plants are replaced with native plantings of a diversity of trees and shrubs, while creating a few narrow view corridors into the park. It will be important to design the view corridors so that the sense of quiet and respite from the view and sound of vehicles on 196th Street is preserved.



IMPLEMENTATION

PHASING AND COST ESTIMATE

A phasing plan and related cost estimate has been developed to identify strategies to move forward with construction and implementation of the Scriber Lake Park Project, determined in order of importance to the overall park improvements. Phasing of the project has been divided into 4 different phases, each phase and its parts are defined below and within in the attached cost estimate. The Phasing Plan is meant as a guide to assist in defining construction costs, assisting in grant application process, and to meter the funds as they become available for the project. Adjustments may be made to modify the phasing if additional funding sources are apparent to fit the schedule the City envisions for the park. (See Figure R for Phasing Plan).

Phase 1

Priority phasing for the Park renovation was given to the NE and SW corners, as these areas are the two main entry points to the park. Also the SW corner has been prone to illegal activities. Improvements will serve to draw the public interest to the park and increase park visitors. The proposed improvements for Phase 1 will offer more passive and recreational activities which will in turn increase the diversity of users to Scriber Lake Park creating a safer more enjoyable environment for park users.

Phase 1 efforts for Scriber Lake Park will focus on the improvements to the SW corner and the NE corner of the Park. Limited water quality improvements and potential lake dredging of Scriber Lake will begin in this phase, as appropriate based on further water quality studies. Restoration efforts of the NE pond will also occur in this phase.

Park site improvements in Phase 1 at the SW corner include the creation of the Peat Bog Plaza, parking area improvements, creation of the Forest Floor Discovery Trail, the Grand Cedar Story Circle and trail improvements. Trail improvements will include the over water structure replacement, boardwalk creation in

marsh areas, wayfinding elements, interpretive elements and some lake overlook improvements. Entry improvements to the Park from 198th street will also be part of Phase 1, these include sidewalk improvements, entry signage, and an additional entry drive to the parking area.

As part of Phase 1 the NE corner improvements will include the Glacier Knoll area, Environmental Play Trail, pond overlooks and habitat restoration. Trail improvements will also vary from boardwalk creation in marsh areas, asphalt paths in the upland areas and wood chip paths. Interpretive elements will also be created in relation to trail development. Trail link improvements to the proposed 200th Street Pedestrian/ Bicycle Entrance linking to a regional trail along 52nd Avenue are also a part of Phase 1. 196th Street SW entry improvements will take place in Phase 1 also, these include sidewalk and curb improvements, entry signage and wayfinding elements.

Cost estimate for Phase 1 improvements: $ 3,347,057.21

Phase 2

Phase 2 will include improvements to the NW corner of the park and crosswalk improvements at the intersections of 196th Street SW and Scriber Lake Road and 52nd Avenue. The NW corner improvements include the creation of the Community Glade and Northwest Park Pedestrian Entrance. Items include the Forest Canopy Walk, entry signage and wayfinding elements, the Drumlin Amphitheatre/Outdoor Classroom. Trail improvements are limited to asphalt and crushed rock paths in upland areas. Interpretive elements will also be part of the NW corner improvements as identified in the description of the Community Glade and Northwest Park Pedestrian Entrance Area.

Improvements to the proposed 200th Street Pedestrian/Bicycle Entrance connecting to the regional trail along 52nd Avenue are part of Phase 2. These improvements will include vegetation enhancement as well as trail restoration and boardwalk creation.

Streetscape enhancements along 196th Street SW from the intersection of Scriber Way Road to the NW entry will also be part of Phase 2. This will include sidewalk improvements, street tree planting and entry signage.

Cost estimate for Phase 2 improvements: $ 1,514,059.77.

Phase 3

Improvements for Phase 3 include an extensive amount of restoration work and vegetation management along the 196th Street SW corridor. Culvert replacement under 196th Street to improve stream passage and removal of the existing weir structure will also be included as part of this phase. Buffer improvements along the 196th Street Edge will take place, to remove invasive plant material and improve the park edge. Trail improvements will include boardwalk creation within the marsh area, as well as replacement of existing overlooks.

Streetscape enhancements along the 196th Street SW corridor will be included as part of Phase 3. Street tree planting and pedestrian circulation improvements will be the main goal of the streetscape enhancement.

The Neighborhood Gathering Area (53rd Avenue) improvements will be in Phase 3. Improvements include entry to park with signage and wayfinding, viewpoint and trail improvements. Refer to Neighborhood Gathering area (53rd Avenue) description for more information.

Cost estimate for Phase 3 improvements: $ 1,674,439.73.

Phase 4

Phase 4 efforts will include the south area of the park and also focus on habitat restoration and enhancement. The southern asphalt path will be retained; moderate improvements will occur if required. Entry improvements to the Park at the 56th Avenue entry are included in phase 4.

The Beaver Dam overlook construction and Scriber Creek Bridge crossing replacement will also occur in Phase 4 as well as some boardwalk creation in marsh areas.

A portion of the Scriber creek restoration and enhancement efforts will take place in Phase 4, this will include improved stream passage, additional large woody debris, and increased shading for the creek corridor.

Cost estimate for Phase 2 improvements: $ 1,683,795.68.

The Master Plan Cost estimate for the whole Scriber Lake Park project is **$8,216,352.39**

REGULATORY ISSUES

The sensitive natural resources in the park, including the lake, creek, wetlands, fish and wildlife habitat, and significant trees, are regulated by several federal, state, and local agencies. Table 2 lists some of the permits anticipated to develop the updated Master Plan and the agency (ies) responsible for reviewing and issuing the permits. These permits and the authorizing agencies are discussed in more detail below.

Table 2. Permits and Authorizing Agencies

Permit	Agency
Clean Water Act (CWA), Section 404 Individual Permit or Nationwide Permit	US Army Corps of Engineers (USACE)
Endangered Species Act (ESA) Section 7 Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act)	US Fish and Wildlife (USFWS) NOAA Fisheries
Section 401 Water Quality Certification	Washington Department of Ecology (WDOE)
Hydraulic Project Approval (HPA)	WA Department of Fish and Wildlife (WDFW)
ROW Permit	Washington Department of Transportation (WSDOT)
Title 17 Sensitive Areas Permit Application	City of Lynnwood Planning and Development

The USACE regulates fill or discharge into the waters of the United States through the CWA Section 404 regulatory program and Section 10 of the Rivers and Harbors Act. The USACE is also responsible for coordinating with the USFWS and NOAA Fisheries to determine a project's compliance with the ESA and the Magnuson-Stevens Act through review of a Biological Assessment/Biological Evaluation. Activities involving up to 0.5-acre of impact to aquatic environments would likely require a Section 404 Nationwide Permit and impacts over 0.5-acres would likely require an Individual Permit from the USACE. Activities with impacts to aquatic environments include wetland fills, most trail construction through wetlands, lake, bog environments and/or dredging, and many restoration activities in these aquatic environments.

The WDOE has review and approval authority for several federal, state, and local permits including CWA Section 401 Water Quality Certification and the Shoreline Substantial Development Permits under the Shoreline Management Act (SMA). Although activities with impacts over 0.5 acres to the aquatic environments may require CWA 401 authorization, Scriber Lake Park does not contain shorelines regulated under the SMA. The WDFW administers the State Hydraulic Code (75.20 RCW), which is intended to protect fish life and its supporting habitat. The WDFW issues HPAs for work within the ordinary high water mark (OHWM) or work landward of the OHWM that has direct impacts on fish or fish habitat.

The City of Lynnwood reviews project impacts to wetlands through permit reviews under Title 17 of the LMC and under the authority of the GMA. The wetlands in Scriber Lake Park are considered Category I Wetlands, with a minimum 100-foot buffer. Averaging of wetland buffer widths is potentially feasible for the placement of new trails or other "low intensity land uses", as long as wetland functional values are not adversely affected. Buffer averaging would require maintenance of an equal total area of buffer as would have been required using the standard buffer and a substantial documentation and review process. Given the limited amount of park area outside of the 100-foot buffer, buffer averaging does not appear to be practical for the project. The City may reduce the buffer width requirement if the project includes a buffer enhancement plan using native vegetation and demonstrates that the enhanced buffer will improve functional attributes of the buffer (LMC 17.10.054).

Existing Overwater Walkway

The City code allows the remodeling, reconstruction or replacement of existing structures, such as the boardwalk across Scriber Lake and associated paths, as long as the use and size is not changed. Under the code, it may be possible to negotiate the addition of a viewing pavilion constructed on the footprint of an existing viewpoint within the wetland. Any required maintenance of the oil/water separator or weir at Scriber Creek upstream of the lake is assumed to also be exempt from the LMC, as this is an existing structure. The code requires any proposed buildings be setback from the edge of wetland buffers by a minimum of 15 feet to

prevent encroachment into the buffer area during and after construction. This requirement may not pertain to minor structural intrusions such as play structures or fences, but would require City approval.

The LMC requires mitigation for wetland alteration at a 6:1 ratio of mitigation to impact. Although the City may decrease these ratios if a wetland mitigation plan demonstrates no net loss of wetland functional values will result from the decreased ratios, in all cases the code requires a minimum acreage replacement ratio of 1:1. Wetland mitigation acreage replacement is also required to be in-kind and must be located within the same sub-basin. Under the LMC enhancement of existing wetlands alone is not adequate for mitigation for wetland impacts. Therefore, any proposals to deepen portions of the lake or create new water channels would likely require mitigation unless the City considers the activity to be an enhancement or restoration to the aquatic environment.

Upland areas adjacent to the aquatic environments are also regulated by the City of Lynnwood under Title 17 of the LMC. A Sensitive Areas Permit Application will be required for any alteration planned within the 100-foot buffer surrounding the wetlands associated with Scriber Creek and Scriber Lake. In addition, the City of Lynnwood regulates activities in uplands designated as Environmentally Sensitive Areas due to the presence of "species federally or state-listed or proposed for listing as threatened, endangered or sensitive or as priority species, or outstanding or potential habitat for those species." Environmentally Sensitive Areas also include "areas contiguous with large blocks of habitat extending outside the city limits or providing a travel corridor to a significant resource" or areas which are associated with and enhance "Category I wetlands." All of Scriber Lake Park is within a designated Environmentally Sensitive Area, a Fish and Wildlife Conservation Area. The City of Lynnwood regulates impacts to trees under Chapter 17.15 of the LMC. Removal of trees typically requires a tree removal permit and often includes replacement plantings.

NEXT STEPS AND GRANTS

A number of funding sources are available for park and recreation facility and program expansion and development. Documentation of a number of elements is usually required for application such as a plan, capital improvement program, and evidence of support from the public and citizens in the area. Often matching funds are also a condition of application. Typically, a jurisdiction will apply to a number of funding sources for assistance to supplement local community funding resources. The following list indicates funding opportunities from grants. These would likely be matched in part by existing City revenues.

Washington State Department of Ecology, State Revolving Fund

Cities can apply for grants and/or low interest loans from the following programs:

The Centennial Clean Water Fund Program

In 1986 the Washington State Legislature established the Water Quality Account that funds a variety of programs related to water quality. This account is financed primarily from tobacco tax revenues and may also be supplemented from the State General Fund and other funds, subject to legislative appropriation. The Centennial fund provides low-interest loans and grants to local governments and Indian Tribes for water pollution control facilities and water pollution control activities designed to prevent and control water pollution to Washington State's surface and ground water.

WDOE's Water Quality Program has administered the Centennial fund since its inception. The Legislature directed that the Centennial fund shall be used to finance the planning, implementation, design, acquisition, construction, and improvement of water pollution control facilities and water pollution control related activities. WDOE's goal is to ensure that the fund is distributed among those projects that address the state's highest priority water quality protection and water pollution control needs.

Through review of Scriber Lake and Scriber Creek documents and studies, WDOE has determined that there is enough preliminary data to prepare a Total Maximum Daily Load (TMDL) program for the lake and creek. The TMDL program will establish measures to improve the water quality in Scriber Lake and Creek to meet the 2013 WDOE water quality goals. Once the TMDL is complete, the City could apply for a Centennial grant to perform additional monitoring and implementation of water quality improvement measures.

The Clean Water Act Section 319 Nonpoint Source Program (Section 319 Fund)

The Clean Water Act (CWA) Section 319 Nonpoint Source Program provides grant funding to eligible applicants for the management of nonpoint source pollution and to improve and protect water quality. The United States Congress established the Section 319 program as part of the CWA Amendments of 1987. EPA offers Section 319 funds to states subject to an annual appropriation by the United States Congress.

Examples of projects that are funded include: implementation of stream and habitat restoration; use of best management practices; stormwater pollution control; water quality monitoring; lake restoration efforts that focus on pollution prevention; and on-site management programs. The Section 319 program does not fund facilities projects.

The Washington State Water Pollution Control Revolving Loan Fund Program (SRF)

The SRF provides low-cost financing or refinancing to local governments for projects that improve and protect the state's water quality. Projects may include publicly owned wastewater treatment facilities, nonpoint source pollution control projects, and comprehensive estuary conservation and management programs. The United States Congress established the SRF loan program as part of the Clean Water Act (CWA) Amendments of 1987. The amendments authorized the U.S. Environmental Protection Agency (EPA) to offer yearly capitalization grants to states for establishing self-sustaining loan programs. In response, the State Legislature passed a statute in 1988, Chapter 90.50A, RCW (Water Pollution Control Facilities – Federal Capitalization Grants), which created Washington State's SRF program.

Interagency Committee for Outdoor Recreation Grants

The Interagency Committee for Outdoor Recreation (IAC) administers several grant programs for outdoor recreation and habitat conservation purposes. Most grant programs require that the IAC be given assurance that the proposed project will be operated and maintained in perpetuity for the purposes for which funding is sought. Most grant programs also require that sponsors complete a systematic planning process prior to seeking IAC funding.

IAC has grant limits on most of its programs and encourages and often requires sponsors to share in the project's cost. Grants are awarded by the committee based on a public, competitive process that weighs the merits of the proposed projects against established program criteria. Funding grants range from 100% (state agencies) to 50% of total project costs. The maximum grant awards and matching fund requirements change from year to year or even within a given funding cycle depending on the amount of funds available and the number of applicants.

Appropriate IAC grant programs for the Scriber Lake Park include the Washington Wildlife and Recreation Program (WWRP) and Land and Water Conservation Fund (LWCF). Other grants administered by the IAC include the Salmon Recovery Funding Board (SRFB), and Aquatic Lands Enhancement Account (ALEA).

Washington Wildlife and Recreation Program (WWRP)

A special fund created by a coalition of recreation and wildlife groups with the intent of preserving wildlife habitats, open space and developing recreation areas. Eligible projects include local parks, water access sites, trails, critical habitat, and natural areas. Funds and grant processes are administered by the IAC to provide funding assistance for a broad range of land acquisition, protection, park development, preservation/conservation, and outdoor recreation activities.

Generally a 50% local match is required for this program's various funding categories with a maximum IAC per project contribution of $500,000 for acquisition and $300,000 for development. WWRP is a state funding sources and does not require a Corps permit, but not having a permit could affect how the project is evaluated and viewed in terms of "readiness to proceed." This is an even year only application, generally due in May of even years. Applications for WWRP trails are only taken in even years. WWRP local parks category provides acquisition grants yearly but funds development grants every other year like the trails category.

Land and Water Conservation Fund (LWCF)

For fiscal year 2003, $1.9 million in funds were available in Washington State. The LWCF provides funds for the acquisition and development of public outdoor recreation areas and open space. Specific projects that are eligible for funding include picnic areas, trails, fishing access, and interpretive facilities. This is a Federal fund administered by the IAC. In order to be awarded a Land and Water Conservation Fund, an US Army Corps of Engineers (USACE) permit must be in hand at award time (July). The National Park Services does not authorize funding to the state for projects for which a USACE permit has not been issued if one is required. This is an annual grant, which must be matched with 50% funds. Only 20% of award may be used for Architecture and Engineering design services

Salmon Recovery Funding Board Grants (SRFB)

The Salmon Recovery Funding Board supports salmon recovery by finding habitat protection and restoration projects and related programs and activities that produce sustainable and measurable benefits for fish and their habitat. SRFB provides funds to acquire, restore, assess and study and to plan and acquire land for salmon recovery projects. Eligible applicants, through a lead entity, are cities/towns, counties, state agencies, private landowners, conservation districts, tribes, Regional Fisheries Enhancement Groups and other on-profit organizations, and special purpose districts.

Aquatic Lands Enhancement Account (ALEA)

ALEA is a federal fund administrated by the IAC. These funds are intended to assist in provision of public access and recreation (including support activities such as parking and roads) to navigable waters. Eligible projects include waterfront parks, public access, and environmental protection. The maximum per project is typically $80,000 with a 25% local match. This is an even year application grant, generally due June 1.

TEA-21 – Transportation Equity Act for the 21st Century (TEA-21)

TEA-21 grants are administered by the Washington State Department of Transportation (WSDOT) and the local Regional Transportation Planning Office (RTPO). TEA-21 is currently under review and congressional action is expected May 3. These funds may be used for transportation related projects including passenger ferries and trails. Examples of available funding include:

Bicycle Transportation and Pedestrian Walkways

Federal-aid funds may be used for bicycle and pedestrian projects. These projects are broadly eligible for all of the major funding programs where they compete with other transportation projects for available funding at the State and Metropolitan Planning Organization (MPO) levels.

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