# Friends of Royal Lake (FORL) Community Vision Plan for Royal Lake Parks

22 May 2023





# TABLE OF CONTENTS

EXECU	TIVE SUMMARY	1
I. IN	TRODUCTION	2
A.	PURPOSE	2
B.	SCOPE	2
C.	BACKGROUND	2
D.	EXISTING MASTER PLANS	3
E.	ASSUMPTIONS AND CONSTRAINTS	3
F.	PLAN UPDATES	4
II. PA	ARK BACKGROUND	4
A.	LOCATION AND GENERAL DESCRIPTION	4
B.	PARK HISTORY	5
C.	USES OF THE PARK	6
D.	COMPLETED CAPITAL IMPROVEMENT PROJECTS	6
III. CC	DMMUNITY VISION PROJECTS	6
A.	TRAILS	7
B.	STREAM RESTORATION EFFORTS	8
C.	INSTALLATION OF STREAM TRASH TRAPS	8
D.	STORMWATER SEWER OUTFALL REHABILITATION	8
E.	SIGNAGE / UPGRADE EXISTING KIOSKS	8
F.	PARK BENCHES AND PICNIC TABLES	9
G.	COMMUNITY EVENTS SITE UPGRADE – ROYAL LAKE PARK BRADDOC NIGHTS LOCATION / PICNIC AREA	
H.	SHADED PICNIC AREA / PAVILION	9
I.	BUTTERFLY GARDEN	9
J.	RESTROOMS	9
K.	RETENTION BASIN	9
L.	INVASIVE PLANT MANAGEMENT	10
M.	INSTALL FISHING LINE RECEPTACLE CONTAINERS	10
N.	UPGRADE PENINSULA AT CHATSWORTH COURT	10
IV. PL	AN OF ACTION AND MILESTONES	10
V. LC	ONG-TERM PLANNING CONSIDERATIONS	11
APPENI	DIX A ROYAL LAKE PROPOSED UPGRADES AND ENHANCEMENTS	A-1

A.1	COMP	LETED – CAPITAL IMPROVEMENTS	A-1
A.2	PROPO	OSED AND PLANNED – CAPITAL IMPROVEMENTS	A-3
A.3	MAINT	TENANCE AND ON-GOING SUPPORT ACTIVITIES	A-4
APPENI	OIX B	SUPPORTING IMAGES	B-1
APPENI	OIX C	MAJOR COUNTY PROJECTS	C-1
APPENI	DIX D	RICH HISTORY OF ROYAL LAKE COMMUNITY VOLUM	NTEERISM. D-1
APPENI	OIX E	ACRONYMS	E-1

#### **EXECUTIVE SUMMARY**

This document, prepared by Friends of Royal Lake (FORL), is an updated version of the 2017 Community Vision Plan (the Plan) for Royal Lake Parks that lays out a vision for park enhancements. In our view, Royal Lake Parks consist of two contiguous parks in and around Royal Lake: Lakeside Park and Royal Lake Park. While these parks have individual names, they are generally experienced as one park, and we believe it should be dealt with as such.

FORL's goal is for this Plan to provide the community's vision to the Fairfax County political leadership, Fairfax County Park Authority (FCPA) and the Department of Public Works and Environmental Services (DPWES). Our desire is to provide those important county organizations with significant community input to help guide operations and maintenance, master planning, and secure funding to achieve this vision. As the Plan outlines, there is a history of significant cooperative working relationships between hands-on volunteers and county government personnel to improve the parks and the environment. We seek to build on these successful efforts.

FORL's development of this Plan involved a systematic approach with members of the community's active participation. In 2022, FORL sponsored a detailed survey that yielded 433 responses pertaining to the community's vision for the park. The survey's high-level findings include:

- Universal agreement that the parks are a highly valued community resource,
- Preserving peace, quiet and the natural environment are important goals,
- Existing parks facilities, fields and trails need to be improved and maintained.

Using information garnered from the survey, discussions with county officials, and community-wide meetings, FORL created this Vision Plan. Three project areas are of particular importance: trails, environment cleanup/restoration and improvements to existing facilities. Trails are perhaps the most important feature of Royal Lake Parks needing upgrades and where the community would like significant effort directed. Trails allow access to facilities throughout the park and are heavily used.

While the Plan contains useful history and background information to support the complete understanding of FORL's vision, the heart of the Plan is split between:

- Section III, *Community Vision Projects*, which details 14 projects for enhancement and upgrade (Sections III.A. N.), and
- Appendix A, *Royal Lake Proposed Upgrades and Enhancements*, which provides an extensive, short-hand list of approximately 35 community desires for upgrades to park infrastructure, organized into lists of completed projects, proposed and planned capital improvements, and maintenance and on-going support activities.

The Plan is a living document, and it is anticipated that **Appendix A** will be updated frequently. As a closing comment, FORL wants to thank the hundreds of individuals who completed the survey and attended the meetings to make this a community-wide consensus document.

#### I. INTRODUCTION

#### A. PURPOSE

This Plan outlines both a short-range and a long-range vision for the parks in and around Royal Lake. Our goal is to provide both the Fairfax County Park Authority (FCPA) and the Department of Public Works and Environmental Services (DPWES) community input in support of their stewardship of the public lands. It is provided as an aid for the identification, planning, design, and construction of various projects.

#### **B. SCOPE**

This Plan covers the two contiguous parks around Royal Lake: Lakeside Park and Royal Lake Park. After 2017, Kings Park West Park and sections of Pohick Creek Stream Valley Park in the vicinity of Royal Lake were incorporated into Royal Lake Park. While each park has an individual name, they are generally experienced as one park, and we believe should be dealt with as such. Further, Crooked Creek Park, north of Commonwealth Blvd, has a lesser focus for FORL activity.

Individuals from the following communities, civic associations, community associations, and homeowners associations participated in the development of this Plan:

- Briarwood Community Association
- Chatham Village Homeowners Association
- Glen Cove Townhome Homeowners Association
- Glen Cove Community Association
- Hillsdale Homeowners Association
- Kings Park West Civic Association
- Lakepointe Townhomes Homeowners Association
- New Lakepointe Townhomes Homeowners Association
- Village Park Homeowners Association

#### C. BACKGROUND

The Plan has been prepared by FORL – a group of dedicated individuals focused on working with both the FCPA and DPWES to make improvements around Royal Lake. The Plan incorporates active involvement and input from members of the local communities identified above, as well as park patrons from neighboring communities. FORL seeks to provide input to the FCPA and DPWES in the execution of their public stewardship responsibilities on behalf of the Royal Lake community.

Since its inception in the 1970s, the Kings Park West Civic Association (KPWCA) has had a *Parks and Lake Committee* Chairperson who has organized events such as cleanups and trail construction/maintenance at Royal Lake parks with the approval of FCPA Park Operations managers. In 2015, individuals specifically concerned with the lake and surrounding parks from more than just the KPWCA came together and established FORL. In 2016, the group worked with the Park Authority and the Park Foundation to successfully install new outdoor fitness equipment that replaced aging and deteriorating equipment.

FORL has continued its involvement through community-wide meetings and conducting a survey to gain community input and build community consensus for development of the first Royal Lake Community Vision Plan. FORL also conducts park cleanups, holds trail maintenance workdays, and advocates the community's views on the park. to both FCPA and DPWES Some of FORL's approach includes discussions with county officials to garner a better understanding of the county planning process and resource management constraints contained in current laws and regulations. Other follow-on discussions were held to highlight specific communities' views on park improvements. Overall, the past four years have reflected significant progress in maintaining and enhancing Royal Lake Parks. A list of completed efforts are listed in **Appendix A.2, Completed – Capital Improvements**.

A significant step in preparing this new Royal Lake Vision Plan document was for FORL to conduct a comprehensive survey. The FORL Spring 2022 Community Survey yielded 433 responses. The survey results, along with discussions with park patrons and county officials, provided the necessary information for planning and developing a list of projects.

This Plan focuses on the need for new and updated infrastructure, amenities, services, and support facilities consistent with the park's growing popularity. This Plan identifies improvements to be made over several years, recognizing that development will be implemented as funding is available.

#### D. EXISTING MASTER PLANS

There are currently two FCPA Master Plans for parks surrounding Royal Lake. A Master Plan for Lakeside Park is dated 1969 (See Appendix B, Figure 1) and a Master Plan for Royal Lake Park is dated 1973 (See Appendix B, Figure 2). Those Master Plans are concept drawings lacking significant detail, are well over 40 years old, and address less than 15% of the actual park land that surrounds Royal Lake. Further, a significant portion of the park amenities identified in those Master Plans have been established. FORL is providing this updated Plan to inform the county of the needs of the community. As of May 2023, there is no comprehensive, detailed Master Plan that covers all 155 acres of the parks surrounding Royal Lake.

#### E. ASSUMPTIONS AND CONSTRAINTS

This 2023 Plan is based on a number of important assumptions and constraints:

- Royal Lake is a focal point of the neighboring communities and a space for communitybuilding activities. It provides a natural space for public education (programs and exhibits promoting an appreciation of nature as well as history) and public recreational opportunities in the Braddock District.
- Significant sections of park land surrounding Royal Lake are within a Resource Protection Area (RPA), inheriting constraints that an RPA imposes.
- Royal Lake provides a wildlife habitat for the native biological communities and cultural resources of the Pohick Watershed.
- Park users should have universal access to any future park facilities, as feasible.
- New amenities proposed in this Plan should not have a significant impact on visitor traffic. Therefore, additional parking would not be required, and access routes to the

existing parking lots will remain in their existing locations. There is sufficient on-road parking availability to handle overflow during special events.

FORL anticipates that the FCPA and DPWES will use this document to coordinate and identify projects that will subsequently become a part of the DPWES bond referendum or other funding sources for projects. The community's desire is to work closely with the FCPA and DPWES to coordinate projects – both long-term and short-term – within the Royal Lake Parks. FORL will continue to coordinate community input and participation in county-sponsored projects and will use this document to identify community interests and plans to support and inform the FCPA and DPWES activities.

FORL works closely with the Braddock District Supervisor and staff, as well as the FCPA and DPWES staff to coordinate long-term and short-term projects within the Royal Lake Parks. FORL will identify and coordinate volunteer opportunities that support agreed-upon FCPA and DPWES Royal Lake Parks projects.

#### F. PLAN UPDATES

FORL anticipates updating this Plan every four years and will share with both the FCPA and DPWES prior to Park Authority bond referendums. FORL's objective is to ensure Royal Lake community-supported projects can be addressed and encompassed within the subsequent park bond project lists.

#### II. PARK BACKGROUND

#### A. LOCATION AND GENERAL DESCRIPTION

Royal Lake Parks are located in the Braddock District and are an important component of the community and the Fairfax County Park system. Like other county parks, they serve as a neighborhood focal point by providing open space for recreation, while at the same time preserving green space within the community.

Royal Lake Parks are designated as local parks that serve users from the adjacent neighborhoods and the larger community within the service area (roughly defined as a two-three-mile radius). Currently, the parks preserve a sense of the open landscape and woodland areas and serve as a focal point to inspire community-sponsored activities that bring the community together. Additionally, the parks provide community recreation opportunities that appeal to a variety of users including small groups, families, and individuals who want to enjoy recreational facilities, open green space, and woodlands. The parks surrounding Royal Lake comprise about 155 acres; **Appendix B, Figure 3** provides a general vicinity map of the area.

- Lakeside Park is located at 5216 Pommeroy Drive and currently consists of a 23-space parking lot (including one handicapped space), a small picnic area, a playground area, a basketball court, an open play area, a baseball field, a large soccer field used by the Kings Park West Soccer League, a boat ramp, and a section of the trail that provides a circuit around Royal Lake.
- **Royal Lake Park** is located at 5344 Gainsborough Drive and currently consists of a 26-space parking lot, tennis courts, a smaller playground than that at Lakeside Park, a

basketball court, outdoor fitness equipment, a small picnic area, an open play area used for Braddock Nights outdoor concerts as a part of the combined Braddock District Supervisor/Park Authority's Summer Entertainment Series, a boat ramp, and a section of the trail that provides a circuit around Royal Lake. Additionally, Royal Lake Park includes the surrounding park area of Royal Lake going north-west to Roberts Road (previously named Pohick Stream Valley Park), the DPWES dam area, and north-east to Commonwealth (previously named Kings Park West Park), excepting the separately named Lakeside Park.

Besides the vehicular access points, there are several pedestrian access points to Royal Lake. One trail provides a complete circuit of the lake, aka "the circuit trail," portions of which go through each park; the trail contains five bridges: two wood, two fiberglass, and one steel. There are several other social trails in various states of condition.

Before the park renaming, separate and distinct Royal Lake Parks included Kings Park West Park and Pohick Creek Stream Valley Park, which were classified as "stream valley parks" with no address location.

Kings Park West Park, now part of Royal Lake Park, begins at Commonwealth Boulevard and extends south to Royal Lake and contains a section of the trail that provides a circuit around Royal Lake. It contains several social trails used by the community and an open meadow area that replaced a silt retention basin used for dredging operations.

The Rabbit Branch and an unnamed tributary flow through the stream valley and feed into Royal Lake.

A section of Royal Lake Park, previously known as Pohick Creek Stream Valley Park, begins at Roberts Road, extends to Royal Lake, and contains both outdoor fitness equipment and a section of the trail that provides a circuit around Royal Lake. In addition, it contains several social trails used by the community.

Shanes Creek flows through the Pohick Stream Valley and feeds into Royal Lake. Shanes Creek is undergoing a major rehabilitation project projected to be completed in November 2023.

Park areas between Commonwealth and Braddock Road consists of two separate named parks; Crooked Creek Park (just north of Commonwealth Blvd) and Rabbit Branch Park (north of Crooked Creek Park), which abuts Roberts Road and Tapestry Drive. These two parks are separated by a neighborhood homeowners association property.

#### **B. PARK HISTORY**

The Royal Lake community has a history of significant community involvement and volunteerism. As mentioned earlier, since its inception, the KPWCA has had a *Parks and Lake Committee* Chairperson who has coordinated events such as planned monthly, semi-annual, and as-needed emergency storm cleanups at all parks surrounding Royal Lake.

The community, with the involvement of the FCPA, has recognized past volunteer leaders who helped make the community and our parks better. **Appendix D**, *Rich History of Royal Lake* 

*Community Volunteerism*, details major community volunteer-driven projects around Royal Lake since 1994.

#### C. USES OF THE PARK

Currently, recreation at Royal Lake Parks includes use of the trail (e.g., running, walking, hiking, dog walking), picnicking, open area activities (e.g., use of playground equipment, birdwatching, photography, kite flying, exercise, geocaching, observing nature), sporting activities (basketball, tennis, soccer, baseball, volleyball), boating, and fishing, among other activities. Besides the uses consistent with the current infrastructure, the following parks have the additional uses:

- Royal Lake Park accommodates county-controlled archery hunting during the hunting season from September to February each year as a part of the Fairfax County Police Department's Deer Management Program.
- Royal Lake Park is the location for the Summer Entertainment Series Braddock Nights concerts in the Braddock District. Street overflow parking is necessary at Royal Lake Park on Friday nights during the months of July and August to accommodate the Braddock Nights concert series.
- Lakeside Park is the location of all games played by the Kings Park West Soccer League during the Spring and Fall seasons and for Fairfax Little League's T-Ball and baseball games during the Spring and Fall seasons. Street overflow parking is necessary at Lakeside Park during baseball and soccer games and practices.
- Lakeside Park is the site for annual KPWCA-sponsored events, such as the Halloween Festival and the Easter Egg Hunt (historically). Street overflow parking is also necessary during these special events.
- Lakeside Park and Royal Lake Park are the locations for formal and informal county and
  community recreation programs. FCPA hosts various nature and exercise programs at
  park sites. Other county and non-county entities utilize the parks for mixed use
  recreation, such as the Fairfax County-sponsored Walking Club for senior citizens and
  local Boy Scout, Cub Scout, and Girl Scout organizations for such events as the smallboat raingutter regatta, bottle rockets, and picnics.

#### D. COMPLETED CAPITAL IMPROVEMENT PROJECTS

FORL recognizes and appreciates the significant redevelopment efforts DPWES has undertaken to address stormwater management issues, including the Royal Lake Auxiliary Spillway Rehabilitation Project (2008), the Roberts Road Dam Rehabilitation Project (2009), Royal Lake Dredging and Restoration Project (2017), and the ongoing Shanes Creek Rehabilitation Project (2022-2023). Furthermore, DPWES also completed a stream restoration project at Crooked Creek Park just across from Lakeside Park along Commonwealth Boulevard, and a stormwater facility project further upstream at Rabbit Branch Park. Details on these past projects can be found in **Appendix B, Figures 5 and 6**.

#### III. COMMUNITY VISION PROJECTS

The main focus of this Plan is to highlight the various long-term capital improvement projects and short-term operations and maintenance projects for the Royal Lake Parks, as envisioned by

the community. This section defines, in detail, 14 various enhancements and maintenance efforts by major function.

Further, FORL has listed approximately **35** specific projects in **Appendix A** (instead of the main body of the document) to allow for semi-annual updates without republishing the entire document. **Appendix A** is organized into three lists:

- A.1 Completed Capital Improvements
- A.2 Proposed and Planned Capital Improvements
- A.3 Maintenance and On-Going Support Activities

**Sections III.A.- N.** (directly below) provide a high-level assessment of the significant information in the appendix, to include proposed enhancements and status of on-going projects that were documented in the previous edition of this Vision Plan.

#### A. TRAILS

Trails are significant features in the Royal Lake Park system and where the community would like significant effort directed. Trails allow access to facilities and form a circuit trail through the park for exercise and nature appreciation.

- Lake Circuit Trail The lake circuit trail should be rehabilitated as necessary, including the rehabilitation or replacement of all non-fiberglass bridges. Trail sections should remain as natural trails (rather than paved) to the greatest extent possible, which supports the community's vision of a more natural park. Certain sections have a very steep slope and require grading, with the installation of appropriate steps with a railing to allow for all community members, especially senior citizens, to take advantage of the trail safely.
- Royal Lake Park Trail (formerly Kings Park West Park Trail) Currently, there is a social trail from Commonwealth Blvd to the circuit trail around Royal Lake. The community would like to have a formal trail from Commonwealth Blvd to Royal Lake. A formal trail should be developed to provide an added nature walk, increase the network of trails, and potentially reduce the traffic and parking at Lakeside Park by allowing access from Commonwealth Blvd.
- Richardson Drive to Lakeside Park The trail that leads from Richardson Drive into Lakeside Park is cracked and presents a potential fall hazard. This ingress/egress route should be repayed to provide a safer approach to Lakeside Park. Additionally, the route should be extended to provide additional access to the soccer field. Non-native invasive weeds along the path should be removed and replaced with beneficial native species.
- Shanes Creek Trail A natural trail extends through Shanes Creek Stream Valley from Roberts Road to the circuit trail. Midpoint access to this trail includes the entrances at Gainsborough Drive near Claridge Court and at Dundalk Street. As part of the major Shanes Creek rehabilitation project, this trail will be upgraded for ease of use.
- Glen Cove Access Trail Natural trails should extend from the Glen Cove community to connect with the circuit trail.
- Lakepointe Trail Access A paved trail for pedestrian traffic should extend from the Lakepointe Townhome community at the eastern end of the dam to connect with the

- circuit trail. The current unpaved walkway has been resodded several times, but the grass hillside turns into a muddy path from consistent heavy use and weather.
- **Bridge Crossing at Rabbit Branch** The 50-foot steel bridge that crosses Rabbit Branch on the circuit trail needs replacing, as FCPA's officials have stated that it is reaching the end of its useful life. Any patron who walks the circuit trail around the lake uses this bridge. Essentially the circuit trail is routed through both parks, and failure of the bridge will result in considerable disruption to park patrons. If the bridge were unusable, the trail would no longer be a complete network and would severely impact all circuit trail users.

#### **B. STREAM RESTORATION EFFORTS**

Given the significant lake dredging effort completed in April 2017, the next major improvements needed are stream restoration efforts. The goal is to protect the streams and reduce the flow of sediment into the lake. Surging stormwater run-off continues to erode the banks of streams feeding into the lake, resulting in the toppling of many mature trees. A major stream restoration effort is underway in Shanes Creek from Roberts Road, down Shanes Creek, to approximately 500 feet from the lake's entrance. Also, modification has occurred in the area of Rabbit Branch. However, continued evaluation of all streams is needed, including the un-named tributary that flows under Commonwealth Blvd and into Rabbit Branch, to assess ongoing damage and potential upgrade.

#### C. INSTALLATION OF STREAM TRASH TRAPS

The Rabbit Branch ports a significant amount of trash from George Mason University, Braddock Road, and adjoining communities to the banks of Royal Lake. Likewise, Shanes Creek also ports a significant amount of trash from Robinson Secondary School, Roberts Road, and adjoining communities. The community holds two major cleanup events each year that generally coincide with FCPA county-wide park clean ups. The community also holds monthly KPWCA "Road Raiders" cleanups to address common areas of concern in the community. While these efforts are effective in curtailing the amount of trash and debris that enters the stream valley, they are nowhere near complete. Trash still ends up in the lake, often at locations that are not easily accessible for volunteers. A trash trap would collect stream trash that volunteers could empty at designated times. The community has a very strong volunteer ethos and would assume clean-out responsibilities in coordination with DPWES.

#### D. STORMWATER SEWER OUTFALL REHABILITATION

Various storm drain outfalls conduct stormwater from area streets to Royal Lake. Excessive and high velocity stormwater outflow from the streets is causing erosion damage to outfalls and stream banks. A review of all the outfalls in the stream valleys leading to Royal Lake should be conducted and corrective action implemented to reduce further erosion damage.

#### E. SIGNAGE / UPGRADE EXISTING KIOSKS

Royal Lake Park has an orientation area with a small kiosk that provides general information about the park to enhance a self-guided park experience. Lakeside Park needs a kiosk similar to the Royal Lake Park kiosk, such as a QR code for the county wide park trail system. All kiosks

should accommodate weather conditions, and signage should be installed to provide visitors with an overview of the complete trail network in the 155-acre park.

#### F. PARK BENCHES AND PICNIC TABLES

Picnic tables and park benches in the Lakeside Park and Royal Lake Park picnic areas should be upgraded as they have deteriorated through years of use. Player benches at the Lakeside Park soccer field have also deteriorated and should be replaced.

After the replacement of the existing benches/picnic tables, consideration should be given to providing new benches in appropriate locations throughout the parks. New benches should enhance patron use in popular park amenity areas and serve as scenic overlook sites. However, selected scenic overlook sites should cause minimal disruption to vegetation and along the line-of-sight views of the lake.

# G. COMMUNITY EVENTS SITE UPGRADE – ROYAL LAKE PARK BRADDOCK NIGHTS LOCATION / PICNIC AREA

The Royal Lake picnic area is an important community event space that accommodates individual, family and community events and picnicking. It is well suited for the Braddock Nights concerts, which often draws more than 300 people per event. This heavily used area needs various upgrades, including re-sodding with grass, new picnic area grills, picnic tables, and trash cans.

#### H. SHADED PICNIC AREA / PAVILION

The current picnic area at Lakeside Park should be enlarged to accommodate larger groups, and a shade structure should be placed over the picnic area and the playground equipment. Since this is an unstaffed site, this shade structure should be built of the most durable materials available to minimize maintenance requirements. In December 2017, three red oak trees were planted that will, in time, provide additional shade protection.

#### I. BUTTERFLY GARDEN

A site with adequate sunlight and/or targeted sites throughout the park should be set aside for plants that attract butterflies. Any site should be self-maintaining.

#### J. RESTROOMS

The lack of restrooms is a significant concern to park patrons. While recognizing the sensitive, flood-prone (RPA) location of Lakeside Park, the community seeks a year-round restroom solution. For Royal Lake Park, the community seeks environmentally friendly, modular-flush restrooms to be provided to encompass solar power, extreme water conservation, and minimal ground disturbance for a reduced environmental impact.

#### K. RETENTION BASIN

The remnant of a silt retention basin is located north of Lakeside Park, behind Pommeroy Drive and is accessed by a gated service road connected to the entrance of Lakeside Park. During the 2016-2017 dredging, the retention basin concept was eliminated, so the previous retention basin area is now non-functional and is available for park development. It is recommended that

opportunities be explored to enhance the use of the former retention basin meadow. For instance, it is proposed that relaxation benches be provided in appropriate locations around a proposed small, natural trail in the retention basin area. Selected bench sites should cause minimal disruption to vegetation and provide line-of-sight views to the stream. Consideration should be given to the use of the retention basin as a site for a butterfly garden listed in **Section III.i.** 

#### L. INVASIVE PLANT MANAGEMENT

The existing landscape and vegetation around Royal Lake have been impacted negatively by human activity, especially land disturbance incidental to construction of the housing developments within the community. Some invasive plants are tracked and spread along trails. The parks are ridden with invasive non-native plants that threaten the existing trees and the propagation of native species. Working with the FCPA Invasive Management Area (IMA) office, Royal Lake has six volunteer IMA site leaders, with many volunteers who conduct extensive ongoing removal of invasive species and planting native species throughout the entire Royal Lake Park area. Some proposed specific IMA projects include:

- Native species shrubs and trees should be planted around picnic areas and playgrounds, allowing for line-of-site and unhindered access.
- Native species shrubs/trees that provide shade should be planted.
- Invasive vegetation along trails should be removed and replaced with native species when there is any widening of the trails.

#### M. INSTALL FISHING LINE RECEPTACLE CONTAINERS

Since the start of the pandemic in 2020, the number of people who fish has grown extensively. This has resulted in a significant increase in fishing monofilament line being left at the water's edge of Royal Lake and its streams, which is creating an unsafe environment for wildlife, in particular water birds. At least two monofilament recycling bins need to be installed at Royal Lake Park.

#### N. UPGRADE PENINSULA AT CHATSWORTH COURT

A popular fishing and lakeside scenic view location is a peninsula located near the Chatsworth Court entrance to the circuit trail. The current site is deteriorating due to severe erosion. The site should be upgraded to control erosion and enhance the area for patron use.

#### IV. PLAN OF ACTION AND MILESTONES

The Friends of Royal Lake intends to take an active role in providing input to the Braddock District Supervisor, the Supervisor's staff and both FCPA and DPWES staffs with respect to activities and projects impacting Royal Lake. FORL will act as the liaison with the community for public outreach and will maintain and coordinate sustained volunteer efforts in support of various projects.

The Park Authority's Planning and Development Division provides planning and execution of major capital improvement projects using bond, proffer, and other funding sources. The Park Authority's Operations Division provides maintenance and repairs to park facilities. DPWES is structured similarly to the FCPA with a Planning and Development Branch and an Operations

Branch. Recognizing the various branches and functions of both the FCPA and DPWES, FORL will seek to meet with FCPA and DPWES staff as per the following schedule to discuss park actions and projects.

Meeting	Frequency	Agenda Focus
District Supervisor and Staff	1X / Year	Status brief
FCPA Planning and Development Branch	1X / Year	Long-term FCPA projects
FCPA Park Operations Branch	3X / Year	Short-term FCPA projects
DPWES Planning and Development Branch	1X / Year	Long-term DPWES projects
DPWES Operations Branch	2X / Year	Short-term DPWES projects

All meetings will review accomplishments since the previous meeting, identify specific actions for upcoming projects for the next time period, establish a project timeline with roles and responsibilities for all involved players, and schedule a notional date for the next meeting.

FORL will take meeting notes, develop project-specific plans of action and milestones as agreed upon at the meeting, and distribute them to all involved parties.

#### V. LONG-TERM PLANNING CONSIDERATIONS

The connectivity of the Royal Lake Parks with other aspects of the county's trail system is beyond the scope of this effort, but certainly worthy of consideration.

To the north of Royal Lake Park, the county is evaluating plans for a trail that runs from Crooked Creek Park through the Erickson Living (Woodleigh Chase) facility (under development) on Braddock Road. Any future plans should be based upon environmental feasibility and wetland considerations.

# APPENDIX A ROYAL LAKE PROPOSED UPGRADES AND ENHANCEMENTS

This appendix highlights the capital improvements and the maintenance actions that have been accomplished or are needed to upgrade Lakeside Park and Royal Lake Park. The appendix is divided into three parts:

- A.1 Completed Capital Improvements
- A.2 Proposed and Planned Capital Improvements
- A.3 Maintenance and On-Going Support Activities

Each part listed above is separated into tables by improvement type. Many of the maintenance actions are continuous or recur frequently and thus can be both on a planning list and completed list. A variety of organizations, groups and individuals accomplished the completed projects.

#### A.1 COMPLETED – CAPITAL IMPROVEMENTS

#### Trail Surface - Completed Capital Improvements

#	Work Description	Location
1	Added a trail segment to the circuit trail to circumvent the parking lot, which alleviated a safety concern.	Lakeside Park
2	Paved the trail to make it ADA-compliant.	Lakeside Park parking lot to ball fields
3	Paved the trail to make it ADA-compliant.	Gainsborough Drive to the tennis courts and playground area
4	Improved trail by widening and adding gravel/large rocks.	At the base of the dam
5	Repaired trail segments and trimmed back overgrown vegetation.	From base of dam to the wooden bridge near Lakepointe Community
6	Repaired trail to eliminate wet sections at Rabbit Branch Bridge and improved usability of various locations on the circuit trail.	Circuit trail around Royal Lake
7	Added culverts and gravel/stone dust to improve drainage to the lake.	Circuit trail, near Braddock Nights area past Shanes Creek
8	Installed additional steps in <i>three</i> separate steep areas just south and north of Lakeview Swim Club.	Circuit trail around Royal Lake
9	Added stone dust to extend the trail to the soccer field.	Richardson Drive entrance to Lakeside Park
10	Installed stones to replace 6' x 6' framing.	Circuit trail between ball fields and dam

# Bridges – Completed Capital Improvements

#	<b>‡</b>	Work Description	Location
1			Circuit trail next to the soccer fields at Lakeside Park

# Park Amenities and Facilities – Completed Capital Improvements

#	Work Description	Location
1	Improved picnic and playground areas by adding an ADA-compliant ramp.	Lakeside Park
2	Added benches.	Circuit trail around Royal Lake
3	Added pet waste stations at both parks.	Lakeside Park and Royal Lake Park
4	Improved <i>multiple</i> sports court facilities in both Lakeside Park and Royal Lake Park.	Lakeside Park and Royal Lake Park

# Environment – Completed Capital Improvements

#	Work Description	Location
1	Planted shade trees in <i>multiple</i> locations.	<ul> <li>Lakeside Park between ball fields and playground</li> <li>Lakeside Park between playground and picnic tables</li> <li>Braddock Nights area</li> <li>Retention basin</li> <li>Miscellaneous locations along the circuit trail</li> </ul>
2	Restored drainage ditch on road.	Between Lakeside parking lot and Rabbit Branch bridge
3	Removed a large stand of bamboo near Glen Cove Community.	Royal Lake Park
4	Removed juniper bushes.	Along trail from Lakeside Park/ball field to Craven bridge historical marker
5	Removed non-native plants and replaced with native plants.	Numerous locations at both Lakeside Park and Royal Lake Park

#### A.2 PROPOSED AND PLANNED – CAPITAL IMPROVEMENTS

Planned completion of the Capital Improvements in this section may take up to three years.

## Trail Surface - Proposed/Planned Capital Improvements

#	Work Description	Location
1	Upgrade the park entrance to the soccer fields for safety and convenience (in planning).	Lakeside/Richardson Drive
2	Develop a walking trail access from Commonwealth Blvd to the circuit trail (in planning).	Commonwealth Blvd and Dequincey Drive
3	Develop a walking trail access from Commonwealth Blvd to the circuit trail.	Commonwealth Blvd and Pommeroy Drive
4	Explore opportunities to upgrade for development the former retention basin area north of Lakeside Park and link it to the circuit trail.	North of Lakeside Park
5	Improve natural walking trails access along Shanes Creek to the circuit trail (in planning).	From 1. Roberts Road and 2. Dundalk Road entrance
6	Upgrade the trail from the top of the dam to the circuit trail (in planning).	Lakepointe Community and dam

## Bridges - Proposed/Planned Capital Improvements

	#	Work Description	Location
ſ	1	Replace the bridge crossing Rabbit Branch (in planning).	Circuit trail at Rabbit Branch
	2	Rehabilitate all wooden bridges by Lakepointe (planned).	Circuit trail

## Park Amenities and Facilities – Proposed/Planned Capital Improvements

#	Work Description	Location
1	Add shade structure above the Lakeside playground.	Lakeside playground
2	Add shade structure above the Lakeside picnic area (planned).	Lakeside picnic area
3	Add shade structure above the Royal Lake playground (Katie's playground).	Royal Lake playground
4	Upgrade trail, fishing and viewing area.	Near the Chatsworth Court entrance to the circuit trail
5	Add scenic overlook benches around the Circuit trail.	Circuit trail around Royal Lake
6	Add and replace benches, picnic tables, and grills at Lakeside Park playground and picnic area.	Lakeside Park playground and picnic area

#	Work Description	Location
7	Add and replace benches at Royal Lake Park playground (Katie's playground) and picnic area.	Royal Lake Park playground and picnic area
8	Install new and upgraded grills and picnic tables and plant grass at the Royal Lake Park Braddock Nights location.	Royal Lake Park at Braddock Nights area
9	Add and replace player and spectator benches at Lakeside Park's soccer fields and basketball court.	Lakeside Park soccer fields and basketball court
10	Install toilet facilities all year round: portable at Lakeside Park and permanent structure at Royal Lake Park.	Lakeside Park and Royal Lake Park
11	Install water fountains.	Lakeside Park and Royal Lake Park
12	Install all-season kiosk at Lakeside Park.	Lakeside Park
13	Add benches and create a trail in the former retention basin.	Royal Lake Park retention basin north of Royal Lake

# Environment – Proposed/Planned Capital Improvements

#	Work Description	Location
1	Install pilot project "Trash Traps" in Rabbit Branch.	Lakeside Park
2	Install used fishing tackle receptacles around Royal Lake.	Circuit trail around Royal Lake
3	Improve the drainage on the soccer fields.	Lakeside Park soccer fields
4	Review and upgrade, as appropriate, stormwater sewer outfalls at locations that require rehabilitation to improve the flow of stormwater into the streams.	Royal Lake Park and Lakeside Park stormwater outfalls

#### A.3 MAINTENANCE AND ON-GOING SUPPORT ACTIVITIES

#### Maintenance

Many projects have been identified for trail maintenance which is separate from Capital Improvement projects. The projects include:

- Path repair,
- Alignment, and
- Improved access.

	#	Work Description
1 Add gravel and improve drainage where the trail has wet spots or those th		Add gravel and improve drainage where the trail has wet spots or those that remain muddy.
	2	Upgrade trail from Glen Cove to the lake circuit trail.

#	Work Description
3	Improve drainage on the circuit trail near Lakeview Swim Club to allow better stormwater flow and provide greater trail stability.
4	Improve spots on the trail where erosion is damaging the environment.
5	Replace steps at Dundalk entrance (Shanes Creek) where steps are eroded.

## **Environment Enhancements**

#	Work Description	
Remove non-native plants, restore native plants, and protect the native plant restoration - an or major activity throughout Lakeside Park and Royal Lake Park.		
2	Add trash cans at Braddock Nights site, Starboard Drive entrance, Chatsworth Court, and Lakeside soccer field.	
3	At the various park entrances, remove non-native plants and replace with native shrubs.	

# Service Upgrades and Other Park Amenities

#	Work Description
1	Review and update signage as appropriate in both parks to improve the patron experience.
2	Resurface the tennis court at Royal Lake Park.

# APPENDIX B SUPPORTING IMAGES

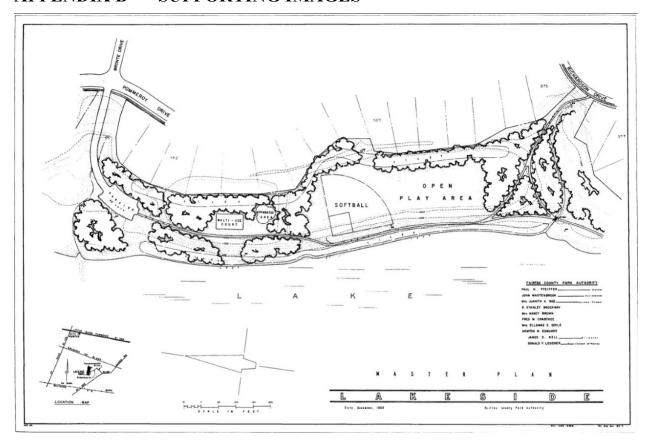


Figure 1. Lakeside Park Master Plan - 1969

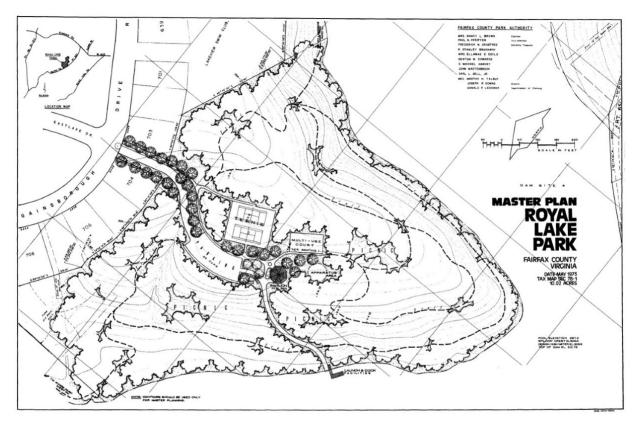


Figure 2. Royal Lake Park Master Plan - 1973



Figure 3. Royal Lake Vicinity Map



Figure 4. Parcel Map of Royal Lake Parks

#### APPENDIX C MAJOR COUNTY PROJECTS

#### Royal Lake Auxiliary Spillway Rehabilitation Project

In 2006 federal officials determined that the Royal Lake Auxiliary Dam Spillway no longer met current design and safety criteria. The Fairfax County Board of Supervisors and Northern Virginia Soil and Water Conservation District entered into a project agreement with the US Department of Agriculture's (USDA's) Natural Resources Conservation Service (NRCS) to share costs to upgrade the dam spillway. NRCS provided \$1,484,718 of the project costs and the sponsors covered the remaining \$799,463 of the \$2,284,181 project. The rehabilitation project included:

- Widening and realignment of the auxiliary spillway to direct water away from existing townhouses;
- Raising the training dikes to direct the auxiliary spillway flow from the toe of the dam to protect townhouses downstream; and
- Armoring the auxiliary spillway and training dikes with articulated concrete blocks covered with soil and grass to prevent erosion. Construction commenced in June 2008 and concluded in April 2009. **Figures 5 and 6** show the Royal Lake dam and spillway before and after the Royal Lake Auxiliary Spillway Rehabilitation Project.

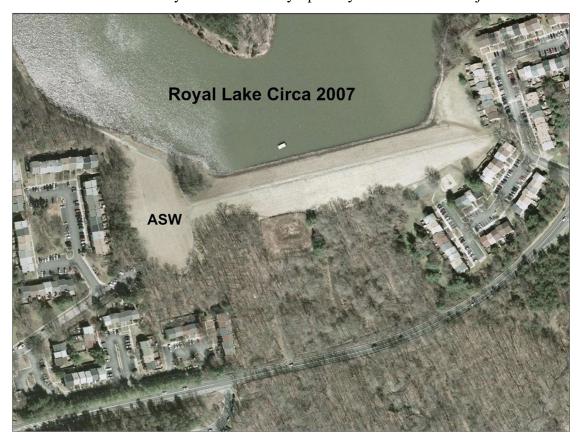


Figure 5. Royal Lake Dam and Spillway Circa 2007



Figure 6. Royal Lake Dam and Spillway Circa 2011

#### **Roberts Road Dam Rehabilitation Project**

The Roberts Road Dam Rehabilitation Project was a project in Pohick Creek Stream Valley Park (Kings Park West Section 118) to reinforce the earthen dam walls upon which Roberts Road travels, and upgrade stormwater infrastructure to bring it to current design and safety criteria. Work commenced in March 2011 and was substantially completed in June 2011, at a cost of about \$375,000.

#### **Royal Lake Dredging and Restoration**

The Royal Lake Dredging and Restoration project consisted of the dry dredge removal of about 80,000 cubic yards of sediment; installation of two forebays (one at each stream feed entrance); partial shoreline restoration; installation of fish habitat structures; silt detention basin removal and area restoration; dam structure riser modifications; partial stream restoration; and infrastructure repairs to service roads, culverts, and boat launch ramps. The project commenced in May 2016, and was completed in April 2017, at a cost of about \$6.457M.

#### Rabbit Branch Tributary Restoration Project (Crooked Creek Park)

The Rabbit Branch Tributary project (Project No. PC9263 Stream Restoration) consisted of restoring approximately 1,515 linear feet of a highly degraded tributary of Rabbit Branch using natural channel design techniques. The tributary merges with the Rabbit Branch stream just prior

to its entry into Kings Park West Park. The project commenced in October 2013 and was substantially completed in April 2014, at a cost of about \$915,000.

#### Rabbit Branch Park Stormwater Facility Project

The Rabbit Branch Park Stormwater Facility project (Project No. SD 000031-089) consisted of removing a pool house, tennis courts and an asphalt parking lot at the defunct Kings West Swim Club along Tapestry Drive and providing for re-vegetated porous surfaces and stormwater facility improvements. The project commenced in January 2013 and was substantially completed in April 2013, at a cost of about \$450,000.

#### **Shanes Creek Stream Rehabilitation Project**

The restoration objectives of the Shanes Creek restoration effort (Project No. PC9256 Stream Rehabilitation) include stream stabilization, water quality improvement, aquatic and riparian habitat enhancement, and reconnection of the channel to its floodplain. Shanes Creek merges into Royal Lake.

# APPENDIX D RICH HISTORY OF ROYAL LAKE COMMUNITY VOLUNTEERISM

#### Ron Craven

In 1994, FCPA and the local community recognized the contributions of Mr. Ron Craven in his support of both the Cub Scout packs and Boy Scout troops that were a part of the Kings Park West/Laurel Ridge Elementary/Robinson Secondary School community. Mr. Craven was the guiding force for the scouting program's presence within, and stewardship of, Royal Lake; many events took place in and around Royal Lake. A sign recognizing Mr. Craven is located at the far end of the soccer field at Lakeside Park symbolizing Cub Scouts crossing over to become Boy Scouts, and Boy Scouts becoming young adults.

#### **Wusterbarth Court**

In 1997, FCPA and the local community recognized Mr. Kurt Wusterbarth for his dedication and service to children and his support of the Kings Park West Soccer League. For years, he maintained the fields and ensured fields were properly lined so that participants could enjoy the games. A sign recognizing Mr. Wusterbarth is located at the basketball court at Lakeside Park.

#### John P. McAnaw Woodlands and Recreation Area at Royal Lake

In 2008, FCPA and the local community recognized the many valuable contributions to the care and maintenance of the trails and parkland around Royal Lake by Mr. John P. McAnaw in his role as the KPWCA *Parks and Lake Committee* Chairperson. His selfless devotion to the community helped protect the environment, allowing others to enjoy this natural area. Two signs recognizing Mr. McAnaw's contributions are located along the circuit trail, one each in Lakeside Park and Royal Lake Park.

#### **Katie Thelin Playground**

In 2011, FCPA and Kings Park West (KPW) residents Joseph Thelin and Tara Mooney dedicated the Katie Thelin Playground at Royal Lake Park, named in honor of their deceased daughter. The Thelins raised funds and then applied for a Mastenbrook Grant to secure funding for the playground, which was on the Royal Lake Master Plan.

#### **Outdoor Fitness Equipment**

In 2016, FCPA and FORL dedicated outdoor fitness equipment installed in Pohick Creek Stream Valley Park and Royal Lake Park that replaced outdoor fitness equipment installed in the mid-1980s, with support from a Wells Fargo grant. That project was also financially supported by the KPWCA and the communities of Lakepointe, Chatham Town and Village Park, as well as private individuals within the greater Royal Lake community. This exercise equipment was not on either the Lakeside Park or the Royal Lake Park Master Plans.

# APPENDIX E ACRONYMS

Acronym	Term
DPWES	Department of Public Works and Environmental Services
FCPA	Fairfax County Park Authority
FORL	Friends of Royal Lake
IMA	Invasive Management Area
KPW	Kings Park West
KPWCA	Kings Park West Civic Association
NRCS	Natural Resources Conservation Service
RPA	Resource Protection Area
USDA	US Department of Agriculture