

APPROVED

GENERAL MANAGEMENT PLAN AND CONCEPTUAL DEVELOPMENT PLAN

WOODGLEN LAKE PARK

APPROVAL DATE: JULY 28, 2004 FAIRFAX COUNTY PARK AUTHORITY

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WOODGLEN LAKE PARK

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I. INTRODUCTION

A. Purpose and Description of the Plan

The purpose of the General Management Plan (GMP) is to serve as a guide for all future planning and programming of this park.

This GMP (see page 20) describes the existing natural and cultural resources of the park, as well as other existing conditions. General Management Plans are meant to be flexible, to change with the changing needs of park visitors. Every GMP should be updated periodically, to reflect changes that have occurred both on and off-site.

The purpose of the Conceptual Development Plan (CDP) is to describe how the park will be managed and what activities should be associated with that management.

B. Property Location and Description

Woodglen Lake Park is a wooded 54.4 acre community park in the Braddock Supervisory District. The lake surface is 12.8 acres in size. It is located at 10617 Zion Drive in Fairfax, Virginia. It is generally bounded by Zion Drive to the north and a vacant parcel of land and then the Norfolk Southern Railroad to the south. It is surrounded by residential development, including Middleridge, Fairfax Club Estates, and Bonnie Brae. It is immediately adjacent to the Bonnie Brae Elementary School to the southeast.

C. Ownership and Land Use History

Woodglen Lake was constructed in the late 1970's through 1980 as part of a pilot, watershed-wide water quality management program known as Public Law 566 (PL566). The majority of the Woodglen Lake Park property was acquired by the County from a variety of private owners and developers in the mid-70s for this construction, then was transferred to Fairfax County Park Authority from the Board of Supervisors in October 1999. Other PL566 lakes in Fairfax County include Barton, Braddock, Mercer, Royal, and Huntsman Lakes. These lakes are designed to capture sediment to prevent it from moving downstream. According to the Annual Report on the Environment, 2003, produced by the Fairfax County Environmental Quality Advisory Council, the lakes are inspected annually for the dam structure, but are not monitored for biological or chemical parameters. Approximately half of Woodglen Lake could fill in with sediment before downstream water quality would be



adversely impacted. In 2000, tests showed that the lake was filled with silt at 5% of its capacity.

Since Woodglen Lake is a stormwater management facility, it is maintained by the Department of Public Works and Environmental Services.

II. PARK PURPOSE AND SIGNIFICANCE

A. Park Purpose: What is the purpose of the park?

Park Purpose statements are intended to provide an umbrella for planning and decision making. If a proposed use conflicts with any one of the purposes listed, it will be considered an incompatible use. By establishing park purposes, future plans can remain flexible, as legislative requirements and visitor preferences change. The purpose of Woodglen Lake Park is to:

Preserve, protect, and interpret natural resources

B. Significance Statement: Why is this park important?

Woodglen Lake Park is an important component of the park system in Braddock District. Each park in this area of the county (see page 16) plays an important role in protecting resources and providing recreational opportunities for the citizens of the county.

C. Visitor Experiences: What will the visitor experience at this park?

Visitors will be able to enjoy the wooded natural area and walk informally around the small lake.

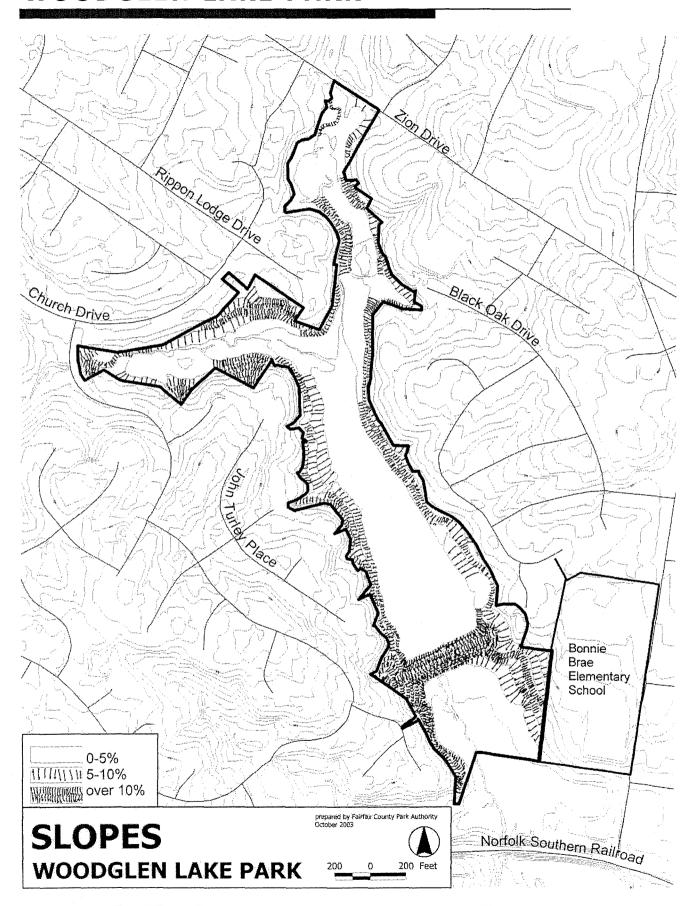
D. Park Classification

When acquired, Woodglen Lake Park was classified as a Community Park based on its acreage. With this plan the classification will be changed to a Natural Resource Park. This subset of the Countywide Park classification is intended to preserve, protect and perpetuate areas of sensitive or unique environmental, ecological, and scenic values in Fairfax County. Development which does not adversely affect ecological functions and which enhances awareness of resource values is appropriate. Interpretive (education) facilities and structures including orientation kiosks, hiking, biking and equestrian trails as designated, signs and benches are acceptable forms of park development. The size of the park type varies according to the extent of resources to be protected.

III. EXISTING CONDITIONS

A. Slopes

Slopes on the site are between 2-7 % in the stream valleys, but are steeper than 10% on either side of the lake. Generally the southwest and northeast sides of the lake are steeper with slopes well over 10%, in the 14-25 % category. Area of slopes greater than 10% also occur along the tributary to the west.



B. Soils

This park is located in the Piedmont upland physiographic province in the central portion of Fairfax County. It occurs east of the Triassic Basin and west of the Coastal Plain. The province is underlain by metamorphic rocks, predominantly schist, granite, gneiss and greenstone. Remnants of the Coastal Plain terrace may be found on high, broad ridge tops in the eastern half of the province. A well-dissected, dendritic drainage pattern occurs throughout the province. The hilltops are typically fairly wide and rolling, except in places along the lower tributaries of large streams. Here, Vshaped valleys with steep slopes and narrow ridge tops occur. All of the soils on the site are silt loams with the exception of the Mixed Alluvial Soil, which is a soil type characteristic of the flood plain areas in the county.

(1A) Mixed Alluvial Soil is derived from recent soil materials which have washed from the uplands and deposited along the stream bottoms. It consists mainly of somewhat poorly and poorly drained soils and mixed soil materials including very sandy areas and gravelly bars. It is subject to frequent flooding and needs drainage in many places for any developed uses. More than half of the land area of the park is this soil type, which is characterized as a hydric soil with a high probability of containing wetlands. Stream bank erosion within these soils may result in undercutting of embankments on adjacent properties. This soil is rated poor in the silty and silty clay areas for road and street subgrade, but good in the sandy

and gravelly areas.

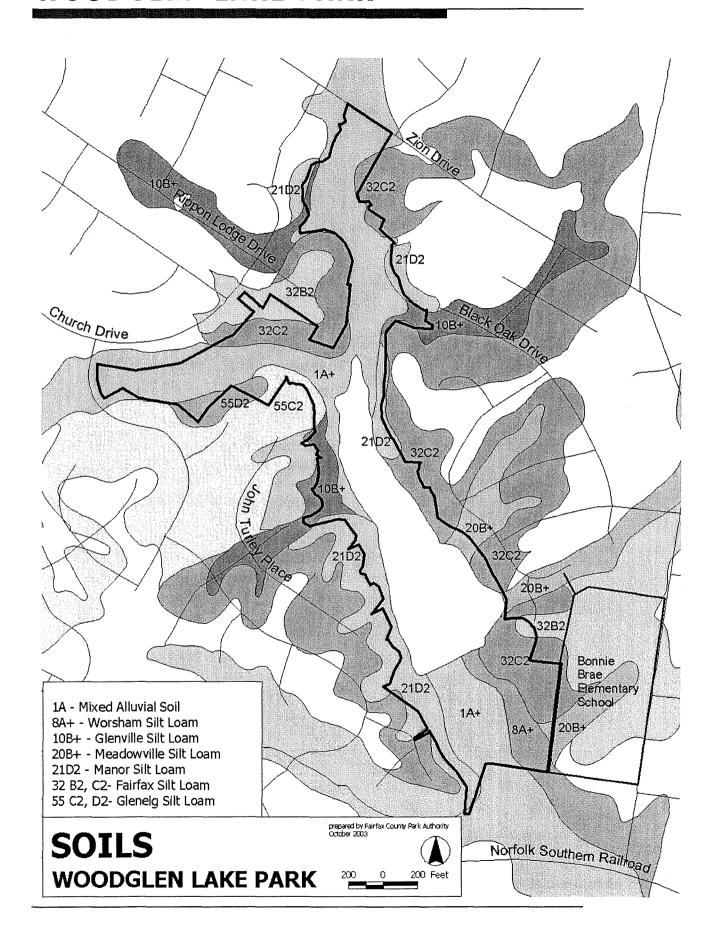
(8A+) **Worsham Silt Loam** is also classified as a hydric soil with a high probably of wetlands. It is poorly drained, gray, flat and occurs along foot slopes and upper drainageways. It is subject to seepage waters from surrounding slopes. It is rated poor for most development.

(10B+) **Glenville Silt Loam** is a deep, moderately well to somewhat poorly drained soil in the upper courses of drainageways, in swales in uplands, in saddles between major drainage sheds and on lower footslopes influenced by seepage. The water table is seasonally high and the soil rates fair to poor for most development.

(20B+) **Meadowville Silt Loam** is a deep, brown moderately well drained, friable, fertile soil that is derived from recent colluvial materials which have washed mainly out of the Glenelg, Elioak, and Manor soil areas. The soil accumulates seepage water from the surrounding slopes and has a high water table during wet seasons. The soil rates poor for most development.

(21D2) **Manor Silt Loam**, hilly phase is a strongly sloping, excessively drained, weakly developed, highly micaceous soil that is derived from quartz serecite schist rock materials. It is difficult to compact and susceptible to erosion. It rates good to fair for development.

(32B2, C2) **Fairfax Silt Loam**, undulating phase, is a moderately well-



drained soil that is developed on old high lying land areas. It usually occupies ridge tops and is fairly extensive. Internal drainage is moderately slow because the soil has a pan layer that usually occurs 28 to 30 inches below the surface. The soil is rated good to fair for development, including road subgrade materials.

(55 C2, D2) – **Glenelg Silt Loam** is a moderately deep, well-drained brown loamy soil formed in materials weathered from quartz mica schist rocks. This soil is located on the upper slopes and hilltops in the Piedmont uplands. It is extensive and typically found in large tracts ranging to several hundred acres in size. It has desirable properties for many uses and rates good for most development.

C. Natural Resources Streams and Wetlands

Two perennial streams are present on the project site: Sideburn Branch flowing north to south into Woodglen Lake and an unnamed tributary flowing through the western portion of the site. Their confluence is at the northern end of the lake. Several small intermittent streams contribute to the lake as well. One is located north-east of the lake and contributes to a wetland system before connecting to the lake. A second one is located approximately midway on the west side of the lake.

The presence of hydric soils, Mixed Alluvial Soil and Worsham Silt Loam, indicates there is a likelihood that wetlands may be found within the area. Several potential wetland areas exist on the site. A small wet area is located on the southern floodplain of the western tributary of Sideburn Branch. Various wetland areas are located within the floodplain of Sideburn Branch below the dam. Another area is present along the lower east side of the lake, where historically a small stream entered Sideburn Branch. Another wetland system is associated with the small tributary on the east side of Sideburn Branch, just north of the lake and below a former de-watering basin. A small seep is present just north of this basin on the east side of the access road.

Resource Protection Areas

The Fairfax County Chesapeake Bay Ordinance maps indicate that almost the entire site falls within a Resource Protection Area (RPA). Only small portions of the site, generally on the steeper slope sections, fall outside the RPA, but are still within the Resource Management Area (RMA).

Forest Cover

Almost the entire area surrounding Woodglen Lake is in forest cover. The forest cover in the stream valleys and lower elevations of the site is generally a mixture of larger bottomland forest species such as tulip poplar (*Liriodendron tulipifera*) and red maple (*Acer rubrum*). Their age is estimated to be 80-100 years. Understory shrubs vary, but include spicebush (*Lindera benzoin*), American holly (*Ilex opaca*), flowering dogwood (*Cornus florida*),

arrowwood (Viburnum dentatum) and black haw (Viburnum prunifolium). Woody vines include poison ivy (Rhus radicans), greenbriar (Smilax rotundifolia), grapes (Vitis sp.) and Japanese honeysuckle (Lonicera japonica). On the higher and steeper slopes of the project site, various oak species are included in the mix, in particular white oak (Quercus alba) and northern red oak (Quercus rubra).

Starting east of Broadwater Drive, the tulip poplar/maple forest on the south side of the stream has a dense overgrown understory of American holly, spicebush, greenbriar, Japanese holly, Japanese honeysuckle and poison ivy. Black gum (Nyssa sylvatica) and flowering dogwood are also present. This forest is of medium quality. Going further east, one encounters a lower, wetter area within the floodplain, which also receives runoff from the adjacent houses. Further east the shrub layer thins out and the overall health of the forest improves. Additional species present in the canopy layer include white oaks and beech (Fagus grandifolia) especially on some of the higher and steeper slopes near the edge of the property.

The forest on the north side is probably somewhat younger than the forest on the south side of the stream since there are still Virginia pines (*Pinus virginiana*), a pioneer species, present in the mix of tulip poplars and maples. Just before reaching the lake, the property widens and the forest on the north side of the lake is similar to the

high quality forest on the south side, with a mixture of tulip poplars, red maples, and white oaks, and Virginia pine remnants on the highest part of the property.

Continuing along the western edge of the lake the forest composition changes little, with the canopy still dominated by tulip poplars, maples and white oaks. Aerial photography of 1937 shows similar forest cover along the stream valleys of both Sideburn Branch and its western tributary. Spicebush, arrowwood, blackberries (Rubus argutus), American holly as well as hazelnuts (Corylus americana) are present along the edge of the lake. Further south on the steeper, narrow slopes, mountain laurel becomes part of the understory mix. Greenbriar and poison ivy are present throughout, as is the invasive Japanese honeysuckle.

South of the dam the forest on the west side of Sideburn Branch is again similar to the forest cover described above, with the lower elevations mostly dominated by tulip poplar and red maples and the higher elevations seeing a higher percentage of white and red oaks mixed in with the other two species. Just east of Sideburn Branch is a younger (20-30 years) forest dominated by red maples and tulip poplars. This area was cleared around 1970 when the sewer line was constructed. Additional clearing took place during construction of the lake (1980). Large areas of the forest within the floodplain of Sideburn Branch are wetlands, as is indicated by the presence of hydric soil in this location,

hummocky saturated soils and many herbaceous and shrub wetland species in addition to the canopy species. Both the younger (east side) and older (west side) portions of the forest contain wetlands, but it is particularly evident on the east side, where the floodplain is wider and flatter and runoff from the hillside tends to pool on top of clayey soils, and contributes to the saturation of the soil. A pathway/clearing located on the east side of the stream at the bottom of the slope, crosses through several wetland areas.

The forest cover on the slopes on the east side of Sideburn Branch is also a relatively young (approx. 50 years) forest, with Virginia pines present on the upper slopes and stunted red cedars (*Juniperus virginiana*) spread throughout. Other species present in the canopy include white and red oak, tulip poplar, high and low bush blueberries and black haw.

There is apparent encroachment onto park property to the east of Broadwater Drive. A substantial area to the edge of the stream has been mowed and maintained as lawn. Additional encroachment appears to be present on the north side of the tributary to Sideburn Branch; brush has been cleared or areas have been mowed up to the edge of the stream in several different locations. The areas of mowing exist in various locations on both sides of the lake as well. The east side of the lake has seen extensive clearing of underbrush and forest areas. The small section of remaining forest is made up of a mixture of oaks,

tulip poplars, beech, Virginia pines, American holly and mountain laurel. The lower section adjacent to the lake is meadow, which has been mowed in some locations.

North of the lake, along the east side of Sideburn Branch, there is a former dewatering basin (constructed in the 1980-1982 time period). Just below the basin is another area of wetlands, dominated by maples and spice bush, which receives additional runoff from a small tributary coming from the east. The forest along this small tributary is a mix of tulip poplars and maples. Their size is generally somewhat smaller than what is found along the major tributary coming from the west. Virginia pine is present along the banks of Sideburn Branch west of the SWM area and these are remnants of a Virginia pine forest that extended to the west.

An access road runs from Zion Drive along the east side of the SWM area towards the lake. The forest north of the SWM area is again dominated by tulip poplars and maples of considerable size and is probably also in the 80-100 year age range. East of the access road is a small wetland seep dominated by red maples, tulip poplar, alder, arrowwood, various herbaceous species and greenbriar. North of the seep the forest remains similar with large tulip poplars, red maples and an occasional beech.

The forest on the west side of the access road is similar in age and

composition as what is found on the east side of the road: floodplain forest dominated by tulip poplars and red maples, with an understory of spicebush, black haw and greenbriar. There are some very large specimens located throughout this area, which possibly are older than 100 years. Japanese honeysuckle and Japanese holly are present in large quantity. One spot along the west side of the access road is overgrown with the invasive English ivy (Hedera helix) both on the ground as well as creeping up several large trees. This area could be targeted for invasive species control, since the English ivy is only present in a limited area.

D. Cultural Resources

A preliminary background review of Woodglen Lake Park has been completed and the area has undergone pedestrian archaeological reconnaissance. All of the area was surveyed, and judgmentally placed Shovel Test Pits (STPs) were excavated in the area of moderate to high potential for archaeological sites.

In times prior to European Contact, these parcels along Woodglen Lake would have been attractive lands for Native American people, with ample water resources. The streams, part of the upper western headwaters of Pohick Creek, also would have attracted Native Americans because of the abundance of game for hunting, as well as cobbles for the manufacture of stone tools. During the pedestrian survey, outcrops of quartz, an important resource for native peoples,

were noted. Two previously documented Native American sites were known to be present at the western end of the parcels, but have been destroyed by housing development and construction of the dam and lake. A new site was found during the current survey. It lies on a narrow bench south of the east to west running tributary into the lake. This site consists of a quartz reduction site, where Native Americans would have camped and made stone tools. Several expedient quartz tools and significant amounts of debitage (the flakes and chips of stone resulting from the manufacture of stone tools) were found.

During the 18th century, the properties were part of a large parcel of agricultural land. Preliminary archival research of the properties in the area showed no evidence of existing structures and no remaining historic structures. During the survey, no evidence of domestic structures or mill sites was noted.

While Woodglen Lake Park has few known cultural resources, the likelihood that additional Native American sites exist is low. The pedestrian archaeological reconnaissance surveyed all of the areas that potentially could have sites and only one new site was found. There are a number of Civil War Sites in the vicinity, as the property is south of Braddock Road, a major thoroughfare during the war. Two Civil War sites located just west of the park boundaries were destroyed by urban

development. Relic hunters reported finding camp-related artifacts in this area prior to and during construction and that both Federal and Confederate artifacts have been found.

As most of the archaeological sites located within Woodglen Lake Park have been destroyed or seriously compromised by both suburban and park development, the sites located on the western edge of park warrant no further preservation methods. The newly identified archaeological site located just west of the lake on the south side of the tributary of the lake is likely to contain information on Native American themes of stone tool manufacture technology, subsistence, and overall site formation and structure. If in the future any ground disturbing activities are planned for this location, the site will require additional archaeological survey, and following that, possibly additional testing and excavation.

E. Access

The most visible access to the park is on Zion Drive. There are also existing connection points to several subdivision streets: Paynes Church Drive, Landmark Place, Goldeneye Lane, and Fireside Court.

F. Utilities

Electricity, water, and sewer are available on various parcels of the site.

G. Existing and Planned Land Use

The park is zoned a combination of zonings: R-1, R-3, and PDH - 3; the areas surrounding the park are zoned the same three zonings, with the Bonnie Brae community being zoned R-2. Almost all of the surrounding area is single-family residential, with the exception of the Norfolk Southern Railroad and properties to the south of the rail line. As you cross Roberts and Guinea Roads, townhouses are added to the mix.

The Comprehensive Plan for Fairfax County, Virginia for Area III, the Pohick Planning District, Main Branch Community Planning Sector states the following: "A remarkable amount of treed landscape remains in older neighborhoods which, when combined with the stream valleys, contributes to the rural character of the residential areas...This entire sector is classified as Suburban Neighborhood... Infill development in these neighborhoods should be of a compatible use, type and intensity...." Regarding transportation, the plan references the future widening and extension of Guinea Road from Sideburn Road to Route 123 within the existing 90 foot right of way. The plan includes a recommendation to re-evaluate the necessity of this road and other options once the Roberts Road overpass has been completed and resultant traffic patterns are better understood.

H. Countywide Trail Plan

The County Comprehensive Plan shows a 6' wide paved trail along Zion Road. This trail exists along the frontage of the park. The main northsouth trails on the plan are along Route 123. A new countywide trail, The South County East-West Trail, is proposed to follow Adare Drive and John Ayres Drive to Goldeneye Lane and south to the stream valley trail along Sideburn Branch of the Pohick. This trail is not planned to touch the park, but trails within the park and connecting to Goldeneye Lane could possibly become part of this trail system.

I. Existing Facilities

The site is not developed.

IV. PUBLIC LAW PL-566

A. Background

In January 1967, the BOS, under Public Law PL-566, approved the Pohick Creek Watershed Work Plan. This watershed work plan was sponsored and prepared by the Northern Virginia Soil and Water Conservation District and the Fairfax County Board of Supervisors through its planning staff. Technical assistance was provided by the Soil Conservation Service and Forest Service of the U.S. Department of Agriculture, cooperating with the Virginia Department of Forestry of the Department of Conservation and Economic Development. Other State and Federal agencies assisting were the Soil and

Water Conservation Commission, the Agricultural Stabilization and Conservation Service, the Virginia Department of Highways and Transportation, the Agriculture Extension Service, the Virginia Commission of Game and Inland Fisheries, and the U. S. Fish and Wildlife Service.

The program established newguidelines for land treatment in urban areas. The guidelines provide an orderly system for storm drainage to help control flooding, erosion and sedimentation, and preserve natural stream channels. Water impoundment structures, or damsites, are an integral part of the watershed project. Construction of six damsites was completed, the first in 1970 and the last in 1985. Each site serves a particular sub watershed (of the Pohick Creek Watershed) containing different soil types and various amounts of pervious and impervious cover, factors which contribute to stormwater surface runoff and natural erosion. The lakes serve to trap sediment washed from upstream sources. The dams were designed, primarily, as stormwater quantity control facilities and with a sediment pool capacity for projected 100-yr sediment accumulations. The impoundments, in total, serve a watershed area of 22,690 acres with an estimated population in excess of 100,000. In addition to serving as flood control facilities, the lakes contribute to water quality and support passive recreational activities (i.e., fishing, non-motorized boating, etc.).

B. Current Inventory

Damsite 1: Lake Mercer

Damsite 2: Lake Barton

Damsite 3: Woodglen Lake

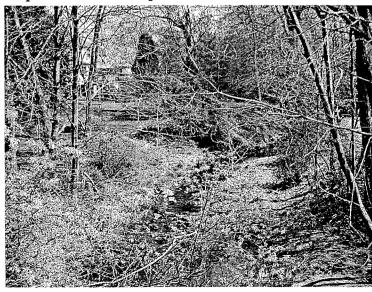
Damsite 4: Lake Royal

Damsite 7: Lake Braddock

Damsite 8: Hunstman Lake

C. Current Inspection Cycle

All PL-566 dams are formally inspected annually via a joint inspection with representatives of the Department of Public Works and Environmental Services, the Fairfax County Park Authority, the Virginia Department of Conservation and Recreation, the U.S. Department of Agriculture and the Northern Virginia Soil and Water Conservation District. These inspections are normally conducted in the fall and serve to identify any safety or operational area in need of corrective action. In addition, a biennial inspection is conducted under contract to an engineering firm with experience and expertise in dam



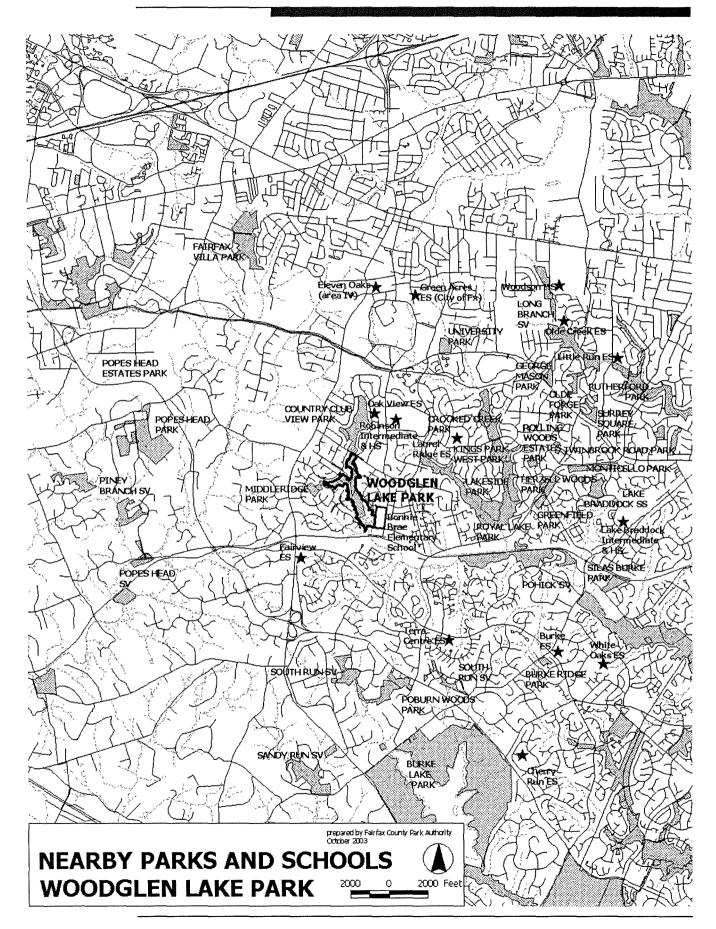
construction. These inspections satisfy the State requirements for dam safety. The permit issued by the State to operate the dam is valid for six years. Re-issuance of the permit is tied to the most recent biennial inspection and compliance with all appropriate safety and operational requirements of the State.

D. Current Service Level

Based on the formal inspections mentioned above and other informal inspections conducted by County staff, a work program is established to correct any deficiencies and to address routine maintenance items. At each site, critical items, such as the stability of the dam embankment and the functioning of the water control facilities, are addressed on a priority basis. Silt removal operations, normally required on a yearly basis to maintain the recreational aspects of the lakes, have not been funded in over ten years.

Four of the six facilities are eligible for a federal cost-share program which provides for study and rehabilitation of aging PL566 flood control facilities. The four include Lake Barton, Woodglen Lake, Lake Royal, and Hunstman Lake. Lake Royal is the first and is currently in the early stages of a study which began in FY2004. It is expected that the study will last approximately 18 months. The other three facilities will also be studied provided federal funding is available.

PARK	TRAIL	COURT	FIELD	PLAYGRND	PICNIC	PARKING
STREAM VALLEY						
Long Branch SV	*					
Pohick SV	*					
South Run SV	*					
Piney Branch SV					,	
Popes Head SV						
Sandy Run SV						
COMMUNITY						
Popes Head Estates						
King Park West						
University						
Fairfax Villa	*					
Country Club View	*	basketball/2 tennis		*		*
Lakeside	*	basketball	60' diam/2 rectang	*	*	*
Monticello			open play			*
Royal Lake	*	basketball/2 tennis			*	*
Rutherford	*	basketball/3 tennis	2-65'diam	*	*	*
Silas Burke		basketball	rectangular	*	*	
NEIGHBORHOOD						
Greenfield						
Herzell Woods						
Rolling Woods Estates						
Twinbrook Road						
Burke Ridge	*					
Olde Forge	*					
George Mason	*		garden plots			*
Surrey Square	*	basketball		*		
Middleridge	*	basketball/2 tennis		*		*
DISTRICT						
Popes Head	*	basketball/2 tennis	2 diam/rectan	*		*



V. NEEDS ASSESSMENT

A. Nearby Parks and Schools

Within the service radius of this community park (3 mile radius) are 13 schools (10 elementary schools, 2 intermediate/high schools and 1 high school) plus an administrative office. Typically, schools have athletic fields and playgrounds (elementary schools).

- · disc golf course
- miniature golf course
- volleyball courts
- playgrounds
- picnic areas and shelters
- concession center
- miniature train
- amphitheater
- restrooms



boat rentals

- marina
- camping
- fishing
- parking

B. Needs Assessment Statement

Need for park and recreation facilities is determined through long range planning efforts. The Park Authority tracks inventory of facilities and land, looks at

industry trends, surveys County citizen recreation demand, and compares itself with peer jurisdictions to determine reasonable need. This needs assessment process was most recently completed in 2003. The results of this study confirm many of the predictions from the prior assessment.

There are a total of 27 parks in the service area (see following chart). Not included in the chart is the Multiple Resource Park, **Burke Lake Park and Golf Course**, which is also within the boundaries of the service area. Facilities at this park include:

- trails
- par 3 golf course and amenities

The proposed plan for Woodglen Lake is most closely related to the "nature center/natural area" included as a facility/activity in the Needs
Assessment Citizen Survey. Although a nature center is not proposed, the use of the park as a natural area and for nature programs makes it a close match to this facility description in the survey. Citizen survey results relevant to Woodglen Park include the following:

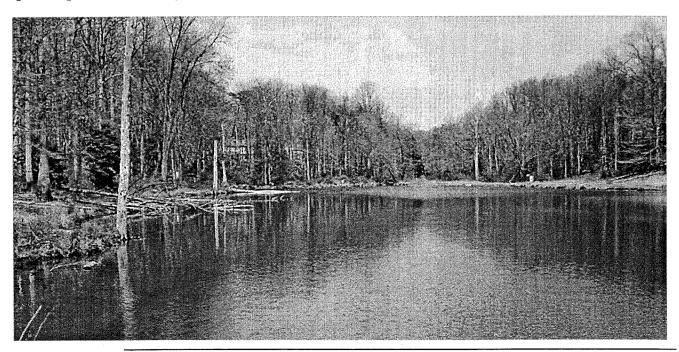
- 37% of County households visited a nature center/nature park during the year prior to the survey.
- 54% of County households indicated a need for nature centers/natural areas and 36% of those indicated that their needs for thesefacilities are partially or completely unmet.
- 19% of County households rate nature center/nature parks as one of the top four most important facilities to their household.
- 16% of the County population participate in birding/nature study an

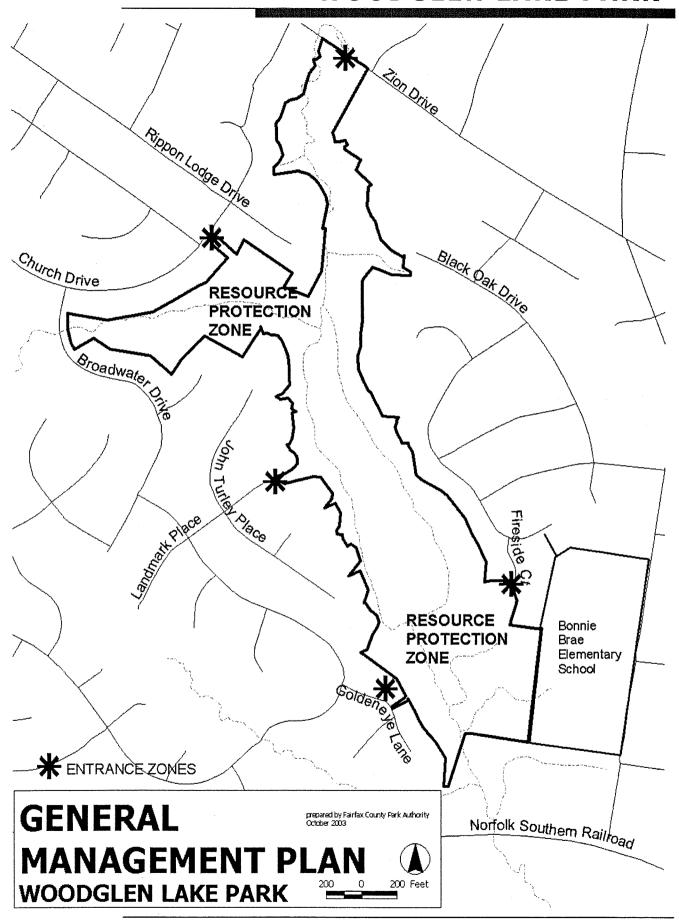
average of 36.7 days per year.

- 62% of the survey respondents were very supportive of purchasing land to preserve open space. Citizens indicated that purchasing land to preserve open space was the most important action they would support with their tax dollars. (While Woodglen Lake is already owned by FCPA, it is an indication of strong support for preserving open space as proposed in the Woodglen Lake Park Master Plan.)
- 34% of respondents are very supportive of developing new nature, history and horticulture facilities.

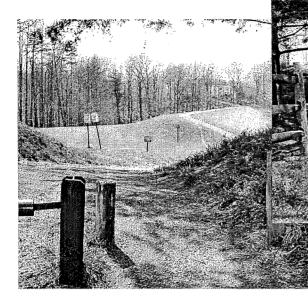
VI. GREEN INFRASTRUCTURE STATEMENT

The Fairfax County Park Authority has developed a modeling tool to identify significant natural and cultural resources in the County. Using the County's geographic information





system (GIS), the FCPA has produced a countywide "Green Infrastructure" model and resultant map based on a weighted analysis of significant



environmental and historic features. The weighted analysis recognizes the difference in value of various resources within the three general categories of environmental, cultural, and open space areas, but does not rank importance between categories. The model is limited by the extent, accuracy, and resolution of the data sources used. Several important resources, such as rare, threatened, and endangered species and **Environmental Quality Corridors** (EQCs) are not considered in the analysis due to the unavailability or incompatibility of the data.

The Green Infrastructure Model Map indicates a good resource value for the Woodglen Lake Park site and the majority of the surrounding area, though an isolated area ranked as a low resource value is shown to the

west of the park. This ranking indicates that the site is important to the local community as one of the wooded lakes and adjacent lands in the area.

VII. MANAGEMENT FRAMEWORK

The management framework integrates research, site analysis, and basic data presented in this document.

Management zones have been defined to provide a framework for decision making. Existing conditions were considered in the development of the management zones. The "Potential Uses" stated for the zone describe what uses are acceptable. If a use is not listed for a zone, by its omission it is considered an incompatible use for that zone. The potential uses are intentionally general to allow flexibility when making decisions.

A. Resource Protection Zone

The entire park should be protected in a Resource Protection Zone (RPZ). Human impact in this zone will be kept to a minimum. Management of the natural resources will be allowed, however, new structures or environmental degradation of this zone shall be prohibited.

POTENTIAL USES:

- Trails and Trail Support Facilities
- · Wildlife and Habitat Management
- Research, Interpretation, and Education
- Short Term Recreation

B. Entrance Zones

There will be no vehicular entrance for the park since the road contact points are all within or very near the flood plain surrounding the lake or tributary streams. Pedestrian access will be from the various residential streets. These entrance areas are marked with an asterisk on the plan and are located on Zion Drive, Paynes Church Drive, Landmark Place, Goldeneye Lane and Fireside Court.

VIII. DESCRIPTION OF CONCEPT PLAN ELEMENTS

A. Entrance Improvements

The pedestrian entrances noted above, at Zion Drive, Paynes Church Drive, Landmark Place, Goldeneye Lane, and Fireside Court will be improved to highlight the public access points for

the park. Each entrance will be marked by adding an attractive sign with a park map and "you are here" notation. These signs may also include a brief summary of Park Authority regulations and contact phone numbers for reporting dangerous situations and maintenance needs. In addition, groupings of native vegetation may be added to enhance the entrance area and show the public the spots to access the lake and park. The entrance on Goldeneye Lane is located on property owned by the Homeowners Association—this entrance will only be improved with their agreement.

B. Trails

A network of informal footpaths exists within the park. A formal hard-surface trail is not recommended due to environmental conditions and limited property.

C. Residential Education

As a part of the management plan for the park, various outreach efforts will be made to educate park neighbors and other park users about environmental concerns expressed during the public comment period. Key among these efforts will be the distribution of a soon-to-be published brochure about the damage caused by park encroachments, such as mowing onto park property and dumping yard waste on the public land. The text for that brochure is included in the appendix of this report. Other education efforts may be directed toward educating the neighborhood about the pooper scooper laws in force

in Fairfax County and techniques homeowners may use to protect the water quality and help slow down erosion in the watershed.

D. Resource Management

Thanks to past and present conservation efforts, residents of Fairfax County still have a rich diversity of wildlife in their parks, including river otter, bald eagle, fox, deer, beaver, reptiles, amphibians and birds. The Park Authority's mission and policies require preservation and protection of this legacy. This protection currently takes many forms including having paid and volunteer staff monitor populations of birds, beaver, deer and other wildlife. Some of this data is now available on the Park Authority's web site. There are other programs and activities such as nest boxes to encourage bluebird nesting, managing meadows to support wildlife dependent on that habitat and establishing brush piles to provide wildlife cover for small mammals and amphibians.

However, it is inevitable in an urban county that conflicts will occur between wildlife and human residents. The Park Authority adopted a Wildlife Conflict Resolution Policy 202 (appendix) in 1998 to guide the agency in mitigating such conflicts. The policy leads to the responses and actions explained in the following section.

Resolving Conflicts With Wildlife

Deer, geese and beaver are examples of wildlife that can be beneficial species in natural communities and thrilling to see in the wild but, when overly abundant or in proximity to humans, cause significant impact on natural resources and human environments.

The Park Authority's Wildlife Conflict Resolution Policy requires the agency to "practice an attitude of acceptance of, and tolerance for, wildlife activity as part of the county's natural environment" and to "foster this attitude among the public through education." If tolerance of wildlife activity is not successful, the policy requires progressive steps from exclusion (such as fences, screens and repellants), to harassment (such as removal of nests or homes). Only when all other means are exhausted and a compelling need is demonstrated, can lethal force be employed in a humane manner.

Deer

Fairfax County has an over-abundance of White-tailed Deer. This has led to significant safety, environmental, health and property damage problems. Each year there are thousands of collisions within the county between deer and automobiles, resulting in damages averaging over \$2,000 per vehicle. Two motorists have been killed in Fairfax County in recent years and many others seriously injured.

Heavy deer browsing in parklands has seriously degraded forest ecological function in some locations, virtually eliminating forest regeneration in the worst instances. Much of the destroyed native vegetation is being replaced by invasive plant species that have insignificant habitat value. Deer are also devouring landscaping material at

other public, commercial sites, as well as in homeowners' yards. This damage is estimated to cost Fairfax County property owners over \$1 million annually, according to the Fairfax County Wildlife Biologist.

Overabundance is affecting the health of the deer population overall, due to food competition, decreasing habitat and disease. Lyme disease, which is spread by deer ticks, is adversely

impacting the human population. By overbrowsing, deer not only degrade their own habitat, but reduce the habitats which support wildlife populations of birds, amphibians, and other species.

The Fairfax County Board of Supervisors adopted an Integrated Deer Management Plan on December 8, 1998, which resulted in the creation of an ongoing Deer Management Program and in the hiring of its first County Wildlife Biologist. A Deer Management Committee made up of citizens, County staff and Virginia wildlife officials was also established. Fairfax County's current goal is to reduce deer population to 15-20 per square mile. While many methods of deer population reduction were evaluated in the plan, the only method found to be cost-effective in Fairfax County's program is hunting deer using police sharpshooters or public

shotgun or archery hunts.

When activities are proposed, the Park Authority requires that a written plan be completed in coordination with the County Wildlife Biologist prior to deer population reduction at any park. To date, population reduction activities have occurred at Riverbend Park, Huntley Meadows Park, Sully Historic Site, Ellanor C. Lawrence Park and Burke Lake Park. Periodic deer

population monitoring has occurred at several additional sites. It is unlikely that the Park Authority will pursue a deer reduction program in the stream valleys leading to and the area

surrounding Woodglen Lake in the near future. However, as the problem grows and new methods of control are proven, reductions may occur here.

Canada Geese

Resident Canada geese, whose population is increasing rapidly, are a property damage nuisance and a human health hazard. Canada geese are attracted to bodies of water and cause bank erosion. Their feces contribute to water pollution. Preliminary results of a U.S. Geological Survey study in the Accotink Creek watershed has found that 40% of the fecal coliform bacteria in the stream comes from waterfowl. In addition, the

geese devour lawns and ornamental vegetation.

Geese Peace, Inc., a non-profit community action group, created a partnership of the County Wildlife Biologist, FCPA, NVRPA, Lake Barcroft Watershed Improvement District, Fairfax County DPW&ES, Fairfax County Public Schools, Citizens for the Preservation of Wildlife, Humane Society of the United States, and Northern Virginia Soil and Water Conservation District to encourage responsible management of Canada geese on lands they control. Management actions include addling eggs to prevent hatching, planting brushy or prickly plants along shorelines to make water bodies less attractive, use of border collies to prevent access, and signs to discourage feeding of geese by people.

Beaver

Beaver are generally a positive influence within natural areas. The ponds resulting from their dams create more habitat diversity that attracts more diverse wildlife, such as fish and waterfowl. The dead snags of trees killed when land is flooded with a beaver pond provide valuable bird habitat. Beaver ponds and associated wetlands provide natural stormwater detention to reduce pollutants and erosion from runoff. However, in their quest for food and building materials, beavers harvest large quantities of vegetation, often including ornamental trees on adjacent homeowner property. Sometimes their ponds also encroach onto adjoining properties or cover trails.

Mitigation techniques utilized by park staff include advising neighboring homeowners about exclusion techniques, such as wrapping trees and shrubs near beaver ponds with wire mesh. Staff sometimes install drainpipes called beaver baffles through beaver dams to control water levels and limit flooding.

Insect Species

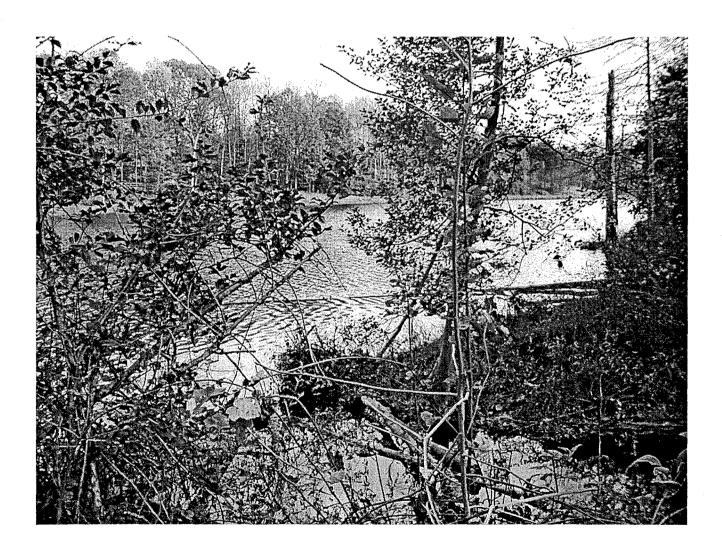
Mosquito breeding has become a major concern with the arrival of the West Nile Virus in the Washington metropolitan area. The Gypsy moth and several other invasive exotic insect pests have become well entrenched in northern Virginia. To minimize their impact, the FCPA participates in the County Forest Pest Program, which takes an integrated pest management approach.

Other Species

This plan recognizes that occurrences of human conflict with other wildlife species will likely require occasional wildlife management actions. The agency also occasionally confronts instances of escaped or released exotic wildlife that could be dangerous to park environments or visitors. When these conflicts arise, Park Authority staff will consult with the Virginia Department of Game and Inland Fisheries, as well as other wildlife experts, to design an appropriate course of action that meets the requirements of the Wildlife Conflict Resolution Strategy.

APPENDIX

Woodglen Lake Park Species List
Policy 202—Wildlife Conflict Resolution Policy
Draft Encroachment Brochure Text



WOODGLEN LAKE PARK

SPECIES LIST

(compiled by Sarah Mayhew from July 2001 to March 2004)

MAMMALS

Short-tailed shrew

White-footed mouse

Meadow vole

Common mole

Grey squirrel

Raccoon

Opossum

Eastern cottontail rabbit

Grey fox

Red fox

White-tailed deer

Beaver

AMPHIBIANS AND REPTILES

American toad

Bullfrog

Green frog

Spring peeper

Box turtle

Painted turtle

Snapping turtle

Black rat snake

Garter snake

BIRDS

Pied-billed grebe

Red-necked grebe (eruption year 2003)

Double-crested cormorant

Great blue heron

Great egret

Green heron

Black-crowned night heron

Tundra swan

Canada goose (confirmed nester)

Wood duck

Mallard (confirmed nester)

Ring-necked duck

Common goldeneye

Common merganser

Hooded merganser

Red-breasted merganser

Ruddy duck

Black vulture

Turkey vulture

Osprey

Sharp-shinned hawk

Cooper's hawk

Red-shouldered hawk (confirmed nester)

Broad-winged hawk

Bald eagle

Killdeer

Semi-palmated plover

Lesser yellowlegs

Solitary sandpiper

Spotted sandpiper

Peeps (probably pectoral, semi-palmated or

least sandpipers)

Caspian tern

Ring-billed gull

Mourning dove

Barred owl

Common nighthawk

Chimney swift

Ruby-throated hummingbird

Belted kingfisher

Yellow-bellied sapsucker

Red-bellied woodpecker

Downy woodpecker (confirmed nester)

WOODGLEN LAKE PARK

Hairy woodpecker

Northern flicker

Pileated woodpecker

Eastern wood pewee

Epidonax flycatcher

Easter phoebe

Great crested flycatcher

Eastern kingbird

Red-eyed vireo

Blue jay

American crow

Fish crow

Barn swallow

Northern rough-winged swallow

Bank swallow

Tree swallow

Carolina chickadee

Brown creeper

Tufted titmouse

White-breasted nuthatch

Carolina wren

House wren (confirmed nester)

Winter wren

Golden-crowned kinglet

Ruby-crowned kinglet

Eastern bluebird

Hermit thrush

Wood thrush

American robin

Gray catbird

Northern mockingbird

Brown thrasher

Cedar waxwing

European starling

Wood warblers, including the following:

Yellow warbler

Magnolia warbler

Black-throated blue warbler

Yellow-rumped warbler

Pine warbler

Black-and-white warbler

American redstart

Common yellowthroat

Canada warbler

Northern cardinal (confirmed nester)

Eastern towhee

Chipping sparrow

Field sparrow

Song sparrow

Swamp sparrow

White-throated sparrow

Dark-eyed junco

Baltimore oriole

Red-winged blackbird

Common grackle

Brown-headed cowbird

House sparrow

American goldfinch

House finch

Policy 202 Wildlife Conflict Resolution

Revised and adopted October 28, 1998

In its role as the primary steward of Fairfax County's natural resources, it shall be the policy of the Authority to effectively resolve conflicts between wildlife and people, so as to promote peaceful coexistence between citizens and these resources.

the existence of, or potential for:
impact to private property;
impact to public infrastructure including park resources, facilities and services; or
□ impact on public health and safety.
The significance of these impacts will determine the type of management action taken, but all actions will follow established impact mitigation procedures.
2. The Authority will base wildlife management actions on:
□ applicable laws and regulations,
□ adopted natural resource conservation objectives,
approved park plans,
accepted ecological principles,
proven wildlife management techniques, and
□ appropriate animal welfare concerns.
3. The Authority will practice an attitude of acceptance of, and tolerance for, wildlife activity as a part of the county's natural environment, and will foster this attitude among the public through education.
4. When conflicts occur on private property from wildlife activity originating on parkland, citizens must take reasonable measures, on private property, to mitigate the impacts of this activity. Such measures will typically involve exclusionary devices including, but not limited to, fences, screens, caps, baffles, and repellents.
5. If necessary, the Authority will take reasonable measures on parkland, following established procedures, t mitigate impacts to private property of wildlife activity originating on parkland, but will assume no legal li- ability for these impacts.
6. When warranted, the Authority will take reasonable measures on parkland, following established procedures, to mitigate impacts to public infrastructure.
7. For each specific type of wildlife activity, the Authority will develop impact mitigation procedures that utilize progressive, stepwise intervention, typically advancing from:
\square exclusion, including, but not limited to, fences, screens, caps, baffles, and repellents; to
□ harassment, including, but not limited to, destruction of nests, and homes, and visual and auditory hazing; to
□ population management, including, but not limited to, birth control, relocation, and humane destruction.

Draft Encroachment Brochure Text

Parkland Neighbors - Living Next to Public Parkland

Over half a century ago, in 1950, the Board of Supervisors established the Fairfax County Park Authority to serve as steward of the County's parkland. The Park Authority mission is to preserve and protect the County's natural, cultural, and horticultural resources on that land and to provide recreational facilities and programs for county residents.

Currently, the Park Authority owns and maintains over 22,000 acres of parkland. Approximately two-thirds of this acreage is undeveloped and maintained in its natural state. Preservation of these natural areas is an important priority of our mission.

Much of the undeveloped parkland is protected by the Park Authority Stream Valley Policy. Stream valleys are the "connective web" of the park system, providing wildlife habitat and movement corridors, linear green space, trail opportunities, and watershed protection.

Each stream valley serves its watershed as a drainage route, leading to the Potomac River and ultimately to the Chesapeake Bav. Because so many communities in the county border stream valley parkland, it is especially important that we protect and preserve these natural areas for the benefit and enjoyment of all county residents.

While the majority of park neighbors appreciate, value, and protect the parkland, there are a few park neighbors who encroach on parkland by:

- · dumping yard waste and debris
- · removal of trees and other vegetation
- extending private yards into park boundaries
- storing equipment and materials
- · erecting fences and structures

These encroachments create adverse impacts on park resources. Piles of yard waste attract rodents and snakes, and may introduce invasive, destructive plants into natural areas. Removal of trees and other foliage decreases the tree cover that helps to filter pollutants from the air and modify temperatures. Removal of natural ground vegetation encourages erosion and allows surface run-off to contaminate water sources. Natural vegetation cleans the air, supports wildlife and protects the water quality of the streams. Undeveloped land preserves the integrity of cultural resource sites. Digging and removal of artifacts destroys the integrity of archaeological and historical sites. Extending yards, storing material and equipment, and erecting fences or other structures on parkland takes acres of public access land away from county citizens.

The costs associated with the loss of parkland to encroachment are not just environmental or historical. Each year the Park Authority spends thousands of dollars on efforts to clean up and restore damaged park property. Together we can lessen the incidence and impact of encroachment.

Although park staff routinely check for encroachment violations, it is simply not possible to monitor all 22,000 acres of parkland on a daily basis. Therefore, we rely on neighbors like you to be our eyes; to help us in our mission to preserve and protect the County's natural and cultural resources for this generation and the next.

If you notice an encroachment or see a hazardous condition on parkland, please report the information to the **Park Operations Division** at 703-324-8591 or by e-mail to www.fairfaxcounty.gov/parks.

All information remains anonymous.

For more information about the parks, visit the agency's website at $\underline{\text{www.fairfaxcounty.gov/parks}}$ or call 703-324-8700. For a free subscription to $\underline{\text{Parktakes}}$, the agency's quarterly catalog of classes and programs in the parks, call 703-222-4664. For a free subscription to ResOURces, our natural and cultural resource newsletter, call 703-324-8700.

Thank you for supporting your parks.