

Lake Lawson / Lake Smith Natural Area Master Plan

December 2010



Experience the Fun!
Virginia Beach Parks and Recreation

Presented to:
Virginia Beach Parks and Recreation

Presented by:



TABLE OF CONTENTS

TABLE OF CONTENTS1

ACKNOWLEDGMENTS5

EXECUTIVE SUMMARY9

INTRODUCTION15

 Open Space Acquisition Program.....15

 Norfolk Reservoir System.....17

 Related Studies18

 Property Descriptions19

OVERALL GOALS AND PROGRAMMING MANAGEMENT.....32

 Ten Minute Walking Analysis32

 Future Programmed Activities.....36

 Maintenance and Management36

EXISTING RESOURCE ANALYSIS.....39

 History and Cultural Resources39

 Natural Resources47

 Existing Infrastructure56

ANALYSIS AND DESIGN62

 November 2009 Public Meeting/Design Workshop.....67

 Survey Summary.....67

 North Parcel69

 West Parcel – Long Range Improvements.....75

 Shell Road Causeway76

 February 2010 Public Meeting Summary.....78

 Survey Summary.....78

 Reactions to Closing Shell Road – Overall Statistics.....78

DEVELOPMENT CONSIDERATIONS82

 Permitting.....82

 Feasibility Summaries.....84

RECOMMENDATIONS94

REFERENCES95

APPENDIX A: CITY OF NORFOLK DEPARTMENT OF UTILITIES, BOATING RULES ...97

APPENDIX B: BLANK NOVEMBER PUBLIC MEETING HANDOUT99

APPENDIX C: NOVEMBER PUBLIC MEETING SURVEYS101

APPENDIX D: NOVEMBER PUBLIC MEETING141
 Additional Survey Comments.....141
APPENDIX E: FEBRUARY PUBLIC MEETING HANDOUT145
APPENDIX F: FEBRUARY PUBLIC MEETING SURVEYS.....147
APPENDIX G: FEBRUARY PUBLIC MEETING ADDITIONAL COMMENTS176
 General Comments.....176
 Responses to closing Shell Road177

LIST OF FIGURES

Figure 1. Master Plan.....7
 Figure 2. Regional Context Map.....13
 Figure 3. Regional Reservoir Graphic16
 Figure 4. Context Map21
 Figure 5. Ten Minute Walk Analysis.....33
 Figure 6. Composite Analysis.....45
 Figure 7. Potential Improvements (All Parcels)63
 Figure 8. Potential Alternatives (North Parcel/Parcel A)65
 Figure 9. North Parcel.....68
 Figure 10. Overlook Concept.....71
 Figure 11. South Parcel.....72
 Figure 12. West Parcel.....74
 Figure 13. Boardwalk Option77
 Figure 14. Cul-de-sac Option.....77
 Figure 15. Roadway Reconstruction Option.....77
 Figure 16. Master Plan Construction Cost Estimate 79-81
 Figure 17. North Parcel Fishing Station85
 Figure 18. Boat Ramp, Shoreline Restoration & Fishing Pier Concept87
 Figure 19. Shoreline Stabilization (Boardwalk Option)88
 Figure 20. Shoreline Stabilization (Rip-rap Option)89
 Figure 21. Shoreline Stabilization (Coir Log Option).....90

LIST OF PHOTOS

Photo 1. View of Lake Lawson from West Parcel.....5
 Photo 2. Trails at Fishing Station (North Parcel)9
 Photo 3. View of Lake Lawson from South Parcel10
 Photo 4. February Public Meeting11
 Photo 5. Fishing Station Entry Sign.....23
 Photo 6. Degraded Groundcover at Fishing Station23
 Photo 7. Boat Ramp24
 Photo 8. Severe Erosion at Fishing Station.....24
 Photo 9. Dense Forest25
 Photo 10. Gap between North and South Parcels25
 Photo 11. Trails.....25
 Photo 12. Dirt Road26
 Photo 13. Invasive English Ivy26
 Photo 14. Forest Canopy.....27
 Photo 15. Bald Cypress Knees.....27
 Photo 16. Cove Along East Side of South Parcel28
 Photo 17. View of Lake Lawson.....28
 Photo 18. Shell Road29
 Photo 19. View of Sajo Farm Manor House.....29

Lake Lawson and Lake Smith Natural Area Master Plan

Photo 20. Dense Forest Canopy.....30
Photo 21. Fallen Trees in Lake Lawson (South Side of West Parcel).....30
Photo 22. Weir Between Lake Smith and Little Creek Reservoir31
Photo 23. Kayaking in Lake Lawson.....35
Photo 24. Historic Structures38
Photo 25. Weblin House Historic Photo39
Photo 26. Lawson Hall Garden Layout40
Photo 27. Lawson Hall Grounds Historic Photo.....41
Photo 28. Lawson Hall Historic Photo41
Photo 29. Lake Smith Fishing Station Rental Boats (1983).....43
Photo 30. Lake Smith Fishing Station (1983).....43
Photo 31. Bald Cypress Knees.....49
Photo 32. Mountain Laurel Stand50
Photo 33. Invasive English Ivy51
Photo 34. Yellow Bellied Slider Turtles55
Photo 35. Shell Road Causeway56
Photo 36. Fishing Station Entrance at Shell Road57
Photo 37. Parking at the Fishing Station.....58
Photo 38. Boat Ramp59
Photo 39. Trail Along Causeway59
Photo 40. Timber Rail Fencing at Fishing Station.....60
Photo 41. Sample Bridge Photo - Weathering Steel Superstructure & Wood Deck92
Photo 42. Boaters Hand Launching at the Fishing Station97

ACKNOWLEDGMENTS

The authors would like to thank the following for supporting this research:

Robert MacPherson, City of Virginia Beach Parks and Recreation, Planning, Design & Development Division

Brian Solis, City of Virginia Beach Parks and Recreation, Planning, Design & Development Administrator

Barbara Duke, City of Virginia Beach Parks and Recreation, Senior Open Space Planner, Planning Design and Development Division

Shawn Hopson, City of Virginia Beach Parks and Recreation, Parks and Natural Areas

Sharon Godfrey, City of Virginia Beach Parks and Recreation, Parks and Natural Areas

Gregory Newman, City of Virginia Beach Parks and Recreation, Planning, Design & Development Division

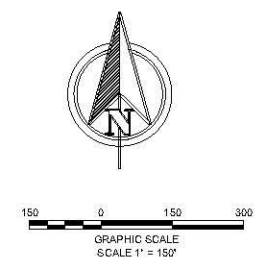
Steve Frooman, City of Virginia Beach Department of Public Works, Traffic Engineering Bureau

David Rosenthal, City of Norfolk Public Works

Civic Leagues, Council of Garden Clubs and public meeting participants



Photo 1. View of Lake Lawson from West Parcel



Lake Lawson / Lake Smith Natural Area

Master Plan

April 8, 2010



Figure 1

EXECUTIVE SUMMARY

The Lake Lawson and Lake Smith Natural Area is a forty-two acre preserve located in the Bayside Borough of Virginia Beach. The property was acquired in multiple parcels between 2005 and 2009 through the Open Space Acquisition Program. Composed of three peninsulas surrounded by fingers and inlets of two freshwater reservoirs, the relatively small land masses have significant lengths of shoreline. The water bodies themselves also increase the perceived magnitude of the holding, and since each sector of the open space also provides water access, there is a much larger “recreational watershed” than the forty two acre holding would suggest.

The Lake Lawson and Lake Smith Natural Area is also unique in that there is a long history of recreation and casual exploration on the site. The Lake Smith Fishing Station has been in operation since sometime in the early to mid-twentieth century as the City of Norfolk allows limited boating and fishing use of the reservoir system. Despite guidelines for limited use, unpermitted use of the site has impacted the vegetation and shoreline along portions of the site. Aging and awkwardly sited infrastructure such as the boat ramp also degrade the user experience, while newly acquired undeveloped forest tracts expand the overall possibilities for use and preservation. The Master Plan herein has been developed with a goal of balancing the objectives of the various stakeholders, potential users and agencies involved. (See Figure 1, Pg. 7 for the Master Plan graphic)

The North Parcel is the most developed and impacted, and it includes the existing fishing station and parking area, trails and bank fishing areas. Overall goals for the North Parcel, according to the Master Plan, include restricting development to the northern portion of the parcel with limited development and preservation in the southern portion of the parcel. Phase I improvements for the fishing station area include entry signage, crosswalks, updated access point from Shell Road, improved circulation route, expanded parking, stormwater management, shoreline restoration, relocated boat ramp and related support facilities at the existing fishing station. The support facilities include a floating dock, rowing shell storage (by others), small shelters and restrooms.



Photo 2. Trails at Fishing Station (North Parcel)

With the remaining two thirds of the parcel characterized by dense forest canopy; the overall goal for this area is preservation with limited access. Recommended Phase I improvements for this portion of the North Parcel include a neighborhood node near the Shell Road communities (small parking area, playground, and small shelters), improved trails and overlook platforms at key locations. The neighborhood node serves to fill a gap in the overall ten minute walk zone service area (walkable service areas), mapped as part of the 2008 Outdoors Plan. The neighborhood node also doubles as an outdoor education and programming area for groups such as City day camps that are bussed onto the site.

The South Parcel is currently undeveloped and has been privately owned. It is characterized by tall tree canopies and shoals of bald cypress lining large portions of the shoreline. The only land boundary is with the developing Sajo Farm community to the south. While there is a maintenance easement across the private development to the natural area, and Sajo Farm residents will have access to the South Parcel at a controlled access gate, currently the only public access to this portion of the preserve is by water. A causeway from the North Parcel ends approximately twelve feet from the South Parcel. A bridge over this gap is a critical element of the master plan to allow pedestrian access to the South Parcel from the North. The primary focus for this sector of the site is on very low impact improvements such as landscape preservation and restoration. The Phase I improvements for the South Parcel include walking trails, one overlook platform and one floating dock.

The estimated construction cost for Phase I (North, South and West Parcels) is **\$2,441,000**.



Photo 3. View of Lake Lawson from South Parcel

At eight acres, the West Parcel is the smallest land unit and does not present opportunities for lengthy trails or the diversity of vegetation and views that the other parcels do. While this parcel is connected by the Shell Road causeway to the North Parcel, the narrow roadbed, banks and shoreline hinder the connectivity without significant infrastructure improvements. Options for a shared use path connection include a boardwalk over the water, roadway improvements with potential traffic calming features, and the introduction of cul-de-sacs on both ends of the causeway. As the latter two options require substantial levels of public involvement, no immediate causeway improvements are recommended for Phase I or Phase II.

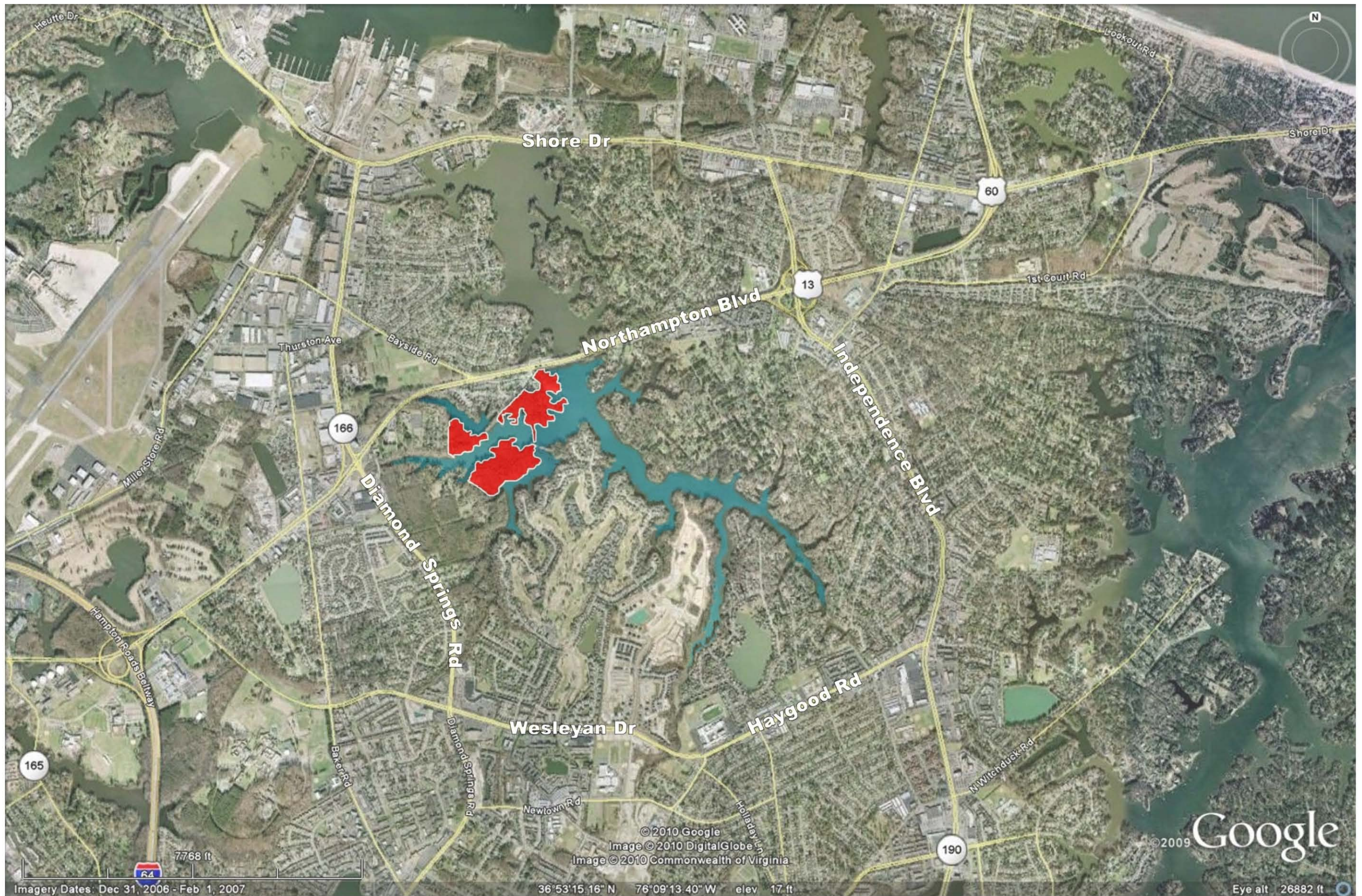
Phase II improvements for the West Parcel include: short walking trails, parallel parking on Shell Road, a crosswalk, sitting areas and one floating dock on the south side of Shell Road. An entrance feature at the western boundary is also recommended to reinforce to drivers on Shell Road that they are entering a natural area. Although they are not included as part of the Phase II improvements, in the future the West Parcel could provide moderate features such as native plant gardens.

The estimated construction cost for Phase II (West Parcel) is **\$91,750.00**.

Public outreach and participation was facilitated through a survey, and two public open houses. The public open houses were attended by a diverse group and facilitated the discussion of opportunities and recommendations. Overall, the plan has been well received and the City intends to implement the Phase I improvements to the North and South Parcels.



Photo 4. February Public Meeting



Regional Context Map

Not to Scale

Figure 2

INTRODUCTION

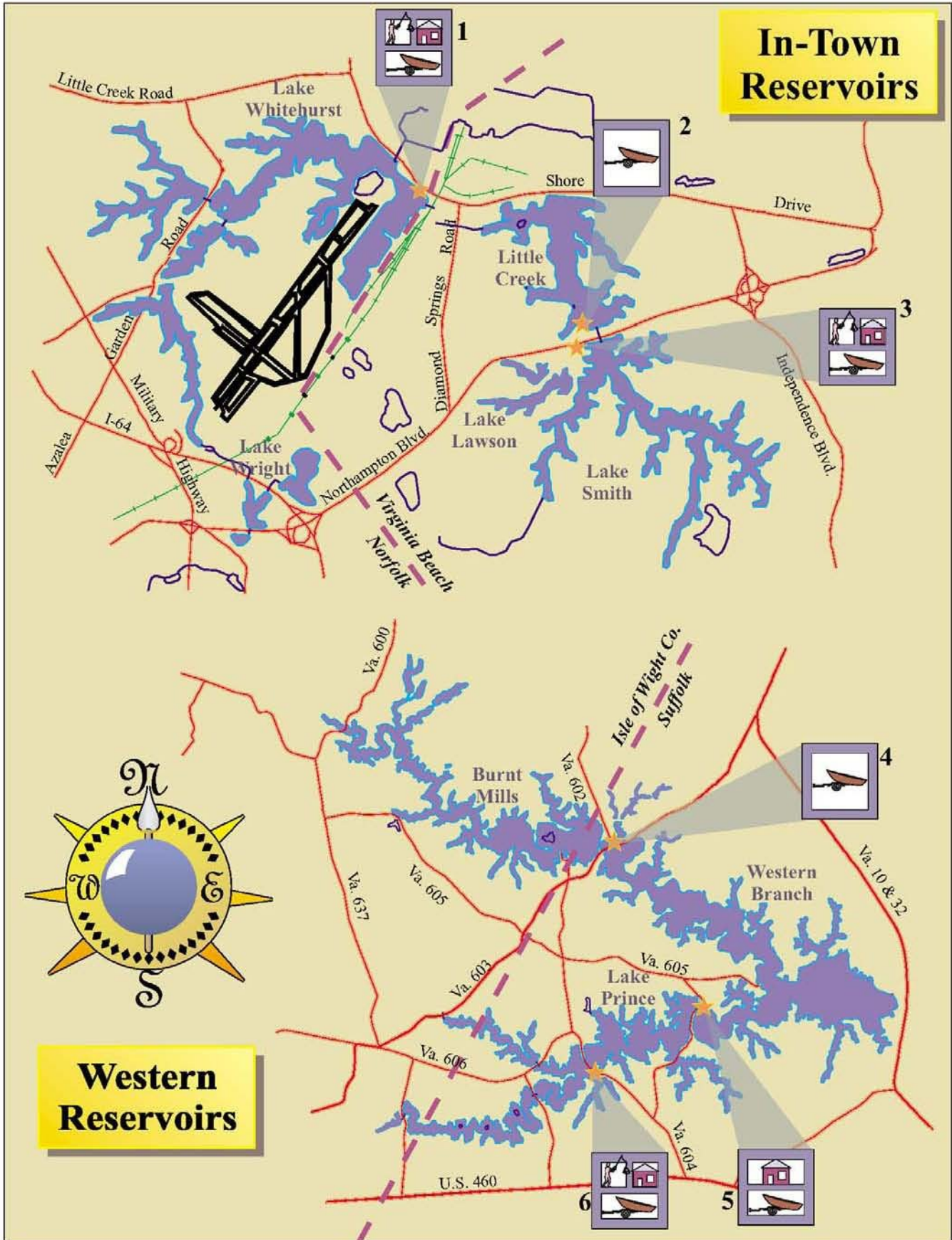
The settlement and history of Virginia Beach and the greater Hampton Roads area is linked in no small part to the numerous water bodies and rich resources surrounding them. The northern part of the city is crossed by the many branches of the Lynnhaven River, a tidal river feeding directly into the Chesapeake Bay and by the Little Creek watershed, which includes Lake Lawson and Lake Smith. Each of these systems has shaped the development of the area, providing travel ways, fertile fields and abundant resources for hunting, fishing and building materials. (See Figure 2, Pg. 13 for regional context map)

Early colonial land grants kept vast tracts of land intact for the first few centuries of statehood. While some of the historical homes and farms have been preserved in the Bayside Borough of the city, other homes are primarily remembered in maps and street names. With a strong agrarian economy continuing into the middle of the twentieth century, most of the land surrounding Lakes Lawson and Smith was held in a small number of large family farms, with occasional hamlets such as the older homes along Shell Road. It has only been in the last half century that the pattern of relatively small, dense residential lots that currently characterizes Bayside became evident.

With almost 42 acres and over 12,200 feet of shoreline, the Lake Lawson Lake Smith Natural Area represents an increasingly uncommon open space resource within the City and a reminder of our heritage. With dense forest canopy, access to fresh water, outstanding scenic quality and an abundance of wildlife, this preserve affords outdoor experiences in the northern part of the City that are generally associated with the more rural south, such as Stumpy Lake or the Back Bay. While a small portion of the site has historically been used primarily for access to the lakes, acquisition of surrounding tracts by the City provides opportunities for a wider range of low impact activities. This master plan addresses issues of diversified use, education, landscape management, restoration and conservation on this significant new component of the Virginia Beach Outdoor Recreation system.

Open Space Acquisition Program

The property that makes up the Lake Lawson and Lake Smith Natural Areas has been assembled through the City of Virginia Beach's Open Space Acquisition fund between 2005 and 2009. The acquisition program is guided by the Open Space Advisory Committee and funded through the Parks and Recreation Capital Improvement Program. The program has evaluated and in some cases purchased land identified through the Outdoors Plan and other sources.



Regional Reservoirs

Not To Scale

Figure 3

Norfolk Reservoir System

Although Lakes Lawson and Smith lie within the Virginia Beach City limits, they are part of a system of ten manmade reservoirs owned and managed by the City of Norfolk Department of Utilities. Other reservoirs within the “Intown Reservoir System” include Lake Whitehurst, Lake Wright, Lake Taylor, the Little Creek Reservoir and Stumpy Lake. These lakes have been a part of the Norfolk system for over 100 years and help supply water to residents of Norfolk, Virginia Beach and parts of Chesapeake. (See Figure 3, Pg. 16)

In addition to managing the reservoirs as a source of water, the Department of Utilities has also allowed recreational use of the water bodies within specific guidelines. Ordinances and guidelines focus largely on boating and fishing and include boat type and motor size limits, bank fishing prohibitions and permitting requirements. Fishing is allowed in the Norfolk water supply reservoirs and is regulated by Article V, Chapter 46 of the City of Norfolk Code of Ordinances, and is also regulated by the Virginia Department of Game and Inland Fisheries. Boating, canoeing and kayaking are permitted in the reservoirs with a boating permit issued by the City of Norfolk. No water skis, jet skis, surf boards, open bottom paddle boats, houseboats, tubes, rafts, inflatable boats or similar devices are allowed. Sailing is not permitted and boat motors cannot exceed 12 horsepower. Most of these regulations are enforced by the officer of the Virginia Game and Inland Fisheries.

Norfolk’s Department of Utilities is responsible for the maintenance, protection and management of the water bodies and the first 25 feet of the shoreline along the lakes within the reservoir system. A maintenance agreement exists between City of Norfolk (Department of Utilities) and City of Virginia Beach (Department of Parks and Recreation) covering the Lake Lawson and Lake Smith Natural Area. The Department of Utilities is working in partnership with the City of Virginia Beach to provide a high quality recreational experience and natural resource preserve in which there is a seamless interface between each city’s holdings. The typical visitor should not discern any distinction in terms of accessibility or management.

A related issue remains unresolved at the publication of this master plan. Lake Whitehurst and the associated public boat launch, fishing station and bank fishing area on Shore Drive was closed to the public, effective November 1, 2009. In addition to being a popular destination for walleye and largemouth bass fishermen, Lake Whitehurst was also one of the area’s most popular locations for high school rowing competitions. Rowing facilities included: three floating docks, a permanent finish line platform and a covered shelter and indoor restrooms. With two fishing piers, Lake Whitehurst was also a great launch location for canoe and kayak users. The elimination of public access at Lake Whitehurst could potentially increase demand on the Lake Smith and Lake Lawson and other reservoirs. However, Lake Whitehurst boasts a thriving population of walleye, which aren’t present in other regional lakes. Norfolk officials are considering alternatives to the Lake Whitehurst boat launch and fishing station.

Related Studies

Virginia Beach Outdoor Plan

This 2008 guidance document is a component of the Virginia Beach Parks & Recreation Strategic Plan and the City's Comprehensive Plan. It outlines overall acquisition, planning and operation guidelines for the full complement of outdoor recreation, open space and cultural facilities. The plan also includes specific recommendations for districts throughout the City. For instance the acquisition of the Lake Lawson and Lake Smith Natural Area is identified as a priority for the Bayside Planning Area.

Virginia Beach Parks and Recreation Design Standards Manual

The Design Standards Manual includes guidelines and specifications for standard park features such as signage, circulation and buildings. Many of these standards are applicable to the Lake Lawson and Lake Smith Natural Area, while some issues such as shoreline stabilization and the boat ramp require site specific approaches.

Lake Smith Fishing Station Renovations, 1996

In 1996 a study titled "Lake Smith Fishing Station Renovations" was developed by Mary Ann Mijares Engineering P.C. This study primarily focuses on improvements to the Lake Smith Fishing Station (North Parcel). In the report, the engineer recommends general improvements to the site including: parking areas, walking trails, demolition of caretaker's house/shed, and the addition of a restroom facility. The report also recommended shoreline improvements including: bulkhead construction, two fishing piers, replacement of the boat ramp, and construction of a rental boat storage area. Other improvements listed in the report included improvements to the concessions building roof and wall repairs. In their proposed layout, they also recommended that the majority of on-site development remain at the northern portion of the site to encourage restoration in the southern portion of the site. Permit requirements listed in the report include a joint permit application through the Army Corps of Engineers.

This report was written over 13 year ago and many of the site challenges remain unresolved: general erosion, shoreline degradation as well as access to and juxtaposition of the boat ramp. The engineer recommended immediate restoration measures be taken to restore the shoreline. In their master plan, the engineer also recommended replacement of the existing boat ramp in the same location and suggested an optional relocation in the cove to the south of the current location. Of the recommended improvements, the demolition of the buildings appears to be the only task completed prior to acquisition of the parcel by the City of Virginia Beach. At that time the concessions building had already been demolished and the boat rental program had been discontinued.

In addition to addressing the entire three parcel site, the 2010 Master Plan deviates from the 1996 study in several significant ways, such as the recommended location of the boat ramp, a new entrance and a larger and more versatile parking area. The expanded scope of

improvements reflects the broader mission of the open space program and recognition of the diversity of users and potential experiences on the site.

Property Descriptions

The Lake Lawson Lake Smith Natural Area is made up of three separate parcels which will be referred to as the North, South and West Parcel. Combined, the land parcels include 41.5 acres. When the water bodies between the land parcels are accounted for the overall footprint of the perceived area within the preserve includes approximately 84 acres. Though the water is technically not part of the Natural Area, by ownership, it is perceived to be part of the preserve as one looks across from one parcel to the other. See Figure 4, Pg. 21.



Lake Lawson/Lake Smith Public Information Meeting/Design Workshop
Context Map

November 4, 2009

Figure 4

North Parcel

The North Parcel is located along Shell Road and Northampton Boulevard and is surrounded by Lake Smith and Lake Lawson. The segment traditionally known as the Lake Smith Fishing Station is located in the northern segment of the site and is the most developed portion of the site. The fishing station area is approximately 4.5 acres and has the longest history of sanctioned recreational use, with a boat launch, open parking and bank fishing areas. With unrestricted access in the years prior to Virginia Beach's acquisition, this portion of the site is also the most degraded.



Photo 5. Fishing Station Entry Sign



Photo 6. Degraded Groundcover at Fishing Station

The boat launch is currently shared by all boaters including: recreational boats (motorized and non-motorized), fishing competition participants, residential bulkhead contractors and City of Norfolk's maintenance crews. This location is also a popular spot for bank fishermen.



Photo 7. Boat Ramp



Photo 8. Severe Erosion at Fishing Station



Photo 9. Dense Forest

The southern portion of the North Parcel covers approximately 12.5 acres and is characterized by dense woods, walking paths and intermittent views over the water. This acreage has traditionally not been recognized as part of the fishing station recreation area. However, people who know about the site have used it for various purposes over the years including walking, dumping trash and fishing. Overall, user impacts here are less noticeable.



Photo 10. Gap between North and South Parcels

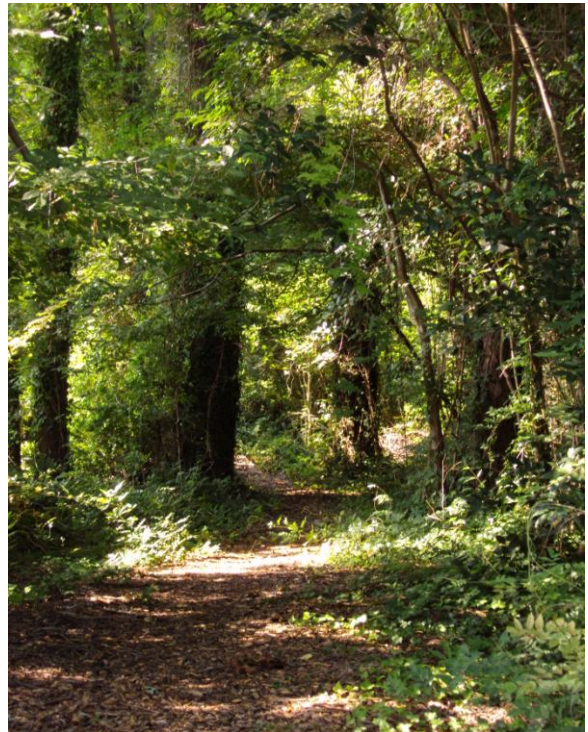


Photo 11. Trails

South Parcel

The South Parcel is a 17.7 acre peninsula bounded by Lake Lawson on two sides and the privately-owned Sajo Farm development to the southwest. There is currently no public access to this Parcel and it has historically been privately held and occasionally logged. The Sajo Farm subdivision plan includes a maintenance and emergency vehicle access easement over private streets, tying into an existing dirt road that crosses the South Parcel. The easement is intended only for City vehicles and as a pedestrian access point for Sajo Farms' residents. A pedestrian gate with key pad is envisioned for controlling access.

The dirt road has recently been graded is intended to serve as the primary maintenance and emergency access road. It leads to the gap in the causeway to the North Parcel. City Parks and Recreation staff have planned a secondary walking trail and plan to clear it with volunteer staff in the near future.

Besides the old logging road, the most visible impacts of prior uses are the dense stands of invasive species including English ivy and Chinese privet in the center of the site.

Several coves on the north portion of the parcel also collect trash and debris floating in the lake. Long stretches of shoreline feature significant bald cypress stands.

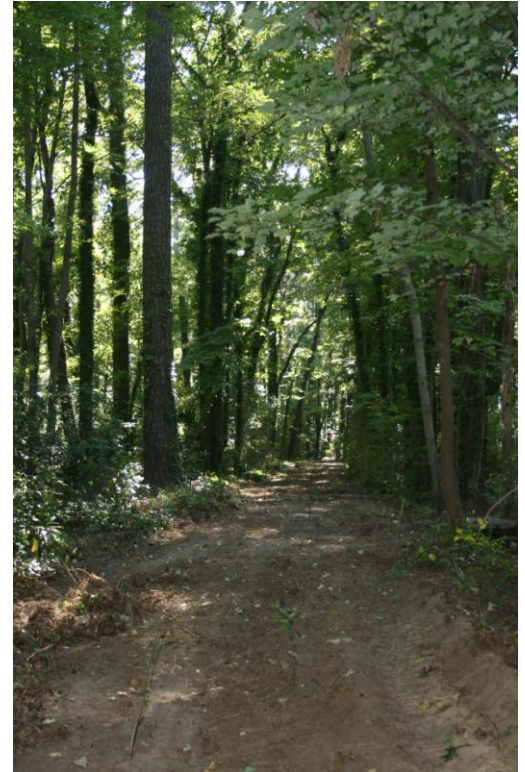


Photo 12. Dirt Road



Photo 13. Invasive English Ivy



Photo 14. Forest Canopy



Photo 15. Bald Cypress Knees

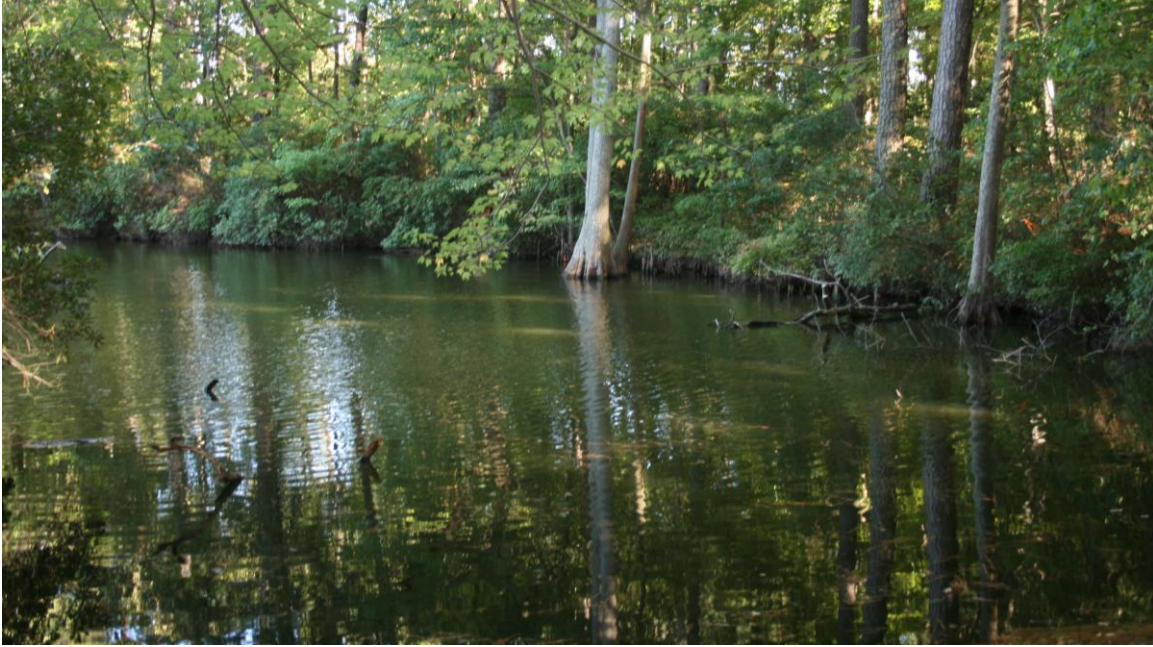


Photo 16. Cove Along East Side of South Parcel



Photo 17. View of Lake Lawson

West Parcel

At almost 7 acres, the West Parcel is the smallest of the three parcels. This parcel is bisected by Shell Road, with the bulk of the parcel to the north of the road. Vehicles have been observed parking on the road shoulders to access this parcel. On the western side of the parcel, residential yards from neighboring parcels are encroaching into the parcel and are the most visible sign of past and ongoing use.



Photo 18 Shell Road

Due to the compact size and more open canopy, much of this parcel can be viewed at once, unlike the other parcels that invite exploration from point to point. This parcel is unique in that it borders the smallest division of Lake Lawson, with more intimate overall scale and less expansive views. From the south portion of the West Parcel one can see the original Sajo Farm Manor House, built in the 1930's by Sam Jones.



Photo 19. View of Sajo Farm Manor House



Photo 20. Dense Forest Canopy



Photo 21. Fallen Trees in Lake Lawson (South Side of West Parcel)

The Lakes

Lake Lawson flows to Lake Smith through a man-made channel created through a dam which separates these two lakes. Lake Smith then drains to the North into the Little Creek Reservoir and eventually to the Chesapeake Bay. The total water surface area of Lake Lawson is approximately 77 acres, with about 31 acres between the causeway and Shell Road and 12 landlocked acres upstream of Shell Road. The Lake Lawson watershed is approximately 1,200 acres. Lake Smith is the larger of the two lakes with a total water surface of approximately 172 acres. The Lake Smith watershed is approximately 1,900 acres. The combined watersheds for the two lakes represent approximately 1.85% of the City of Virginia Beach's total landmass.

Portions of the dam separating Lake Smith from Lake Lawson have been removed and the normal pond elevation for the two lakes is the same, 7.3 NAVD88. This is approximately one foot higher than the normal pond elevation of the Little Creek Reservoir, directly north across Northampton Boulevard. The control structure between Lake Smith and Little Creek Reservoir is a weir at the upstream end of the 10' by 14' box culvert under Northampton Boulevard. The Lake Smith water level rises quickly during heavy rains up to 3 feet above normal pond elevation and drains very slowly back to normal lake level due to this existing narrow weir. At the time of this writing, improvements to the weir are being designed through the Virginia Beach Department of Public Works.



Photo 22. Weir Between Lake Smith and Little Creek Reservoir

OVERALL GOALS AND PROGRAMMING MANAGEMENT

The Virginia Beach Outdoors Plan defines a Natural Resource Area as “a municipal preservation area whose primary purpose is to preserve the indigenous vegetation and wildlife in order to serve as green infrastructure and as a scenic environment for Virginia Beach residents to enjoy. Natural Resource Areas include areas for protection and management of the natural /cultural environment with recreation use as a secondary objective. Recreational use might include passive recreation activities such as hiking, birding and environmental education but may also include public waterway access improvements, public fishing opportunities.”

The Lake Lawson and Lake Smith Natural Area fits these criteria and provides many of the secondary recreational activities. The philosophy of “preservation foremost and recreation second” has guided the consideration of program elements, management and development scenarios throughout the master planning process. Although these are dwindling reminders of the origins of the community, the plan focuses on conserving the unique assets that define the site and celebrating those characteristics. Programmed activities and recreational/educational programs that can be introduced on the site in a manner compatible with the goals of preservation are also addressed.

With the overarching goal being that of preservation, very specific and limited objectives are proposed for the park. In an effort to preserve the site’s recreational history, the department is interested in accommodating past use of the fishing, but in a manner that improves user experience and minimizes environmental degradation. Past use has degraded the site and the master plan includes provisions to improve conditions and change practices such as uncontrolled vehicular circulation that have led to the degradation.

In keeping with the Outdoors Plan and guidelines for Natural Areas, the Department would like to provide quality outdoor recreation experiences without staff stationed on site. The Department’s current management preference is to utilize staff from other facilities and programs in coordination with volunteers.

Ten Minute Walking Analysis

The Outdoors Plan includes a walkable service area analysis for each planning area (see Figure 5, Pg. 33). The Lake Lawson and Lake Smith Natural Area is located near the center of an area that is not served by City parks. Consequently, consideration was given to basic neighborhood park level facilities on the site to serve nearby residents.

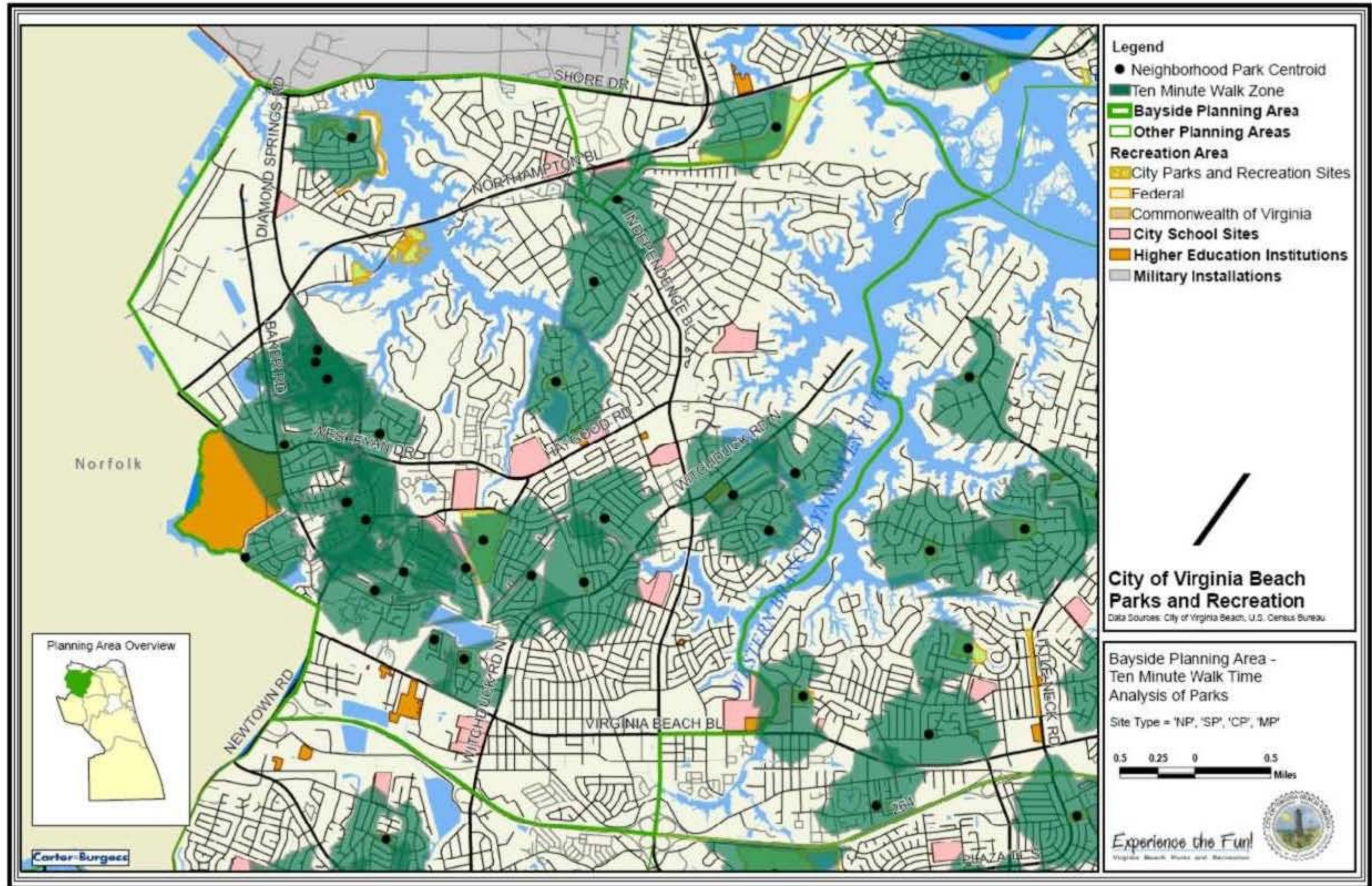


Figure 5

Current Uses

Currently the site is being used for a variety of recreational uses including: bank fishing, fishing from boats, motorized boating, non-motorized boating (kayaks/canoes), picnics and trail activities. Lake Smith and Lake Lawson are a popular destination for bass fishing. Fishing competitions are held at Lake Smith throughout the year and draw fishing enthusiasts and clubs, including Bass Jon's, Rule 9 Bass Club, 3 Rivers Bass Club, and Bass Chasers.

The Parks and Recreation Department also programs activities at the site and anticipates extending programs that support the objectives of resource preservation, education and low impact recreation. Current programs include the Back 2 Nature Camp and Day Camp visits for groups arriving by bus for special programs. During their summer Day Camp programs, a temporary tent is set up as a shelter for lunches and instruction. Explore Lake Smith is a kayak program for adolescents, which includes basic kayaking instruction and nature observation from the water. The existing boat launch is used for launching kayaks.



Photo 23. Kayaking in Lake Lawson

Future Programmed Activities

Parks and Recreation staff has considered or supported additional programmed activities such as the activities listed below. With the exception of the ropes course, these programs do not require extensive permanent structure or facilities and are therefore well suited to the site. Archery programs could be conducted with portable or permanent target supports.

- “Trail Blazers” - a program for children to explore the hiking trails
- “Owl Prowls” – a trail activity for children and adults to hike and learn about the basics of birding
- Orienteering program
- Geocaching (Currently, there is a program called Letterboxing in place, which is a low-tech version of Geocaching.)
- A Hunting We Will Go – a photo scavenger hunt club
- Haunted Walk - a nighttime educational trail walk, learning about the animals seen along the way
- Star Party - program that is currently in place at Mt. Trashmore for star gazing.
- Yoga in the park
- Tai Chi and related movement classes
- City organized overnight camping
- Archery
- Low ropes course

Programs and facilities that were not supported by the Parks and Recreation staff involved in the master planning process are listed below. In general respondents felt that these were not compatible with the direction of the open space program, required staffing or reservation support or could draw unsustainable crowds to the site.

- Group use shelters with numerous tables
- Community event room
- Education center (building)
- Wedding, ceremony venue, community circle

Maintenance and Management

As the City has acquired the parcels that make up the Lake Lawson Lake Smith Natural Area, active management and maintenance has begun with existing forces and staff, as detailed herein. In establishing future management goals, Parks and Recreation staff identified that their goal is to continue to manage the site without permanent staff or full time volunteers assigned exclusively to this site and without facilities for permanent staff on the property. The implications of allowing expanded public use of recently acquired natural areas without the presence of full time programming, maintenance and enforcement personnel influences some of the site development strategies. The challenges that will be involved became evident in spirited dialogues between divisions concerning the appropriate level of “public-proofing” that may need to occur in sensitive or fragile areas such as the shoreline, and the potential of such measures

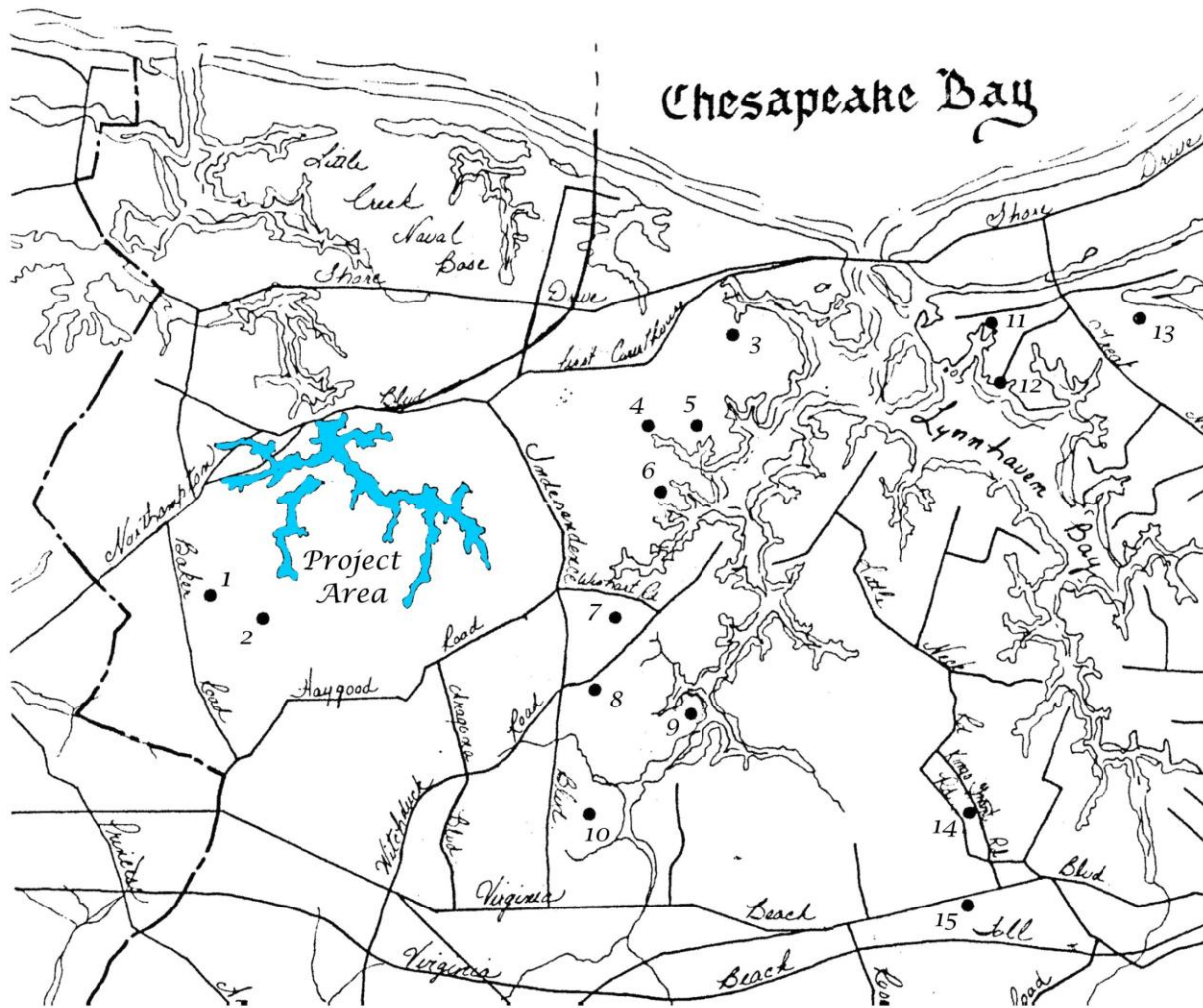
diminishing the very values and natural characteristics that prompted the City to make the land acquisition.

The fishing station and existing trails are open seven days per week from sunrise to sunset. Current management and maintenance staff and responsibilities are outlined below.

- General oversight – This responsibility is shared by Natural Areas Manager and Park Supervisor (both of these employees manage multiple sites within the City of Virginia Beach). These staff members are responsible for coordinating and managing other park staff that assist in operating the site, coordinating and managing special events on the site and keeping track of non-routine maintenance and necessary repairs through regular visits to the site. Depending on the scope of the repair/maintenance project, the work will either be done in-house or contracted out.
- Opening and closing duties – A Park Aide who is permanently assigned to Bayville Park is responsible for traveling to this site to open/close the gates, police the area and clean up debris on a daily basis. Removal of large debris is requested by work order to Parks/Lifecycle staff.
- Dumpster pickup and Mowing – Mowing is currently done in house by Parks/Landscape Mgt staff. Dumpster pickup is handled by contract services monitored by Park Supervisor.
- Bulkhead maintenance and shoreline stabilization – The City of Norfolk owns the first 25 feet of shoreline, however, bulkhead maintenance and shoreline stabilization is currently managed by the City of Virginia Beach in accordance with the purchase agreement. Norfolk provides shoreline clean up and herbicide spraying on an as-needed basis. Trees that fall into the water are generally left alone by Norfolk unless they are considered a hazard, since they provide habitat for fish. An aquatic harvester and spray boat are used for periodic maintenance on the lakes.
- Trail maintenance – Removal of fallen limbs, clearing and mulching is currently done primarily through volunteers organized by the Natural Areas Manager and/or the Park Supervisor.
- Existing Boat Ramp maintenance and repairs – Boat ramp maintenance is handled by City of Virginia Beach.
- Restrooms – Presently there are no permanent restrooms or storage facilities on the site. Portable Restrooms are always on site and additional ones are ordered as needed for special events.
- Enforcement oversight – The Virginia Department of Game and Inland Fisheries (VDGIF) enforces fishing and boating rules on the lake itself. The City of Virginia Beach Police Department typically makes random stops to patrol the site. The City does not participate in a volunteer enforcement program.

The resulting mixture of features in the master plan reflects a conservative approach with a narrow range of activities and limited magnitude of infrastructure and facilities. It provides access to representative areas of the site, while leaving some inaccessible and therefore more protected. It incorporates facilities such as stabilized bank fishing platforms in specific areas, but not at every cove or accessible bank. As this type of natural open space in an urbanized area is a relatively new facility type for the City, adjustments to the current management and

maintenance program, including additional staff resources, may need to be made over time as the impacts of public use are measured and evaluated.



1. Lawson Hall	1785	9. Ferry Farm	1730-1735
2. Weblin House	1671	10. Pembroke House	1764
3. Bayville Estates	1826	11. Keeling House	1683-1714
4. The Hermitage	1600's	12. Woodside Road	
5. Thorowgood House	1653-1700	13. Green Hill	1791
6. White Acres	1846	14. Burgess House	1773
7. Wishart House	1653-1700	15. Francis Land	1720
8. Old Donation Church	1736		

Portion of original map, *Old and Historic Structures Built Prior to 1860*, courtesy of the Virginia Beach Public Library Special Collections. Original authors and date unknown. Lawson Hall and lake shading added by InSites, 2010. Not to scale.

Photo 24. Historic Structures

EXISTING RESOURCE ANALYSIS

History and Cultural Resources

In order to understand the cultural significance of the site and its history, it is helpful to look at the history of the northern sector of Virginia Beach. While an exhaustive history of the contextual setting would not be appropriate within this master plan, a look at trends within some general time periods underscores the significance of preserving the Lake Lawson and Lake Smith Natural Area. The areas surrounding the Chesapeake Bay have historically been rich and fertile and provided shelter and sustenance to the Native Americans and to those arriving later on these shores. On much of the site, these qualities endure.

Early Settlement

From the time of the First Landing, land grants were made in the north part of what became Princess Anne County. These were generally held in large tracts of land, with hundreds or over a thousand acres and often with a significant dwelling and working farms. Homes were often built near the rivers and streams that fed into the Lynnhaven River and the Chesapeake Bay. Several of these homes still remain relatively close to site and an excerpt from a tree ring dating report provides a good overview of the “Virginia style” homes of the time.

"The Keeling House is one of a significant group of small brick dwellings that were built in Princess Anne County in what is now present-day Virginia Beach, Virginia. This assemblage of dwellings--including the Thoroughgood, Lynnhaven, and Weblon (sic) houses--have traditionally been dated to the 17th century, but scholarship over the past several decades has shown them to be a part of improved gentry housing in the lower Chesapeake that emerged in the 1710s, '20s, and '30s." The Weblin House dates to the 1600's and still stands near the natural



Photo 25. Weblin House Historic Photo

area along water that used to be a small branch of the Lynnhaven, but which now feeds Lake Lawson. One of the early land grants near the preserve was granted to Anthony Lawson and it consisted of 490 acres. The Lawsons held other grants throughout Norfolk County and Princess Anne County (formed after 1691)

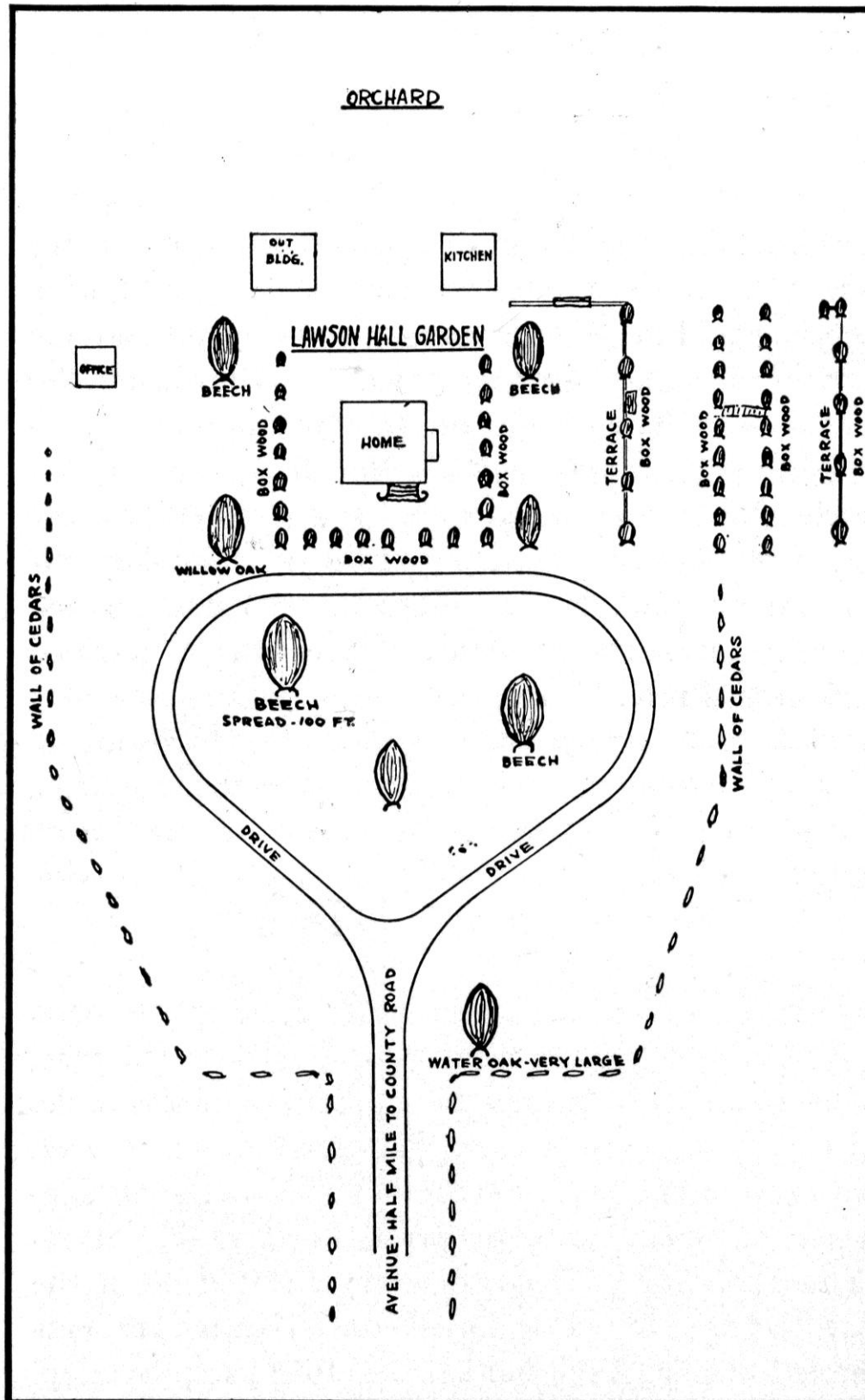


Photo 26. Lawson Hall Garden Layout

much of which was passed down among generations. One of these heirs, Col Anthony Lawson is credited with building a grand home with gardens, Lawson Hall, prior to his death in 1785. The mansion was apparently well known throughout the region and the Lawson's were prominent in society, with family connections still traced throughout the region.



Photo 27. Lawson Hall Grounds Historic Photo

The original Lawson Hall burned in the early 20th century close to the time that property was acquired by the Hodgeman family, who rebuilt a home of a different style on the same foundation. Remnants of the garden and grounds are reported to still be intact today. A portion of the South Parcel peninsula was acquired in 2009 from the Hodgeman family by the City of Virginia Beach and forms part of the Natural Area.

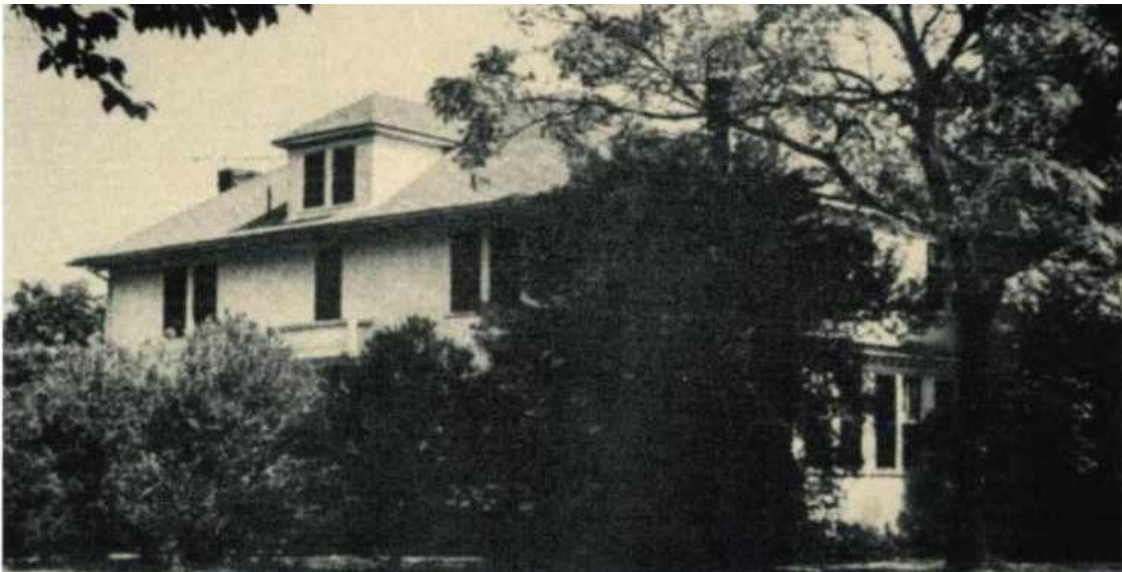


Photo 28. Lawson Hall Historic Photo

Creating the Reservoirs

The following excerpt is taken from *Waterfront News*, Spring 2008, A Brief History of the Norfolk Water System: “In the early 1870’s Norfolk city leaders began exploring the area for more reliable sources of water and ultimately chose an area in Princess Anne County called “Moore’s Bridges. There were several streams in the area that flowed to Broad Creek and it was determined that if these two streams were dammed the resulting lakes would provide an adequate water supply. Along with the streams at Moore’s Bridges, several ponds located on the plantation of Mr. Cole would “last 800 days without any rain.” These three lakes are now known as Lake Wright, Lake Taylor and Lake Lawson. What is now known as Lake Smith was constructed downstream of Lake Lawson by placing a dam across “Taylor’s Branch.” The dam is now called Northampton Boulevard. In 1899 Little Creek was condemned and two new lakes were created with the construction of the dam separating Little Creek Harbor from Little Creek Reservoir East and Little Creek Reservoir West. Little Creek Reservoir West is also known as Lake Whitehurst.”

Mid-Twentieth Century

A snapshot of the area surrounding Lake Lawson and Lake Smith comes through oral histories from Lynn Oliver Adams who grew up in the 1950s on a farm on the south end of Lake Smith, and Adrian Spence who grew up and still lives on Shell Road across from the fishing station. According to Ms. Adams, the area surrounding the lakes at that time was still largely rural and was dominated by working farms, dotted with settlements such as the original homes along Shell Road, Reedtown and Grace Town. Many of the roads we are familiar with, such as Wesleyan Drive and the lower section of Diamond Springs Road were not there. Commercial establishments such Hawkin’s Place, an African American roadhouse or the general store and post office at Robbins Corner were landmarks at the intersections of the limited street network.

Agriculture was a mainstay of the Princess Anne County economy throughout much of the twentieth century and the farms here supplied produce throughout much of the Eastern seaboard. The farms in the area were typically either dairy farms or truck farms. The term truck farming was used to describe the large-scale production and distribution of crops by road or rail. The word “truck” originally referred to the bartering of goods, and then came to mean the process of carrying goods to market, and eventually came to mean the vehicle used to haul the goods. In the 1950’s there were eight large farms immediately surrounding the lakes including the Jones, Hodgeman, Moore, Brock, DeFord, Oliver, James and Shelton Farms. As it surely had throughout prior centuries, the lake environment provided a rich resource for fishing, hunting and trapping for sustenance. Some of the farm children were able to earn money from the pelts of muskrats trapped along the lakes into the 1950’s. The Moore family farmed the property around the Weblin house into the 1980s, perhaps the last operational family farm in the area. The nearby Williams Farm has been acquired by the City and is home to several schools and a park and planned community center.

According to another resident Ms. Adrian Spence who has lived on Shell Road across from the preserve, the fishing station and what is now the rest of the North Parcel were used by residents. She recalls that the fishing station has been used for fishing since at least the 30’s. People would

back their cars up to the edge of the bank and would hike to the other banks they could not reach by car. The City of Norfolk used to supply row boats for people to rent. The North Parcel used to be part of a nursery with lots of specimen plants called the “Wild Flower Garden.” The Hill Family of Seabreeze Farm maintained it with the City of Norfolk.



Photo 29. Lake Smith Fishing Station Rental Boats (1983)



Photo 30. Lake Smith Fishing Station (1983)

While official hiking trails are relatively new to the site, the causeway (they used to refer to it as the Cross Down) was always used as a trail. As children they would explore the site and created their own trails. The secondary paper streets used to be dirt roads. Paving along neighborhood streets is relatively new. People used to drive over the causeway. Adults used the site hunting for small game: rabbits, squirrels and trapping muskrats. The grass area has always been used as a picnic area. Families would also picnic along the causeway. The site has always been used for some sort of recreation by people of all ages.

Later Twentieth Century to Present

The last half of the twentieth century was characterized by rapid growth and development throughout the northern portion of Princess Anne County. The City of Virginia Beach, formed as an independent entity in 1952 and merged with the county through annexation in 1963. The character and the economy diversified away from agriculture during this period and most of the farms were subdivided and developed into relatively low density suburban tracts. Sewer and water service came to the Shell Road community in the 1980s. Within the last decade two of the last large holdings along the lakes have been subdivided and are known as Ridgely Manor and Sajo Farms, the latter adjacent to the South Parcel of the Natural Area.

Cultural Resources Data Analysis

A search of the Virginia Department of Historic Resources Data Sharing System by Kerr Environmental Services in 2009 showed that the three parcels contain no historical resources eligible for listing in the National Historic Register. The Data Sharing System did identify one location where pottery shards were found underneath what is now the west bound lane of Shell Road. A field reconnaissance of the parcel did not identify any potential archeological sites or potential historic resources.

Summary

In the course of roughly a half century, the Lake Lawson and Lake Smith waterfronts have been transformed from a handful of large, relatively undeveloped land holdings and farms to hundreds of lakefront homes. From a time characterized by holdings in the hundreds or thousands of acres to our current era where people strive to own even fractions of acres, the forty two acres that make up the Lake Lawson and Lake Smith Natural Area represent a vanishing resource and link to our past on many levels. The stories that the site can tell to this and future generations are timeless and priceless and can serve as an interpretive theme on site.

As part of the diverse Virginia Beach outdoor experience, the connections to other public and private cultural and historic resources can be reinforced through programming and shared messages. For instance, the visitors at the Lynnhaven House might be directed to the Lake Lawson and Lake Smith Natural Area for a living lesson in the ethnobotanical aspects of the site's flora. Similarly, visitors to the natural area could learn how water routes originally linked some of the areas early homes including the Thoroughgood and Lynnhaven Houses, City resources which they could also visit.



Lake Lawson/Lake Smith Public Information Meeting/Design Workshop
 Composite Analysis
 November 4, 2009

Figure 6

Natural Resources

Water Quality

Portions of Lake Smith near the fishing station and Northampton Boulevard are listed as impaired in the Virginia Department of Environmental Quality 2008 Water Quality Assessment for low dissolved oxygen content. Low dissolved oxygen can be detrimental to aquatic life such as fish that rely on dissolved oxygen in the water to breathe. The typical causes of low dissolved oxygen include elevated nutrient inputs such as nitrogen and phosphorus, high sediment load and elevated temperature. The dissolved oxygen is lowest during the summer months. One common source of nutrients to water bodies such as Lake Smith and Lake Lawson is stormwater runoff from residential lawns which typically contain concentrations of nitrogen and phosphorus from fertilizers.

Nutrients in stormwater runoff can be reduced by the presence of forested riparian buffers which serve to slow down the stormwater runoff before entering the lake. Riparian buffers serve to increase the infiltration of stormwater into the groundwater where nutrients can be utilized by plants before they have a chance to enter the lake.

Fish

The Virginia Department of Game and Inland Fisheries (VDGIF) regularly sample the fish communities in Lake Smith and Lake Lawson. The VDGIF has indicated that Lake Smith has a stable community of freshwater species such as: largemouth bass, bluegill, pumpkinseed sunfish, yellow perch, white perch, common carp, gizzard shad, American eel, yellow bullhead and brown bullheads.

The VDGIF have noted that both lakes typically experience overpopulation of largemouth bass due to insufficient harvesting. Increased fishing within the lake would help to balance the overall fish community. Since Lake Smith is known for shoreline fishing, artificial fish habitat placed near shore may facilitate increased productivity of fishing within the lake. In addition, since the nearby Lake Whitehurst boat ramp is closed indefinitely as of November 1, 2009, recreational fishing on Lake Smith and Lake Lawson may increase.

There is currently no stocking program in place for Lake Smith or Lake Lawson. A stocking program had been in place in the late 1980's which introduced flathead catfish for forage control. The program was discontinued as it did not appear to achieve its goals. Additional stocking programs are not anticipated within either Lake Smith or Lake Lawson as the populations of sport fish are plentiful.

Soils

Soils within the interior of the North and West Parcel are predominately Tetotum loam soils with Rumford fine sandy loam along the lake edges. The South Parcel has predominately State soils throughout the interior of the property and Rumford Soils along the lake edges. Tetotum soils

are well drained soils typically found along coastal plain terraces. State Soils are moderately well drained soils that are typically found in coastal plain river valleys and on stream terraces. Rumford soils are well drained soils which are found throughout the coastal plain and along the edges of all three parcels. All three soils mapped within the property are similar in nature as they all are typically used for forestry and cropland, typically do not support wetlands, and are typically suitable for the support of structures if necessary. Each of these soil types found within the project area may contain small pockets of other soils called inclusions. Therefore, upon further investigation, small areas of hydric soil inclusions may be found within the project area.

Soils and Shoreline Degradation at the Fishing Station Site

Soil mapping shows the area in the fishing station where slope failures and shoreline degradation are the worst to be Tetotum Loam. Two soil borings were hand augured on the site and were consistent with the soil mapping. Silt and clay silt mixtures were evident to a depth of six feet, sandy silt was in the next one foot and then sand to a depth of ten feet which is about the level of the water table and the lake level. The sand at the lower level provides for rapid drainage but is unstable when there are rapid rises and drops in the lake level. The surface soils are considered highly erodible because their slopes are greater than 12%. The hydraulic pressure in the sand layer near the shore line will lead to continued undermining of the banks.

Overuse, direct vehicular access and bank fishing have led to root compaction and severe degradation of the shoreline around the majority of the fishing station site. The bank and shoreward slope of the ground from the water line is nearly bare of vegetation, tree roots are exposed and portions of the slopes are severely eroded. There is evidence of undermining of the bank at the water edge. A bank slope failure is evident at one area of this bank line. In contrast there are small portions of the shoreline where steep slopes appear to be stable and are covered with vegetation.

Wetlands

Wetlands were evaluated by reviewing the National Wetland Inventory (NWI) mapping and supplemented by a site visit to identify any apparent wetland communities notable for the planning study.

Wetlands within the project area are predominately small forested wetlands along the shorelines of the lakes. There are several backwater Cypress Gum Swamps and Swamp Forest wetlands associated with bald cypress coves and low lying areas along the many shorelines. However, the lands within the planning areas are largely forested uplands. Some wetland areas are shown in Figure 6 (Pg. 45).

Wetlands serve many beneficial uses to the community such as aquatic habitat for wildlife, foraging grounds for terrestrial animals searching for food, pollutant removal from the environment and providing aesthetic additions to the landscape. Several aquatic fish, amphibians, insects and mollusks utilize the vegetated wetlands for protection from predators and a source of food. Several terrestrial species utilize these wetlands for their lush vegetation eaten by resident herbivores and their plentiful insect, fish, and mollusk populations available for

predators to eat. Species diversity is highest in these wetland areas and should be protected not only for their ability to filter pollutants from the water but also for their ability to provide habitat and forage for many populations of aquatic and terrestrial life.

Vegetative Communities

Vegetative Communities within the Lake Smith/Lake Lawson Master Planning Area are primarily composed of Mixed Pine/Hardwood Forest in the uplands with Cypress Gum Swamps along several of the coastlines and some smaller examples of Non-Riverine Swamp Forests communities along the coast line of lower lying areas.

The tree canopies within most of the planning area have been left undisturbed for many decades with some very large (specimen) trees distributed throughout that may be 3.5 feet in diameter at



Photo 31. Bald Cypress Knees

breast height (dbh) or greater. Specimen trees with a dbh of 3.5 feet or greater are located within each of the three planning areas. Common species of specimen trees found within the planning area include Sycamore (*Platanus occidentalis*), White Oak (*Quercus alba*), Red Oak (*Quercus falcata*), and Tulip Poplar (*Liriodendron tulipifera*).

Even though most of these forests have mature canopies the North Parcel has experienced a significantly thinned understory in the area near the boat ramp from use of the parcel as a public park.

Several areas have been identified within the project area to have special vegetation. Some vegetative communities of interest include stands of bald cypress (*Taxodium distichum*), sweet pepper bush (*Clethra alnifolia*), sweet bay magnolia (*Magnolia virginiana*), and mountain laurel (*Kalmia latifolia*).

Bald Cypress is prevalent among many of the shorelines throughout the project area and provides a unique character. These trees grow along freshwater coastlines producing the characteristic “cypress knees” which are small woody projections which grow in the area surrounding the main trunk. These knees are thought to provide structural support and

stabilization to these large trees which grow in wet soils. Overall bald cypress trees are prominent throughout the project area and serve as unique assets which should be preserved and featured.

Other interesting and less prominent vegetation include a stand of sweet pepper bush just upslope of a bald cypress cove on the northeast corner of the South Parcel. This somewhat small population of sweet pepper bush has developed just upslope of a gradually sloping wetland feature. Sweet pepper bush is a small shrub which grows in moist woodlands usually near water. These plants are unique for their showy and fragrant summer flowers which can attract bees, butterflies, and hummingbirds.

Sweetbay magnolia can be found throughout all three parcels however one stand was identified in the southeastern portion of the North Parcel as a dense stand of this unique plant. Sweet bay magnolia is unique for its fragrant leaves. It typically grows in moist forests and along streams and ponds. These small trees typically do not grow taller than 20 feet and produce white flowers in the late spring and early summer. Sweetbay is a very common and characteristic species for this area.

Although its name suggests differently, mountain laurel is very common in coastal areas. A significant stand of mountain laurel was identified along the northwestern coastline of the South Parcel which provides a dense understory. This area is more difficult to walk through than the surrounding forest and provides a more closed in habitat used by birds for forage and protection. Mountain laurel has white to pink flowers that bloom in the late spring.



Photo 32. Mountain Laurel Stand

Areas of concern include two large areas which have experienced the invasive species English Ivy and Chinese privet. English Ivy has spread both as a ground cover and as a climbing vine throughout the southwestern portions of the South Parcel. Chinese privet has also developed a dense stand near the southern portion of the South Parcel. English Ivy and Chinese privet can both be managed through a combination of physical and chemical methods.

Dense stands of wisteria, Japanese honeysuckle and groves of Devil's Club *Aralia* characterize the central portion of the North Parcel, especially along the gated access close to Ellis Avenue. Residents in houses adjacent to the North Parcel have expressed concern over large trees and limbs potentially falling on their property. Large trees falling throughout the site will always be a safety and maintenance concern, but one that is inherent in the relatively unmanaged natural areas.



Photo 33. Invasive English Ivy

Forest Continuity and Other Vegetative Considerations

Determining the age of the forest cover based upon casual observation can be imprecise, however, all three parcels have mature canopies that have a range of very old to very young trees which is appropriate for a mature forest. Estimates from the planning team biologist are as follows.

On the North Parcel and West Parcel, the Forest cover appears to be on average around 30-40 years old with some trees approximately 75 years old. Those areas along the southeastern edge of the North Parcel are very representative of Mixed Mesic Hardwood Forests, Coastal Plain Subtype, coastal forests, (as defined by The Classification of Natural Communities of North America, Third Approximation, Schafale and Weakley, 1990) that have been historically prominent in Virginia Beach. The areas inland to the northwest have experienced some significant harvesting, most likely associated with the proposed subdivision that was planned for that area.

On the South Parcel, much of what was the City of Norfolk property seems to have been left untouched for 40-50 years. The adjacent Hodgeman property seems to have experienced some clearing of the understory and some earthwork near the Northeast edge. Still some trees look to be approximately 75 years or older. The old City of Norfolk Site is great old coastal forest and is very representative of what one would expect a pristine forest would have looked like for the last 100 years. There is evidence of some land clearing on the southern edge of the parcel where the invasive species; English Ivy and Privet have smothered the old growth forest. This would indicate that there has been some land clearing even though a substantial amount of old growth trees were left in the disturbed area.

The West Parcel seems to have experienced more disturbance over the years. However, what type of disturbance is hard to tell. As there are still very old trees on the parcel, it seems to have been selectively harvested at one time. Adjacent property owners have established lawns within portions of the site and may have cleared portions of the parcel to utilize the land or open water views over the years.

In evaluating the age and likely history of the natural communities on the site, the impact of damming the streams to form the lakes was also considered. The creation of Lake Smith and Lake Lawson has most likely had a net negative effect on the abundance of wetland vegetation and wetlands in general. The area that is currently underwater was most likely floodplain wetlands and low terraces prior to impoundment. As wetlands are in general one of the most biologically productive terrestrial communities there was probably a net reduction in terrestrial species abundance and diversity. If this area had not been impounded there would most likely be significant River Bottomland Forests, and Cypress –Gum Swamps. Bald Cypress would not be present at the current water elevation if the lake had not been dammed up. It is likely that Bald Cypress would have been present at a lower elevation within the floodplain of the stream that has been impounded.

So while the Mixed Mesic Hardwood Forest and the Coastal Plain forest that is present on the site is indicative of the vegetation associated with Virginia Beach, the vegetation on site has been impacted to some degree by practices such as damming and land clearing and in the last century and likely earlier. Regardless, the vegetation on site still tells a rich tale of how Native Americans and colonists lived and utilized trees and parts of many of the plants found throughout the site. The ethnobotanical characteristics of some of the common plants are summarized below.

Baldcypress (*Taxodium distichum*):

- These trees are especially prized for their wood
- The heartwood is extremely resistant to rot and termites because it contains “cypressene” which acts as a natural preservative
- Much used in former days in the southeastern United States for roof shingles.

Southern Red Oak (*Quercus falcata*):

- The acorns of red oak (and other oak species) were an important food source for Native Americans.
- To remove bitter tannins, the Native Americans boiled, leached with ashes, soaked for days in water, or buried over winter.
- Some Native American tribes used red oak bark as a medicine for heart troubles and bronchial infections or as an astringent, disinfectant, and cleanser.

White Oak (*Quercus alba*):

- It was a signature wood used in mission style oak furniture by Gustav Stickley in the Craftsman style in the Arts and Crafts movement.
- Cells contain “tyloses”. Tyloses give the wood a closed cellular structure, which does not allow water to pass. The white oaks, with tyloses, are used in making wine and whiskey barrels as well as outdoor furniture. Red Oaks do not have the tyloses, thus

white oak barrels are used in wine and whiskey production to prevent leaking, which would be the result of using red oaks.

- They were also used by Native Americans as a food. The acorns are much less bitter than the acorns of red oaks, therefore do not need to be soaked overwinter to eat.
- They are small relative to most oaks, but are a valuable wildlife food, notably for turkeys, wood ducks, pheasants, grackles, jays, nuthatches, thrushes, woodpeckers, rabbits, squirrels and deer.

Southern Magnolia (*Magnolia grandiflora*)

- In England, the flowers are pickled and eaten. Used as both a spice and a condiment on food.

Sycamore (*Platanus occidentalis*)

- Trunks of wild trees were at one time hollowed out to make barges capable of carrying several tons of goods.

Tuliptree (*Liriodendron tulipifera*)

- Native North Americans used the tree for making canoes.

Waxmyrtle (*Morella cerifera*)

- Wax myrtle is a popular herbal remedy in North America where it is employed to increase the circulation, stimulate perspiration and keep bacterial infections in check.
- A wax covering on the fruit contains palmitic acid and is extracted by scalding the fruit with boiling water and immersing them for a few minutes, the wax floats to the surface and is then skimmed off. The fruit is then boiled in water to extract the wax from the pulp and once more the wax is skimmed off. It is then strained through a muslin cloth and can be used to make aromatic candles, sealing wax etc About 1 kilo of wax can be obtained from 4 kilos of berries.
- Candles made from this wax are quite brittle but are less greasy in warm weather. They are slightly aromatic, with a pleasant balsamic odor and do not smoke when put out, making them much more pleasant to use than wax or tallow candles. The wax is also used in making soaps.
- A blue dye is obtained from the fruit.

Redbay (*Persea borbonia*)

- Red bay was widely employed medicinally by the Seminole Indians who used it to treat a variety of complaints, but especially as an emetic and body cleanse.

Sweet cherry (*Prunus serotina*)

- Fruit is used in pies, jellies, stews etc. The fruit can also be used as a flavoring. An infusion of the twigs is used as a beverage. An extract from the bark is used commercially as a flavoring in soft drinks, sweets, syrups and baked goods.

- North American Indian tribes used it to treat a variety of complaints. The bark of the root, trunk and branches is an astringent, pectoral, sedative, stomachic and tonic.

Mountain Laurel (*Kalmia latifolia*)

- The leaves of which were at one time used by some native North American Indian tribes in order to commit suicide. Leaves have been used externally in herbal medicine and are a good remedy for many skin diseases and inflammation. The leaves are analgesic, astringent, disinfectant, narcotic, salve and sedative. An infusion of the leaves is used as a disinfectant wash and liniment to treat pain, scratches, rheumatism, inflammations and to get rid of body parasites. Used internally, the leaves have a splendid effect in the treatment of active hemorrhages and diarrhea. They are also used in the treatment of syphilis, inflammatory fevers, neuralgia, paralytic conditions, tinnitus and angina. Excess doses cause vertigo, headache, loss of sight, salivation, thirst, nausea, palpitations, slow pulse and difficulty in breathing.
- Mountain Laurel is poisonous in excess amounts.

Sassafras (*Sassafras albidum*)

- Sassafras has a long history of herbal use. North American Indian tribes who used it to treat a wide range of complaints, valuing it especially for its tonic effect upon the body. It is still commonly used in herbalism and as a domestic remedy. The root bark and root pith are alterative, anodyne, antiseptic, aromatic, carminative, diaphoretic, diuretic, stimulant and vasodilator. A tea made from the root bark is particularly renowned as a spring tonic and blood purifier as well as a household cure for a wide range of ailments such as gastrointestinal complaints, colds, kidney ailments, rheumatism and skin eruptions. The mucilaginous pith from the twigs has been used as a poultice or wash for eye ailments and is also taken internally as a tea for chest, liver and kidney complaints. An essential oil from the root bark is used as an antiseptic in dentistry and also as an anodyne. The oil contains safrole, which is said to have carcinogenic activity and has been banned from use in American foods - though it is less likely to cause cancer than alcohol. In large doses the oil is poisonous, causing dilated pupils, vomiting, stupor, collapse and kidney and liver damage. The oil has been applied externally to control lice and treat insect bites, though it can cause skin irritation.
- An essential oil is obtained from the bark of the root and also from the fruits. One hundred kilos of root chips yield one liter of essential oil under steam pressure - this oil comprises about 90% safrol. The oil is medicinal and is also used in soaps, the coarser kinds of perfumery, toothpastes, and soft drinks. It is also used as an antiseptic in dentistry. A yellow dye is obtained from the wood and the bark. It is brown to orange. The plant repels mosquitoes and other insects.

Wildlife

The abundance of wildlife habitat within the natural area allows for a wide range of wildlife within and surrounding the preserve. Although nearly completely surrounded by developed

areas the on-site natural areas provide for a diverse assemblage of terrestrial and aquatic habitat. The Lake Smith / Lake Lawson Natural Area provides a large uninterrupted ecosystem preserve to allow for wildlife communities to live undisturbed.

Mammals which are expected to live within these parcels are opossum (*Didelphis virginiana*), little brown bats (*Myotis lucifugus*), red fox (*Vulpes vulpes*), grey fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), muskrat (*Ondatra zibethicus*), cottontail rabbits (*Lepus sylvilagus*), and grey squirrel (*Sciurus Carolinensis*). Anticipated birds would include: the Great Blue Heron (*Ardea herodias*), American egret (*Ardea egretta*), the downy woodpecker (*Picoides pubescens*), yellow shafted flicker (*Colaptes auratus*), hawks, warblers and sparrows. One may expect to see reptiles such as northern water snakes (*Nerodia sipedon*), black rat snakes (*Elaphe obsoleta*), snapping turtles (*Chelydra serpentina*), eastern box turtles (*Terrapene Carolina*), American toads (*Bufo Americanus*), American bullfrogs (*Rana catesbeiana*), five-lined skinks (*Eumeces fasciatus*), and broadhead skinks (*Eumeces laticeps*).



Photo 34. Yellow Bellied Slider Turtles

Existing Infrastructure

Shell Road

Shell Road is considered a substandard road. Substandard usually refers to the inadequate width of the lanes or the width of the shoulders. Ideally a road in this type of setting and with similar traffic volumes should have a four foot paved or graded shoulder with 11-12 foot traffic lanes and a possible bike lane as well. Shell Road's existing lanes are approximately nine feet wide. There is also vegetative encroachment along the North and South ends of Shell Road, which is not ideal. The amount of ROW available is limited by water on both sides of the causeway.

Roadway classification is based on the number of trips, purposes of the trips, speed limit and zoning along the roadway. Shell Road is considered a minor collector. However, it is atypical of a minor collector because of its narrow width. Because of all of the types of properties that tie into Shell Road (including: churches, cul-de-sacs and an industrial site), it cannot be considered a Residential Street. Density of residential use along the roadway is another factor that is indicative of a residential street. Currently there are 18 total residential driveways on the length of Shell road, which does not meet the density factor to be considered a Residential Street. The posted speed limit of 35 mph is higher than allowed on Residential Streets.



Photo 35. Shell Road Causeway

Sidewalks – Off Site

Sidewalks leading to and adjacent to the natural area are intermittent. There are more continuous sidewalks along the residential properties east of the Shell Road causeway. There are no shared use paths along Shell Road currently, although the VA Beach Outdoors Plan calls for a shared use path along Shell Road from Diamond Springs Road to Northhampton Boulevard.

Roadway and Fishing Station Entry Drive

The configuration of the entry point from Shell Road does not meet current traffic safety criteria. The entry drive is within 100 feet of Northhampton Boulevard, a major arterial roadway with high traffic volumes. The intersection of Shell Road and Northhampton Boulevard is awkward for drivers arriving at or leaving the site. An accident report from 2009 indicates 7 accidents within this intersection for that year.



Photo 36. Fishing Station Entrance at Shell Road

Spillway

The City of Virginia Beach is studying potential upgrades to the existing Lake Smith spillway, and it is under review for compliance with the Dam Safety Act. The Act requires the dam and reservoir to contain the storm identified as “one half the Maximum Probable Storm” and the Act does not allow for appeals or waivers to this requirement. Thus the improvements required at the spillway are considerably greater than those originally planned. As of this writing, the City will be requesting the General Assembly to provide relief from the Act requirements for low head dams such as this.

The impact of the improved spillway will have little impact on the park other than the new spillway would allow for the water in the lake to return to normal level after a rain event much faster than it does currently.

Parking – On Site

Parking is set up in a temporary corralled system separating cars from trucks and trailers. The base material for parking is a combination of gravel and grass. The current layout is not efficient or easily understood and is not sustainable from a maintenance standpoint.



Photo 37. Parking at the Fishing Station

Boat Launch

The existing boat ramp is located on the northern boundary of the fishing station site adjacent to the southern right of way line of Northampton Boulevard. The concrete surfaced boat ramps slopes from the edge of the water to elevation 18 in fifty-five feet or at slope of 15%. This slope is at the high end of the normal range of boat ramp slopes for use with automobile trailers. The depth of the water at the boat ramp is over 3 feet based on the bathymetry survey provided by the City of Norfolk. The difficulty with the boat ramp in its current location is the turning and backing movements required to launch. The south shoreline of the ramp is bulkheaded allowing for on bank control of launched boats.

The existing boat launch presents difficult circulation patterns for users. The current location of the boat launch is partially on VDOT right-of-way. Due to the a high volume of traffic at the boat launch and because there is no designated hand launch or dock location, many kayak and canoe users tend to launch their boats elsewhere.

The existing boat ramp is used as a construction access for work on the lake. This site will likely be needed for access and staging at the time the weir improvements are under construction.



Photo 38. Boat Ramp

Bank Fishing

Bank fishing is allowed on the fishing station site in designated areas although it's not evident where the authorized areas are. Fisherman also fish from the banks of the causeway, North Parcel and from Shell Road. These areas have not been designated as bank fishing areas and in most areas are posted as No Fishing zones.

Paths – On Site

On the North Parcel a pedestrian and maintenance path connects the parking area to the causeway. This path leads directly to the break in the causeway. From the boundary with Sajo Farms, a similar path meanders through the South Parcel to the break in the causeway.

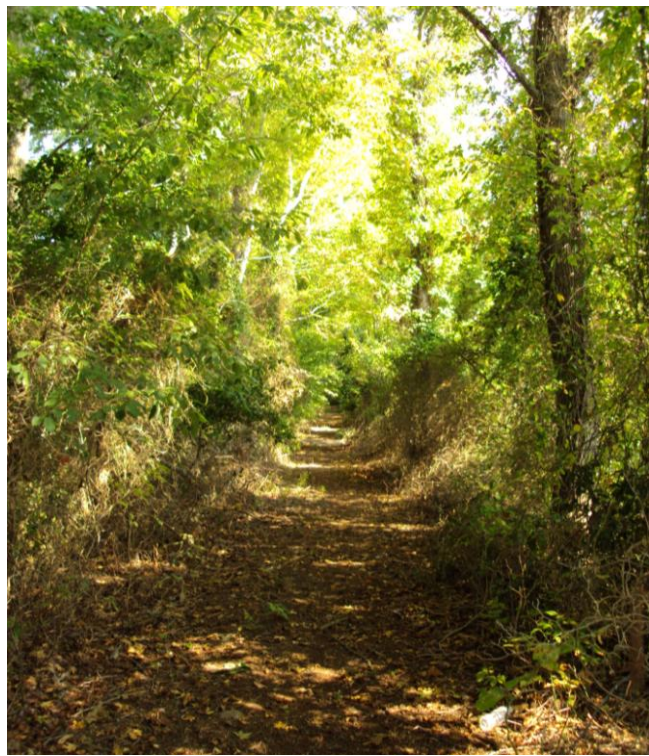


Photo 39. Trail Along Causeway

Causeway

The causeway between the North Parcel and South Parcel is low and narrow. During periods after heavy rains sections of this causeway are inundated for extended periods. The width of the causeway is as narrow as twelve feet for most of its 450 foot length. The existing vegetation lining the causeway (particularly the Bald Cypress trees) provide added stability and protection from erosion.

Borrow Pits

At the north end of the causeway on the North Parcel are bowl shaped depressions, from which soil for the causeway may have been excavated. Large trees have grown among the borrow pits. Due to the slopes and configuration of the topography, this area might attract mountain bike and BMX enthusiasts.

Perimeter Control

Timber rail is used for perimeter control surrounding the parking area. Along Shell Road, chain link fencing follows the property line and includes an access gate for entry into the maintenance easement. The chain link fence is in disrepair and serves primarily as supports for entanglements of noxious vines.



Photo 40. Timber Rail Fencing at Fishing Station

Utilities

City water and gravity sewer service are available from either Locust Crescent or Shell Road. Both locations are near the upper ends of the gravity sewer service. Thus gravity sewer service can only be extended limited distances probably no more than 200 feet. Sewer service to areas

of the sites further from the road would require pumping. Electric and telephone are also available from Locust Run and Shell Road without limitation of location.

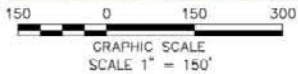
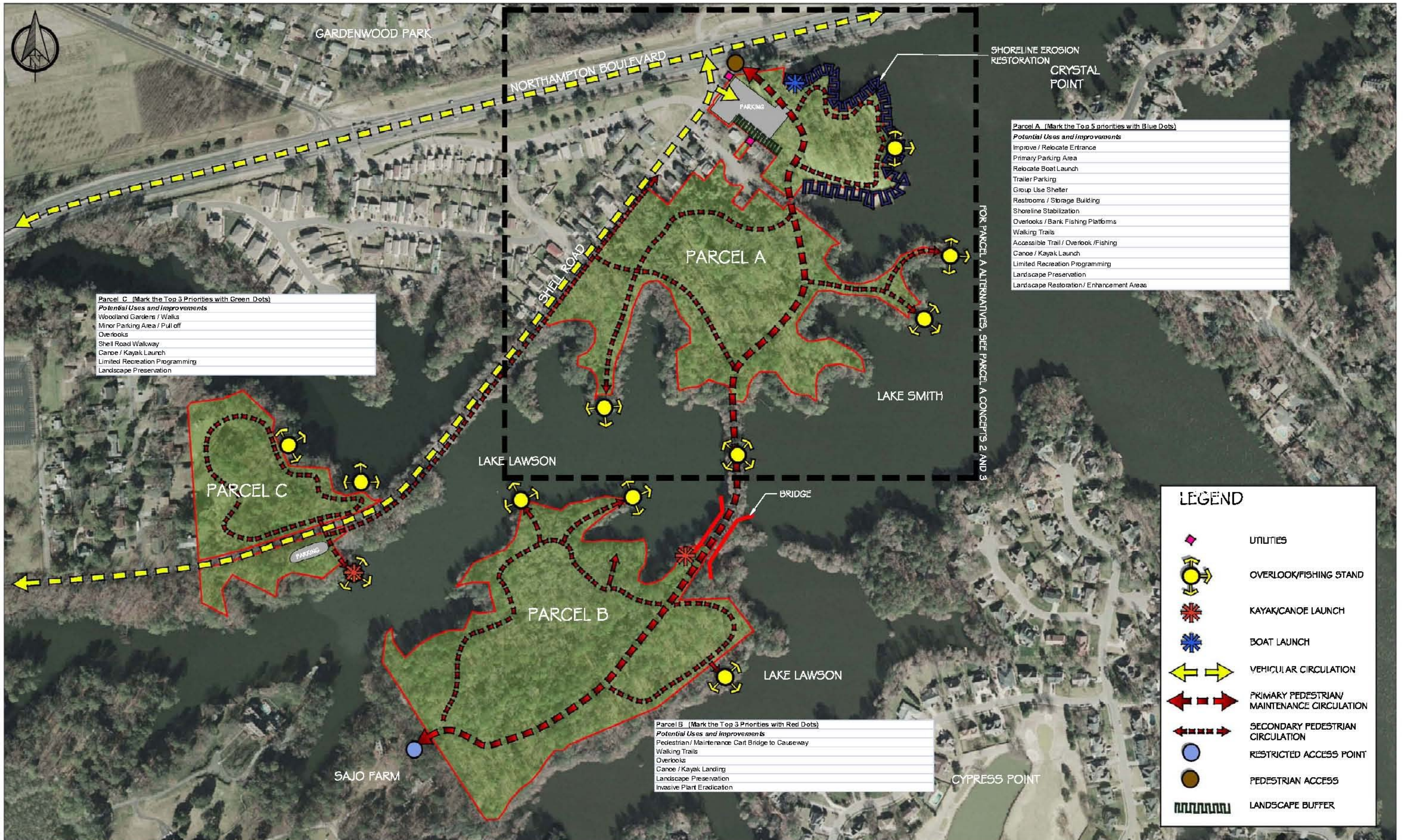
Other Facilities - On Site

Currently, there are no group use facilities, shelters, restrooms and storage for maintenance equipment. Temporary tents and port-o-lets are brought on site on an as-needed basis for day camp programs.

ANALYSIS AND DESIGN

A context map (Figure 4, Pg. 21) and composite site analysis (Figure 6, Pg. 45) were developed along with some preliminary design concepts to evaluate and convey some of the preliminary design ideas. The site analysis took into consideration existing manmade and natural features on-site including: vehicular and pedestrian circulation patterns, utility locations, access points (pedestrian and vehicular), wetlands, key vegetation locations, existing boat ramp and shoreline erosion areas.

Based on the site analysis, preliminary design concepts were developed for all three parcels (Figure 7, Pg. 63). Two concepts were developed for the North Parcel (Parcel A) and are shown in Figure 8, Pg. 65. The two concepts show variations in the development for the North Parcel. Concept 2 shows concentrated development in the north part of the parcel; whereas Concept 3 shows the development in the southern part of the North Parcel. These concepts, along with site analysis and other preliminary design ideas were presented at the November 2009 Public Meeting and Design Workshop.



Lake Lawson/Lake Smith Public Information Meeting/Design Workshop

Potential Improvements - All Parcels

November 4, 2009

Figure 7



PARCEL A - CONCEPT 2

NOT TO SCALE



PARCEL A - CONCEPT 3

NOT TO SCALE

LEGEND			
	OVERLOOK/FISHING STAND		KAYAK / CANOE LAUNCH
	GROUP USE / RR / STORAGE		SECONDARY PEDESTRIAN CIRCULATION
	SHORELINE EROSION RESTORATION		PRIMARY PEDESTRIAN / MAINTENANCE CIRCULATION
	BOAT LAUNCH		ADA PATH
			VEHICLE CIRCULATION

Lake Lawson/Lake Smith Public Information Meeting/Design Workshop

Potential Alternatives - Parcel A

November 4, 2009

Figure 8

November 2009 Public Meeting/Design Workshop

A public information meeting and design workshop was held November 4, 2009. The overall goals of the meeting and workshop were to introduce the project, show preliminary design concepts and gain crucial feedback from the public. A brief Power Point presentation was given explaining the background of the project, City's goals, brief description of the parcels' existing conditions, summary of the survey results, overview of the preliminary design concepts and what the next steps for the project would be. Presentation boards were displayed throughout the room for the people to view, and consultants were on hand for questions. The participants were asked to contribute by indicating what their top use priorities would be for each parcel on the Potential Improvements Board. The parcel priority ranking is listed below:

The top five priorities for North Parcel:

- Landscape Restoration / Enhancement Areas (9 votes)
- Walking Trails (7 votes)
- Landscape Preservation (7 votes)
- Accessible Trail / Overlook /Fishing (7 votes)
- Canoe / Kayak Launch (6 votes)

The top three priorities for South Parcel:

- Landscape Preservation (11 votes)
- Walking Trails (8 votes)
- Canoe / Kayak Launch (6 votes)

The top three priorities for West Parcel:

- Landscape Preservation (8 votes)
- Woodland Gardens / Walks (7 votes)
- Overlooks (6 votes)

Survey Summary

A survey was made available to the public in October of 2009 (prior to the public workshop) and distributed at the workshop to gain insight on how people were using the site and would like to use the site. The users were polled on their usage of the site, specific parts of the site used, how they access the site, what they use the site for, type of boat used (if any), if their boat required a trailer, trailer size and the boat launch location that they used. Based on the results, most people visit the site on a weekly or monthly basis. Most people typically visit the site in the morning or afternoons. Most people tend to visit the site during the weekend. However, a large percentage of people visit the site during the week as well. In terms of parts of the site that are used, the majority of the people use the trails and boat ramp. People typically access the site via car, truck, boat or by foot (very few via bicycle or motorcycle). Most users said they currently enjoy the site for boating, walking, nature observation and fishing. Motorized boats, kayaks and canoes are the types of boats used. Very few of the boaters who responded said that they use a trailer. Most of the respondents said that they hand launch their boat elsewhere. A few people said they use the actual boat launch. For specific surveys, see Appendix C.



Legend		North Parcel - Fishing Station		North Parcel - Neighborhood Node	
Shelters	Pedestrian Bridge	Motorized Boat Launch	Rowing Shell Storage	Playground	Outdoor Education
Paved Path	Picnic Tables	Designated Fishing Area	Restrooms	Auxiliary Parking (11)	
Reinforced Mulch Path	Key Views	Canoe/Kayak/Shell Launch	Car Parking (24)		
Mulch Path	Vegetation	Entry Feature	Boat Trailer Parking (18)		
Benches	Shoreline Restoration Area	Proposed Access / Existing Boat Launch			
Overlooks	Forest Cover	Cross Walks			
Floating Dock	Existing Invasive Vegetation				
	Bald Cypress Stands				

Figure 9

North Parcel

For North Parcel improvements see Figure 9, opposite.

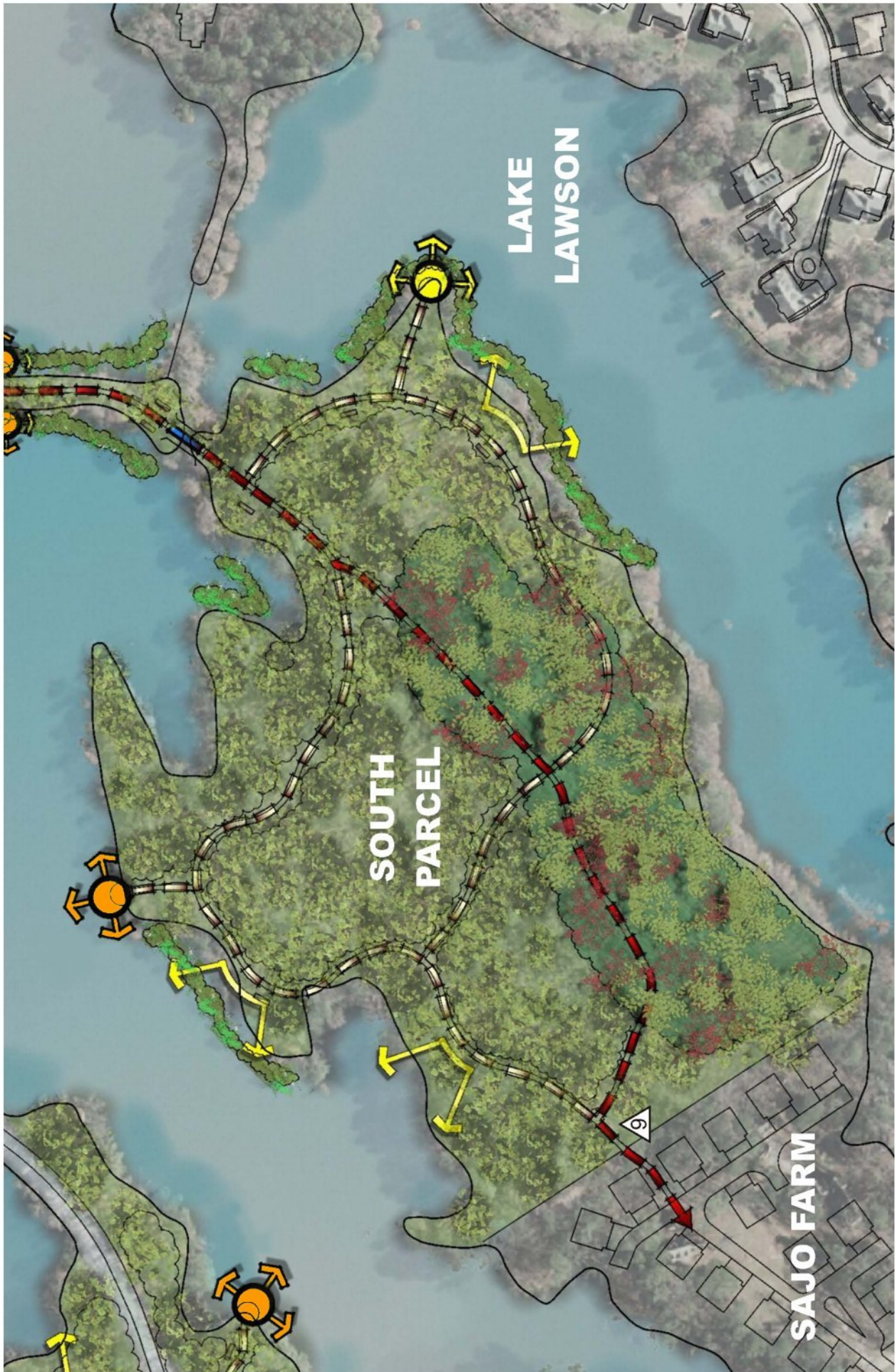
- Updated Fishing Station Entrance – The primary entrance is to be relocated approximately 60’ further south from the existing. The new centerline for the drive aisle is 100’ south of the edge of Northampton Boulevard, providing a safer entry point.
- Entry Gates – Parking areas are secured with gates to reinforce the dawn to dusk use restrictions.
- Perimeter Fencing – New black vinyl chain link fence delineates the boundaries with private properties (along Locust Crescent). Perimeter fencing along the water’s edge and between Norfolk and Virginia Beach property limits is not required. Standard wood park railing will be used to control vehicular access from parking areas and other potential entry points.
- Sign – Standard park signs are displayed at the primary entry off Shell Road and Northampton Boulevard. Enhanced plantings reinforce the point of entry into the natural area.
- Crosswalks – Crosswalks are proposed at the intersection of Bayside Road and Shell Road.
- Fishing Station Drive and Parking Lot – The proposed drive is a two way loop to the boat launch and other fishing station features, allowing vehicles to drop off/launch or pick up/trailer boats and easily park. The proposed parking lot provides 18 spaces for boat trailer parking and 24 spaces for cars. The base paving material is permeable to allow for improved storm water infiltration.
- Paths – Articulated pedestrian paths and walking trails open the site and connect key features on the site. ADA compliant paved paths in the fishing station allow for readily accessible connections to many of the critical program elements including: picnic areas, shelters, non-motorized boat launch, fishing pier, motorized boat launch, restrooms, playground, education center and an overlook. A reinforced mulch path (wood mulch surface course over 6” of crushed stone) provides a stable surface for maintenance and emergency vehicles to cross the site and access the causeway and south parcel. Mulch paths (without subsurface gravel reinforcement) provide accessible connections to more natural parts of the site and are intended primarily for pedestrian use.
- Restrooms – The proposed restroom facility is centrally located between the fishing station portion of the parcel and the less developed portions of the parcel. The restroom is located near a municipal sewer and water connection, although the Department may choose a self composting system over a traditional sewer connection. In either case the building would have one toilet each in the male and female water closets, a plumbing chase and a small maintenance facility is integrated into the restroom building. The maintenance facility is for storage of small tools (wheelbarrow, rakes, shovels, etc.) and supplies for the restrooms.
- Bike Racks – Bicycle racks are located near the restroom between the fishing station and the natural area.

- Motorized Boat Launch – The motorized boat launch is located in a new location south of the existing location. The proposed boat launch provides two lanes and is situated so that it does not conflict with other vehicular traffic. The updated and improved geometry eliminates the conflict of uses between motorized and non-motorized watercraft. A wooden pier is provided along the boat ramp and allows for boaters to easily guide, tie up or launch their boats. A conceptual rendering of this area is shown in Figure 18, Pg. 87.
- Shoreline Stabilization – Shoreline stabilization is proposed along critical areas of shoreline at the fishing station. The method of stabilization may include a combination of several of the following elements: vegetation, coir logs, boardwalks, sand fencing and rip rap. Refer to Development Considerations, Shoreline Stabilization Feasibility Study.
- Fishing Platform – A designated fishing platform is proposed at a key fishing location on the south shore of the parcel. The platform is located over one of the most degraded shoreline areas. Providing reinforced shoreline opportunities can help minimize compaction, erosion and further degradation elsewhere on site.
- Canoe/Kayak/Shell Launch – A long floating dock is centrally located off the parking and drop off area. This will provide people using kayaks and canoes a safe location to launch that does not conflict with the boat launch. The dock is sized to accommodate rowing shells and the gently sloping approach path and open staging area accommodate events and use by organized rowing clubs and schools.
- Rowing shell storage – Norfolk Academy has expressed an interest in using this site for their rowing program. A location adjacent to the parking lot includes a fenced in area with racks for shells. A hose bib is recommended near the staging or storage area so boats can be rinsed prior to storage. These improvements would be funded and constructed by others.
- Shelters – Several small shelters are located in the fishing station area, playground and outdoor education zone. For larger sanctioned group activities, portable tents may temporarily expand the functionality of the shelters.
- Picnic Area – Through the history of this site, the grassy area along the existing bulkhead has been utilized as a picnic area. The picnic area will be enhanced with tables on pads and additional trash receptacles.
- Auxiliary Parking – A second gated parking area for eleven cars and one bus is provided near the playground and education area. Permeable paving will be used to construct the bays.
- Neighborhood park node – In order to partially fill a gap in the walking service area and provide safe and easy access to basic recreational amenities for the Shell Road community, a small neighborhood park node is sited close to Shell Road and Ellis Avenue. With a playground, shelter and tables, the neighborhood node is in an area that has been impacted by past clearing and that needs additional clearing and management of invasive species.
- Outdoor Education – A designated outdoor educational area is provided to accommodate outdoor recreation programs. The education area includes a small shelter and an open area for classes and groups to gather. Larger tents can be brought into the area to expand the functionality on a per event basis. The group area is a short walk from the restroom and other fishing station features, yet is separate from

- the associated higher levels of traffic and general activity.
- Overlooks (Figure 10, below) – Overlooks are proposed at two key locations on the North Parcel. Each overlook location provides a destination point for people wanting to take in the key views of lakes and surrounding areas. The overlooks also provide key locations for fishing. The overlooks tie back into the grade and provide accessible approach to the land. Overlooks are not at the water’s level and do not provide direct access to the water, or serve as a place to moor boats. The railings on the overlooks are ADA compliant. Permits for overlooks would be required as part of a Regional Permit 19. Refer to pg 84 for more information about permits.
 - Floating docks – Two small floating docks are proposed at the middle of the low lying causeway, one on each side. These docks would allow users to tie up their canoes/kayaks and access the trail to either the north or south parcels without traversing and damaging steep slopes. The floating docks also serve as low viewing platforms, with a unique view corridor from one lobe of Lake Lawson to the other. The docks also expand bank fishing opportunities and have the same permit requirements as the overlooks.
 - Causeway – The dense vegetation and network of roots and cypress knees helps to stabilize the causeway. Stand of undesirable vegetation such as greenbrier should be managed over time to control further spread and to open up views between the tree trunks over the water.



Figure 10. Overlook Concept



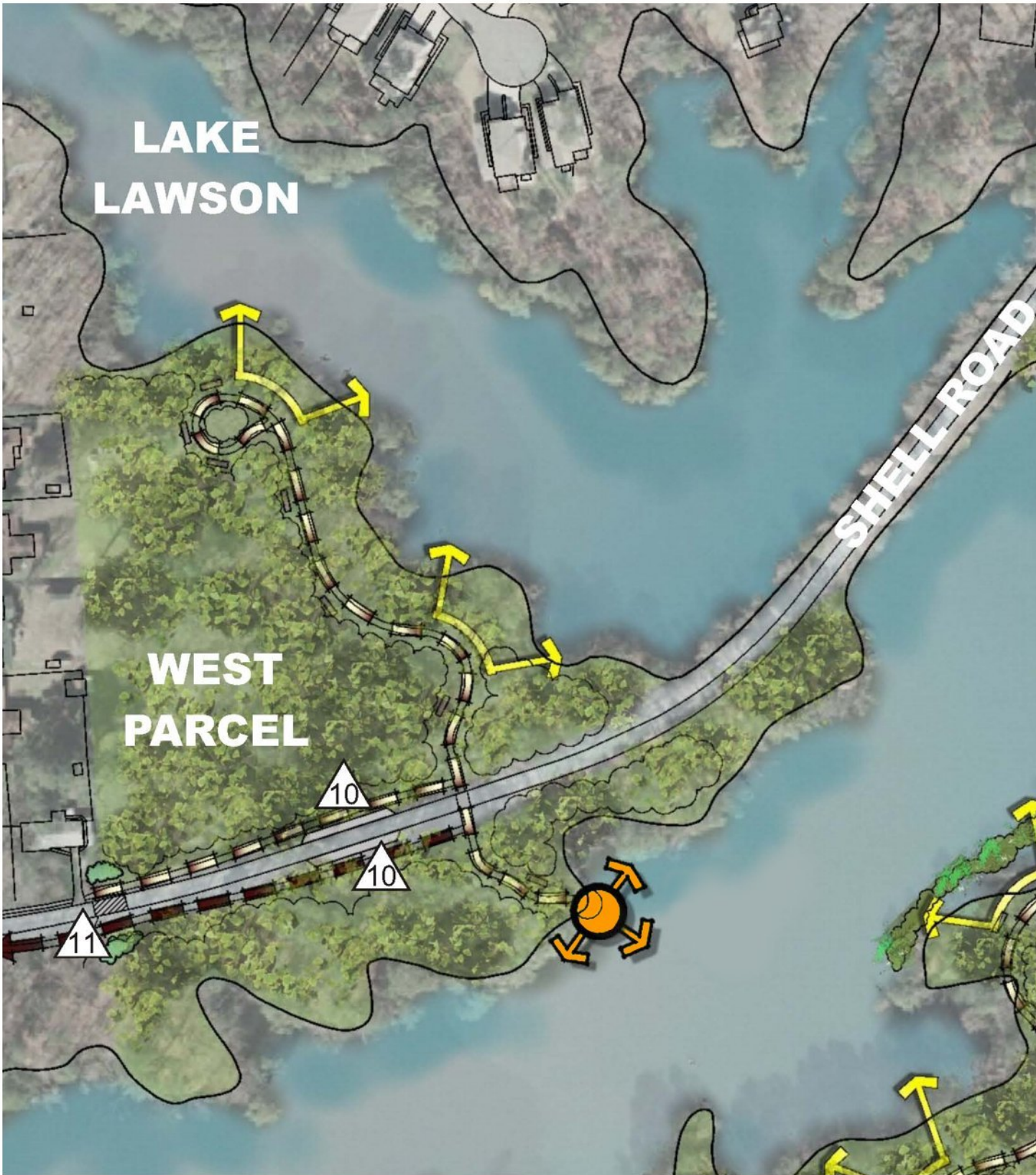
- | | | | |
|--|-----------------------|-------------------|------------------------------|
| | Legend | | South Parcel |
| | Shelters | | Controlled Access |
| | Paved Path | Vegetation | |
| | Reinforced Mulch Path | | Shoreline Restoration Area |
| | Mulch Path | | Forest Cover |
| | | | Existing Invasive Vegetation |
| | | | Bald Cypress Stands |
| | | | |
| | | | |
| | | | |

Figure 11

South Parcel

For South Parcel improvements see Figure 11, opposite.

- Bridge – A pedestrian bridge is required to provide visitors and maintenance personnel a continuous path connecting the North and South Parcels. For more details about the bridge refer to Bridge Feasibility Study (Development Considerations).
- Fence/Controlled Access Point – The Sajo Farms developer will be participating with the City to provide an upgraded fence package on the boundary with the natural area. The preferred fence is black metal picket style. Two gates allow separate use and key systems for pedestrians, (Sajo Farm residents) and municipal vehicles.
- Paths – Mulch paths meander through the South Parcel and create several loops for people to experience the tall interior canopy and variety in the understory. Benches line the paths and provide sitting areas at key viewing areas. The existing path provides a more direct connection to the causeway and North Parcel, while secondary loops focus on the shorelines and water views.
- Overlooks – One overlook is provided at a key location. On the east shore the overlook clings to bank to provide views through a living wall of bald cypress and the intriguing structure of their knees along the shoreline. This overlook serves an ADA accessible viewing platform.
- Floating Dock - On the northwest shore a floating dock serves as a boat landing, overlook and fishing platform.



Legend

- Shelters
- Paved Path
- Reinforced Mulch Path
- Mulch Path
- Benches
- Floating Dock

- Pedestrian Bridge
- Picnic Tables
- Key Views
- Vegetation**
- Shoreline Restoration Area
- Forest Cover
- Existing Invasive Vegetation
- Bald Cypress Stands

West Parcel

- Parallel Parking (10)
- Entry Feature

Figure 12

West Parcel – Long Range Improvements

For West Parcel improvements see Figure 12, opposite.

- Parallel parking – Ten parallel parking spaces are proposed along Shell Road for access to the West Parcel.
- Sign – Standard park sign is displayed at the west property boundary. Enhanced plantings reinforce the point of entry into the natural area. The sign should be installed as part of the first phase of improvements to reinforce the breadth of the natural area and to signal to drivers that they are driving through a scenic and recreation area.
- Paths – Mulch paths focus primarily along the lakefront on both sides of Shell Road. Seating areas are provided along the trails for people to take in the exquisite views.
- Floating Dock – On the south shore a floating dock at water level serves as a boat landing, viewing area and fishing platform.

Interpretive Themes

Interpretive features can range from exhibits and displays to integrated design features, colors, patterns or artwork. Features that increase the user's awareness and understanding can heighten a feeling of connection to and appreciation for the site and surrounding area. Themes that would be appropriate on this site include the following.

- Restoration and environmental design features, such as shoreline stabilization and stormwater drainage
- Water quality improvement strategies
- Plant identification and ethnobotany
- Wildlife
- History of the surrounding area, the causeways and reservoir system.

Shell Road Causeway

The 2008 Outdoors Plan proposes a shared use path along Shell Road from Diamond Springs Road to Northampton Boulevard. With narrow roadway lanes and limited shoulder space though, improving pedestrian and bicycle connectivity over the Shell Road causeway presents a significant challenge. Several strategies have been explored as part of the master plan process. Because many of these affect the roadway network and street classification and would require further public involvement and traffic analysis, the following options are presented at a conceptual level and may or may not be considered further by the City as a subsequent study or improvement phase.

Boardwalk Option (Figure 13, Pg. 77). This option includes a boardwalk over the lake, paralleling the causeway. This strategy has been employed recently at Lake Holly along Pacific Avenue, and Stumpy Lake along Indian River and Elbow Road. This alternative provides a completely separate shared use path and does not require changes to the roadway.

Cul-de-sac Option (Figure 14, Pg. 77). This option would introduce cul-de-sacs at both ends of the causeway, restricting all traffic except emergency vehicles. In this case the roadway would be given over to bicycle and pedestrian traffic, and a small secured parking area could be provided for the west parcel.

Roadway Reconstruction (Figure 15, Pg. 77). This option illustrates the portion of the road that would have to be reconfigured in order to provide a shared use pathway and two vehicular lanes. The ultimate solution could include substantial retaining structures, guardrails or other safety barriers which could be out of context with the natural setting. Traffic calming strategies such as traffic speed reduction, irregular paving surfaces and other non-standard approaches would require extensive involvement from Public Works, Traffic Engineering and the public.

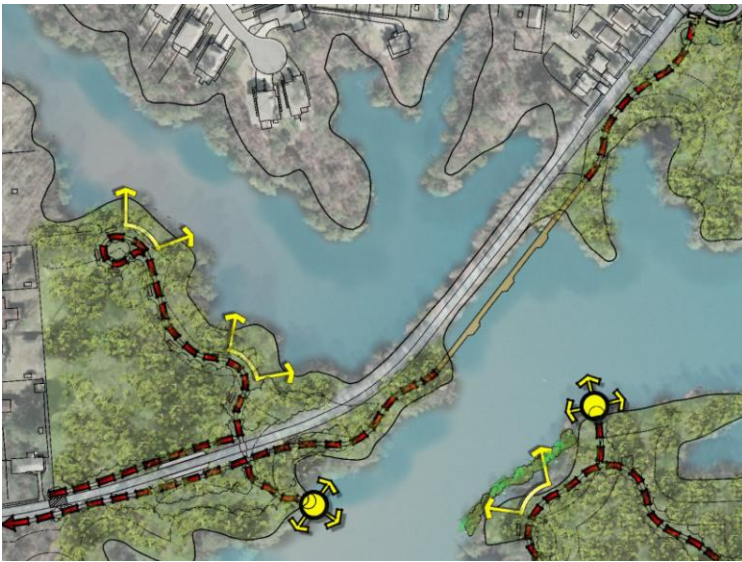


Figure 13. Boardwalk Option

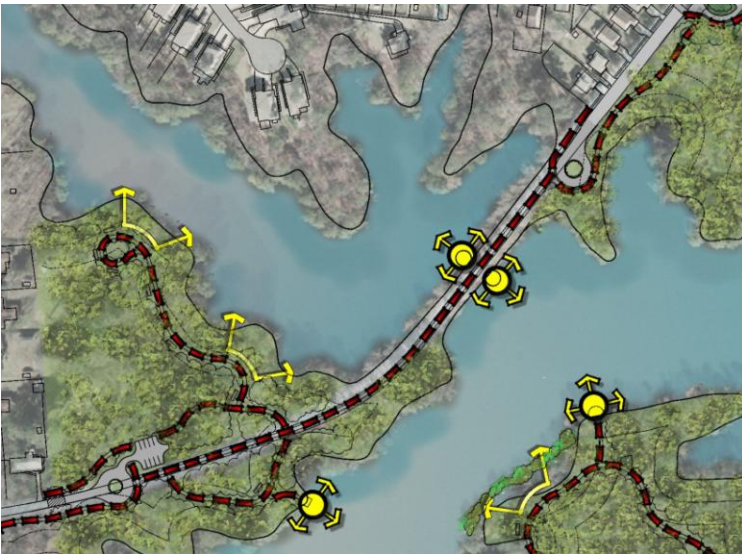


Figure 14. Cul-de-sac Option

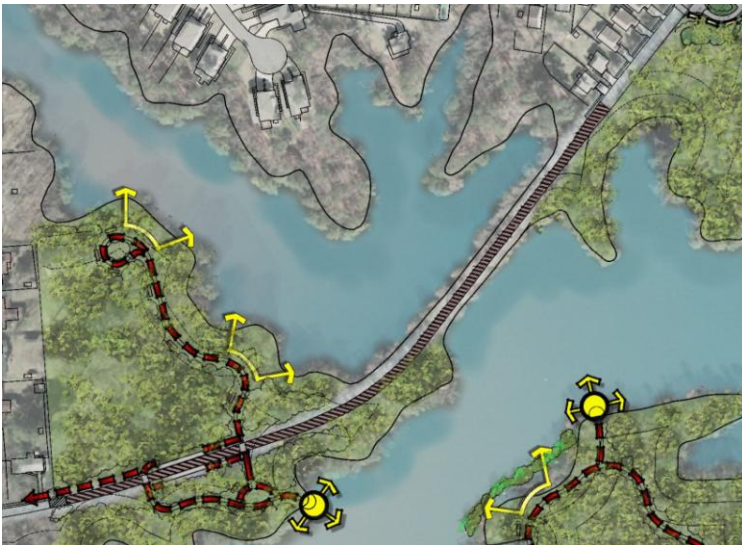


Figure 15. Roadway Reconstruction Option

February 2010 Public Meeting Summary

A second public meeting was held February 24, 2010. The purpose of the meeting was to share with the public the status of Master Plan and to listen to their responses to the design. A brief Power Point presentation was given reviewing the City's goals, the public's top priorities for each parcel and the current Master Plan status. A cul-de-sac alternative to through traffic on Shell Road was also presented as part of the presentation. Presentation boards were displayed throughout the room and consultants were on hand to answer questions. The presentation boards included: the Preferred Master Plan, Cul-de-sac Alternative Plan, Boat Ramp, Shoreline Restoration and Fishing Pier Concept, Overlook Concept and a Detailed Plan of the North Parcel. The public was asked to review the Master Plan and share their feedback with the consultants.

Survey Summary

A survey was handed out at the second public meeting. The public was asked several questions concerning the status of the Master Plan. Questions included: whether their concerns have been addressed, how they felt about the option for closing Shell Road, provide any information that would help the City in implementing this project, whether they felt the information was clearly presented and how they heard about the meeting. Almost half of the respondents said that they supported the closing of Shell Road option. A third of the respondents were against closing Shell Road, and several people were undecided. Two other issues that were mentioned in the general responses included: the height of the pedestrian bridge and the possibility of lowering the speed on Shell Road. For specific surveys, see Appendix F.

Reactions to Closing Shell Road – Overall Statistics

For Closing Shell Road: 13

Against It: 9

Undecided/No opinion: 6

See Figure 16, Pg. 79 for Master Plan estimate.

Lake Lawson and Lake Smith Natural Area Master Plan

Figure 16. Master Plan Construction Cost Estimate

Phase I - North Parcel	Quantity	Unit	Unit Price	Total
Site				
Clearing & Grubbing	2.50	ACRE	\$4,000.00	\$10,000.00
Bank Stabilization	1.00	LS	\$325,000.00	\$325,000.00
Shoreline Stabilization & Restoration	1.00	LS	\$78,000.00	\$78,000.00
Causeway Cleanup and Reinforcement	1.00	LS	\$36,000.00	\$36,000.00
Mobilization	1.00	LS	\$12,000.00	\$12,000.00
Subtotal				\$461,000.00
Stormwater Management				
Drop inlets/drain boxes	3.00	EA	\$2,000.00	\$6,000.00
12" drain pipe PVC	240.00	LF	\$14.55	\$3,492.00
6" drain pipe PVC	240.00	LF	\$9.65	\$2,316.00
Drain Outlet to lake	180.00	LF	\$14.55	\$2,619.00
Bedding #57	10.00	TON	\$23.50	\$235.00
Sand filter	10.00	TON	\$27.50	\$275.00
Subtotal				\$14,937.00
Access Drive				
2" asphalt SM-9.52	402.00	TON	\$88.08	\$35,408.16
6" aggregate base No. 21A stone	1000.00	TON	\$23.90	\$23,900.00
E&S temporary silt fence	1300.00	LF	\$2.03	\$2,639.00
Subtotal				\$61,947.16
Parking Area				
Geogrid paver cells & #27 aggregate to fill cells	18030.00	SF	\$8.00	\$144,240.00
Vehicular Gates	3.00	EA	\$5,000.00	\$15,000.00
Subtotal				\$159,240.00
Existing Boat Ramp Access				
Grading	1.00	LS	\$5,000.00	\$5,000.00
Demo existing asphalt	960.00	SY	\$4.00	\$3,840.00
2" asphalt SM-9.52	69.00	TON	\$88.08	\$6,077.52
6" aggregate base No. 21A stone	204.00	TON	\$23.90	\$4,875.60
Vehicular Gate	1.00	EA	\$5,000.00	\$5,000.00
Subtotal				\$24,793.12
Signs				
Entry Sign	1.00	EA	\$2,410.00	\$2,410.00
Interpretive and Regulatory Signs	1.00	LS	\$1,500.00	\$1,500.00
Subtotal				\$3,910.00
Restroom				
Prefab Restroom (Flush Facility)	1.00	LS	\$121,800.00	\$121,800.00
Water Service	1.00	LS	\$3,600.00	\$3,600.00
Sanitary Sewer	1.00	LS	\$3,200.00	\$3,200.00
Electrical Service	1.00	LS	\$2,850.00	\$2,850.00
Subtotal				\$131,450.00
Vegetation Areas				
Invasive Species Eradication & Revegetation	1.00	LS	\$15,000.00	\$15,000.00
Tree Planting in Parking Area	30.00	EA	\$500.00	\$15,000.00
Shrub Planting in Parking Area	262.00	EA	\$40.00	\$10,480.00
Buffer Planting	1.00	LS	\$25,000.00	\$25,000.00
Tree Removal & Selective Pruning	1.00	LS	\$30,000.00	\$30,000.00
Entry Enhancement Plantings	2875.00	SF	\$7.00	\$20,125.00
Subtotal				\$115,605.00
Site Amenities				
20x20 Shelter	5.00	EA	\$25,000.00	\$125,000.00
Outdoor Education Center	1.00	LS	\$15,000.00	\$15,000.00
Picnic Tables	22.00	EA	\$1,000.00	\$22,000.00
Playground	1.00	LS	\$50,000.00	\$50,000.00
Playground Flooring	6000.00	SF	\$3.00	\$18,000.00
Public Art (1% of construction costs)	1.00	LS	\$18,400.00	\$18,400.00

Lake Lawson and Lake Smith Natural Area Master Plan

Phase I - North Parcel , Continued

	Quantity	Unit	Unit Price	Total
Site Amenities, Continued				
Benches	6.00	EA	\$500.00	\$3,000.00
Trash Receptacles	8.00	EA	\$400.00	\$3,200.00
Bike Racks	2.00	EA	\$1,600.00	\$3,200.00
Rowing Shell Storage - Fence Only	1.00	EA	\$20,000.00	\$20,000.00
Vehicular Bridge (8' w, 4' clearance, 70' span)	1.00	EA	\$132,406.00	\$132,406.00
Floating Dock	2.00	EA	\$13,275.00	\$26,550.00
Launching Dock	1.00	EA	\$38,300.00	\$38,300.00
Black Vinyl Chain Link Fence	1225.00	LF	\$30.00	\$36,750.00
Timber Rail Fence	1015.00	LF	\$18.00	\$18,270.00
Overlook Deck	2.00	EA	\$16,129.00	\$32,258.00
20' x 40' Boat Ramp	1.00	EA	\$75,955.00	\$75,955.00
8' x 40' Boat Pier	1.00	EA	\$10,035.00	\$10,035.00
Fishing Pier	1.00	EA	\$28,800.00	\$28,800.00
Subtotal				\$677,124.00
Paths				
Mulch Path (8' Wide) - 4" Wood Mulch over 2" Sand	1460.00	LF	\$4.00	\$5,840.00
Reinforced Mulch Path (8' Wide) -4" Wood Mulch over 6" Crushed Stone	1440.00	LF	\$7.75	\$11,160.00
Paved Path (3500 LF @ 8 Wide Typ.) - Pavers	28000.00	SF	\$12.00	\$336,000.00
Concrete Sidewalk Connection (302 LF @ 4' Wide)	175.00	SY	\$40.00	\$7,000.00
Crosswalk Striping	530.00	SF	\$0.75	\$397.50
Subtotal				\$360,397.50
Subtotal North Parcel				\$2,010,403.78
15% Contingency				\$301,560.57
Total				\$2,311,964.35

Phase I - South Parcel

	Quantity	Unit	Unit Price	Total
Site				
Clearing & Grubbing	1.60	ACRE	\$4,000.00	\$6,400.00
Invasive Species Eradication & Revegetation	1.00	LS	\$10,000.00	\$10,000.00
Subtotal				\$16,400.00
Signs				
Interpretive and Regulatory Signs	1.00	LS	\$2,500.00	\$2,500.00
Subtotal				\$2,500.00
Site Amenities				
Trash Receptacles	1.00	EA	\$400.00	\$400.00
Black Vinyl Fence	676.00	LF	\$30.00	\$20,280.00
Overlook Deck	1.00	EA	\$16,129.00	\$16,129.00
Low Overlook Deck/Floating Dock	1.00	EA	\$10,843.00	\$10,843.00
Benches	5.00	EA	\$500.00	\$2,500.00
Trash Receptacles	1.00	EA	\$400.00	\$400.00
Pedestrian Gate (Sajo Farm)	1.00	EA	\$2,500.00	\$2,500.00
Vehicular Gate (Sajo Farm)	1.00	EA	\$5,000.00	\$5,000.00
Subtotal				\$58,052.00
Paths				
Mulch Path (8' Wide) - 4" Wood Mulch over 2" Sand	3060.00	LF	\$4.00	\$12,240.00
Reinforced Mulch Path (8' Wide) -4" Wood Mulch over 6" Crushed Stone	1485.00	LF	\$7.75	\$11,508.75
Subtotal				\$23,748.75
Subtotal South Parcel				\$100,700.75
15% Contingency				\$15,105.11
Total				\$115,805.86

Lake Lawson and Lake Smith Natural Area Master Plan

Phase I - West Parcel		Quantity	Unit	Unit Price	Total
Signs					
	Entry Sign	1.00	EA	\$2,410.00	\$2,410.00
Subtotal					\$2,410.00
Vegetation Areas					
	Entry Enhancement Plantings	1300.00	SF	\$7.00	\$9,100.00
Subtotal					\$9,100.00
					Subtotal South Parcel
					15% Contingency
					Total
					Phase I Total

Phase II - West Parcel		Quantity	Unit	Unit Price	Total
Site					
	Clearing & Grubbing	0.80	ACRE	\$4,000.00	\$3,200.00
Subtotal					\$3,200.00
Parking					
	2" asphalt SM-9.52	59.00	TON	\$88.08	\$5,196.72
	6" aggregate base No. 21A stone	174.00	TON	\$23.90	\$4,158.60
	Asphalt Pavement	0.00	SF	\$1.40	\$0.00
Subtotal					\$9,355.32
Signs					
	Sign Package	1.00	EA	\$1,250.00	\$1,250.00
Subtotal					\$1,250.00
Site Amenities					
	Benches	7.00	EA	\$500.00	\$3,500.00
	Trash Receptacles	2.00	EA	\$400.00	\$800.00
	Black Vinyl Fence	620.00	LF	\$30.00	\$18,600.00
	Low Overlook/Floating Dock	1.00	EA	\$13,275.00	\$13,275.00
Subtotal					\$36,175.00
Paths					
	Mulch Path (2025 LF, 8' Wide) - 4" Wood Chips	1000.00	LF	\$4.00	\$4,000.00
	Concrete Sidewalk Connection (1150 LF @ 5' Wide)	640.00	SY	\$40.00	\$25,600.00
	Crosswalk Striping	265.00	SF	\$0.75	\$198.75
Subtotal					\$29,798.75
					Subtotal West Parcel
					15% Contingency
					Phase II Total

Future Phase - Shell Road Causeway		Quantity	Unit	Unit Price	Total
Boardwalk					
	Boardwalk	7090.00	SF	\$50.00	\$354,500.00
	8' Paver Path East End	3680.00	SF	12.00	\$44,160.00
	8' Paver Path West End	7664.00	SF	12.00	\$91,968.00
Subtotal					\$490,628.00
					Subtotal Boardwalk
					15% Contingency
					Total
Add Alternates Shell Road					
Cul-de-sac Option					TBD*
Traffic Calming Option					TBD*

*Roadway reconstruction and traffic calming cannot be estimated at this point due to the survey, public and traffic engineering that needs to be done.

DEVELOPMENT CONSIDERATIONS

Permitting

The following is a discussion of permitting alternatives for prospective additions to the Project Area. Proposed additions include a boat ramp, pier structures for scenic overlooks, and bank stabilization. It is important to note that this permitting information is current as of April, 2010. Depending on the timeline of project phases, the permitting requirements may change. The following is a brief discussion regarding the types of general permits available for the projects that have been considered to date.

Nationwide Permits

Nationwide permits are available for the following activities:

Nationwide Permit 42 - Recreational Facilities (including hiking trails and nature centers)

Conditions:

- May cause no more than 0.5 acre of wetland and 300 lf of stream impacts.

Currently the proposed plan (including trails and outdoor education center) meets the conditions for the Nationwide Permit 42.

Nationwide Permit 36 - Boat Ramps

Conditions:

- Discharge into Waters does not exceed 50 cubic yards.
- Ramp is no wider than 20 feet.
- No fill placed in special aquatic sites, including wetlands.

Currently the proposed plan (including boat ramp) meets the conditions for the Nationwide Permit 36.

Nationwide Permit 13 – Bank Stabilization

Conditions:

- No more than 500 feet of bank stabilization is authorized
- No greater than an average of one cubic yard of fill per running foot is allowable under the ordinary high water mark.
- No dredge or fill in special aquatic sites

Currently the proposed plan meets the conditions for the Nationwide Permit 13. However, as the project progresses, the 500 feet of stabilization will most likely be exceeded.

There are limitations to using multiple nationwide permits for a single project. Multiple Nationwide permits are not cumulative and can only be used if the total impacts do not exceed the maximum impacts allowable under the most lenient permit. Therefore if both nationwide permits 36 and 42 are used, the total impacts to wetlands would not be able to exceed 0.5 acres

or 300 lf of stream.

When an applicant exceeds the impacts associated with the most lenient nationwide permit or cannot meet their requirements then it's necessary to apply for a Virginia Water Protection (VWP) Permit from the Department of Environmental Quality (DEQ) and a State Program General Permit (SPGP) from the Army Corps of Engineers which generally can be issued within 2-3 months. This VWP/SPGP option is still a general permit process which is relatively uncomplicated and expedient.

Regional Permit 19 – Boat Ramp Pier/Overlooks/Floating Docks

Regional Permit 19 applies to open-pile piers at community, commercial or government facilities for recreational or commercial use. Permits are required for structures that reach or touch the mean high water line. The primary approval agency for the regional permit is the United States Army Corps of Engineers. However, entities seeking approval must also obtain the appropriate local and state approvals prior to commencement of work. These agencies include: the Virginia Marine Resource Commission (VMRC) and the local Wetlands Board. It is also important to note that any submittals that meet the requirements of the Regional Permit 19 also meet the requirements of the Department of Environmental Quality's (DEQ) Virginia Water Protection Permit Regulation.

Bridge

No specific permitting is required for the bridge construction. However, a notification must be submitted with all other joint permit application information. This notification will state that no wetlands will be disturbed during the construction process of the bridge.

Virginia Stormwater Management Program Permit (VSMP)/ Storm Water Pollution Prevention Plan (SWPPP)

When the contractors apply for their General construction permit, they are also required to apply for the Virginia Stormwater Management Program Permit (VSMP). Because the project involves soil disturbances that are greater than 2500 square feet, the VSMP will be required. As part of the VSMP, the contractor is required to develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP outlines the steps and techniques the operator will take to comply with the terms and conditions of the permit. This includes water quality and quantity requirements that are consistent with the VSMP permit regulations, to reduce pollutants in the stormwater runoff from the construction site.

Joint Permit Application

For any impact to natural resources, a Joint Permit Application (JPA) is required. The JPA is completed prior to the application for any specific permits. The JPA is the vessel that is used to determine which specific permits will be required for the project.

Feasibility Summaries

The Parks and Recreation Department had identified four key priority areas to develop to a schematic level in order to identify design constraints, permit requirements and preliminary budget projections. Each of these priority areas were deemed to be feasible, with varying permit and design considerations as illustrated and outlined in the following figures and summaries.

Fishing Station Parking

The primary parking lot is shown in Figure 17, Pg. 85, and includes a new access point further from the intersection of Shell Road and Northampton Boulevard. The new access point has been reviewed and approved by the Virginia Beach Traffic Engineering Division. The proposed alignment does not impact wetlands and no special permits are required. The layout is held back from the shoreline as an example to the community of buffers and setbacks, although there is no requirement such as the Chesapeake Bay Buffer Act which applies to the reservoir system. Site soils as documented should be conducive to innovative storm water measures including infiltration, bioswales and permeable pavements, and permeable parking bays are recommended. As the base mapping for the master plan study was pieced together from various graphic sources, it will be important to prepare a current topographic and cultural survey with tree locations, contours and property information prior to finalizing the parking lot design and budget. The ultimate parking lot design may need to be refined and parking counts may change based on the location of significant trees.

The estimated budget for the parking lot development is **\$222,000.00**



Lake Lawson/Lake Smith Master Plan Presentation
 North Parcel - Fishing Station
 August 5, 2010



Figure 17

Boat Ramp

The proposed boat ramp is located on the southern side of the fishing station site as shown below. The location was selected because of the current slope from the waterline to the top of the bank, the maneuverability available at the location and the lack of disturbance of existing vegetation. The current slope is approximately 15 %. The proposed slope of the boat ramp would be between 12% and 14% which is in the range recommended for automobile trailer use by the ASCE Planning and Design Guidelines for Small Craft Harbors. The depth of the water at the boat ramp is 3 to 4 feet which is adequate for typical fresh water fishing boats. The ramp will be designed to be twenty feet wide and for use by recreational boats as defined in the City of Norfolk Ordinance.

A small pier is proposed adjacent to the ramp to provide for docking of the boats while the trailers are parked. Separate steps/path will be provided for access to the pier. (See Figure 18, Pg. 87)

The estimated budget for the boat ramp and pier is **\$85,990.00**.



Boat Ramp, Shoreline Restoration & Fishing Pier Concept
Not to Scale

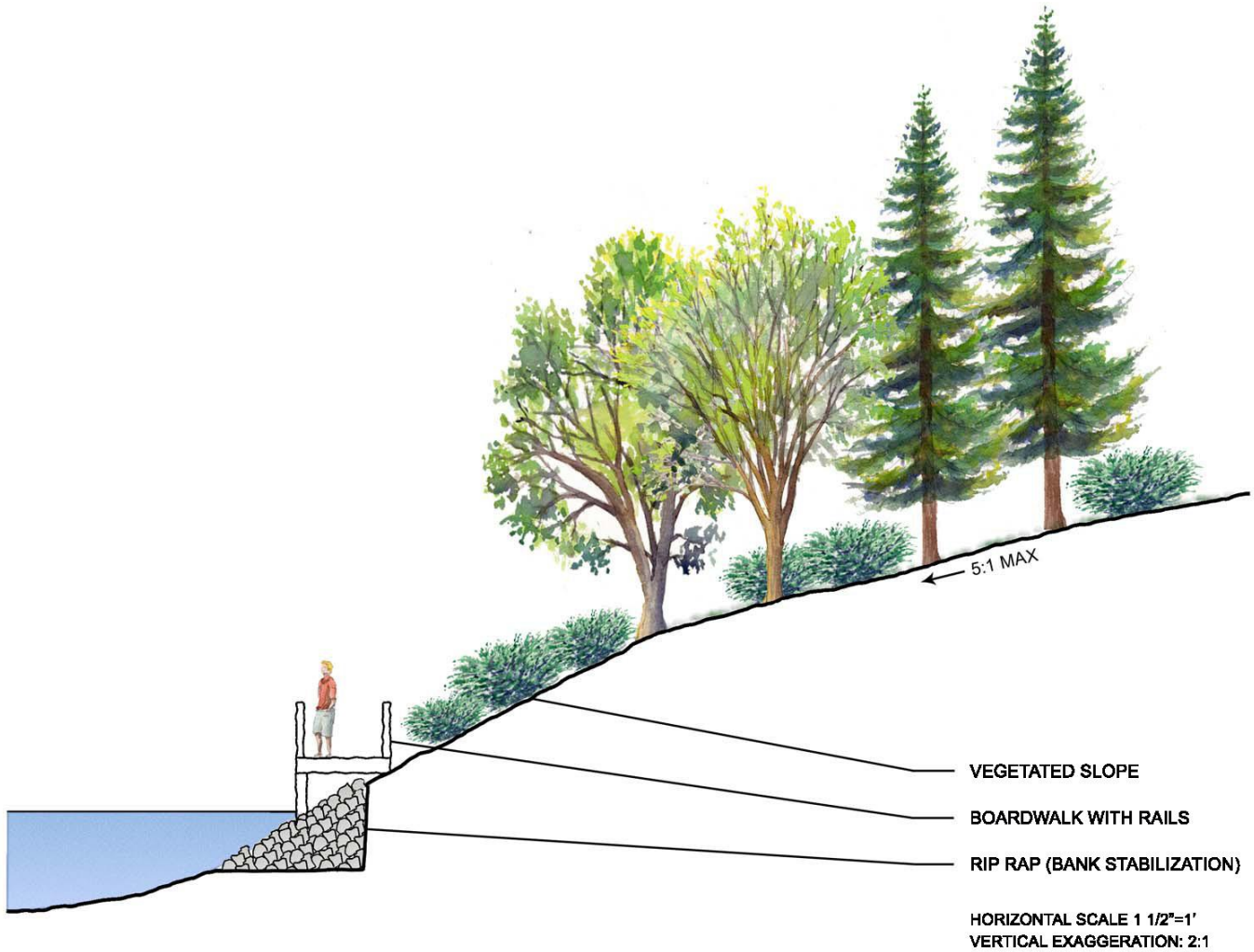


Figure 19. Shoreline Stabilization (Boardwalk Option)

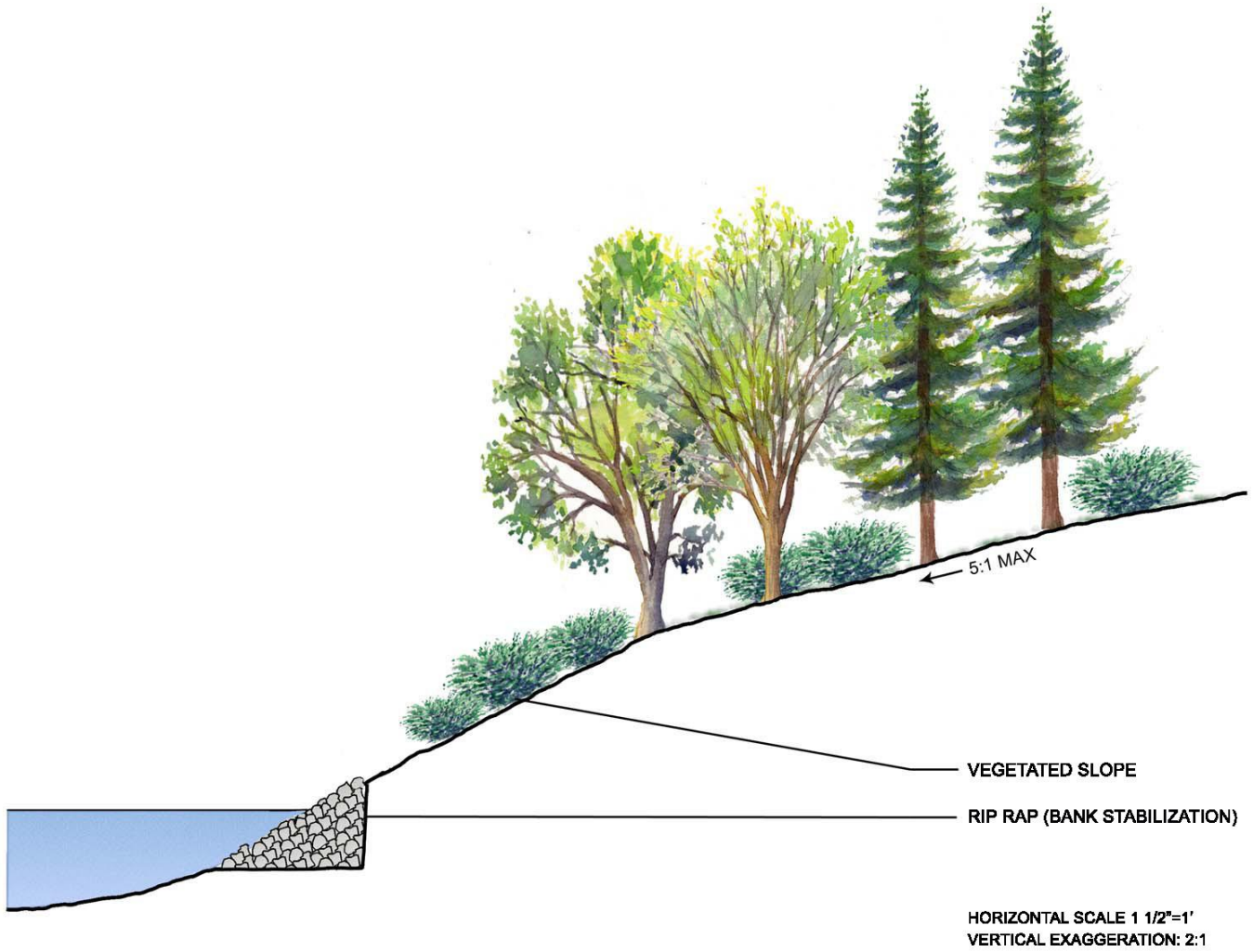


Figure 20. Shoreline Stabilization (Rip-rap Option)

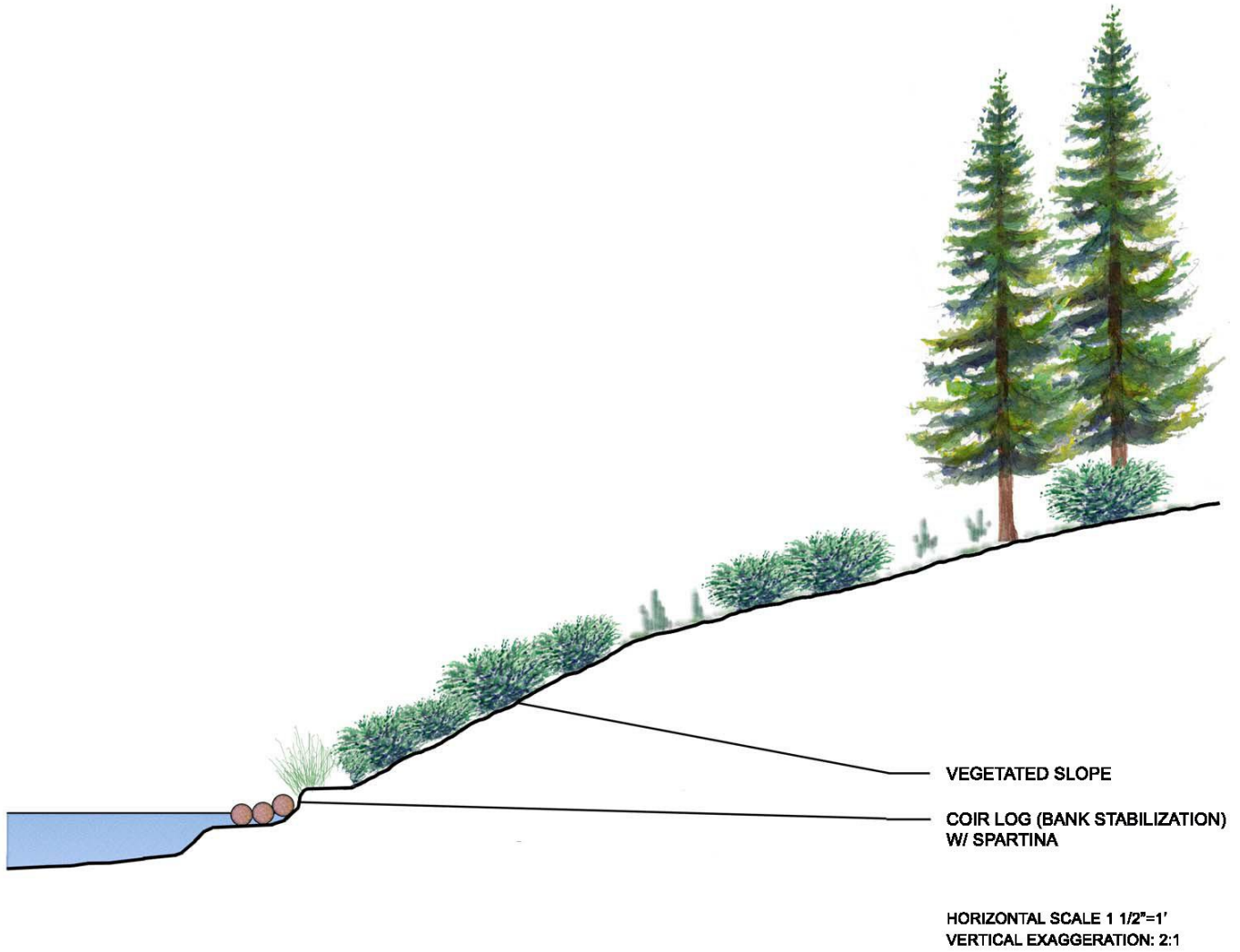


Figure 21. Shoreline Stabilization (Coir Log Option)

Shoreline Stabilization

Bank Stabilization

Bank stabilization refers to treatment for areas in the North Parcel that are immediately adjacent to the water. Our recommendations are for areas that will receive moderate to high pedestrian traffic. Banks with low pedestrian usage that are currently stable should remain stable as long as the vegetation in these areas remains undisturbed. There are three options for bank stabilization a) use a boardwalk or similar stable access for paths along the bank in areas where usage is encouraged and concentrated (Figure 19, Pg. 88) b) use riprap in areas that will be moderately used (see Figure 20, Pg. 89). Riprap can also be used in areas where it is desirable to discourage or reduce pedestrian traffic on the banks. c) Use coir logs or other organic stabilization with wetland plantings in areas that will receive little traffic (Figure 21, Pg. 90).

Slope stabilization

Slope stabilization refers to treatment of the areas "uphill" of the banks. Modifying areas that are currently vegetated and stable is not recommended. In the areas that are currently experiencing significant and severe erosion, flattening the slopes where there are steep slopes is the recommended solution. The slopes should then be planted with vegetation. Topsoil and matting will likely be required initially before the vegetation becomes established. Low bushy vegetation will discourage pedestrians from walking indiscriminately through the area. This could be accomplished by planting very dense vegetation or by using "hostile" vegetation that is thorny, brambly, has sharp edges or is otherwise unpleasant to walk through. Natural vegetation that does not require fertilization, pesticides or long term irrigation should be used. Stable pathways through the area and to the water's edge will need to be provided to direct people to the water's edge while remaining out of these areas. Trees could be used further back from the water, where the height and density of the trees does not impede the view. Trees will provide shade on hot days, will reduce the heat island effect of the added pavement and will have other natural benefits.

As previously mentioned, these lakes are impaired for dissolved oxygen. Dissolved oxygen is important to maintain a strong fish population and is also important for Norfolk's use of the lakes for drinking water. Keeping the banks stable and providing as natural an environment as possible will help achieve this goal. There is a concern that use of grasses will encourage people to walk along the banks wherever they choose, resulting in continued erosion of the site.

The estimated budget for the shoreline stabilization is **\$403,000.00**



Photo 41. Sample Bridge Photo - Weathering Steel Superstructure & Wood Deck

Bridge Between North and South Parcel

The causeway from the North Parcel to the South Parcel formerly served as the Dam separating Lake Smith from Lake Lawson. A twelve foot section of the causeway has been removed to allow boat traffic to pass between Lake Lawson and Lake Smith and to allow for the free flow of water between the two reservoirs. A narrow prefabricated bridge is proposed over the causeway opening to allow for pedestrian and light maintenance vehicles to move between the North Parcel and South Parcel. The proposed bridge length is 70'. One of the reasons this length was chosen is because 70' is the longest span that can be trucked in as just one span. Another reason this length was chosen is because there is a drastic drop in grade at the water's edge that will not be able to be re-graded without impacting the lake. The bridge approaches need to meet ADA requirements and therefore structural fill may be required. The maximum slope on the approaches is five percent (per ADA requirements). The depth of the structure would be 18 inches.

The travel width of the bridge would be no wider than eight feet and with a structural capability to handle light all terrain vehicles with light trailers. Pickup truck sized vehicles and larger would have to access parcel B through the entrance at Sajo Farms.

The bridge clearance must be 48 inches at normal water level to allow for recreational boats and City of Norfolk maintenance boat to pass. During periods of higher than normal water, boat traffic under the bridge would be limited. This height will provide most boats that are allowed to use this lake with adequate clearance. It also may be the most clearance that can be provided without filling or re-grading the causeway such that the lakes are impacted. Some additional height may be provided by building up the abutments and reduce re-grading requirements, but accurate survey information will be required before that determination can be made. The actual bridge clearance is something that will be finalized during design.

Increasing the bridge clearance will have aesthetic consequences as well. A higher bridge will have more impact to the causeway. Its increased height and ramp length will be more visible to adjacent homeowners and to park users. A four foot bridge clearance will have less impact to existing vegetation, require less earthwork and as a result will fit in better with the natural setting of the park. See Photo 40, Pg. 92.

A permit will not be required for bridge construction. However, a written notification stating that no wetlands will be disturbed during the construction of the bridge must be included with all permitting applications for this project.

The estimated budget for the bridge is **\$132,406.00**

RECOMMENDATIONS

Based upon the current availability of funding, the degradation of the fishing station, increased awareness and use of the site and the inaccessibility of the South Parcel, the Phase One improvements should be funded for further design and construction as soon as possible. The overall estimate for the Phase One improvements is **\$2,441,000**.

Phase I improvements for the fishing station area include entry signage, crosswalks, updated access point from Shell Road, improved circulation route, expanded parking, stormwater management, shoreline restoration, relocated boat ramp and related support facilities at the existing fishing station. The support facilities include a floating dock, rowing shell storage, small shelters and restrooms. Recommended Phase I improvements for other portions of the North Parcel include a neighborhood/educational node near the Shell Road communities (small parking area, playground, and small shelters), improved trails and overlook platforms at key locations.

On the South Parcel, a bridge over the gap in the causeway is a critical element. The primary focus for this sector of the site is on very low impact improvements such as landscape preservation and restoration. The Phase I improvements for the South Parcel include walking trails, one overlook platform and one floating dock.

The only immediate improvements to the West Parcel would be an entry sign and plantings at the west boundary of the property. In tandem with a similar feature at the north end near Northampton Boulevard, these features would instill a sense of arrival and indicator to drivers that they are entering a unique open space zone within the City. In order to provide safe pedestrian and bicycle passage between the North and West Parcels the boardwalk option is recommended as part of Phase One.

Longer range considerations for future phases and related initiatives include limited development of the West Parcel and extension of a shared use path along Shell Road outside the boundaries of the natural area.

REFERENCES

Castleberry, Amy Hayes, *Then and Now, Virginia Beach*, 2010. Arcadia Publishing, Charleston, SC.

Kellam, Sadie Scott; Kellam, V. Hope, 1931. *Old Houses in Princess Anne Virginia*. Print Press, Inc., Portsmouth, VA.

Maryann Mijares Engineering P.C. *Lake Smith Fishing Facility Renovations*. Virginia Beach, VA: Maryann Mijares Engineering P.C.; 1996. 40 p.

Schafale, Michael P., Weakley, Alan S. *The Classification of Natural Communities of North America, Third Approximation*. Raleigh, NC: North Carolina Heritage Program, a Division of Parks and Recreation, Department of Environment and Natural Resources; 1990. 326 p.

Virginia Beach Parks and Recreation Department. *Virginia Beach Outdoors Plan, The City's Guidance Document for Open Space Acquisition and Outdoor Recreation Planning, A Component of the Virginia Beach Parks and Recreation Strategic Plan*. Virginia Beach, VA: Parks and Recreation Department; 2008. 107 p.

Virginia Beach Parks and Recreation Department. *Design Standards Manual, City of Virginia Beach, Parks and Recreation Department*. Virginia Beach, VA: Parks and Recreation Department; 2007. 104 p.

Map of Lake Lawson/Lake Smith context, retrieved on April 13, 2010 from website:

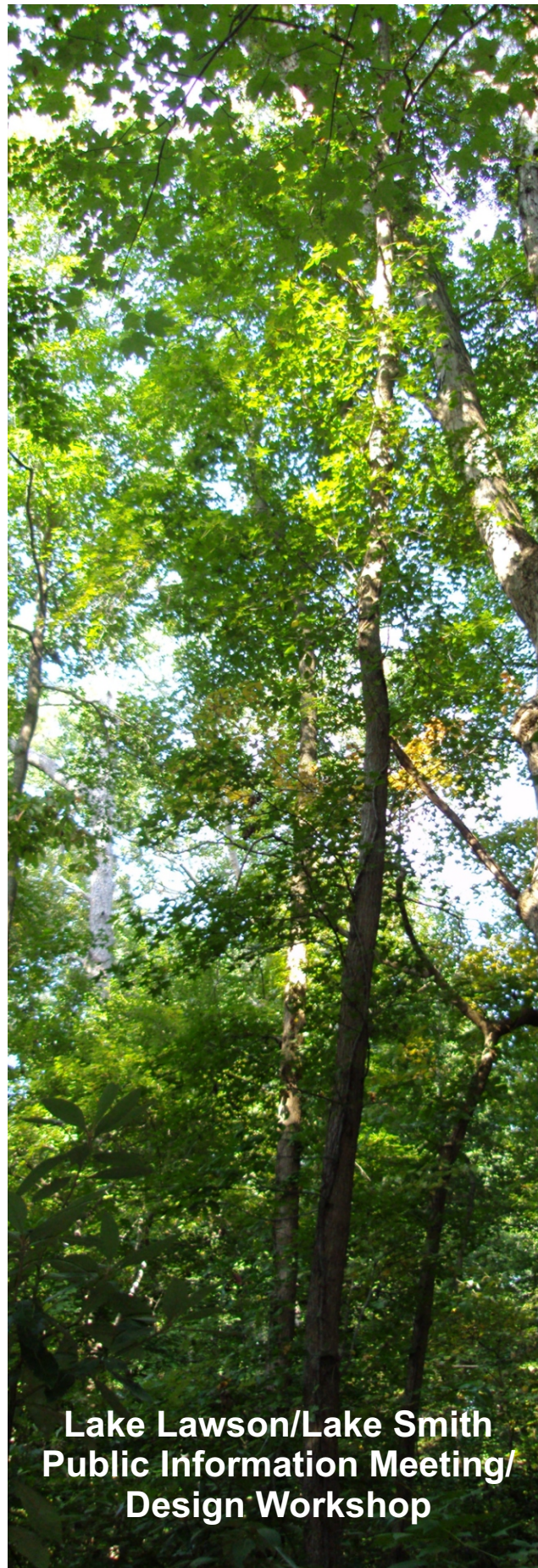
<http://maps.google.com/>

APPENDIX A: CITY OF NORFOLK DEPARTMENT OF UTILITIES, BOATING RULES

- All boats must have a city of Norfolk boat permit. This includes canoes and kayaks.
- A boat identification tag, issued with each permit, must be securely attached to the left bow of the boat in plain view.
- Powered boats may be used for fishing only. Outboard motors must not exceed 12 HP.
- Boats may be launched only from designated launching areas.
- Persons under age 12 may not operate a boat unless accompanied by an adult.
- Coast Guard approved safety equipment is required for each person in a boat.
- The use of water skis, jet skis, surfboards, tubes, rafts and other inflatables is prohibited, as are pontoon, paddle, house boats and sail boats.
- Boat size restrictions apply to all boats, including pontoon boats.
- Sail boats are no allowed on the lakes.
- All boats require a Norfolk Reservoir boat permit.



Photo 42. Boaters Hand Launching at the Fishing Station



**Lake Lawson/Lake Smith
Public Information Meeting/
Design Workshop**

Workshop Agenda

- 4:30-4:45 Greeting/Sign In
- 4:45-5:00 Brief Presentation
- 5:00-5:30 Q & A Session
- 5:30-6:30 Open House and Discussion
- 6:30-6:45 Brief Presentation (Repeat)
- 6:45-7:15 Q & A Session
- 7:15-7:30 Open House and Discussion

Looking Ahead - What's Next?

Nov, 2009 - Feb, 2010:
Detailed Analysis & Alternative Development
Spring 2010:
Presentation of Draft Master Plan to the City
Public Meeting & Presentation of Final
Master Plan

City of Virginia Beach
Parks and Recreation Department
Brian Solis

Planning, Design & Development Administrator

Robert MacPherson, Gregory Newman
Planning, Design & Development Division

Shawn Hopson, Sharon Godfrey
Parks and Natural Areas

Consultants
Parsons Brinckerhoff
Lewis White, Professional Engineer
Beth Arnold, Professional Engineer, LEED AP

InSites
Keith Oliver, Principal/Landscape Architect,
LEED AP
Tonya Gifford, Landscape Associate
Will Richardson, Landscape Designer

Virginia Beach Parks and Recreation's vision is a balanced, sustainable and value-focused system of parks, recreation and public spaces that creates a sense of community. We are accredited by CAPRA, the certifying agency of the National Recreation and Park Association.

For more information, call (757) 385-1100 (TTY: 757-711 Virginia Relay), visit VBgov.com/parks or sign up for our email newsletters at VBgov.com/newsletters.



**Lake Lawson/Lake Smith
Public Information Meeting/Design Workshop**

Welcome

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. In addition to the long range goals and because this is an actively used site, we will also be considering improvements in the near term to address the following priority areas at the existing fishing station :

Parking Boat Ramp Shoreline Restoration

Our goal for this workshop is to share with you the background of the Lake Lawson/Lake Smith site, results of our preliminary site analysis and present some preliminary planning alternatives. We look forward to hearing your ideas and concerns and appreciate your participation in this planning workshop.

Experience the Fun!

Virginia Beach Parks and Recreation

Wednesday November 4th, 4:30 - 7:30pm

Location: Hermitage Elementary School Cafeteria, 1701 Pleasure House Rd, Virginia Beach, VA 23455





INSITES
LANDSCAPE ARCHITECTURE

Lake Smith/Lake Lawson – User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

- How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
- What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
- Do you use the site primarily on the:
 - Weekdays
 - Weekends
- What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
- How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run



Anthony Brennan

6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the site: _____

Name Anthony Blanchard Organization/Company _____

Email _____ Phone No (____) _____

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily ___ Weekly
___ Monthly ___ Bi-annually ___ Yearly
- What time of day do you typically use the site?
___ Morning ___ Afternoon Evening
- Do you use the site primarily on the:
 Weekdays ___ Weekends
- What parts of the site do you use?
___ Upland grassy area
___ Area surrounding parking lot (within sight of)
 Trails through densely wooded area
___ Boat Ramp
- How do you get to the site?
___ Boat ___ Car or Truck ___ Motorcycle
___ Bicycle Walk/Run
- How do you currently use the site?
___ Recreational fishing from boat
 Recreational fishing from shore
___ Competitive fishing
___ Boating/kayak/canoeing
___ Walking
___ Walking w/pets
___ Running
___ Mountain biking
 Nature observation
___ Picnics
___ Other (please list) _____
- If using a boat, what size/type of boat do you use?
___ Canoe ___ Kayak ___ Motorized
___ Other (please list) _____
- Does your boat require a trailer?
___ Yes ___ No N/A
- What size is your trailer?
___ up to 15' ___ 15'-25'
___ 25'+ N/A
- Where do you typically launch your boat?
___ Boat launch ___ Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.
_____ *see back* _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name Erik Wagner E-mail wag23455@msn.com Phone 757 407 4528
Address 5456 Shell Rd VB 23455

TRASH - more people means more trash. I am the Zone Capt for Lake Lawson for "Save the Bay" Day each year for the past 6 yrs. We typically pick up 700-900 # of trash along Shell Rd, the boat ramps and from along the shoreline. There is a small rubble dump off the maintenance road ^{entrance} on Shell Rd.

FENCE - Not in favor of removing the current fence line ~~the~~ along Parcel A or Shell Rd. Keeping a fence in place will funnel people accordingly. Would like the underbrush cleared along the fence.

ALT ENTRANCE - Not in favor of moving entrance south (where maint rd entrance). This invites ^{more} traffic into the heart of the Shell Rd neighborhood. Would like to keep boat trailer, truck, and miscellaneous use traffic on the north end of Shell Rd.

USAGE - Keep it simple. Wildlife observation points, walking/bike trails into the heart of Parcel A. Frisbee golf course is a waste. BBQ/picnic area near fishing ramp would be nice. Perhaps a simple playground adjacent to this would be nice.



Lake Smith/Lake Lawson – User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run



6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the site: _____

Name Jerry Odom Organization/Company Resident on Shore of Lake
Email jerry029@Verizon.net Phone No (757) 464-2355

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

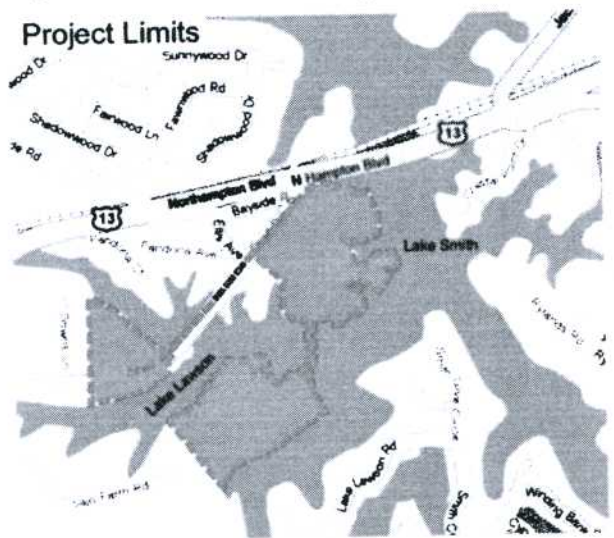
CYPRESS CIVIC
POINT LEAGUE 11-23

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey. Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____

- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.

*Develop minimally +
Protect wildlife*



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

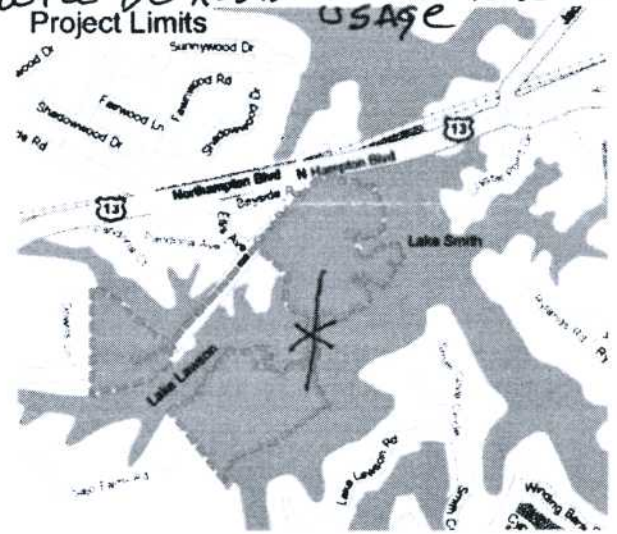
Name _____ E-mail _____ Phone _____
 Address _____

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily ___ Weekly
 ___ Monthly ___ Bi-annually ___ Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 ___ Upland grassy area
 ___ Area surrounding parking lot (within sight of)
 ___ Trails through densely wooded area
 ___ Boat Ramp
- How do you get to the site?
 Boat ___ Car or Truck ___ Motorcycle
 ___ Bicycle ___ Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 ___ Recreational fishing from shore
 ___ Competitive fishing
 Boating/kayak/canoeing
 ___ Walking
 ___ Walking w/pets
 ___ Running
 ___ Mountain biking
 ___ Nature observation
 ___ Picnics
 ___ Other (please list) _____
- If using a boat, what size/type of boat do you use?
 ___ Canoe ___ Kayak Motorized
 ___ Other (please list) _____
- Does your boat require a trailer?
 ___ Yes No ___ N/A
- What size is your trailer?
 ___ up to 15' ___ 15'-25'
 ___ 25'+ ___ N/A
- Where do you typically launch your boat?
 ___ Boat launch ___ Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. **I STRONGLY OPPOSE PUTTING A BRIDGE OVER THE CUT ON LAKE LAWSON TO SAJO FARMS. THERE 25 BOATS ON LAKE LAWSON & SMITH THAT WILL BE RESTRICTED TO 75% OF PROJECT LIMITS USAGE**



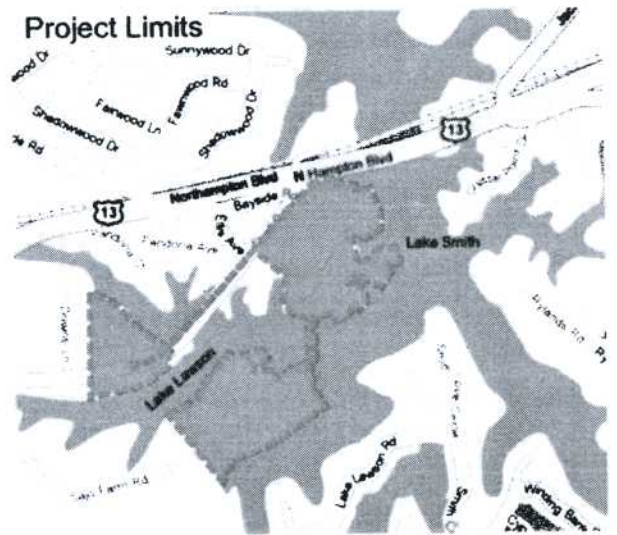
Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name RAY RICE E-mail RERICE99@NSM.COM Phone 497-7112
 Address 5312 LAKE LAWSON RD

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.
Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) N/A
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. would like to see rental boats at fishing station



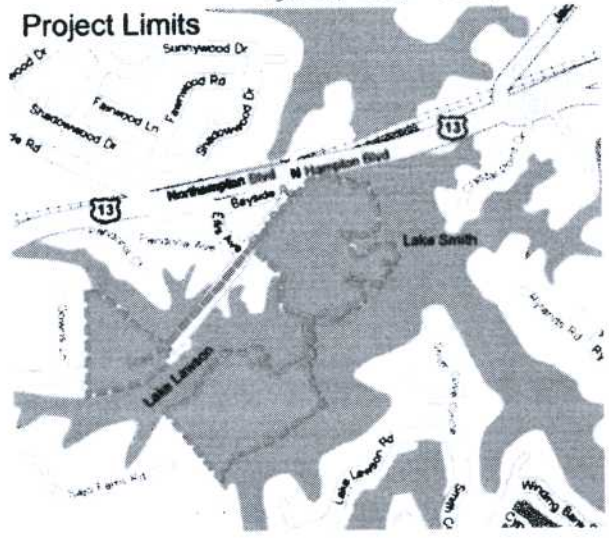
Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name _____ E-mail _____ Phone _____
 Address _____

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.
Check all that apply:

- How often do you use the site? *Not much but would like to*
 Daily Weekly Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
Would like to use this site
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) *N/A*
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.
*would like some benches + along walking trails - for observation + relaxation
 How about boat rental station.*



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name SUSAN ANDERS E-mail ANDERS2@COX.NET Phone (757) 534-0122
 Address 1204 SMITH COVE CIRCLE, VA BEACH, VA 23452

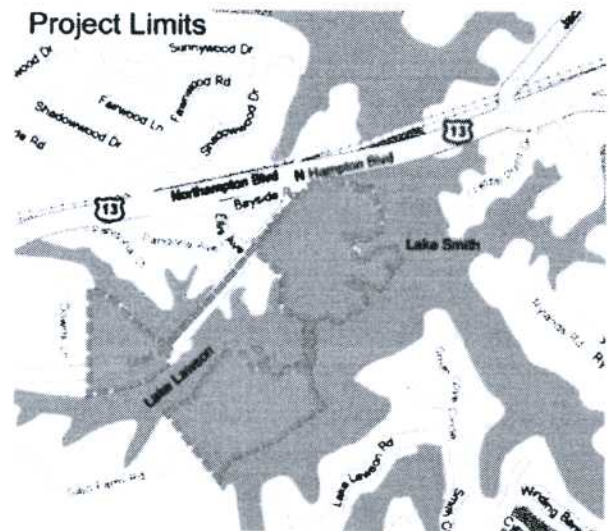
LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.
Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____

- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____

- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name _____ E-mail _____ Phone _____

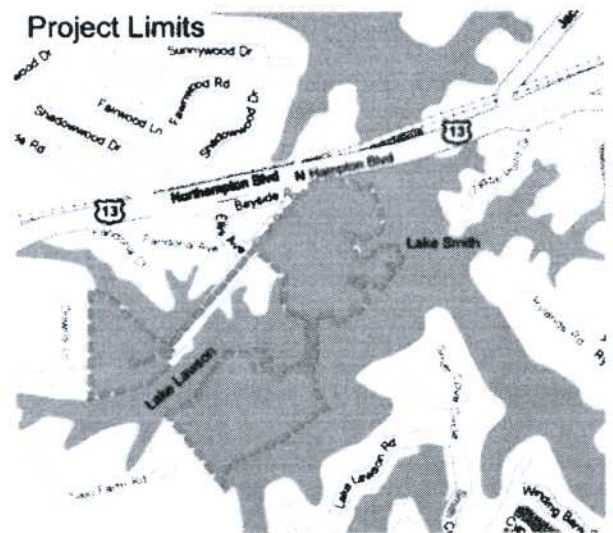
Address _____

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) JOH-BOAT
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name _____ E-mail _____ Phone _____

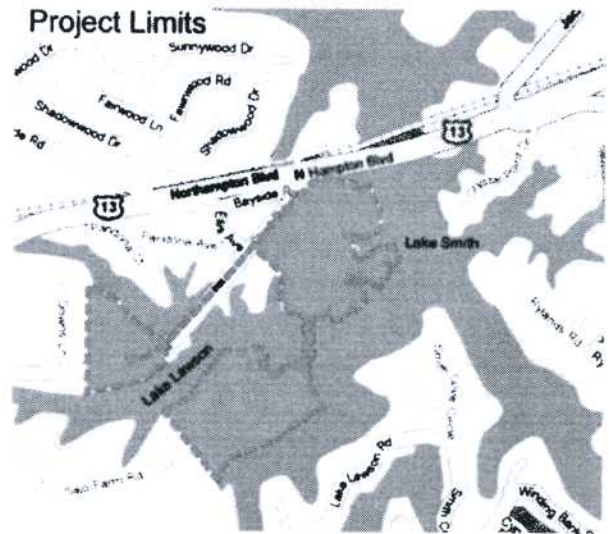
Address _____

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) N/A
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

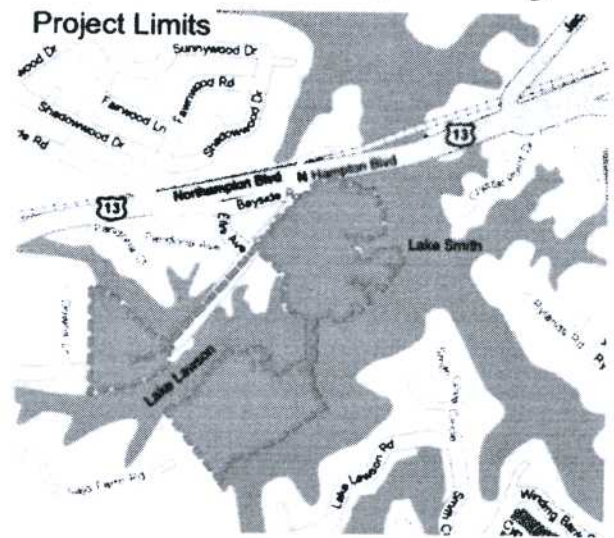
Name _____ E-mail _____ Phone _____
 Address _____

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA

user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey. Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends *rarely*
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) *rarely*
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list)
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.
My concern is for the added garbage that will be floating on the lake. Who is going to control & clean up this garbage.



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name Hank Karzun E-mail HKarzun@MSN.COM Phone 519-9088
 Address 1320 Smith Cove. V.B. 23455

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

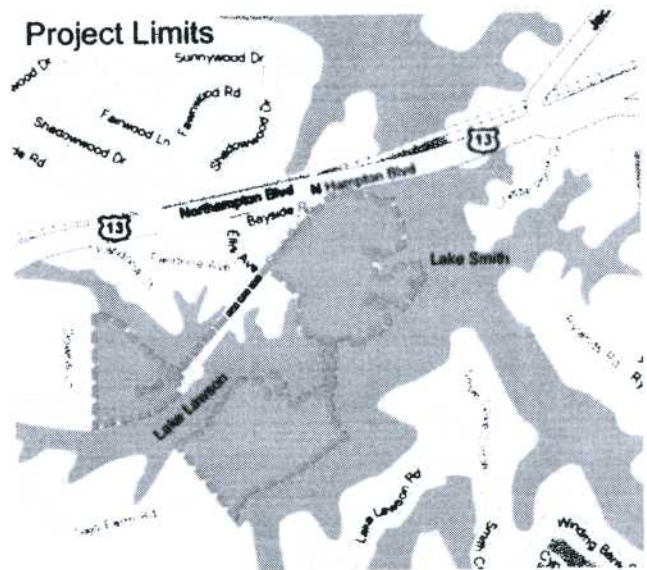
The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____

- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____

- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name Susan Butler E-mail _____ Phone 408-4985
 Address 1153 Lawson Cove Circle

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

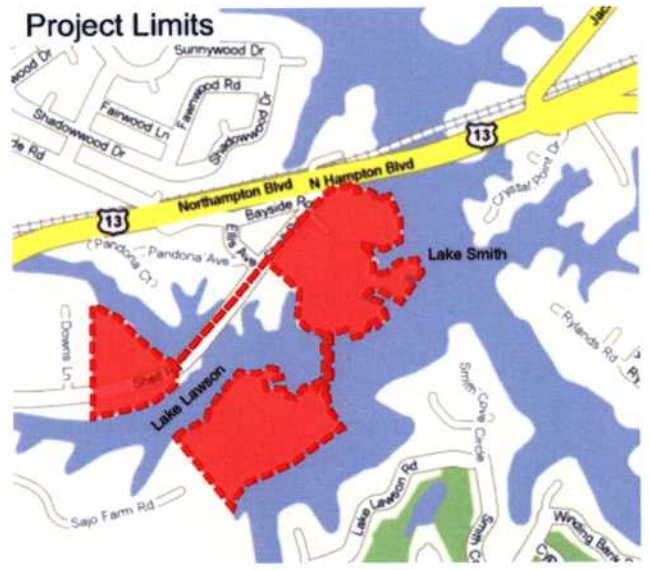
The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____

- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____

- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name Glen Logan E-mail GLOGANCANO@AOL.COM Phone 228-5018
 Address 4112 Church Point Road, VA Beach 23455

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) NOT CURRENTLY USING
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) ROWING RACING SHELL
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.
WHAT ARE THE DIMENSIONS OF LAKE. LENGTH, WIDTH DEPTH



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name TIM KERR E-mail TKKERR@COXNET Phone 757.450.3401
 Address 301 WOODBERRY DR. CHEESAPEAKE, VA 23022
REP. NORFOLK ACADEMY ROWING

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

Leave the boat ramp where it is — for now!

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 14' Canoe Kayak Motorized
 Other (please list) _____
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.
We'd use it more if there were improvements, but NOT if it became overcrowded or if the natural beauty was diminished



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

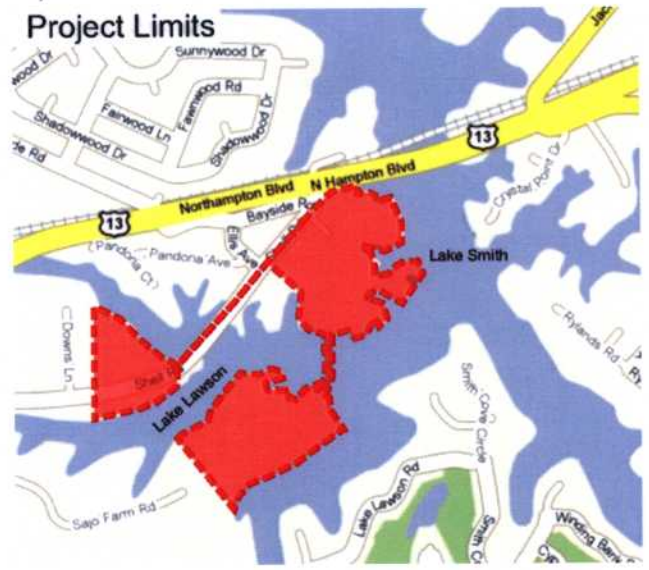
Name Liberman E-mail MNCLIB2@COX.NET Phone 321-7933
 Address 5187 Lake Shores Rd, VTB 23455

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. *Improve visibility of main entrance for oncoming and exiting traffic. Split parking spaces & facilities between parcel A and B.*



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name KALE WARREN E-mail kalewarren@earthlink.net Phone 499-8150
 Address 1177 POND CYPRESS DR. in CYPRESS POINT

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space.

A SHED FOR YOUTH PICNIC & GROUP STUDY CHURCH ACTIVITIES, Camp FIRE WALKING TRAIL, BOAT RENTAL & FISHING GEAR RENTAL
Project Limits



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name FRANKLIN GAMBINO E-mail FRENECY.COM-NET Phone 757 497-7988
 Address 3417 DAYSIDE RD VA BEACH VA. 23455

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. It would be nice to have walking & bike paths picnic area's with trees. It does not need to be totally cleared. Leave it with a natural look.



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

Name Adriane G. Spence E-mail _____ Phone 757-464-4609
 Address 5414 Shell Road VA Beach, VA 23455

live Born here 1957 & My Mother has been here since 1937

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. Need gate open earlier for early fishing



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

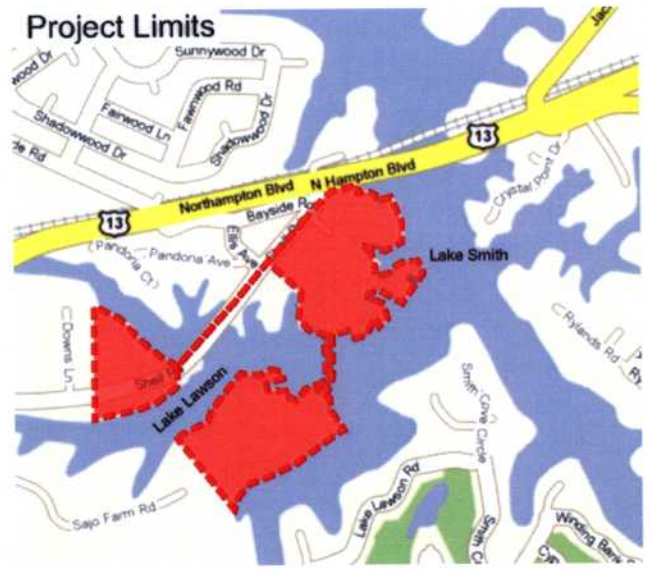
Name Robert Nannewald E-mail rhannewald@yahoo.com Phone 497-6206
 Address 233 Green Kemp Rd VA Bch VA 23462

LAKE LAWSON/LAKE SMITH NATURAL RESOURCE AREA user survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Lawson/Lake Smith Natural Resource Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey.

Check all that apply:

- How often do you use the site?
 Daily Weekly
 Monthly Bi-annually Yearly
- What time of day do you typically use the site?
 Morning Afternoon Evening
- Do you use the site primarily on the:
 Weekdays Weekends
- What parts of the site do you use?
 Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp
- How do you get to the site?
 Boat Car or Truck Motorcycle
 Bicycle Walk/Run
- How do you currently use the site?
 Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____
- If using a boat, what size/type of boat do you use?
 Canoe Kayak Motorized
 Other (please list) _____
- Does your boat require a trailer?
 Yes No N/A
- What size is your trailer?
 up to 15' 15'-25'
 25'+ N/A
- Where do you typically launch your boat?
 Boat launch Hand launch elsewhere
 N/A
- List any additional comments you may have about existing or future use of the site. Use back of survey for additional space. _____



Please provide us with your contact information if we may contact you regarding your comments on the Lake Lawson and Lake Smith Natural Resource Area.

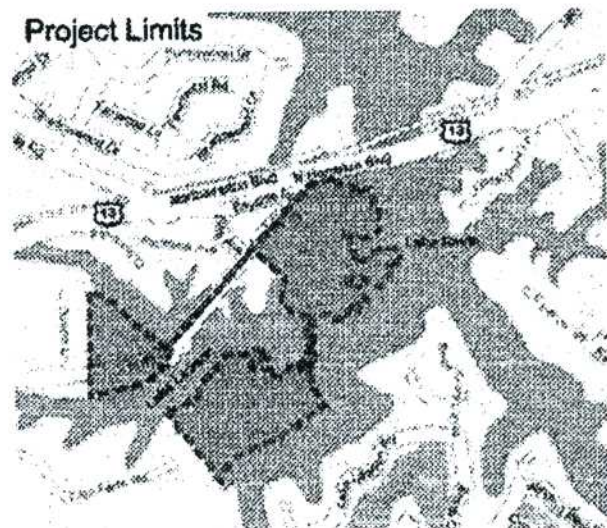
Name Lynn Nelson, Drew Izes E-mail baileycat@verizon.net Phone _____
 Address 1434 RYLANDS RD, VA BCH



Lake Smith/Lake Lawson – User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to inSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run



H Tuttle mu @ Cox.net

89292

6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the site:

I use a neighbor's boat.

Name Harry Tuttle Organization/Company Retired

Email H Tuttle MU @ Cox.net Phone No (757) 460-2967

Lake Smith/Lake Lawson – User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities:

water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email:

surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site? Monthly
2. What time of day do you typically use the site? Afternoon
3. Do you use the site primarily on the: Weekends
4. What parts of the site do you use? Trails through densely wooded area
5. How do you get to the site? Bicycle Walk/Run
6. How do you currently use the site?
 Boating/kayak/canoeing Walking
 Walking w/pets Running
 Mountain biking Nature observation
7. If using a boat, what size/type of boat do you use? Kayak
8. Does your boat require a trailer? No
9. What size is your trailer? N/A
10. Where do you typically launch your boat? Hand launch elsewhere
11. Please list any additional comments you may have about existing or future use of site:
 Look forward to foot bridge to and hiking trails on the ~18 acre peninsula just bought from Norfolk City.

Name: Geoff Bauer
Email BauerG@cox.net

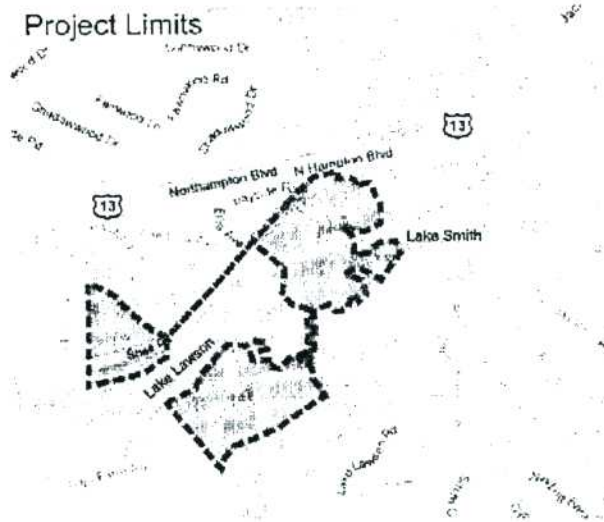
Organization/Company: Wesleyan Chase Civic League
Phone No: (757)460-1972



Lake Smith/Lake Lawson - User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466 OR email: info@insites-studio.com) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle



Walk/Run

6. How do you currently use the site?

Recreational fishing from boat

Recreational fishing from shore

Competitive fishing

Boating/kayak/canoeing

Walking

Walking w/pets

Running

Mountain biking

Nature observation

Picnics

Other (please list) _____

7. If using a boat, what size/type of boat do you use?

Canoe

Kayak

Motorized

Other (please list) _____

8. Does your boat require a trailer?

Yes

No

9. What size is your trailer?

up to 15'

15'-25'

25'+

10. Where do you typically launch your boat?

Boat launch

Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the

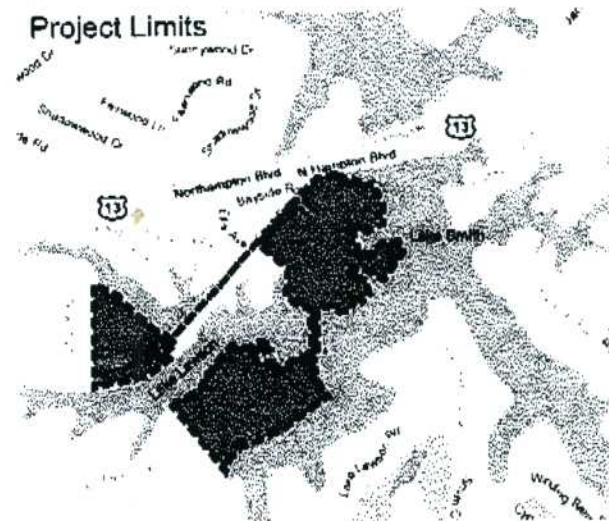
site: _____



Lake Smith/Lake Lawson - User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run



6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the

site: PRESERVATION OF NATURAL SETTING

Name WILLIAM MILLER Organization/Company _____

Email billandjoanm@earthlink.net Phone No (757) 464 6519

Tonya Gifford

From: Keith McDowell [keith.mcdowell@cox.net]
Sent: Friday, October 16, 2009 5:48 PM
To: surveys@insites-studio.com
Subject: Survey

1. How often do you use the site?

- Daily (except when raining)
 Weekly
 Monthly
 Bi-annually
 Yearly

2. What time of day do you typically use the site?

- Morning
 Afternoon
 Evening

3. Do you use the site primarily on the:

- Weekdays
 Weekends

4. What parts of the site do you use?

- Upland grassy area
 Area surrounding parking lot (within sight of)
 Trails through densely wooded area
 Boat Ramp

5. How do you get to the site?

- Boat
 Car or Truck
 Motorcycle
 Bicycle
 Walk/Run

6. How do you currently use the site?

- Recreational fishing from boat
 Recreational fishing from shore
 Competitive fishing
 Boating/kayak/canoeing
 Walking
 Walking w/pets
 Running
 Mountain biking
 Nature observation
 Picnics
 Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
 Kayak
 Motorized
 Other (please list) Boat is 14ft. 9.9hp

8. Does your boat require a trailer?

- Yes
 No

9. What size is your trailer?

up to 15'

15'-25'

25'+

10. Where do you typically launch your boat?

Boat launch

Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the site:

I live on Lake Smith and dock the boat at home. I use the boat ramp to launch and recover often to transport the boat to other locations and perform maintenance. I am out in the boat and enjoying the lake as often as possible. I would like to see a pavilion and BBQ area so we could have community events. Walking trails and access by bicycle would be great. I am concerned that the water access between Smith and Lawson be maintained with boat access permitted. A couple of small docks for boat owners to tie up to would also be nice. I am very willing to participate in any self help projects and spend many hours cleaning the Lake as I don't fish. Sorry I don't have adobe and hope this is an acceptable format for you. I very much look forward to the beautiful park I am sure you will create.

Name: Keith McDowell

Organization/Company: Civil Servant

Email: keith.mcdowell@cox.net

Phone No. (757) 705-9930

6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the site:

I think the site could be used for all types of recreational use.

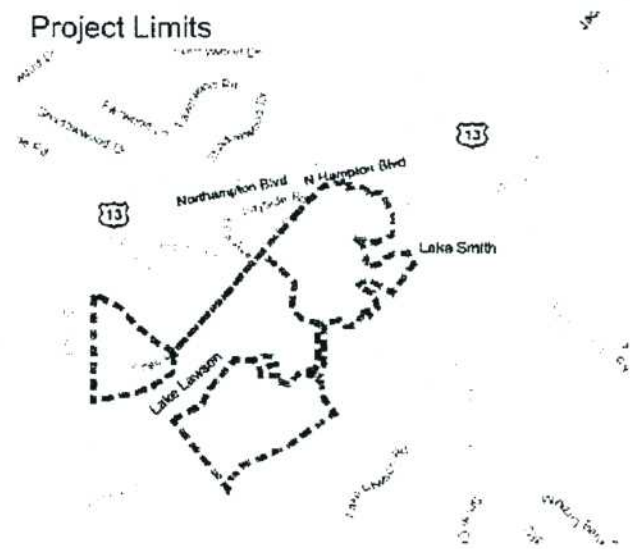
Name Jim Stehle Organization/Company Crystal Pt. Homeowners ASSO.
 Email jim@atomicplumbing.com Phone No (757) 363 1923



Lake Smith/Lake Lawson – User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run



6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the

site: We would love for there to be a neighborhood park developed on this property to walk to for picnics and for our kids to play with other kids in the neighborhood.

Name Laura Hulings Organization/Company Homeowner

Email lhulings@nps.k12.va.us Phone No (757) 724-5079



Lake Smith/Lake Lawson – User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run

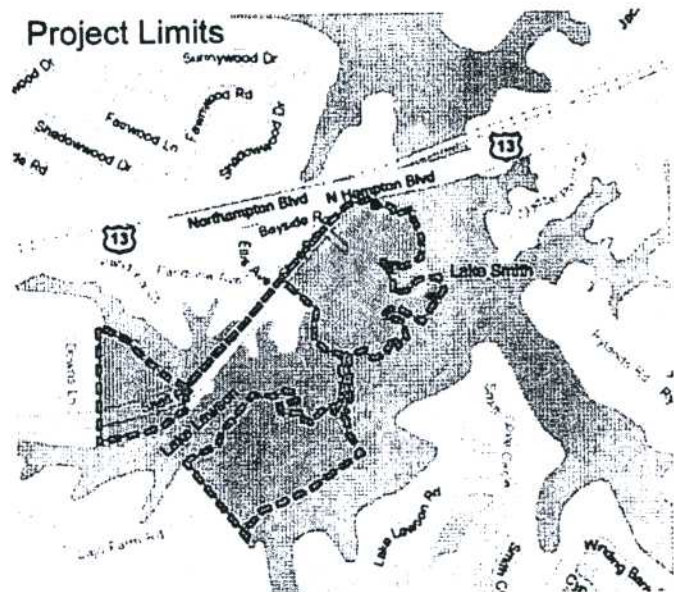




Lake Smith/Lake Lawson - User Survey

The City of Virginia Beach Department of Parks and Recreation is developing a Master Plan for the Lake Smith/Lake Lawson Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The City has identified the following areas to be considered primary priorities: water access, fishing, open space, trails and preservation. We'd like to get your feedback as we develop the Master Plan for this new facility. Please take a few minutes to complete the following survey and return to InSites (fax: 757.622.6466, email: surveys@insites-studio.com, mail: 424 W 21st Street, Suite 201, Norfolk, VA, 23517) by 10/21/09. We appreciate your time and look forward to your response. Check all that apply:

1. How often do you use the site?
 - Daily
 - Weekly
 - Monthly
 - Bi-annually
 - Yearly
2. What time of day do you typically use the site?
 - Morning
 - Afternoon
 - Evening
3. Do you use the site primarily on the:
 - Weekdays
 - Weekends
4. What parts of the site do you use?
 - Upland grassy area
 - Area surrounding parking lot (within sight of)
 - Trails through densely wooded area
 - Boat Ramp
5. How do you get to the site?
 - Boat
 - Car or Truck
 - Motorcycle
 - Bicycle
 - Walk/Run



6. How do you currently use the site?

- Recreational fishing from boat
- Recreational fishing from shore
- Competitive fishing
- Boating/kayak/canoeing
- Walking
- Walking w/pets
- Running
- Mountain biking
- Nature observation
- Picnics
- Other (please list) _____

7. If using a boat, what size/type of boat do you use?

- Canoe
- Kayak
- Motorized
- Other (please list) _____

8. Does your boat require a trailer?

- Yes
- No

9. What size is your trailer?

- up to 15'
- 15'-25'
- 25'+

10. Where do you typically launch your boat?

- Boat launch
- Hand launch elsewhere

11. Please list any additional comments you may have about existing or future use of the

site: It is imperative that shell road(s) be connected by paved

Shoulders/Bike Lane BETWEEN Shell Road with the Traffic Light
down Northampton to the Shell Road AT The Fishing Station. Gaining Omiss

Name KEVIN PEEK

Organization/Company LAKEVIEW PARK

Email KSPeeK@COX.net

Phone No (757) 460-0592

Very DANGER
Limits Use
of site to
Cyclists

Survey Information Received Online

Evon Rice

Frequency of Use: Daily

Time of Day: Morning, Afternoon, Evening

Day of Week: Weekdays, Weekends

Getting There: Boat

Current Use: Recreational fishing from boat, Boating/kayaking/canoeing

Other current uses:

Boat type: Motorized

Other boat type:

Trailer: No Trailer

Size: N/A

Launch: N/A

Comments: the proposed footbridge will prevent access for over 25 residents who live on the lakes to pass through the cut going to Sajo Farm. This is approximately 25% of our navigatable water. The many new residents in Sajo and the upscale end of Ridglea will be restricted to a much smaller boating area. I strongly oppose a walkway across the passageway to Sajo Farms from Lake Lawson

Name: Evon Rice

Address: 5312 Lake Lawson Rd.

Email: evonrice@msn.com

Phone: 497 7112

Joseph Nowlan

Frequency of Use: Weekly

Time of Day: Morning

Day of Week: Weekdays

Parts of Site: Trails through densely wooded area, Boat Ramp

Getting There: Walk/Run

Current Use: Recreational fishing from shore, Walking, Nature observation

Other current uses:

Other boat type:

Trailer: N/A

Trailer Size: N/A

Launch: N/A

Comments:

Name: Joseph Nowlan

Address: 1508 Gardenwood Pkwy

Email: joerosenowlan@cs.com

Phone: 757 464 3935

I remember when Northampton Blvd. was first opened. There was clear view of the lakes from both sides of the Northampton Blvd. causeway. In the years after, with several City Rec Managers, the sites have overgrown and the entire entry to our city has become a jungle. Vines as well as many volunteer bushes, which have grown into trees. We even has a motorist's car destroyed by a fallen tree. Even today with the cut back of the trees for power line protection, trees are now bent at about 40 degrees, just waiting to again destroy private property. open grass, managed trees, well maintained paths and boat launch areas. Simple but neat. If requested many flowers could be donated as well as maintained with little cost to the city.

Kevin Peek

I'm glad you are accepting citizen input. The lack of a connector in the form of a paved bike path or simply a paved shoulder along both sides of the short stretch of Northampton Boulevard to connect the two Shell Roads is a glaring safety problem that needs to be remedied right now. It is a shame that this wasn't done many years ago. Why should we have to drive to safely get to the facility?

This subjects cyclists to high speed traffic on Northampton. It would connect the Lake Smith facility to the sidewalk bike trail along Newtown Road. And give a reasonably safe route down Shell Road (East) to Robins Corner/Pleasure House Rd/ Shore Drive (another inexcusable mess of unpaved shoulders) to the Lesner Bridge (another inexcusable mess of unpaved short stretch of shoulder leading to the sidewalk across the bridge) to the Cape Henry Trail all the way through First Landing State Park to 6th Street to the Beach. I guess one can always dream, but I'll probably be dead as Daniel Hersh before this happens.

Name: Kevin Peek
Email: kspeek@cox.net
Phone: 460-0592

Suzanne Duckworth

I DO NOT USE THE LAKE SMITH SO MY ONLY COMMENT WOULD BE IF WE HAD WILD FLOWER TRAILS IT WOULD BE WELL ATTENDED.. ALSO WE COULD CONSIDER BUYING BENCHES ALONG THE TRAIL TO SIT DOWN AND WATCH NATURE IN ITS GLORY DONATED BY THE COUNCIL OF GARDEN CLUBS. SUZIE DUCKWORTH. ALSO I COULD NOT OPEN YOUR SURVEY.

Name: Suzanne Duckworth
Email: suzied@verizon.net

Joe Rule

Frequency of Use: Bi-annually
Time of Day: Afternoon
Day of Week: Weekends
Parts of Site: Upland grassy area, Trails through densely wooded area
Getting There: Boat, Car or Truck
Current Use: Recreational fishing from boat, Boating/kayaking/canoeing, Walking, Nature observation
Other current uses:
Boat type: Kayak, Motorized
Other boat type:
Trailer: No
Trailer Size: N/A
Launch: Hand launch elsewhere
Comments: We will use the site more often after it has been improved. We especially look forward to the development of trails throughout the site. There was a request at the CYPT Civic League meeting to enlarge the access to the NE section of Lake Lawson so that pontoon boat could have access. I am not in favor of this option since the extended trails which will need a pedestrian bridge at this location are much more important than pontoon boat (currently illegal on the lakes) access. Many more people will use the trails than boaters of any type will use the access point. If the bridge is built to accommodate a 14-16 ft john/fishing craft, the majority of boaters will be able to navigate through. We look forward to the development of this beautiful area.

Name: Joe Rule
Address: 1200 Smith Cove Circle
Email: jrule@odu.edu
Phone: 757 554 0440

Anonymous

Frequency of Use: Monthly

Time of Day: Afternoon
Day of Week: Weekends
Parts of Site: Upland grassy area, Trails through densely wooded area
Getting There: Boat, Walk/Run

Current Use: Recreational fishing from shore, Boating/kayaking/canoeing, Walking, Nature observation

Other current uses:

Boat type: Canoe, Kayak, Motorized

Other boat type:

Trailer:

NoTrailer Size: up to 15'

Launch: Boat launch

Comments: Would like to see Parcels A and Parcel B bridged for public access to Parcel B, as long as canoes/kayaks can traverse underneath the bridge.

John Sprowl

Frequency of Use: Daily

Time of Day: Morning, Evening

Day of Week: Weekdays, Weekends

Parts of Site: Upland grassy area, Trails through densely wooded area

Getting There: Walk/Run

Current Use: Walking, Walking w/pets, Nature observation

Comments: I would like to see additional improvements to the park that are mainly tailored more to the side of non-motorized activity. Additional areas to fish from the lake bank would be nice as well as continue the walking trail improvement effort. My concerns with this project as a local resident is increased traffic in an area that sees little or no police patrol and unlawful activity in a park that is not staffed.

Address: 5432 Shell Rd. Virginia Beach, VA 23455

Email:

jssprowl@cox.net

Phone: 757-962-5069

APPENDIX D: NOVEMBER PUBLIC MEETING

Additional Survey Comments

- looking fwd to foot bridge connection and hiking trails on the 18 acre peninsula bought from city of Norfolk
- I use a neighbor's boat
- I remember when Northampton Blvd. was first opened. There was clear view of the lakes from both sides of the Northampton Blvd. causeway. In the years after, with several City Rec Managers, the sites have overgrown and the entire entry to our city has become a jungle. Vines as well as many volunteer bushes, which have grown into trees. We even had a motorist's car destroyed by a fallen tree. Even today with the cut back of the trees for power line protection, trees are now bent at about 40 degrees, just waiting to again destroy private property. open grass, managed trees, well maintained paths and boat launch areas. Simple but neat. If requested many flowers could be donated as well as maintained with little cost to the city.
- I live on Lake Smith and dock the boat at home. I use the boat ramp to launch and recover often to transport the boat To other locations and perform maintenance. I am out in the boat and enjoying the lake as often as possible. I would like to see a pavilion and BBQ area so we could have community events. Walking trails and access by bicycle would be great. I am concerned that the water access between Smith and Lawson be maintained with boat access permitted. A couple of small docks for boat owners to tie up to would also be nice. I am very willing to participate in any self help projects and spend many hours cleaning the Lake as I don't fish. Sorry I don't have adobe and hope this is an acceptable format for you. I very much look forward to the beautiful park I am sure you will create.
- Preservation of natural setting
- overgrown vegetation
- I think the site could be used for all types of recreational use
- We need to keep this area "open and green"
- we would love for there to be a neighborhood park developed on this property to walk to for picnics and for our kids to play with other kids in the neighborhood
- Improve visibility of main entrance for oncoming and exiting traffic. Split parking spaces & facilities between North Parcel & B
- A shelter for youth picnic & group study, church activities, campfire, walking trail, boat rental & fishing gear rental
- need gate open earlier for early fishing
- It would be nice to have walking & bike paths, picnic areas with trees
- Trash - more people means more trash. I am the zone captain for Lake Lawson for "Save the Bay" Day each year for the past 6 years. We typically pick up 700-900 pounds of trash along Shell Road, the boat ramps and from along the shoreline. There is a small rubbish dump off the maintenance road of Shell Road. Fence - Not in a favor of removing the current fenceline along Parcel A or Shell Road. Keeping a fence in place will funnel people accordingly. Would like the underbrush cleared along the fence. Alternative Entrance - Not in favor of moving entrance south (where maintenance road entrance is). This invites more traffic into the heart of the Shell

- Road neighborhood. Would like to keep the boat trailer, truck and miscellaneous use traffic on the North end of Shell Road. Usage - Keep it simple. Wildlife observation points, walking/bike trails into the heart of Parcel A. Frisbee golf course is a waste. BBQ/Picnic area and real fishing area would be nice. Perhaps a simple playground adjacent to this would be nice.
- Not currently using the site. What are the dimensions of the lake (length, width and depth)?
 - Leave the boat ramp where it is for now! We'd use this site more if there were improvements but not if it became overcrowded or if the natural beauty was diminished.
 - The proposed footbridge will prevent access for over 25 residents who live on the lakes to pass through the cut going to Sajo Farm. This is approximately 25% of our navigable water. The many new residents in Sajo and the upscale end of Ridgley will be restricted to a much smaller boating area. I strongly oppose a walkway across the passageway to Sajo Farms from Lake Lawson.
 - I do not use Lake Smith so my only comment would be if we had wild flower trails it would be well attended. Also, we could consider buying benches along the trail to sit down and watch nature in its glory donated by the Council of Garden Clubs.
 - I'm glad you are accepting citizen input. The lack of a connector in the form of a paved bike path or simply a paved shoulder along both sides of the short stretch of Northampton Boulevard to connect the two Shell Roads is a glaring safety problem that needs to be remedied right now. It is a shame that this wasn't done many years ago. Why should we have to drive to safely get to the facility? It is imperative that Shell Road(s) be connected by paved shoulders/bike lanes between Shell Road with the traffic light down Northampton to the Shell Road at the Fishing Station. Glaring amiss very dangerous, limits use of site to cyclists.
This subjects cyclists to high speed traffic on Northampton. It would connect the Lake Smith facility to the sidewalk bike trail along Newtown Road. And give a reasonably safe route down Shell Road (East) to Robins Corner/Pleasure House Rd/Shore Drive (another inexcusable mess of unpaved shoulders) to the Lesner Bridge (another inexcusable mess of unpaved short stretch of shoulder leading to the sidewalk across the bridge) to the Cape Henry Trail all the way through First Landing State Park to 6th Street to the Beach. I guess one can always dream, but I'll probably be dead as Daniel Hersh before this happens.
 - We will use the site more often after it has been improved. We especially look forward to the development of trails throughout the site. There was a request at the CYPT Civic League meeting to enlarge the access to the NE section of Lake Lawson so that pontoon boat could have access. I am not in favor of this option since the extended trails which will need a pedestrian bridge at this location are much more important than pontoon boat (currently illegal on the lakes) access. Many more people will use the trails than boaters of any type will use the access point. If the bridge is built to accommodate a 14-16 ft john/fishing craft, the majority of boaters will be able to navigate through. We look forward to the development of this beautiful area.
 - Would like to see Parcels A and Parcel B bridged for public access to Parcel B, as long as canoes/kayaks can traverse underneath the bridge.

- I would like to see additional improvements to the park that are mainly tailored more to the side of non-motorized activity. Additional areas to fish from the lake bank would be nice as well as continue the walking trail improvement effort. My concerns with this project as a local resident is increased traffic in an area that sees little or no police patrol and unlawful activity in a park that is not staffed.
- Develop minimally and protect wildlife
- I strongly oppose putting a bridge over the cut on Lake Lawson to Sajo Farm. There are 25 boats on Lake Lawson & Lake Smith that will be restricted to 75% of usage.
- would like to see rental boats at fishing station
- Would like some benches along walking trails for observation & relaxation. How about a boat rental station?
- My concern is for the added garbage that will be floating on the lake. Who is going to control and clean up this garbage?

Workshop Agenda

- 4:00-4:30 Greeting/Sign In
- 4:30-4:45 Brief Presentation
- 4:45-5:15 Q & A Session
- 5:15-6:00 Open House and Discussion
- 6:00-6:15 Brief Presentation (Repeat)
- 6:15-6:45 Q & A Session
- 6:45-7:15 Open House and Discussion
- 7:15-7:30 Wrap Up

Virginia Beach Parks and Recreation's vision is a balanced, sustainable and value-focused system of parks, recreation and public spaces that creates a sense of community. We are accredited by CAPRA, the certifying agency of the National Recreation and Park Association.

For more information, call (757) 385-1100 (TTY: 757-711 Virginia Relay), visit VBgov.com/parks or sign up for our email newsletters at VBgov.com/newsletters.

City of Virginia Beach Parks and Recreation Department Brian Solis

Planning Design & Development Administrator
Robert MacPherson, Greg Newman
Planning, Design & Development Division
Shawn Hopson, Sharon Godfrey
Parks and Natural Areas
David Walker
Life Cycle Maintenance

Consultants

Parsons Brinckerhoff
Lewis White, *Professional Engineer*
Beth Arnold, *Professional Engineer, LEED AP*
InSites
Keith Oliver, *Principal/Landscape Architect, LEED AP*
Tonya Gifford, *Landscape Associate*
Matt Stark, *Landscape Associate*
Will Richardson, *Landscape Designer*



Welcome

The City of Virginia Beach Department of Parks and Recreation has developed a Master Plan for the Lake Lawson/Lake Smith Natural Area. The purpose of the Master Plan is to provide a framework for planning, recreational programming, site improvements and management of this property. The Master Plan has taken into consideration the following priority areas at the existing fishing station:
Parking Boat Ramp Shoreline Restoration

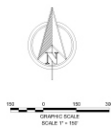
Our goal for this presentation is to share with you the final draft Master Plan and receive your thoughts and feedback on the overall design. We look forward to hearing your ideas and concerns and appreciate your participation in this presentation.

Experience the Fun!

Virginia Beach Parks and Recreation

Wednesday February 24th, 2010, 4:00 - 7:30pm

Location: Hermitage Elementary School Cafeteria, 1701 Pleasure House Rd, Virginia Beach, VA 23455



Lake Lawson/Lake Smith Master Plan Presentation
Cul-de-sac Alternative
February 24, 2010



lake lawson/lake smith master plan

Please return this comment sheet by March 29, 2010 to Rob MacPhearson via fax: 757.385.1130 or via email: rmacpher@VBgov.com

Name BETSY ROSENFFELD
 Property Address 1193 WESTBRAFAR DRIVE
 Mailing Address Same as above
 Phone Number 757-477-5980
 Email Address ELROSENF@sentara.com

Basically, that neighborhood has a private park ^{access} funded by all the city taxpayers.

1. Were your concerns addressed in the Master Plan? Why or why not?
 Yes, it was pleased with proposal and implementation plan. Personally, still not happy taxpayers will not have access via Sago Dam. I do understand the easement issue.
2. How do you feel about closing Shell Road to through traffic? Why?
 I would prefer this option. Added benefit to community - purpose of project. Offering increased recreational use by parkgoers.
3. Please provide any information that you feel will assist the City in implementing this project.
 Can't wait!!



4. Do you feel that the information was clearly presented at this meeting?
 Yes. Nicely done.
5. How did you hear about this meeting?
 Va. Beach Beacon

Name DIANA BAILEY
Property address 5401 LAWSON HALL KEY 23455 (waterfront)
Mailing SAME
Phone 464-2269
Email artemis29@cox.net

- 1- Concerns addressed? This is my first time to attend, but I really have few concerns. Really excited about preserving and increasing access to this natural resource area.
- 2- Reaction to closing Shell Rd. Pros + cons.
Alternate route is my decompression road to and from home. 600± vehicles a day also a big dump onto already dangerous Northampton/Diamond Springs intersection (over) →
- 3- Provide info that may assist city.
Education programs that address excess fertilizer + runoff issues; explain difference between duckweed + algae!;
- 4- Info clearly presented?
Yes
- 5- How did you hear about meeting?
Newspaper

2-Shell Rd. (cont.) Like the idea of easier access on foot & by boat to that area. That portion is one of the prettiest parts of Lake Lawson and pedestrian access would enhance citizen use and appreciation.

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Steve Liberman
Property Address 5187 Lake Shores Rd.
Mailing Address VB 23455
Phone Number 321-7933
Email Address mnclib2@cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes - Relocated entrance to North Parcel
- Canoe/kayak access through the causeway
between North and South Parcels

2 How do you feel about closing Shell Road to through traffic? Why?

Would like canoe/kayak access to
west section of Lake Lawson.

3 Please provide any information that you feel will assist the City in implementing this project.

See diagram on back

4 Do you feel that the information was clearly presented at this meeting?

Yes.

5 How did you hear about this meeting?

Newspaper

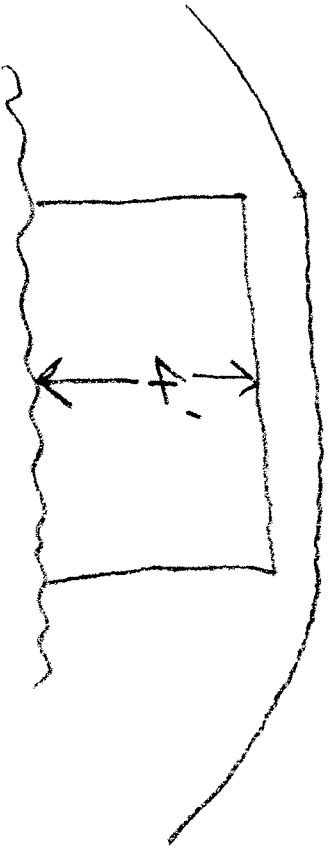
INSITES
LANDSCAPE ARCHITECTURE

**D.D. PARSONS
BRINCKERHOFF**

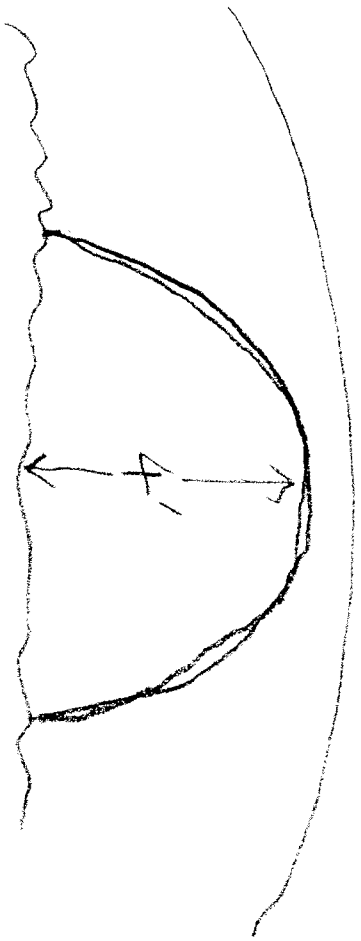


Causeway Bridge

OK



NOT



OK

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Lynn Nelson / Drew Izes
 Property Address 1424 Rylands Rd VB 23455
 Mailing Address same
 Phone Number _____
 Email Address JBaileyCat@verizon.net

1 Were your concerns addressed in the Master Plan? Why or why not?

yes. moved boat Ramp + parking w/
least disturbance of existing growth

2 How do you feel about closing Shell Road to through traffic? Why?

If the surrounding neighborhoods get
the benefit of these upgrades parks -
they should accept possible additional →

3 Please provide any information that you feel will assist the City in implementing this project.

meetings should be later for
increased participation



4 Do you feel that the information was clearly presented at this meeting?

5 How did you hear about this meeting?

email + Beacon

traffic - The city does not have the funds
to close off that road. The road
was there first

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Virginia M. Hollifield

Property Address 5540 SHELL ROAD

Mailing Address 5540 SHELL ROAD VA. BEACH, VA

Phone Number 757-464-6910

Email Address N/A

1 Were your concerns addressed in the Master Plan? Why or why not?

NO - WE HAD PEOPLE HERE WHO WILL NOT BE IMPACTED BY THESE CHANGES

2 How do you feel about closing Shell Road to through traffic? Why?

DO NOT CLOSE SHELL RD. YOU CAN NO LONGER EXIT EXCEPT BY A STOP SIGN - CAN'T GET TO ELLIS FOR LIGHT AT BAYSIDE

3 Please provide any information that you feel will assist the City in implementing this project.

FIND ANOTHER LOCATION OR DOWNSCALE THIS ONE. - I DIDN'T RETIRE TO HAVE TO BE BOTHERED WITH THE PROBLEMS THIS WILL PRESENT.

4 Do you feel that the information was clearly presented at this meeting?

YES - BUT NOT REALLY DIRECT ANSWERS - RATHER VEILED

5 How did you hear about this meeting?

MAIL



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Jeff Thompson

Property Address 736 Baldwin St., VA Beach, VA 23452

Mailing Address same

Phone Number 757-0712

Email Address 2blackdog4@cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes, ample channeling access for fishermen and
boaters, you might want to add some non-motorized
access pts. in Lake Lawson

2 How do you feel about closing Shell Road to through traffic? Why?

would be nice because it would tie the properties
together ~~and~~ ~~provide~~ ~~for~~ safety for property
users

3 Please provide any information that you feel will assist the City in implementing this project.

Make sure there is some sort of fish attracting
structure is placed by the shoreline fishing access points
to provide a chance of quality fishing.

4 Do you feel that the information was clearly presented at this meeting?

yes

5 How did you hear about this meeting?

Beacon



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Paul Calhoun
Property Address 1468 Maharis Rd.
Mailing Address Same
Phone Number 377 3431
Email Address PCalhoun@VBGOV.COM

1 Were your concerns addressed in the Master Plan? Why or why not?

2 How do you feel about closing Shell Road to through traffic? Why?

I can see merits towards closing
shell road. I would like to see the
arguments towards closing the road

3 Please provide any information that you feel will assist the City in implementing this project.

4 Do you feel that the information was clearly presented at this meeting?

I came in late so I missed most of the
meeting

5 How did you hear about this meeting?

NSITES
LANDSCAPE ARCHITECTURE

**DD PARSONS
BRINCKERHOFF**



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name LILLIE GILBERT

Property Address _____

Mailing Address _____

Phone Number _____

Email Address _____

1 Were your concerns addressed in the Master Plan? Why or why not?

GOT HERE LATE, BUT HOPE KAYAKING WILL BE A
PRIORITY HERE 😊

2 How do you feel about closing Shell Road to through traffic? Why?

NO OPINION - I THINK THE NEIGHBORHOOD'S WISHES
MAY BE THE CRUCIAL PART OF THIS DECISION.

3 Please provide any information that you feel will assist the City in implementing this project.

SMITHFIELD JUST INSTALLED AN ADA LAUNCH SITE FOR
KAYAKS/CANOEES AT A NEW PARK. ITS A VERY INNOVATIVE
APPROACH & WILL WORK @ LAKE LAWSON. I'D OVEREST WOULDING
@ IT AND PERHAPS USE THE SAME IDEAS. I CAN EMAIL A PHOTO.

4 Do you feel that the information was clearly presented at this meeting?

YES - YOU HANDLED THE "SEMI-HOSTILE" COMMENTS
BEAUTIFULLY

5 How did you hear about this meeting?

NEWSPAPER, OPEN SOURCE TASK FORCE MTG



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Christopher Feltton
 Property Address 151 S. Fir Ave VB, VA 23452
 Mailing Address Same
 Phone Number 499-0360
 Email Address christopher.feltton@jbschools.com

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes. Very good job w/ the whole project
much needed and will be
a huge benefit spot for the city.

2 How do you feel about closing Shell Road to through traffic? Why?

I feel any addition to ped/bike trails
is a plus. I think it is a great idea
for a complete system and park/facility.

3 Please provide any information that you feel will assist the City in implementing this project.

Great job!

4 Do you feel that the information was clearly presented at this meeting?

Great job!

5 How did you hear about this meeting?

Letter



Done

PUBLIC INFORMATION MEETING • FEBRUARY 24, 2010

lake lawson/lake smith master plan

Please return this comment sheet by March 29, 2010 to Rob MacPhearson via fax: 757.385.1130 or via email: rmacpher@VBgov.com

Name GEOFF BAUER

Property Address 1001 Pastern Brief

Mailing Address "

Phone Number 460-1972

Email Address Bauer G @ cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes - trails and pedestrian bridge to
South Parcel
Please Build Soonest?

2 How do you feel about closing Shell Road to through traffic? Why?

As a Shell Rd walker (at least once a week for years)
I vote keep road open to traffic. There is very little traffic as it is and side with residents who want short cut out of their neighborhood (4 alternate)

3 Please provide any information that you feel will assist the City in implementing this project.

Pedestrian Bridge height discussion in 1st presentation useful. 4' or up to 6' clearance? for boats?



4 Do you feel that the information was clearly presented at this meeting?

Yes!

Thx!

5 How did you hear about this meeting?

Via email & phone calls with Brian Solis and others...

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name KEITH A. Mc DOWELL

Property Address 5036 JAKEMAN ST. 23455

Mailing Address _____

Phone Number 757 462-3264

Email Address keith.mcdowell@cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes.

2 How do you feel about closing Shell Road to through traffic? Why?

Great idea to solve several problems.

3 Please provide any information that you feel will assist the City in implementing this project.



4 Do you feel that the information was clearly presented at this meeting?

yes

5 How did you hear about this meeting?

Newspaper

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Maria Mc Dowell
Property Address 5036 Jakeman st, VA Beach 23455
Mailing Address K.mcdowell@cox.net
Phone Number 757-395-4016
Email Address K.mcdowell@cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

yes

2 How do you feel about closing Shell Road to through traffic? Why?

good idea safety

3 Please provide any information that you feel will assist the City in implementing this project.

4 Do you feel that the information was clearly presented at this meeting?

yes

5 How did you hear about this meeting?

Newspaper



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Kate Tipper-Bowley

Property Address 5048 Gatenow St.

Mailing Address VA VA 23455

Phone Number 757 460-9624

Email Address Kate.Tipper@ATB.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes - Quite thorough - thanks!

2 How do you feel about closing Shell Road to through traffic? Why?

It does not matter to me.

3 Please provide any information that you feel will assist the City in implementing this project.

I love the idea

4 Do you feel that the information was clearly presented at this meeting?

Yes - again I thank you for your efforts.

5 How did you hear about this meeting?

My neighbor posted it on Facebook - I then went to VA Beach Parks ^{web site} ~~page~~

* I would like to continue ~~with~~ the increased litter talk



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Al Wallace
Property Address 4601 Chippendale Ct
Mailing Address Va Beach 23455
Phone Number 497-2187
Email Address alwallace@com.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes. Need to relocate the present boat ramp &
close Shell Road and convert it to a pedestrian
walkway with a site points.

2 How do you feel about closing Shell Road to through traffic? Why?

CLOSE Shell Road to vehicles. Must reduce negative
impacts on the fragile environment and resolve
the erosion problems and the fact that the road is
too narrow for through traffic.

3 Please provide any information that you feel will assist the City in implementing this project.

The presenter mentioned work to coincide w/ Lake
Smith weir upgrade which I believe is the
right approach to minimize impact to the populace.

4 Do you feel that the information was clearly presented at this meeting?

yes.

5 How did you hear about this meeting?

3RD Precinct Citizen's Advisory Committee (CAC) meeting -
(or Community)
Sharon made the announcement.



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Richard P. Stuart

Property Address 4500 THOROUGHGOOD DRIVE

Mailing Address ~~STU 64 @ VERIZON.NET~~ Same

Phone Number 464-0073 H 287-7598 CELL.

Email Address STU 64 @ Verizon.NET

1 Were your concerns addressed in the Master Plan? Why or why not?

YES.

2 How do you feel about closing Shell Road to through traffic? Why?

LEAVE SHELL Road Open. #1. FOR FIRE & RESCUE
#2. During Accidents @ Diamond Spring & Northampton
North Beach. This one detour route.

3 Please provide any information that you feel will assist the City in implementing this project.

Bridges need more clearance that 4 ft. so all
Guest in Boats do not have to move around in
small Boats.

4 Do you feel that the information was clearly presented at this meeting?

Yes

5 How did you hear about this meeting?

At C.A.C. Meeting Bayview High School.



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Carolyn Matter

Property Address 1337 Downs Lane Va B 23455

Mailing Address Tab Matter@aol.com

Phone Number 757-464-0527

Email Address

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes - Preserve area

2 How do you feel about closing Shell Road to through traffic? Why?

Prefer not due to access issues several times one end of Shell road has been closed due to fallen trees, construction etc -

3 Please provide any information that you feel will assist the City in implementing this project.

2 sections of Lake Lawson on either side of Shell Road - correct flow of water under Shell Road so water will not go over road

4 Do you feel that the information was clearly presented at this meeting?

5 How did you hear about this meeting?

Newspaper



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Robert Rumney / Deanna Rumney
 Property Address 776 HARRIS POINT DRIVE
 Mailing Address SAME
 Phone Number 757-490-3030
 Email Address NORSKAMERICAN@AOL.COM

1 Were your concerns addressed in the Master Plan? Why or why not?

PRETTY MUCH. HAVING ENTERED THAT
SECTION OF THE LAKE THAT LEADS TO
SAJO FARMS I DO THINK THAT THE
CAUSEWAY SHOULD BE HIGHER THAN 4'
 2 How do you feel about closing Shell Road to through traffic? Why?

IT DOESN'T AFFECT ME

3 Please provide any information that you feel will assist the City in implementing this project.

Congratulations - Let's get
started



4 Do you feel that the information was clearly presented at this meeting?

YES

5 How did you hear about this meeting?

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Jerry Odom

Property Address 1320 Downs Lane

Mailing Address " " "

Phone Number 757-464-2355

Email Address Jerry027@Verizon.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Somewhat

2 How do you feel about closing Shell Road to through traffic? Why?

Yes Not for it. Getting out of shell road is getting more
difficult caused by the increased traffic created by the development
of the Bejo Farm property and a vehicle making a U turn back to
Northampton Blvd after exiting onto from we would go to Diamond Spring

3 Please provide any information that you feel will assist the City in implementing this project.



4 Do you feel that the information was clearly presented at this meeting?



5 How did you hear about this meeting?

By letter from city of Va Beach

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Mary Jane Taylor
Property Address 813 Mariposa Court
Mailing Address Virginia Beach 23455
Phone Number 671-7751
Email Address taylormaryjane@cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

Yes

2 How do you feel about closing Shell Road to through traffic? Why?

Closing should be seriously considered
to eliminate cut through traffic going
at high speeds

3 Please provide any information that you feel will assist the City in implementing this project.

Seriously consider raising height of
pedestrian bridge between North & South
parcels

4 Do you feel that the information was clearly presented at this meeting?

Yes

5 How did you hear about this meeting?

Newspaper "ad"

INSITES
LANDSCAPE ARCHITECTURE

DD PARSONS
BRINCKERHOFF



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name JOHN MAGNER
Property Address 1316 Smith Cove Circle VA Beach
Mailing Address Same as Above
Phone Number 757 456 2286
Email Address jmagner1@cox.net

1 Were your concerns addressed in the Master Plan? Why or why not?

YES

2 How do you feel about closing Shell Road to through traffic? Why?

Good Idea

3 Please provide any information that you feel will assist the City in implementing this project.

4 Do you feel that the information was clearly presented at this meeting?

YES

5 How did you hear about this meeting?

FRIEND

INSITES
LANDSCAPE ARCHITECTURE

**DD PARSONS
BRINCKERHOFF**



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name ROBERT BITNER

Property Address 5234 WINDING BANK RD VAB

Mailing Address _____

Phone Number 456-9470

Email Address rbittner@verizon.net

1 Were your concerns addressed in the Master Plan? Why or why not?

YES

2 How do you feel about closing Shell Road to through traffic? Why?

THIS WOULD ^{PROVIDE} BE A MORE
NATURAL FEEL TO THE AREA

3 Please provide any information that you feel will assist the City in implementing this project.

4 Do you feel that the information was clearly presented at this meeting?

YES

5 How did you hear about this meeting?

VER-1 INFORMATION



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name KALE WARREN

Property Address 1177 POND CYPRESS DR., V.B., VA 23455

Mailing Address SAME

Phone Number 499-8150

Email Address Kalewarren@earthlink.net

1 Were your concerns addressed in the Master Plan? Why or why not?

yes, I love the plan!

2 How do you feel about closing Shell Road to through traffic? Why?

*I like the idea. I think it will enhance the
safety and enjoyment of the overall area.
Also, the views from Shell are drop-dead gorgeous
' and would be more accessible for leisurely
enjoyment.*

3 Please provide any information that you feel will assist the City in implementing this project.

I'll help any way I can.



4 Do you feel that the information was clearly presented at this meeting?

Very much so. Good job.

5 How did you hear about this meeting?

Saw ads in Beacon And was personally notified.

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name John Sprawl

Property Address 5432 Shell Rd. Virginia Beach Va.

Mailing Address SAME

Phone Number 757-962-5069 / 757-619-9347

Email Address jssprawl@comcast.net

1 Were your concerns addressed in the Master Plan? Why or why not?

I feel the improvements look really good and
will add alot to the area.

2 How do you feel about closing Shell Road to through traffic? Why?

I like the idea. It will stop cars from
speeding down shell Rd.

3 Please provide any information that you feel will assist the City in implementing this project.

Looks like a good ~~old~~ plan I prefer the cut-de-sac
alternative.

4 Do you feel that the information was clearly presented at this meeting?

Yes

5 How did you hear about this meeting?

Letter in the area



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name TERRI Boothe
Property Address 528 Pinewood Dr 23451
Mailing Address Same
Phone Number 491-2883
Email Address boothetheresa@gmail.com

1 Were your concerns addressed in the Master Plan? Why or why not?

curious about the depths of the
lakes and boats and fish

2 How do you feel about closing Shell Road to through traffic? Why?

undecided, I like privacy but I
dislike restrictions, and I like
pedestrian environments

3 Please provide any information that you feel will assist the City in implementing this project.

4 Do you feel that the information was clearly presented at this meeting?

yes

5 How did you hear about this meeting?

newspaper

INSITES
LANDSCAPE ARCHITECTURE

**DD PARSONS
BRINCKERHOFF**



Lake Lanosm / Lake Smith
Master Plan

Laura Hulings
5430 Shell Rd., Va Beach, VA 23455
(757) 961-0064
lhulings@nps.k12.va.us

- ① Yes - playground, picnic areas, overlooks
- ② Dislike - I use the access at both ends of Shell Rd to go to and from my home. I would like it to remain open, but I would like the speed limit to be lowered and speed bumps to be installed.
- ③ There are over 30 children ages 4-16 that play outside in the neighborhood. We desperately need the speed limit lowered and speed bumps installed.
 - Restrooms & parking should be locked each day at dusk to prevent people from parking over night.
- ④ yes
- ⑤ Letter mailed to my home

lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Wesley D. Stephens

Property Address 5407 Shell Rd.

Mailing Address Virginia Beach, VA. 23455

Phone Number (757) 962-0649

Email Address wes.s.stephens@yahoo.com

1 Were your concerns addressed in the Master Plan? Why or why not?

① Parallel parking on a road that is already very narrow
② Police presence in the neighborhood to
outside attracted people
③ who will be responsible for cleaning the park area and the areas leading to it.

2 How do you feel about closing Shell Road to through traffic? Why?

It will create a reason for people to come through
just to disregard the sign creating additional
traffic the "why" factor.

3 Please provide any information that you feel will assist the City in implementing this project.

The city needs to get better at maintaining the property
that's their now re cleaning curbs & gutters
as well as mowing city property by my neighbors house
and the church.

4 Do you feel that the information was clearly presented at this meeting?

yes

5 How did you hear about this meeting?

Friends & family.



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name Lawn Stephens
Property Address 5407 Shell Rd
Mailing Address Virginia Beach, VA 23455
Phone Number 962-0649
Email Address wesdawn@yahoo.com

1 Were your concerns addressed in the Master Plan? Why or why not?

increased garbage

2 How do you feel about closing Shell Road to through traffic? Why?

Absolutely not!

3 Please provide any information that you feel will assist the City in implementing this project.

Boaters blocking driveways on
Shell Road

4 Do you feel that the information was clearly presented at this meeting?

yes

5 How did you hear about this meeting?

Mailing

INSITES
LANDSCAPE ARCHITECTURE

**DD PARSONS
BRINCKERHOFF**



lake lawson/lake smith master plan

Please return this
comment sheet by
March 29, 2010 to
Rob MacPhearson via
fax: 757.385.1130 or
via email: rmacpher@
VBgov.com

Name RUTH + STEPHEN DEVLIN

Property Address 5236 WINDING BANK ROAD

Mailing Address VIRGINIA BEACH, VA 23455

Phone Number 757-518-8231

Email Address SODEVLIN@aol.com / RUTHMONE@aol.com

1 Were your concerns addressed in the Master Plan? Why or why not?

THE BRIDGE BETWEEN THE NORTH + SOUTH PARCELS; 4 FEET
HEIGHT ABOVE THE WATER MAY BE A BIT SMALL FOR
"SAFE" BOAT TRANSIT. A LITTLE MORE CLEARANCE WOULD BE BETTER.

2 How do you feel about closing Shell Road to through traffic? Why?

GOOD IDEA, NO OBJECTIONS, BUT THEN I DON'T
LIVE ON SHELL ROAD.

3 Please provide any information that you feel will assist the City in implementing this project.

GET PRIOR PERMISSION ~~IF~~ FROM NORTOLK, BEFORE PLANNING
FOR PIERS OR STRUCTURES GRABER IN AREA THAT THE
150 FT² MAXIMUM ALLOWED FOR HOMEOWNERS' PIERS

4 Do you feel that the information was clearly presented at this meeting?

EXCELLENT PRESENTATIONS, PROJECT SHOWS
VERY FORWARD THINKING. GOOD WORK.

5 How did you hear about this meeting?

VIRGINIAN ~~BEACH~~ PILOT / POSSIBLY THE "BEACON"



APPENDIX G: FEBRUARY PUBLIC MEETING ADDITIONAL COMMENTS

General Comments

- I feel the improvements look really good and will add a lot to the area.
- My concerns were addressed. Need to relocate the existing boat ramp and close Shell Road.
- Find another location or downscale this one. I didn't retire to be bothered with the problems this will present.
- My concerns were addressed: playground, picnic areas, overlooks.
- Really excited about preserving and increasing access to this natural resource area
- I was pleased with the proposal and implementation plan. Basically, that neighborhood has a private park being funded by all of the City taxpayers.
- My concerns were addressed with the relocated entrance to the North parcel and canoe/kayak access through the causeway between the North and South parcels.
- Still not happy that tax payers will not have access via Sajo Farm; I do not understand the easement issue. Basically that neighborhood has a private park funded by all of the City taxpayers
- Two sections of Lake Lawson on either side of Shell Road – correct flow of water under Shell Road so water will not go over the road
- Get prior permission from Norfolk, better planning for piers or structures great to area than the 150' maximum allowed for homeowner's piers
- Boaters block driveways on Shell Road
- Provide education programs that address excess use of fertilizer and runoff issues. Explain the difference between duckweed and algae
- Hope that kayaking will be a priority here. Smithfield just installed an ADA launch site for kayaks/canoes at a new park. It's a very innovative approach and will work @ Lake Lawson. I'd suggest looking at it and perhaps use the same ideas. I can email a photo
- Very good job on the whole project. Very much needed and will be a bright spot in the City.
- The presenter mentioned work to coincide with Lake Smith Weir upgrade which I believe is the right approach to minimize impact to the populace
- Glad to see ample shoreline access for fisherman and boaters. You might want to add some non-motorized access points in Lake Lawson
- Concerns were addressed: boat ramp moved and parking was incorporated with least disturbance of existing growth. Meetings should be later for increased participation
- Make sure there is some sort of fish attracting structure near the shoreline fishing and access points to provide a change/variety of quality fishing
- You addressed my concerns with the trails and bridge to South parcel – please build soon! Pedestrian bridge height discussion in first presentation useful. 4' or 6' clearance for boats?
- Having entered that section of the Lake that leads to Sajo Farm I do think that the causeway should be higher than 4'
- Let's get started
- I love the plan

- I feel the improvements look really good and will add a lot to the area
- There are over 30 children ages 4-16 that play outside in the neighborhood. We desperately need the speed limits lowered and speed bumps installed. Restrooms and parking should be locked each day at dusk to prevent people from parking overnight
- I'm concerned about increased garbage
- The bridge between north and south parcel: 4' height above the water may be a bit small for "safe" boat transit. A little more clearance would be better.
- Parallel parking on a road that is very narrow? Police presence in the neighborhood for outside attracted people. Who will be responsible for cleaning the park area and the areas leading to it?
- The City needs to get better at maintaining the property that's theirs now i.e. Cleaning curbs and gutter pans as well as mowing City property by my neighbors house and the church
- Curious about the depths of the lakes and boats and fish
- Bridges need more clearance than 4' so as guests in boats do not have to move around in small boats
- I love the plan! I'll help in any way I can.
- Seriously consider raising the height of pedestrian bridge between North and South parcel.

Responses to closing Shell Road

- I use shell road as my decompression drive to and from home. 600+/- vehicles per day and is a big dump onto already dangerous Northampton boulevard. I like the idea of easier access on foot and by boat. That portion is one of the prettiest parts of Lake Lawson and pedestrian access citizen use and appreciation.
- I think the neighborhood's wishes may be the crucial part of this decision.
- I am for closing Shell Road – added benefit to community, purpose and project. Offers increased recreational use by all park goers
- As a Shell Road walker (at least once a week for years), I vote to keep the road open to traffic. There is very little traffic as it is and I side with residents who want short cuts out of their neighborhood and alternate exits.
- Closing Shell Road would be nice for property owners because it would tie properties together for safety for users
- I can see the merits for closing Shell Road and would like to see adjustments made towards closing the road.
- Good idea (closing the road) helps w/safety
- Would like canoe/kayak access to west section of Lake Lawson
- If the surrounding neighborhoods get the benefit of these park upgrades they should be able to be comfortable with the increased traffic
- If the neighborhood gets the benefit of these upgrades in the parks, they should accept possible additional traffic. The City does not have the funds to close off that road. The road was there first.
- Do not close Shell Road. You can no longer exit except by a stop sign – can't get to Ellis for light at Bayside.

- I feel any addition to pedestrian and bike trails is a plus. I think it is a great idea for a complete system and park facility.
- Need to close Shell Road and connect it to a pedestrian walkway with site points. Close Shell road to vehicles. Must reduce negative impacts on the fragile environment and resolve the erosion problems and the fact that the road is too narrow for through traffic.
- Closing the road is a great idea to solve several problems
- Prefer not to close the road due to access issues. Several times our end of Shell road has been closed due to fallen trees, construction, etc.
- It doesn't affect me
- I like the idea of closing Shell Road. I think it will enhance the safety and enjoyment of the overall area. Also, the views from Shell are drop dead gorgeous and would be more accessible for leisurely enjoyment
- Closing the road should be seriously considered to eliminate cut through traffic going at high speeds
- This would provide a more natural feel to the area
- Absolutely not!
- Good idea, no objection but then again, I don't live on Shell Road
- It will create a reason for people to come through just to disregard the sign creating additional traffic. The "Why" factor?
- Undecided – I like privacy but I dislike restrictions and I like pedestrian environments
- It does not matter to me
- I like the idea of closing Shell Road. It will stop cars from speeding down Shell Road. I prefer the Cul-de-sac option.
- I dislike the idea. I use the access at both ends of Shell Road to go to and from my home. I would like to remain open, but I would like the speed limit to be lowered and speed bumps to be installed.
- I'm not for it. getting out of Shell road on to Diamond Springs road is difficult caused by the increased traffic created by the development of the Sajo Farm property and a vehicles making a U-turn back to Northampton Blvd. after existing from Wawa onto Diamond Springs
- Leave Shell Road open. #1 For fire and rescue. #2 During accidents at Diamond Springs and Northampton northbound. This is the one detour route.
- Closing Shell Road is a good idea