GENERAL MANAGEMENT PLAN

PREPARED BY:
FAIRFAX COUNTY PARK AUTHORITY
STRATEGIC PLANNING TEAM
JULY 1992

LAKE ACCOTINK

GENERAL MANAGEMENT PLAN

Prepared by the Lake Accotink Strategic Planning Team

Core Team Members
Cecilia Lammers, Planning Coordinator
Mirza Baig, Engineer
Kirk Kincannon, Park Manager
Toni Ogurcak, Architect

Support Team Members
Olin Allen, Environmental Services
Claire Blanchard, Design
Nick Duray, Programming and Marketing
Gary Roisum, Conservation
Richard Sacchi, Historic Preservation
Steve Southerlan, Design
Mubarika Shah, Planning and Land Acquisition

LAKE ACCOTINK PARK GENERAL MANAGEMENT PLAN

Background: A Project Team was assigned the task of developing this General Management Plan (GMP) for Lake Accotink Park. Extensive research was conducted and input was solicited from every division within the Authority. This GMP reflects the collective efforts of staff across the agency and is recommended for your approval by the Project Team.

This General Management Plan approval sheet verifies that the undersigned support and concur with the contents herein.

GENERAL MANAGEMENT PLAN APPROVAL

William C. Beckner 7-14-92
William C. Beckner Date
Director

James A. Heberlein 7/14/92
James A. Heberlein Date
Deputy Director, Park Development

Michael Kane 7-14-92
Michael Kane Date
Deputy Director, Park Operations

for DAP
Christopher J. Hoppe 7-14-92
Doug Petersen Date
Chief, Special Projects Branch

Charlie Bittenbring 7/14/92
Charlie Bittenbring Date
Manager, Facility Operations

TABLE OF CONTENTS

I. **INTRODUCTION** 1
- A. **Park Description** 1
- B. **Purpose and Description of the Plan** 1
- C. **Park Initiatives for the 90's** 3
- D. **History of the Park** 4

II. **PURPOSE, SIGNIFICANCE, THEMES, AND VISITOR EXPERIENCE CONCEPTS** 5
- A. **Park Purpose:** What is the purpose of the park? 5
- B. **Significance Statements:** Why is this park important? 6
- C. **Park Themes:** What can the visitor enjoy, understand, or learn about the park? What information or experience will the visitor take home? 6
- D. **Visitor Experiences:** Who is the visitor and what will they experience at the park? 7
  1. **Who is the visitor?** 7
  2. **Existing Visitor Experiences** 10
  3. Desired Future Visitor Experiences 10

III. **EXISTING CONDITIONS** 10
- A. **Description of Existing Conditions On-site** . . . 10
- B. **Description of Adjacent Properties** 11
- C. **Natural Resources** 11
- D. **Cultural Resources** 15
- E. **Site Issues and Constraints** 16
  1. Fairfax County Comprehensive Plan 16
  2. Fairfax County Development Constraints . . 16
- F. **Existing and Proposed Recreational Opportunities** 17
  1. Existing Recreational Opportunities 17
  2. Proposed Recreational Opportunities (off-site) 18

IV. **MANAGEMENT FRAMEWORK** 19
- A. **Descriptions of zones** 19
  1. **Cultural Resource Protection Zone** 19
  2. **Habitat Protection Zone** 20
  3. **Entrance Zone** 20
  4. **Recreation Zone** 20
  5. **Water Management Sub-Zone** 21

V. **RECOMMENDATIONS FOR FUTURE PLANS AND PROJECTS** . . . 21
- A. **Proposed On-site Recreational Opportunities** . . 21
- B. **Planning Projects** 22
- C. **Design and Construction Projects** 22
- E. **Research Projects** 23

APPENDIX

1. Map #1: Existing Facilities
2. Map #2: Natural Resource Cover Types
3. Map #3: Chesapeake Bay Act Resource Protection Areas
4. Map #4: Management Zones and Potential Uses
5. Available funding as of May 1992
6. Ecological Inventory (Lists and Site Map)

I. INTRODUCTION

A. Park Description

Lake Accotink Park is located in Springfield, Virginia, southwest of the Capital Beltway. Although the main portion of the park is in the Braddock Supervisory District, some parts of the park are also in the Lee and Springfield Supervisory Districts. Encompassing 482 acres, 77 of which are wetlands or water covered, Lake Accotink contains a managed conservation area, wetlands, deciduous and evergreen forests, and historic and pre-historic sites.

Many recreational opportunities exist including picnic grounds, boating, fishing, miniature golf, excursion boat rides, a carousel, play equipment, and ballfields. The park also has several miles of maintained trails, numerous foot paths, pavilions, and open space. Lake Accotink is classified as a multiple resource park in the Fairfax County Park Authority's Park Register, which means that the kind of activities available at the park are varied and extensive. A visitor may be able to explore the entire park in a day, but in order to participate in all the activities available they would need to spend more than one day at the park.

Lake Accotink functions as a flood and sediment control facility in a critical location. The watershed is approximately 19,000 acres in size, most of which is developed land. Lake Accotink assists in controlling the large volume of storm water from the watershed and controls downstream sediment through deposition. The lake was dredged in 1986 and the sediment was deposited in basins on-site.

Lake Accotink is a vital link in the environmental and genetic corridor which links open space from Little River Turnpike, Route 236, all the way to Fort Belvoir. This corridor serves as a greenway for wildlife and a recreational link for people.

B. Purpose and Description of the Plan

The purpose of this General Management Plan (GMP) is to serve as a guide for all future planning, design, and programming. This document should be referred to before future planning and design projects are started. Research has been conducted on the existing natural and cultural resources and should be referred to prior to any site specific decision-making.

Another purpose of this plan is to assist in Park Authority compliance with the Fairfax County Comprehensive Plan. Through the designation of management zones, this GMP will help to meet the countywide park planning goals described below.

- One of the goals of the Board of Supervisors states: "...Fairfax County should support the conservation of appropriate land areas in a natural state to preserve, protect and enhance stream valleys, meadows, woodlands,

wetlands, farmland, and plant and animal life."[1] Through the designation of a majority of the park as a Habitat Protection Zone, the GMP meets this goal.

- As a link in the environmental corridor between Little River Turnpike and Fort Belvoir, Lake Accotink is essential to meeting Objective 2, policy b of the Policy Plan: "Use the park system in conjunction with the Environmental Quality Corridor system to establish an integrated network of green ways linking major resource areas and providing migration routes essential to biological diversity."[2] The preservation of the Habitat Protection Zone assists in meeting this objective.
- Identification and protection of the existing heritage resources on-site meets policy d which states: "Identify and protect through public acquisition or other appropriate means significant heritage resources for inclusion in the park system."[3]

The park purpose, as stated in section II. A is to be used as a guide for decision-making. From the park purpose the significance statements were developed, to describe why this park is important. Themes are recommended as a guide for interpretive planning and to assist in making future plans and projects cohesive and integrated.

Demographics were compiled for a five mile service area. By definition as a multiple resource park the service area for Lake Accotink is countywide, however, the five mile service area better describes the potential users of this park because water based parks exist in other parts of the County. Demographics were considered throughout this planning process and especially when recommendations were made for future plans and projects.

This GMP describes the existing natural and cultural resources of the park, as well as the existing facilities. Descriptions of adjacent park uses are included to provide a context for regional park planning. Demographics are included to assist in planning for visitors' needs.

Management zones have been established, with accompanying lists of potential uses for each zone. The uses are described in general terms, so that as visitor needs change, the uses provided can change.

Recommendations for future planning, design, and construction projects are described in the final section of this plan. It is not the intent of this plan to develop the specifics of each future plan, but to state what plans and projects are needed to meet the goals of the GMP and the needs of park visitors.

GMP's are only one part of an integrated Park Management Plan. After the GMP is complete, the recommended plans and projects in the final section of this document should be started. With a finalized GMP, Interpretive Plan, Resource Management

Plan, Facilities Management Plan, etc., a Project Implementation Plan can be done to coordinate and integrate the various proposed projects; thus completing the Park Management Plan.

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 Strategic Planning Team recommends that this GMP be reviewed in 1997 and updated as necessary.

C. **Park Initiatives for the 90's**

The Park Initiatives for the 90's provided a framework for decision-making in this planning process. The initiatives that are addressed in this plan include:

Initiative 100 **Natural and Cultural Resources.** Develop and implement long-range strategies to acquire, protect and manage natural and cultural resources.

In this plan the existing natural and cultural resources have been identified. The areas of importance for protection and preservation of these resources have been delineated by establishing zones within the management framework. For each zone, a list of potential uses is included, to assist in the preservation of the resources within that zone.

Initiative 300 **Visitor Services/Opportunities.** Provide high quality visitor services and balanced recreational opportunities.

Demographics of potential park visitors have been included in this plan to focus planning on the visitors' perspective. Through the renovation of the existing facilities, park staff will be able to provide a higher level of quality service.

Initiative 700 **Alternative Funding.** Increase the proportion of operational funding support from sources other than County budget allocations.

Although the alternative funding research is not directly a part of this document, research is being conducted on operational alternatives.

Initiative 900 **Innovative Management.** Utilize innovative management practices to increase the operational effectiveness of the Park Authority.

This General Management Plan will assist in the management and decision-making of Lake Accotink by providing a direction for management decisions. With a clearer direction on the purpose of the park, staff will be better equipped to make more effective decisions.

The existing operational functions of the park were analyzed when the management framework was developed. Research was conducted to support these decisions. The site designs that will follow this GMP will be based on the research conducted, the management framework established, and present and future visitor needs.

D. History of the Park

Accotink is an Algonquin name, reminding us of the first inhabitants of Northern Virginia. The peoples that Captain John Smith encountered, while exploring the Potomac River in 1608, were the Potomac Creek peoples; the Piscataways, Doeges and Anacostans. As was the custom with the English, the naming of a stream often corresponded to the name of the largest Indian village located along its shores. That village, Accotink, has never been found. Within Lake Accotink Park there is evidence of a much earlier Indian group, culturally unrelated to those who Captain Smith and other early European explorers found. This small group of hunters and gathers left behind, along the shores of Accotink Creek, their material culture in the form of stone tools dating to about 4000 years ago.

Lake Accotink Park was carved out of the 21,991 acre Ravensworth track which dates to the 17th century land patents. By the early 18th century, the Fitzhugh family had controlling interest in several parcels, renting some of the land to tenant farmers growing tobacco. But tobacco farming quickly exhausted the soil, and with falling prices for tobacco most farms turned to alternative crops, such as wheat, corn and rye. Still, farming practices of the late 18th and early 19th century in Fairfax County were poorly applied. Combined with an economic recession and failing crops, a generation of farmers migrated west in search of better land conditions. The price of land in Northern Virginia declined accordingly, attracting northern farmers in search of large cheap tracts of land without the environmentally constraining terrain found in much of New England. With them, came new ideas for revitalizing the depleted land. Later, in the 19th century, many of these farmers turned to dairy farming, being attracted by lucrative markets in Washington and Alexandria.

Civil War activity within Lake Accotink Park, while sporadic, was significant. The tracks of the Orange and Alexandria Railroad, Ravensworth Station, and the wooden trestle over Accotink Creek were logical targets for northern and southern strategists. Clashes between opposing armies occurred up and down the rail line and the wooden trestle bridge was burned on December 28, 1862, reportedly by the famous southern raider, Jeb Steuart. In addition, the railroad carried northern troops and supplies to the first and second Battles of Manassas. Today the physical remains of Civil War activity are scant in the park but what appears to be the remains of a small Civil War camp sits on a hill overlooking the rail line and Accotink Creek.

Construction of the Orange and Alexandria Railroad was a major accomplishment of the 19th century. The construction of the rail lines quickened the pace of commerce and travel, and accelerated the pace of development of the interior. Lake Accotink Park preserves the longest stretch of the Orange and Alexandria railroad in the County.

What appears to be the remains of a mill race at Lake Accotink Park reflects the heavy industry of the 18th and 19th centuries in Fairfax County. Driven by the water of Accotink Creek, raw materials were turned into semi-finished products, ready for transportation to coastal markets by rail and road. The 19th century road system within the park is partly based on connecting the mill area to the Ravensworth Station and improved primary roads, such as Little River Turnpike, Rolling Road, and Braddock Road.

Today Lake Accotink Park is best known for its fishing and boating activities. But the original purpose of damming the creek, to create Lake Accotink, arose from the need for a dependable long term water supply for Camp A. A. Humphries (renamed Fort Belvoir in 1935). Completed in late 1918 or early 1919, the first dam was considered a threat to the railroad bridge embankment and it became necessary to partially destroy a section of the dam to lower the water. The Army still utilized the Accotink Stream Valley for a water supply, but was able to make do without the use of the dam until 1943 when it was rebuilt. The Fairfax County Park Authority acquired the property from the United States Government in 1960 and began full operations in 1963.

II. PURPOSE, SIGNIFICANCE, THEMES, AND VISITOR EXPERIENCE CONCEPTS

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 Lake Accotink Park is to:

- preserve, protect, and restore natural resources, both terrestrial and aquatic.
- preserve, protect, and restore cultural resources.
- educate visitors about the existing natural and cultural resources, and how to protect them.
- provide a variety of recreational opportunities for all County citizens.
- generate revenue to support the operation, maintenance, and restoration of the resources and facilities.

It may appear that some of these statements conflict. The purpose statements are not intended to be mutually exclusive. They are intended to be integrated into a common purpose of protecting the existing resources and generating revenue.

Protection and enhancement of the existing resources is an important element of the management of Lake Accotink. Although it is vitally important to this park to generate revenue, the protection of natural resources will be included in all development plans. Revenue generation will assist in the implementation of the future resource management plan goals and objectives by providing funding for needed projects.

B. **Significance Statements:** Why is this park important?

Lake Accotink is important to the Fairfax County park system because it provides this region of the County with a variety of water-based recreational opportunities and experiences. In the Fairfax County Park Authority Register of Parks, Lake Accotink is categorized as a "multiple resource park". In the entire County there are only 11 multiple resource parks and only three that have water-based facilities. Lake Accotink is unique to its geographic region because Lake Fairfax and Burke Lake are far enough away so as not to compete with Lake Accotink for visitors.

Lake Accotink is significant because:

- it provides geographically unique water-based recreational opportunities.
- it is an integral part of the environmental and genetic corridor from Little River Turnpike to Fort Belvoir.
- its location is unique in the watershed and provides for storm water and sediment control.
- it provides aquatic and terrestrial wildlife habitats in an urban area.

C. **Park Themes:** What can the visitor enjoy, understand, or learn about the park? What information or experience will the visitor take home?

Themes are included to provide some guidelines for the GMP. When the GMP is complete the themes can be developed in greater detail in the Interpretive Plan. Themes are stated here for consideration in all phases of planning and design.

Lake Accotink Park Themes

- Avenues for Leisure: Trade/ Travel/ Troops (cultural history)
- An Ecological Link in the Watershed (natural resource)
- A Highway for Wildlife (wildlife)
- A Place to "Get Away" in an Urban Setting (relaxation, recreation)

D. **Visitor Experiences:** Who is the visitor and what will they experience at the park?

1. Who is the visitor?

Information on actual park visitors is not available at this time, however, some information has been provided based on staff observations on-site. The descriptions that follow are of potential visitors to the park based on demographics provided by 1990 Census data and the Fairfax County Office of Research and Statistics.

Because Lake Accotink is a multiple resource park is it considered to have a countywide service area. However, because of the location of the Park Authority's other two water-based recreational parks, the service area for Lake Accotink is generally a five mile radius.

It is expected that most of the users will come from within a five mile radius of the park because a) there are other parks in northern and southern parts of the County with similar water-based facilities, therefore this park will mostly attract users from areas closest to the park, b) almost 38 percent of the population of the County lives within five miles of the park, and c) since the average length of stay at a park affects the service area, and the length of stay at multiple resource parks is longer than other managed parks, then the service area should be expanded beyond three miles.

Information has been included for countywide, five mile and three mile service areas to make some comparisons between the different groups of potential visitors. Without accurate information about actual park visitors, it is difficult to determine which set of demographics represents the average visitor.

Lake Accotink is located in the Braddock Supervisory District which has the smallest share of the County's nonresidential gross floor area. This suggests that the dominant type of development in this district is residential. The neighboring district of Providence has the highest nonresidential gross floor area, indicating the potential for a large number of corporate park visitors.

POPULATION

Table 1 presents the existing and projected population figures for all service areas. As shown in the table almost 38 percent of the total population of Fairfax County lives within the five mile service area of the park, suggesting that the park will attract a large number of local visitors. Projected population growth in this service area is expected to be moderate as most of the area is already developed.

TABLE 1
POPULATION BY SERVICE AREA [4]

SERVICE AREA	1991 POPULATION	1996 POPULATION
0 to 3 Miles	125,711	134,232
0 to 5 Miles	311,963	348,685
Countywide	827,100	891,300 (1995)

INCOME

The income summary in Table 2 shows the income levels of the service area residents in comparison to countywide income levels. Analysis indicates that people residing near the park are more affluent than the average County resident. Forty-eight percent of the residents in the five mile service area have incomes between $50,000 to $100,000 per household. Fairfax County's median household income of $59,284 is far above the national median household income of $28,525.[5]

People who live within a five mile radius of this park have a yearly income level above the County's median income. Forty-eight percent of the households have incomes more than $75,000 and 27% of the households make between $50,000 to $74,999[6]. Higher levels of income suggest the ability of the population to pay for the usage of facilities, if the facilities fulfill their needs and requirements.

TABLE 2
INCOME BY SERVICE AREA[7]

SERVICE AREA INCOME	AVERAGE HOUSEHOLD INCOME	MEDIAN HOUSEHOLD
0 to 3 Miles	$74,951	$79,034
0 to 5 Miles	$78,391	$72,898
Countywide	$68,958	$59,284*

* Countywide information was provided by the Fairfax County Office of Research and Statistics, 1992.

RACIAL DISTRIBUTION

An important element in developing the profile of potential visitors is their ethnic background. Distinct differences exist between information gathered from park personnel (on-site observations) and the demographics of the area. The demographics show that a high percentage of the potential visitors from the five mile service area are white (84 percent). Park staff has observed that weekday use of the park tends to follow the racial make up of the service area compared to weekends when 50 to 60 percent of the park visitors are white.

Based on staff observations, people with different racial backgrounds use the park differently. People of Hispanic origin use parks as a place for social interaction in addition to recreation. Whites and Hispanics exhibit a greater propensity to attend water parks than African Americans, while all groups seem

to play miniature golf with the same tendency.[8] This tendency is reflected in the park use reported by the park staff where 40 percent of the visitors are observed to be other than African American or white.

TABLE 3
RACE DISTRIBUTION BY SERVICE AREA[9]

SERVICE AREA	WHITE	AFRICAN AMERICANS	OTHER	TOTAL
0 to 3 Miles	84.1%	4.0%	11.9%	100.0%
0 to 5 Miles	83.7%	5.6%	10.7%	100.0%
Countywide	84.3%	7.6%	8.1%	100.0%

AGE DISTRIBUTION

Age is an important demographic factor in the use of recreational facilities. Younger people tend to participate more in active recreational activities as compared to older people.[10]

Table 4 presents a summary of age groups in the different service areas. The age distribution pattern is almost identical for the three to five mile service areas. At the County level it changes slightly but it clearly indicates that the largest group, almost 42 percent of the population in all service areas are between the ages 25 to 44. Among children the largest group is age 6 to 17. With the majority of the population in these age groups, there tends to be a greater number of potential users for active recreational facilities.

TABLE 4
AGE DISTRIBUTION IN THE SERVICE AREA[11]

AGE CATEGORY	3 MILE SERVICE AREA	5 MILE SERVICE AREA	COUNTYWIDE
Under 5	7.89	7.98	7.97
6 to 17	17.65	17.66	18.16
18 to 24	7.75	8.61	7.33
25 to 34	19.40	18.94	21.61
35 to 44	21.12	21.20	21.34
45 to 54	13.65	13.02	11.57
55 to 64	7.95	7.56	6.33
65 and over	4.59	5.04	5.70

In conclusion, the "average potential visitor" to Lake Accotink would tend to be white, middle to upper middle class, and have children between 6 and 17 years old. In the future as the cultural diversity of this region continues to change, the visitor profile will also change. Future updates of this plan should focus on changes in the visitor population and be based on actual visitor use information.

2. Existing Visitor Experiences

Lake Accotink contains a wide variety of facilities including a marina with row boat and canoe rentals, food concessions, a carousel, a miniature golf course, picnic areas, picnic shelters, a playground, trails, open play areas, ballfields, and parking (Refer to Existing Facilities Map in appendix).

Existing visitor experiences include boating, fishing, wildlife watching, hiking, biking, playing miniature golf, riding the carousel, enjoying a picnic, playing on the playground, playing ball, enjoying the scenic views, and enjoying solitude.

3. Desired Future Visitor Experiences

- o Visitors will be able to learn about the history of the park and understand the historical significance of the area.
- o Visitors will be able to learn about the impacts that humans have had on the lake environment and its surroundings.
- o Visitors will be able to learn about and observe the existing natural resources and understand the importance of protecting this ecological link in the watershed.
- o Visitors will be able to learn about and view first hand how the area is used by wildlife.
- o Visitors will be able to enjoy the natural beauty and be provided the opportunity for solitude and relaxation.
- o Visitors will be able to participate in active recreation activities.
- o Visitors will be able to participate in passive recreation activities.

III. EXISTING CONDITIONS

A. Description of Existing Conditions On-site

The majority of the existing facilities were constructed in the mid to late sixties. The existing buildings are too small to serve the needs of the park staff adequately and are in poor condition. The concession stand was closed due to a lack of revenue, and the inability to store enough supplies to serve park visitors through an entire weekend. The maintenance area currently used by park staff is too small for their use, is somewhat dilapidated, and is the first building visitors see when they enter the core recreation area from the south.

The natural resources are under stress because of the high visitation at the park. Much of the understory in some of the wooded areas has been trampled by visitors. In some places, erosion in the floodplain is also a problem.

The number of staff currently assigned to Lake Accotink is not adequate to maintain the park and provide reasonable levels

of visitor service. The focus of future development will be to generate enough revenue to provide visitors with a high level of quality service, to reduce maintenance costs, and to reduce dependence on Park Authority funds for park operations.

B. **Description of Adjacent Properties**

A description of adjacent properties is provided to define the planning context of the park. The area within the Lake Accotink watershed is developed predominantly with single family detached homes. Wakefield, Brookfield, and Byron Avenue parks are located in close proximity to this park. Lake Accotink is located in the stream valley network that stretches from Little River Turnpike to Fort Belvoir. It is a critical link in this environmental and genetic corridor.

Industrial development is established on the northeast boundary of this park near the beltway. An intrusion into the Environmental Quality Corridor of Flag Run exists in this area. Retail businesses lie north of the park near Braddock Road and also northwest of this area. Residential development exists along the northern, western, and southern park boundaries. Pedestrian access from residential properties exists and is a commonly used method of access to the park. Vehicular access from all adjacent properties is limited.

C. **Natural Resources**

The natural beauty of Lake Accotink is a main attraction for many visitors. The protection of these resources is important, not only because the park is made up of sensitive ecosystems, but also because degradation of the natural environment would detract from visitors' experiences, thus potentially effecting revenue generation.

Information on natural resources was categorized using the County's Ecological Resource Inventory Committee (ERIC) scheme. The ERIC inventory is based on the classification of the County into 16 different types of vegetative land cover, ranging from upland hardwood forest, to developed land, to inland wet meadows and marshes. Through the interpretation of aerial photographs, discreet units of these cover types, called polygons, are delineated in order to provide a broad perspective on ecological resources. For ease of mapping for this project, the specific polygons have not been delineated on the Natural Resources Map in the appendix, however, the category titles are the same as those used by ERIC. Lists of plants and animals observed at various sites around the park are also available in the appendix.

The variety of cover types in Lake Accotink Park and Stream Valley provide a good diversity of habitat for many plant and animal species in this urban setting. Most areas feel the impacts of humans, as they are accessible by trail to visitors, and are adjacent to private homes on all sides. However, there are a few remote sites that remain "wild".

Upland Hardwood Forest

This is a highly diverse plant community that contains recognizable strata--canopy, understory, shrub, and herbaceous layers. It consists primarily of the White Oak-Black-Oak-Northern Red Oak forest type, but Tuliptree and Virginia Pine are also common. Hickories, Black Cherry, Red Maple, American Beech and ashes are present in significant numbers. Common understory trees are Flowering Dogwood, Redbud, Sassafras and, in the drainages, Ironwood. The shrub layer consists mostly of vacciniums, viburnums, Pink Azalea and Wild Hydrangea. Lianas are represented by grapes, Virginia Creeper, Poison Ivy and greenbriars. A wide variety of ferns and evergreen ground covers are present. Among the many herbaceous species are Mayapple, Jack-in-the-pulpit, solomon's seals, bellworts, and many orchids. Along the northeast edge of the park, where the trail is close to the boundary, many non-native, invasive species are taking over. These include English Ivy, American Wisteria, Vinca and, to a lesser extent, Bamboo.

Of special note is a Pignut Hickory, near the picnic area, that holds the Virginia State Big Tree record. Also in this area is a large Bitternut Hickory.

The large forest south and west of the lake contains several indicator species of birds, including Pileated and Downy Woodpeckers, Eastern Wood Pewee, American Redstart, Black-and-white Warbler, and Ovenbird. These are indicative of the healthy, unfragmented nature of the forest, an important consideration in planning the park.

Upland Softwood Forest

Two small areas of this type have persisted adjacent to the dam and in Carrleigh Park. Softwood forests generally lack the well-developed strata of hardwood forests. Virginia pine dominates, with scattered Eastern redcedar. These areas are succeeding into hardwood forest. Field surveys of these areas were not completed.

Old Field

These areas consist of very narrow bands of old field vegetation on the slopes surrounding wetlands created by the deposition of dredge spoil removed from the lake in 1986. Grasses and forbs predominate in the old fields, with woody briers, such as Multiflora Rose, blackberries and Red Raspberry also present. Herbaceous species include asters, goldenrods, smartweeds, trefoils and daisies. Many of these species are also found along the trails at open, sunny spots.

None of these old field habitats is sufficiently large to support any indicator wildlife species.

This cover type is one of the rarest habitats (< 3% of the land surface) in Fairfax County. If not managed through regular mowing and/or clearing, it will eventually succeed into softwood forest, and then into hardwoods.

Maintained Grassland

Maintained grasslands include about 20 acres of recreational facilities, right-of-way for roads and utilities, and the dam. The character of each of these grasslands is highly dependent on the length of time between mowings. More formal areas, adjacent to the facilities, roads and the dam, are mowed weekly during the growing season, which entrenches the successional sequence in its earliest stage, that of a monoculture of non-native grasses, primarily fescues. Less frequent mowings in informal areas allow for the survival of forbs, and in some cases woody vegetation, along utility easements.

Field surveys of these areas were not completed.

Floodplain Forest

The floodplain forest is a counterpart of the upland hardwood forest, occurring instead in the floodplains of Accotink Creek, Flag Run, and other smaller tributaries. The single most conspicuous species is Sycamore, which appears in all stages of floodplain forest development. Associates in the mature stage range from Ashleaf Maple, River Birch and Common Pawpaw on wetter sites, to Tuliptree and oaks on drier sites. Sweetgum and Red Maple are also common. Successionally, these are preceded by Black Willow, a species which persists on the very edge of the streams and lake. Ironwood is an abundant understory tree. The shrub layer varies from sparse viburnums and Spicebush, to almost 100% cover of herbaceous species. Indicator herbaceous species include Jack-in-the-pulpit, Spotted Touch-me-not, Virginia Bluebells, False Nettle, and Skunk Cabbage, although Mayapple may be the most common.

One would normally expect floodplain forests to occur on the banks surrounding the lake, as well as encompassing the floodplains of Accotink Creek and Flag Run. In reality, the floodplain forest does not exist along the lakeshore. Instead, there is simply a more mesic version of the adjacent upland hardwood forest, with a higher percentage composition of Tuliptree, Red Maple, and American Beech.

Indicative wildlife species include Acadian Flycatcher, Beaver, Green-backed Heron, and Belted Kingfisher.

Small pockets of this cover type are found along a number of minor drainages that empty into Accotink Creek and the lake at several points.

Inland Wet Meadow and Marsh

This cover type is somewhat transient in nature, becoming Shrub Swamp Wetland under slightly drier conditions, but persisting under wetter conditions. Permanent inundation usually results in the Open Water cover type.

These marshes, separated only by channels of Accotink Creek, have existed since the creek was dammed. The marshes, as well as the lake itself, have silted in over time. American Lotus dominates the wetter areas, with cattails, sedges, rushes, Common Arrowhead, and other emergents also abundant. In drier areas,

Shrub Swamps are dominated by Black Willow, Buttonbush, Swamp Rose Mallow, and Smooth Alder.

Canada Geese, Mallards, Green-backed and Great Blue Herons, and Muskrat are the most conspicuous wildlife characteristic of this community, although Northern Water Snakes, Bullfrogs, and Eastern Painted Turtles are probably the most abundant.

Both Wet Meadows and Shrub Swamps are represented in the three dredge spoil sites mentioned above. The easternmost of these consists primarily of Shrub Swamp; the central one, Shrub Swamp and Wet Meadow; and the western, Wet Meadow and Open Water.

The significance of this community can not be overstated. It is extremely important to a wide variety of wildlife, including aquatic and semi-aquatic mammals and birds, as well as a profusion of reptiles, amphibians, fish, and insects. The only other major freshwater marsh in the Accotink watershed is the Accotink Wildlife Refuge, located near Gunston Cove in Ft. Belvoir.

Open Water

In general, the 77 acres of Lake Accotink consists of concentric zones of vegetation that are patterned primarily according to depth of the water, but also influenced by turbidity. Where the water depth exceeds two meters, down to the lake's three and one-half meter depth, there is a central zone of unconsolidated bottom that contains no rooted plants (the exact depth below which this zone appears is dependent on the turbidity of the water, which influences the depth of sunlight penetration). Shoreward of this zone is the aquatic bed zone, which consists of plants that grow on the bottom, are rooted on the bottom but have leaves in the water column or near the surface, or are entirely free-floating. Included here are algae, mosses, waterweeds, pond lilies and duckweeds. Occasionally adjacent to, and on, the shore itself are zones of emergent herbaceous plants, shrubs and trees, represented by the Inland Wet Meadow and Marsh and Shrub Swamp cover types.

The aquatic fauna of Lake Accotink has not been well characterized, although some generalizations can be made. Species mentioned under the Wet Meadow cover type utilize open water at least periodically, if not regularly. Also, the lake attracts a number of "visitors", ranging from Bald Eagles and Ospreys, to Ring-billed Gulls, and migrating waterfowl. Warm water fish such as Largemouth Bass, sunfish, and catfish would be expected, as well as a great diversity of planktonic and benthic invertebrates.

Riverine - Accotink Creek, Flag Run, minor drainages

Streams in the Piedmont typically have rocky or sandy bottoms, although mud or organic bottoms may be found in pools. Many stretches are devoid of vegetation due to the depth and/or velocity of the water, especially storm run-off from adjacent

developments. Algae may be found any place where sunlight reaches the bottom, but rooted plants, such as those found in the marsh, are restricted to pools. Liverworts and mosses are found growing on rocks in permanent streams.

Riverine fauna have not been inventoried, but would be expected to include various minnows and darters, Eastern Painted Turtle and Northern Water Snake, Beaver, and many invertebrates.

D. **Cultural Resources**

Cultural Resources include any physical evidence of past human existence. Lake Accotink contains the following study units as defined by the Comprehensive Plan on Heritage Resources for Fairfax County: Hunter -Gatherers, Agrarian Fairfax, Expansion and Growth (railroads, roads, industries), Civil War, and probably contains others. The number of study units is significant for the park. These study units are used for research models and to note the type and number of cultural resources in Fairfax County.

The following cultural resources have been identified within the park. This list is not intended to represent all of the cultural resources present, but represents those sites that have been identified.

1. Prehistoric site 44FX1414 - This site is defined by quartz flakes and tools. No diagnostic artifacts were recovered. The site has strong horizontal integrity but is not eligible for the National Register. Further testing of this area is recommended.

2. Historic Railroad Bed and Culverts - The park contains the longest undisturbed portion of the Orange and Alexandria Railroad bed in Fairfax County (circa 1851). Three culverts, built of carefully crafted cut stone, are found along the length of the rail line. One of the three culverts was crashed and severely damaged, another culvert was destroyed by the overburden from the dredging of Lake Accotink by the Park Authority. This dredging also destroyed part of the Orange and Alexandria Railroad bed. The entire railroad system is probably eligible for the National Register.

3. Civil War Activity - Due to the location of the railroad, Civil War skirmishes at Lake Accotink were likely. A possible encampment was located northwest of the lake. This encampment is probably not eligible for the National Register.

4. Mill Race - A possible mill race system runs along Accotink Creek. The mill has not been located (probably no longer existing) nor have references to a mill been found. The suspected race is a quarter of a mile long and not eligible for the National Register.

5. Historic Roads - Historic roads are located throughout Lake Accotink Park illuminating earlier transportation routes. These roads often link domestic structures to main thoroughfares and other significant structures. Historic sites of all types are often found along the sides of roads. The historic roads themselves are not eligible for the National Register.

6. Historic Home - Along one of these abandon roads and close to the railroad are the ruins of Augustus Lee's home. The ruins date to at least 1876 and are probably at least 30 to 40 years older (1830-1840). Outbuildings are likely to be found within close proximity to the structure. This site may be eligible for the National Register.

7. Quartz outcroppings - High quality quartz outcroppings are located within the park boundaries. Quartz was a popular lithic material used by area Native Americans for making stone tools. The natives who created Site 44FX1414 probably quarried the quartz from these outcroppings. The outcroppings strongly suggest that additional prehistoric sites exist. These sites are not eligible for the National Register.

E. Site Issues and Constraints

1. Fairfax County Comprehensive Plan

The comprehensive plan, as such, does not place requirements or restrictions on park development, but it does establish guidelines for park planning. Under the heading "Parks and Recreation" of the Comprehensive Plan as adopted by Board of Supervisors on July 1, 1991 , the Area Plan states: "The upgrading of athletic fields at existing parks is required to meet the current and projected needs."[12]

The provision of athletic fields for users who come to the park only for that activity is inconsistent with the purpose of this park. Although athletic fields will continue to exist within the recreation zone, they are to be used by park visitors in conjunction with other activities at the park (ie. picnics, group outings, etc.)

In the "Countywide Parks" section of the plan, the recommendations are to: "Complete development of (the) countywide Stream Valley trails."[13] Lake Accotink is a critical link in the countywide trails system from Little River Turnpike to Fort Belvoir. Plans are underway to make trail improvements to stream valley trails in this area.

2. Fairfax County Development Constraints

The following information was gathered during a meeting between FCPA Staff and staff from the Department of Environmental Management (DEM), Fairfax County. FCPA Staff asked questions concerning the regulations and requirements that will be applicable to the proposed renovation of the core facilities.

County Requirements

- Floodplain requirements will be in force for much of the existing core area. A Special Exception will need to be obtained for constructing a building in the floodplain, but the existing facilities will be allowed to remain. A Special Exception would not be required for the proposed uses, but since more than 5000 square feet of land will be disturbed for the core facilities in the floodplain, and a building permit will be required, a Special Exception is required.
- A floodplain study will probably not be required for this project.
- Renovation of existing parking lots in the floodplain is acceptable. Parking can be expanded by up to 5000 square feet without a Special Exception.
- Picnic tables and grills are acceptable in a floodplain.
- Prior to plan submittal, FCPA and DEM should meet with a larger scale plan to coordinate plan review efforts.

Chesapeake Bay Regulations (refer to Map #3 in appendix)

- The proposed renovation of facilities at Lake Accotink is considered compatible with the Chesapeake Bay Regulations.
- Renovation of existing facilities/ buildings will require a reduction in the phosphorus run-off by 20 percent in the Resource Protection Area (RPA), which is approximately the same as the floodplain.
- Chesapeake Bay regulations do not prohibit boat launch areas or docks in floodplains.
- Underground utilities may be allowed under these regulations, with approval from the Director of the Department of Environmental Management (DEM).
- Chesapeake Bay Regulations will be enforced by DEM.
- The Special Exception application should include and meet floodplain and RPA requirements when submitted. It is not clear at this time what impact the Chesapeake Bay Protection Act will have on the proposed core facility renovations.

F. Existing and Proposed Recreational Opportunities

Existing and proposed recreational opportunities outside of Lake Accotink are provided to define the planning context and to develop a needs assessment for this area. If facilities are provided by public or private entities outside the park they may not need to provided at this park.

1. Existing Recreational Opportunities

The five mile service area for Lake Accotink contains an excellent diversity of parks and recreation facilities. There are 113 parks providing everything from camping and fishing to garden plots, as shown in Table 5.

TABLE 5
EXISTING RECREATIONAL OPPORTUNITIES

FACILITY	AREA PARKS	LAKE ACCOTINK
Soccer/Football	31	0
Baseball	5	0
Little League	44	1
Adult Softball	13	0
Tennis	49	0
Multi-Use Court	35	2
Playground	34	1
Tot Lot	35	1
Miniature Golf	0	1
Carousel	1	1
Picnic Sites	29	3
Open Play Areas	38	1
Garden Plots	28	0
Amphitheater	1	0
Camping	1	0
Fishing	1	1
Cultural Resource Sites	12	5
Natural Areas	21	1
Trails	36	1

Account of facilities provided by the private sector is not available.

2. Proposed Recreational Opportunities (off-site)

As of the writing of this document the Fairfax County Park Authority Board has approved, through 1997, the development of the following facilities within the five mile service area of Lake Accotink.

Accotink Stream Valley: Trail construction from Braddock Road to Lake Accotink Park
Barcroft Mews/ Clark House: Renovation for community use
Burke Lake: District I maintenance facility
Carrleigh Parkway Trail: Trail to connect Carrleigh Parkway Park with Lake Accotink
Deerlick Park: Two tennis courts, parking and trail
Eakin Park: Renovation of community park facilities
Green Spring Gardens Park: Addition to Horticulture Center, Green Spring Road abandonment, demonstration gardens, and bridge
Huntsman: Playground, multi-use court, trail
Mason Community Parks: Replacement of playground equipment
Newington: Multi-use court, picnic area, trails, tot lot, playground, tennis courts, open play area
South Run District Park: Accessible playground
Wakefield Park: Renovation of all ballfields and lighting

IV. MANAGEMENT FRAMEWORK

The management framework integrates the research, site analysis, and basic data presented in this document. Management zones have been defined in order to provide a framework for decision-making. Existing uses, existing conditions, and recommendations from a wide range of professionals were considered in the development of the management zones. The management framework provides broad flexibility within a wide range of potential uses for each management zone.

The "Potential Uses" stated for each zone describe what uses are acceptable in each zone. If a use is not listed for a zone, then by its omission it is considered an incompatible use for that zone. However, the potential uses are intentionally general to allow for flexibility when making site specific decisions.

Cultural resources exist within every management zone delineated in this park. Before any design work is begun, the existing cultural resources will be researched, and the site approved for design and construction.

A. Descriptions of zones

1. Cultural Resource Protection Zone

The Cultural Resource Protection Zone is considered to include the entire park due to its significance. Because cultural resources occur in every management zone, research should be conducted prior to any site design work at the park. A map of the Cultural Resource Protection Zone is available in the Division of Historic Preservation.

The primary purpose of these areas is to protect the existing cultural resources and to develop those resources for interpretation where applicable. If a cultural resource site occurs within a zone that may have a contrary primary purpose, compromises will be reached before any degradation of the Cultural Resources is allowed.

The Cultural Resource Protection Zone represents a long and varied use of the land by prehistoric and historic peoples. The park has not been systematically surveyed and additional sites are likely to be found. Cultural resources found in the park have not been evaluated, except on the largest scale (National Resister qualification).

Potential Uses:

- o Passive Recreation
- o Interpretation and Education
- o Research
- o Trails

2. Habitat Protection Zone

The Habitat Protection Zone encompasses a large percentage of the land area of Lake Accotink Park. The primary purpose of this zone is to protect existing habitats and improve areas that have been degraded over time.

In keeping with this purpose, human impacts in this zone shall be kept to a minimum. Management of the natural resources will be allowed, however, built structures and environmental degradation of this zone shall be prohibited.

Cultural Resources exist in this zone and shall be researched prior to any site design activity.

If sediment control work is needed in this zone, it will be done as sensitively as possible.

Potential Uses:

- o Trails
- o Passive Recreation
- o Wildlife Management
- o Research
- o Interpretation and Education

3. **Entrance Zone**

The existing main entrance to the park, off of Lake Accotink Park Road, will continue to be the main park entrance. The entrance zone includes the entrance, the existing entrance road, and the existing parking. If the maintenance building is constructed on the site shown on the current master plan, it would be considered a compatible use in this zone. The installation of a visitor contact station in this area is recommended to control park access, assist in distributing information, and to collect fees.

The primary purpose of this zone is to draw the visitor into the site and prepare them for a recreational experience. This area could be called the "detoxification zone", where visitors have the opportunity to view the natural environment as they enter the park.

Cultural Resources exist in this zone and shall be researched prior to any site design activity.

Potential Uses:

- o Visitor Contact Station(s)
- o Park Buildings
- o Parking
- o Trails
- o Roads
- o Utilities

4. **Recreation Zone**

The recreation zone includes the existing core facilities area and all the land east to Heming Avenue. The lake is a sub-zone of the Recreation Zone because although it is used for recreation, it also has important water management values. The primary purpose of this zone is to provide visitors with active and passive recreational experiences.

Existing recreation activities in this area include picnic sites, play equipment, open space, a ballfield, picnic pavilions, miniature golf, a carousel, concessions, boating, and fishing.

All of the existing uses in the recreation zone are considered acceptable as potential uses.

Cultural Resources exist in this zone and shall be researched prior to any site design activity.

Potential Uses:

- o Active Recreation
- o Utilities
- o Parking
- o Passive Recreation
- o Park Buildings

5. **Water Management Sub-Zone**

As a sub-zone of the Recreation Zone, the Water Management Zone includes recreation as a potential use, as long as the provision of recreational opportunities does not inhibit wildlife management and habitat protection. The primary purpose of this sub-zone is to provide water based recreational experiences in harmony with the environment.

Cultural Resources exist in this zone and shall be researched prior to any site design activity.

Potential Uses:

- o Active Recreation
- o Storm Water Management*
- o Wildlife Management
- o Passive Recreation
- o Interpretation and Education
- o Habitat Protection

* Storm water management includes any activity related to flood water and sediment control.

V. RECOMMENDATIONS FOR FUTURE PLANS AND PROJECTS

A. Proposed On-site Recreational Opportunities

The existing activities at Lake Accotink have enjoyed tremendous popularity with park visitors in the past. The picnic areas are in constant use between May and October. The miniature golf course was used by over 50,000 visitors last year alone. The carousel is a popular attraction for younger visitors and is currently being renovated by park staff. The row boats, canoes, and paddleboats are an increasingly popular activity at this park. Visitors are familiar with what activities are available, and have certain expectations about what should be available to them in the future.

The proposed recreational opportunities are based on the success of past activities at the park and research on the availability of these activities in the service area. It is recommended that the existing facilities be renovated and up-graded, providing park visitors with the same opportunities, but with enhanced visitor service.

Proposed Recreational Facilities at Lake Accotink

- o Trails
- o Picnic areas
- o Picnic pavilions
- o Boating
- o Fishing
- o Playgrounds
- o Ballfields (for visitor use only)
- o Food concessions
- o Meeting room

Proposed Programs at Lake Accotink

- o Interpretive Programs
- o Nature Hikes
- o Adapted aquatics
- o Boating classes

B. **Planning Projects**

As one part of the Park Management Plan framework, this General Management Plan is the beginning of planning for Lake Accotink. The GMP provides the basic data for these future plans. The plans listed here should be completed as soon as possible after the completion of the GMP to allow for project coordination under a Project Implementation Plan.

1. Development Concept Plan (DCP) for Core Facilities
2. Interpretive Plan (includes an exhibit plan)
3. Natural Resources Management Plan
4. Cultural Resources Management Plan
5. Park Operations Plan
6. GMP Evaluation and Revisions (recommended to be done in 1997)

C. **Design and Construction Projects**

Under normal circumstances, the following projects should not be started until the recommended plans are complete. However, due to the time constraints of this project, the first two design and construction projects will proceed without the benefits of having all the necessary plans complete. Projects are not listed in priority order.

1. Renovate core facilities
2. Install maintenance building
3. Install interpretive exhibits
4. Install trail signage (in conjunction with the Interpretive Plan)
5. Dam inspection and maintenance project
6. Construction of toe drain for dam
7. Trail surfacing (pave trail north of lake, improve trail south of lake)
8. Re-surface entrance road and existing parking
9. Improve stilling basin
10. Remove unnecessary chain link fences
11. Re-work outflow for sediment basin #1

E. **Research Projects**

Much of the information that is recommended to be gathered under this section would have been beneficial in the development of this GMP. It is still needed as baseline information for future planning of Lake Accotink.

1. Parking study
2. Visitor use study
3. Financial analysis of proposed revenue generating facilities
4. Analysis of proposed facility attendance
5. Geotech evaluation of silt deposition in sediment basin #1

END NOTES

1. Fairfax County Comprehensive Plan, adopted by the Board of Supervisors on August 9, 1990. p.190.

2. Ibid.

3. Ibid.

4. Claritas Corporation Data Base, 1991 and 1990 Census STF-1A.

5. William L. Haralson & Associates, Inc., Market Feasibility Analysis of Facilities Proposed for Lake Fairfax Park (draft), #2181, September, 1991.

6. Claritas Corporation Data Base, 1991 and 1990 Census STF-1A.

7. Ibid.

8. William L. Haralson & Associates, Inc., Market Feasibility Analysis of Facilities Proposed for Lake Fairfax Park (draft), #2181, September, 1991.

9. Claritas Corporation Data Base, 1991 and 1990 Census STF-1A.

10. William L. Haralson & Associates, Inc., Market Feasibility Analysis of Facilities Proposed for Lake Fairfax Park (draft), #2181, September, 1991.

11. Claritas Corporation Data Base, 1991 and 1990 Census STF-1A.

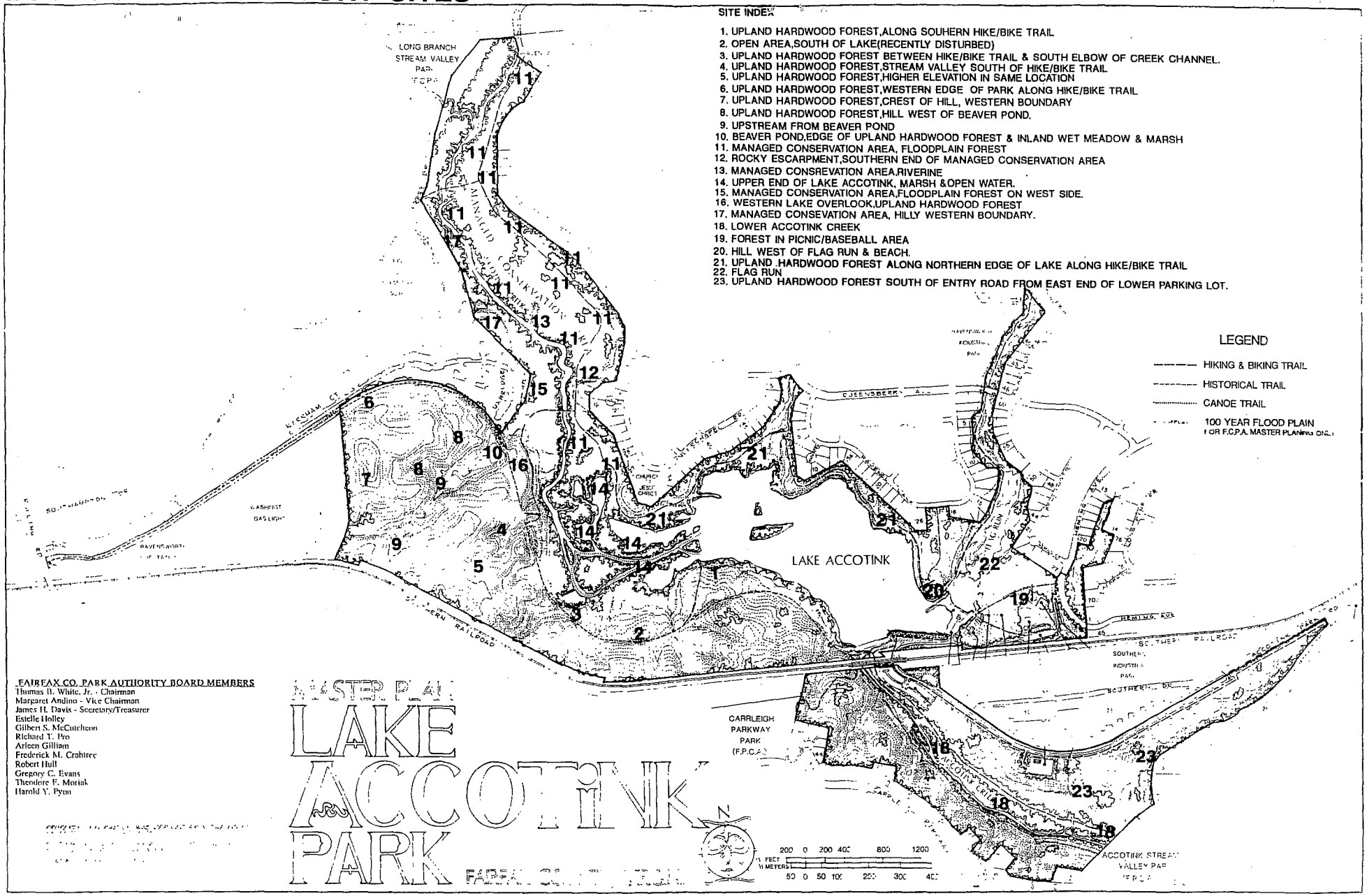
12. Fairfax County Comprehensive Plan as adopted by the Board of Supervisors, July 1, 1991, Area Plan, Parks and Recreation section.

13. Fairfax County Comprehensive Plan as adopted by the Board of Supervisors, July 1, 1991, Area Plan, Countywide Parks section.

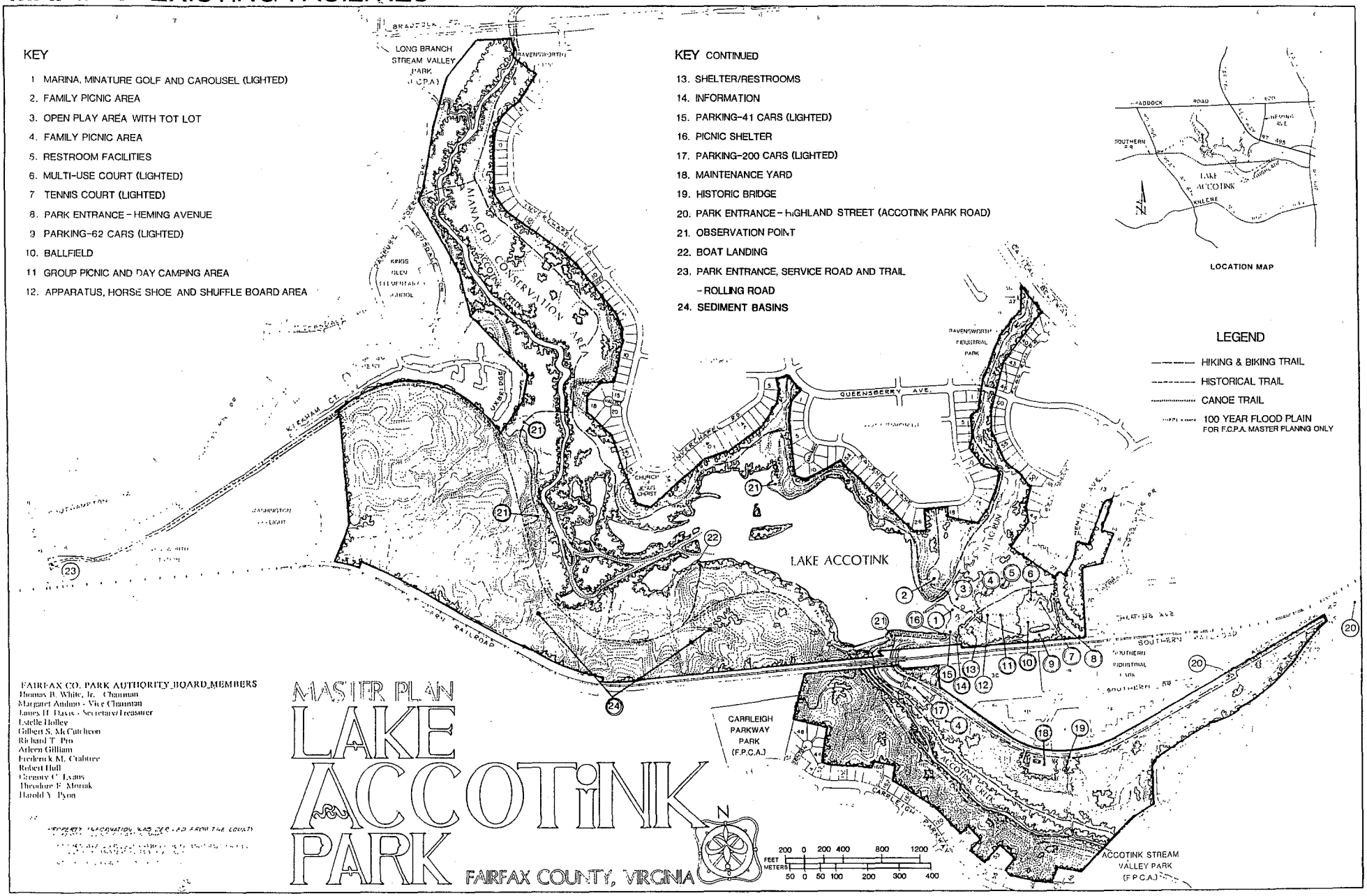
APPENDIX

1. Map #1: Existing Facilities
2. Map #2: Natural Resource Cover Types
3. Map #3: Chesapeake Bay Act Resource Protection Areas
4. Map #4: Management Zones and Potential Uses
5. Available funding as of May 1992
6. Ecological Inventory (Lists and Site Map)

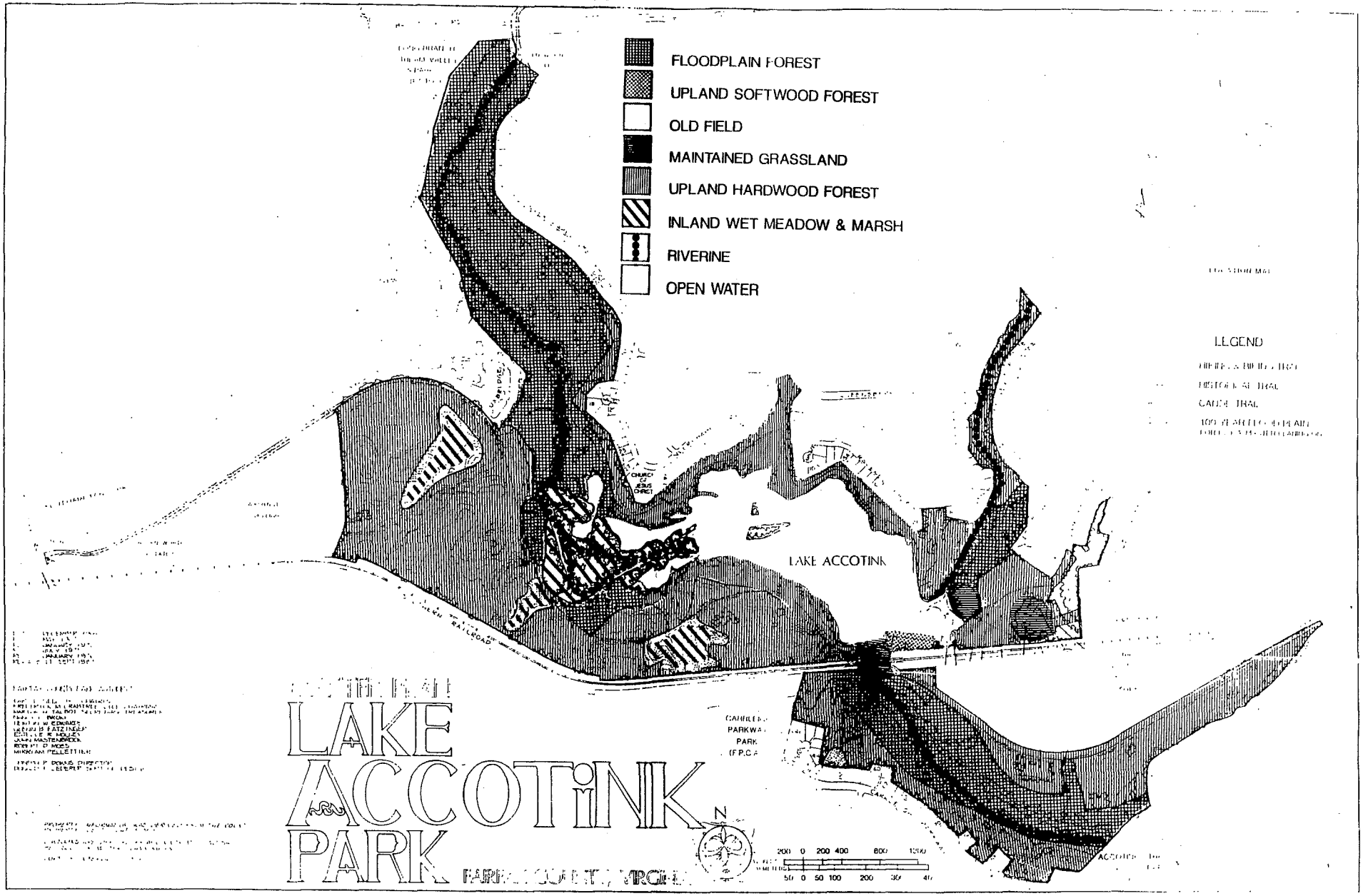
ECOLOGICAL INVENTORY SITES



MAP# 1 EXISTING FACILITIES



MAP # 2 EXISTING NATURAL RESOURCES



MAP# 3 CHESAPEAKE BAY RESOURCE PROTECTION AREAS

I- FY 1992-1997 Capital Improvement Program - Bond Sales Schedule and Cash Flow Analysis.

Listed below are the projected bond sales by calendar year as agreed to by the Board of Supervisors at their meeting on February 10, 1992. Based on this revised schedule, a total of $10.935 million will be deferred in order to fund other capital improvements within the County.

Fall, 1988 Park Authority Bonds Authorized but Unissued (Unsold)	$40.385 million
Remaining Park Bonds to be Deferred	($10.935 million)
Scheduled Sales through Spring 1997	$29.450 million

Park Authority Bond Sale Schedule
(in millions)

Date of Sale	Spring 1992	Spring 1993	Spring 1994	Spring 1995	Spring 1996	Spring 1997	Total
Amount	$8.900	$6.550	$5.000	$3.000	$3.000	$3.000	$29.450

Based on the above schedule, the Park Authority will have a total of $29.450 million available through Spring, 1997. Expenditures, outstanding encumbrances, contracts and staff costs must be deducted from this amount. Design contracts are necessary for the completion of on-going projects and include geo-technical studies; structural and electrical engineering; architecture; registered surveyor; and environmental studies expertise which is not available within the agency. After these deductions $13.332 million will remain available through FY 97 for land acquisition and construction activity. The table below shows these itemized deductions:

Cash Available through Spring, 1997	$29.450 million
Expenditures to date	(5.400 million)
Encumbrances to date	(1.600 million)
Remaining design & construction salaries for FY 1992	(0.700 million)
Design & construction salaries for FY 1993-1997 at 1.400 million/year	(7.000 million)
Consultant contracts for design projects FY 1993-1997	(1.418 million)
Remaining Amount for Land Acquisition and Construction Projects	$13.332 million

Of this remaining amount of $13.332 million, the following projects have been delineated by the Board of Supervisors for inclusion in the CIP program:

Park Name	Supervisor District	Facilities	Construction Cost
Accotink S.V.	B	Braddock Road to Lake Accotink	$ .180 million
Danbury Forest	B	Bridge replacement	$ .040 million
Fairfax Villa Acquisition	B	Land acquisition adjacent to Fairfax Villa Park	$ .650 million
Lake Accotink	B	Bridge over railroad and trail	$ .431 million
Lake Accotink	B	Maintenance facility	$ .500 million
Lake Accotink	B	Replacement of core [redacted]	$1.750 million
Lake Braddock School Field	B	Renovation of existing athletic fields	$ .060 million
Wakefield	B	Renovate all ballfield lights	$ .500 million
Wolf Trails	C	Open play, tennis, multi-use court, playground	$ .909 million
Scotts Run Nature Preserve	D	Parking, trail	$ .110 ~~.407~~ million
Great Falls Nike	D	Athletic Fields	.297 million
Huntley Meadows	L	Boardwalk renovation	$ .302 million
Clark House	M	Renovation of house for community use	$ .700 million
Deerlick	M	Two tennis courts, parking, trail construction	$ .249 million
Green Spring Garden	M	Horticulture center	$1.037 million
Green Spring Garden	M	Demo gardens and bridge	$ .162 million
Mason Community Parks	M	Replacement of playground equipment	$ .060 million

Hollin Hall	MU	Multi-use courts, picnic areas, trails, parking, athletic field renovations	$ .190 million
Mason Neck West	MU	Baseball, multi-use court, parking	$ .625 million
Newington	MU	Multi-use, picnic, trails, tot lot/ playground, tennis court, open play area	$ .400 million
Eakin	P	Renovation of community park facilities	$ .300 million
Tysons Woods	P	Playground, picnic, trail	$ .202 million
Burke Lake	S	District I Maintenance Facility	$ .568 million
Huntsman	S	Playground, multi-use court, trail	$ .763 million
Popes Head	S	Community park facilities	$ .410 million
Popes Head	S	Two tennis courts	$ .103 million
South Run District	S	Playground	$ .101 million
E.C. Lawrence	SU	Middlegate site improvements	$ .175 million
E.C. Lawrence	SU	Two soccer fields, parking	$ .760 million
E.C. Lawrence	SU	Walney Visitor Center, stone wall	$ .070 million
Greenbriar	SU	Restroom/concession, parking	$ .728 million
		T O T A L	$13.332 million

ENCLOSED DOCUMENTS: None.

STAFF: William C. Beckner, Director; James A. Heberlein, Deputy Director; Doug Ehman, Manager, Planning and Land Acquisition Division; Thaddeus Zavora, Planner.

WILDLIFE OBSERVATIONS
LAKE ACCOTINK PARK ECOLOGICAL INVENTORY
BY JO ANN MILLS
JULY - OCTOBER 1991

(These observations were made as an aside to the plant inventory at Lake Accotink. Wildlife observations were not made systematically, but were simply noted as observed. Several birds seen or heard were not identified. The Site lists reflect attention to wildlife, or relative lack thereof, and amount of time spent at each Site. It is assumed that many more species use the Sites than are listed. A more thorough study of the Wildlife at Lake Accotink should be a priority.)

BIRDS	MAMMALS	OTHER
Site 6: Upland Hardwood Forest, Western Edge of Park		
Chickadee, Carolina		**Micrathena, Spined (spider)**
Jay, Blue		
Titmouse, Tufted		
Woodpecker, Pileated		
Site 7: Upland Hardwood Forest, Crest of Hill, Western Boundary		
Woodpecker, Downy		**Micrathena, Spined**
Site 8: Upland Hardwood Forest, Hill West of Beaver Pond		
Chickadee, Carolina		**Moth, Gypsy**
Jay, Blue		Snake, sp.
Heron, Green-backed		Snake, Black Rat
Titmouse, Tufted		Turtle, Eastern Box
Wood-Pewee, Eastern		Yellow Jacket
Woodpecker, Pileated		
Site 9: Upstream from Beaver Pond		
Gnatcatcher, Blue-gray		Frog, Leopard
Heron, Green-backed		Micrathena, Spined
Redstart, American		Moth, Gypsy
Warbler, Black & White		Turtle, Eastern Box
Wren, Carolina		

Site 10: Beaver Pond, Both Wetland and Surrounding Upland

Cardinal, Northern	Beaver	Frog spp.
Chickadee, Carolina	Squirrel, E. Gray	Frog, Green
Duck, Wood		Micrathena, Spined
Flycatcher, Epid. (Acadian)		Moth, Pale Tiger (Catep.)
Gnatcatcher, Blue-gray		Snake, Garter
Hawk, Broad-winged		Toad, American
Heron, Green-backed		Turtle, Eastern Box
Hummingbird, Ruby-throated		Turtle, Painted
Jay, Blue		
Kinglet, Ruby-crowned		
Mallard		
Nuthatch, White-breasted		
Sapsucker, Yellow-bellied		
Swift, Chimney		
Titmouse, Tufted		
Warbler, Black-troated Blue		
Woodpecker, Downy		
Woodpecker, Pileated		
Woodpecker, Red-bellied		
Wood-Pewee, Eastern		
Wren, Carolina		
Yellowthroat, Common		

Site 11: Managed Conservation Area, Floodplain Forest

Cardinal, Northern	Beaver	Dragonflies spp
Chickadee, Carolina	Deer, Wh-tailed	Fish (minnows) sp
Dove, Mourning	Squirrel, E. Gray	Frog sp
Flicker, Northern		Frog (tadpoles) sp
Gnatcatcher, Blue-gray		Micrathena, Spined
Grackle, Common		Turtle (Painted?)
Heron, Great Blue		Waterstrider sp
Heron, Green-backed		
Kingfisher, Belted		
Titmouse, Tufted		
Thrush, Wood		
Warbler sp		
Woodpecker, Downy		
Wren, Carolina		

Site 14: Upper End of Lake Accotink, Marsh and Open Water

Goose, Canada	Beaver	Fish
Gull, Ring-billed		Frogs
Heron, Green-backed		Turtles, Painted
Kingfisher, Belted		
Mallard		
Wigeon, American (Baldpate)(?)		

Site 15: Western MCA Floodplain Forest

Dove, Mourning	Beaver	Frog spp
Heron, Green-backed	Deer, Wh-tailed	Micrathena, Spined
Kingfisher, Belted		Snake sp. (black & yellow)
		Turtles, Painted
		Yellowjackets

Site 16: Western Lake Overlook

Heron, Green-backed	Deer, Wh-tailed	Micrathena, Spined

Site 17: Hilly Western Boundary

Cardinal, Northern	Deer, Wh-tailed	Fish (minnows) sp.
	Squirrel, E. Gray	Frog spp.
		Micrathena, Spined
		Waterstriders

Site 18: Lower Accotink Creek Floodplain

Cardinal, Northern	Deer, Wh-tailed	Ants
Catbird, Gray	Fox, Red	Butterflies
Chickadee, Carolina	Raccoon	Cicadas
Crow, Common		Fish (minnows)
Dove, Mourning		Frog spp
Flicker, Northern		Frog (tadpoles) sp
Flycatcher, E. (Acadian?)		Hornets
Gnatcatcher, Blue-gray		Swallowtail, Tiger
Goldfinch, American		Waterstrider sp
Grackle, Common		
Kingfisher, Belted		
Robin, American		
Tanager, Scarlet		
Thrush, Wood		
Titmouse, Tufted		
Warbler, Yellow-rumped		
Waterthrush, Louisiana		
Woodpecker, Pileated		
Woodpecker, Red-bellied		
Wren, Carolina		
Wren, House ? (young)		
Vireo, Red-eyed		

Site 19: Forest in Picnic/Baseball Area

Dove, Mourning	Chipmunk, Eastern	Cicada sp
		Micrathena, Spined
		Yellowjackets

Site 20: Hill West of Flag Run and Beach

Dove, Mourning
Robin, American
Thrush, Wood
Woodpecker, Downy
Wren, Carolina

Hornets
Micrathena, Spined
Turtle, Eastern Box

Site 21: Upland along Northern Edge of Lake Accotink

Cardinal, Northern
Goldfinch, American
Hummingbird, Ruby-throated

Opossum (dead yng)

Monarch (catep.)
Swallowtail, Spicebush

Site 22: Flag Run

Cardinal, Northern
Chickadee, Carolina
Flycatcher, E. (Acadian?)
Hummingbird, Ruby-throated
Titmouse, Tufted
Woodpecker, Downy
Wren, Carolina

Crawfish sp
Frog sp
Micrathena, Spined

Site 23: Upland Forest South of Entry Road

Chickadee, Carolina
Jay, Blue
Titmouse, Tufted

Fox, Red
Squirrel, E. Gray

Fish (minnows) sp

ECOLOGICAL INVENTORY OF LAKE ACCOTINK PARK
COMBINED PLANT AND WILDLIFE LISTS FROM ALL AVAILABLE SOURCES
COMPILED JANUARY 1992
By Jo Ann Mills

TREES

Ash, Green	Fraxinus pennsylvanica	1,3,10
Ash, White	Fraxinus americana	1,2,6,10
Aspen, Bigtooth	Populus grandidentata	1,10
Basswood	Tilia sp.	3
Beech, American	Fagus grandifolia	1-3,6,10
Birch, River	Betula nigra	3,6,8,10
Catalpa, Common	Catalpa bignonioides	3
Ceder, Red	Juniperus virginiana	1,3,10
Cherry, Black	Prunus serotina	1,3,10
Cherry, Choke	Prunus virginiana	10
Chestnut, American	Castanea dentata	1,10
Cottonwood	Populus deltoides	1,10
Crab apple	Pyrus sp	3
Dogwood, Flowering	Cornus florida	1-3,5,6,1
Elm, American	Ulmus americana	1,3
Elm, Slippery	Ulmus rubra	10
Hackberry, American	Celtis occidentalis	3
Hickory, Bitternut	Carya cordiformis	1,3,10
Hickory, Mockernut	Carya tomentosa	1,3,10
Hickory, Pignut	Carya glabra	1,3,10
Hickory, Shagbark	Carya ovata	2,10
Holly, American	Ilex opaca	1,3,10
Ironwood (American Hornbeam)	Carpinus caroliniana	1-3,5,6,8
Juneberry (Shadbush, Serviceberry)	Amelanchier sp	7
Locust, Black	Robinia pseudo-acacia	1-3,6,10
Maple, Ash-leaf (Box elder)	Acer negundo	3,6,8,10
Maple, Red	Acer rubrum	1,3,8,10
Maple, Silver	Acer saccharinum	1,3,10
Maple, Sugar	Acer saccharum	3
Mimosa	Albizzia julibrissin	1,3,10
Mulberry, Red	Morus rubra	10
Oak, Basket (Swamp Chestnut)	Quercus michauxii	10
Oak, Black	Quercus velutina	1,3,6,10
Oak, Blackjack	Quercus marilandica	10
Oak, Chestnut (Rock)	Quercus prinus	10
Oak, Pin	Quercus palustris	1,2,3,8
Oak, Red	Quercus rubra	1-3,6,10
Oak, Scarlet	Quercus coccinea	10
Oak, Southern Red (Spanish)	Quercus falcata	1,3,10
Oak, White	Quercus alba	1-3,6,10
Oak, Willow	Quercus phellos	8,10
Pawpaw, Common	Asimina triloba	1,3,6,7,1

Pine, Loblolly	Pinus taeda	1,10
Pine, Virginia (Scrub)	Pinus virginiana	1,2,3,10
Pine, White	Pinus strobus	3
Redbud, Eastern	Cercis canadensis	1-3,6,10
Sassafras	Sassafras albidum	1-3,6,10
Sweetgum	Liquidambar styraciflua	3,6,10
Sycamore, Eastern	Platanus occidentalis	1-3,6,10
Tulip Poplar (Tulip Tree)	Liriodendron tulipifera	1-3,6,10
Tupelo (Sour-gum, Black-gum)	Nyssa sylvatica	1-3,6,10
Walnut, Black	Juglans nigra	2,3,10
Willow, Black	Salix nigra	1,3,6,8,1
Yew	Taxus sp	10

SHRUBS AND VINES

SHRUBS

Alder, Smooth (Tag)	**Alnus serrulata**	3,8,10
Arrowwood, Southern	**Viburnum dentatum**	1,3,10
Azalea, Pink	**Rhododendron, nudiflorum**	3,7,10
Barberry, Japanese	**Berberis thunbergii**	1,10
Blackberry sp.	**Rubus sp.**	1,3,10
Bladdernut, American	**Staphylea trifolia**	7
Blueberry, High-bush sp.	**Vaccineum sp.**	10
Blueberry, Low-bush sp.	**Vaccineum sp.**	1,2,3,10
Boxwood	**Buxus sempervirens**	3
Buttonbush	**Cephalanthus occidentalis**	3,8,10
Dewberry sp.	**Rubrus sp.**	10
Dogwood, Silky	**Cornus amomum**	1,3,8,10
Elderberry, Common	**Sambucus canadensis**	3
Hazelnut, American	**Corylus americana**	2,10
Hercules Club	**Aralia spinosa**	10
Huckleberry, Black	**Gaylussacia baccata**	10
Huckleberry, Squaw	**Gaylussacia sp.**	10
Hydrangea, Wild	**Hydrangea arborescens**	1,2,3,10
Laurel, Mountain	**Kalmia latifolia**	1,3,6,10
Raspberry, Black	**Rubus occidentalis**	10
Raspberry, Wine (Wineberry)	**Rubus phoenicolasius**	1,3
Rose, Multiflora	**Rosa multiflora**	1,2,3
Rose, Swamp	**Rosa palustrus**	8
Russian-olive	**Elaeagnus angustifolia**	1,10
Spicebush, Common	**Lindera benzoin**	1,3,5,6,1
Strawberry-bush, American	Euonymus americanus	1
Sumac, Smooth	Rhus glabra	10
Sumac, Staghorn	Rhus typhina	2,10
Sumac, Winged (Shining, Dwarf)	Rhus copallina	1,3
Viburnum, Mapleleaf	Virburnum acerifolium	1,2,3,10
Witch-hazel, Common	Hamamelis virginiana	2,3,10

VINES

Ampelopsis sp.	Ampelopsis sp.	1,3
Bittersweet, American	Celastrus scandens	10
Grape, Cat	Vitis palmata	10
Grape, Summer	Vitis alstivalis	2
Grapes sp.	Vitis sp.	3,10
Greenbrier, Bristly	Smilax hispida	2
Greenbrier, Common	Smilax rotundifolia	1,3,6,10
Honeysuckle, Japanese	Lonicera japonica	1,3,5,10
Ivy, English	Hedera helix	3,10
Ivy, Poison	Rhus radicans	1-3,6,10
Kudzu-vine	Pueraria sp.	10
Sawbrier (Glaucous Greenbrier)	Smilax glauca	10
Trumpet Creeper	Campsis radicans	6
Virginia Creeper	Parthenocissus quinquefolia	1,2,3,10
Wisteria, American	Wisteria frutescens	3

FLOWERS

Agrimony, Many-(Small-?)Flowered	Agrimonia parviflora	10
Agrimony, (Woodland?)	Agrimonia sp. (rostellato?)	1
Anemone, Wood	Anemone quinquefolia	5,7
Angelica, Great (Alexander)	Angelica atropurpurea	1
Arrowhead, Common (Wapato)	Sagittaria latifolia	8
Arum, Arrow	Peltandra virginica	1,3,8
Aster, Calico	Aster lateriflorus	1
Aster, Cornel-leaved	Aster infirmus	1
Aster, Crooked-stemmed	Aster prenanthoides	1
Aster, Large-leaved	Aster macrophyllus	1
Aster, Lowrie's	Aster lowrieanus	1
Aster, Panicled	Aster simplex	1
Aster, Purple-stemmed	Aster puniceus	1
Aster, Small White	Aster vimineus	1
Aster, Wavy-leaved	Aster undulatus	1
Aster, White Heath	Aster pilosus	1
Aster. White Wood	Aster divaricatus	1,3
Avens, Rough	Geum virginianum	1,10
Avens, White	Geum canadense	1,2,5
Avens, Yellow	Geum aleppicum	1,3
Baneberry, White	Actaea pachypoda	1
Basil Balm	Monarda clinopodia	5
Basil, Wild	Satureja vulgaris	1
Bean, Sacred	Sp.	10
Bearberry	Arctostaphylos uva-ursi	6
Bedstraw, Rough	Galium asprellum	1,2

Beechdrops	Epifagus virginiana	1,2,6
Beefsteak Plant	Perilla frutescens	1
Beggar-ticks	Bidens frondosa	1
Beggar-ticks, Swamp	Bidens connata	1
Bellwort, Perfoliate	Uvularia perfoliata	1,2,5
Bellwort, Sessile-leaved (Wild Oats)	Uvularia sessilifolia	5,7
Bittercress, Pennsylvania	Cardamine pensylvanica	5,7
Bittercress, Small Flowered	Cardamine parviflora	5
Black-eyed Susan	Rudbeckia hirta (serotina)	3
Bloodroot	Sanquinaria canadensis	1,2,5,7,1
Bluebells,Virginia	Mertensia virginica	5,7
Blue-eyed Grass	Sisyrinchium sp.	8
Bluets	Houstonia caerulea	3,5,7
Boneset	Eupatorium perfoliatum	1
Boneset, Upland	Eupatorium sessilifolium	1
Bugleweed, Virginia	Lycopus virginicus	1
Bur-cucumber	Sicyos angulatus	1
Burdock, Common	Arctium minus	1
Bur-marigold, Nodding	Bidens cernua	1
Bush-clover	Lespedeza sp.	1
Buttercup, Kidneyleaf (Crowfoot, SmF	Ranunculus abortivus	5,7
Cardinal Flower	Lobelia cardinalis	3,5,8,10
Carrion Flower	Smilax herbacea	1,7
Chervil, Spreading	Chaerophyllum procumbens	7
Chickory	Cichorium intybus	2
Chickweed, Common	Stellaria media	5,7
Chickweed, Mouse-ear	Cerastium vulgatum	7
Chickweed, Star	Stellaria pubera	5,7
Cicely, Sweet	Osmorhiza claytoni	7
Cinquefoil, Common	Potentilla simplex	1,3
Clearweed	Pilea pumila	1,3,8,10
Cleavers	Galium aparine	6,7
Clover, Red	Trifolium pratense	3,5
Clover, White	Trifolium repens	5
Clover, White Sweet	Melilotus alba	2
Coneflower, Green-headed (Tall)	Rudbeckia laciniata	3,5
Cress, Marsh Yellow	Rorippa islandica	1
Cucumber Root, Indian	Medeola virginiana	1,3,7,10
Dandelion, Common	Taraxacum officinale	5,7
Dayflower, Asiatic	Commelina communis	1,3
Dead-Nettle, Purple	Lamium purpureum	5,7
Devil's-bit	Chamaelirium luteum	1
Duckweed sp.	Lemna sp.	1

Elephant's Foot	Elephantopos carolinianus	1
Enchanter's Nightshade	Circaea quadrisulcata	1,2
Evening-Primrose, Common	Oenothera biennis	5
False Buckwheat, Climbing	Polygonum scandens	1
False Nettle	Boehmeria cylindrica	1,3,5
Fleabane, Common	Erigeron philadelphicus	2
Fleabane, Daisy	Erigeron annuus	5
Fleabane, Marsh	Pluchea camphorata	8
Forget-me-not, Smaller	Myosotis laxa	5
Geranium, Wild	Geranium maculatum	3,6,7,10
Germander, American (Wood Sage)	Teucrium canadense	8
Ginger, Wild	Asarum canadense	1,3,5,10
Ginseng, Dwarf	Panax trifolius	5,7
Goatsbeard	Aruncus dioicus	2
Goldenrod, Blue-stem	Solidago caeria	1
Goldenrod, Early	Solidago juncea	3
Goldenrod, Elm-leaved	Solidago ulmifolia	1
Goldenrod, Grass-leaved	Solidago graminifolia	1
Goldenrod, Gray	Solidago nemoralis	1
Goldenrod, Rough-stemmed	Solidago rugosa	1
Goldenrod, Tall	Solidago altissima	1
Heal-all (Self-heal)	Prunella vulgaris	1,3,5,10
Hempweed, Climbing	Mikania scandens	8
Hepatica, Round-lobed	Hepatica americana	1,3,7,10
Hog Peanut	Amphicarpa bracteata	1,10
Honewort	Cryptotaenia canadensis	2
Horse Balm	Collinsonia canadensis	1
Horse-nettle	Solanum carolinense	1,3,5
Indian Hemp	Apocynum cannabinum	?
Indian Pipe	Monotropa uniflora	3,10
Indian Tobacco	Lobelia inflata	5
Ironweed, New York	Vernonia noveboracensis	?
Ivy, Ground (Gill-over-the-ground)	Glechoma hederacea	1,10
Jack-in-the-pulpit	Arisaema triphyllum	1-3,5-7,1
Jerusalem Artichoke	Helianthus tuberosus	3
Joe-Pye-weed, Spotted	Eupatorium maculatum	1,2,3
Knotweed, Virginia	Tovara virginiana	1
Lady's Thumb	Polygonum persicaria	1,2,3,5
Lady's-slipper, Yellow	Cypripedium calceolus	10
Lettuce, Blue	Lactuca floridana	1
Lettuce, Prickly	Lactuca scariola	3
Lettuce, Tall White	Prenanthes altissima	1
Lettuce, White	Prenanthes alba	1
Lettuce, Wild	Lactuca canadensis	2
Licorice, Wild	Galium circaezans	1,3,6,10

Lily, Turk's-Cap (1)	Lilium superbum	3
Lizard's Tail	Saururus cernuus	3
Lobelia, Spiked (Pale-spike?)	Lobelia spicata	10
Loosestrife, Fringed	Lysimachia ciliata	1,2,5
Loosestrife, Garden (?)	Lysimachia vulgaris	1
Loosestrife, Purple	Lythrum salicaria	3
Loosestrife, Whorled	Lysimachia quadrifolia	10
Lopseed	Phryma leptostachya	1,2
Lotus, American	Nelumbo lutea	3
Mallow, Swamp Rose (1)	Hibiscus palustris	3
Marigold, Marsh	Caltha palustris	3
May-apple	Podophyllum peltatum	1-3,5-7
Meadow-rue, Early	Thalictrum dioicum	1,3,10
Meadow-rue, Tall	Thalictrum polygamum	1,3,5,7
Mercury, Three-seeded	Acalypha virginica or rhombl	
Milkweed, Common	Asclepias syriaca	3
Milkweed, Swamp	Asclepias incarnata	2,3
Mint, Wild	Menta arvensis	2
Monkey Flower, Square-stemmed	**Mimulus ringens**	**1,10**
Monkey Flower, Winged	**Mimulus alatus**	**10**
Monkshood, Wild	**Aconitum uncinatum**	**1**
Morning Glory, Sm Red or Sm White(?)	Ipomoea (coccinea or lacunol	
Mountain Mint, Hoary	Pycnanthemum incanum	1
Mullein, White	**Verbascum lychnitis**	**3**
Mustard, Field (Rape)	**Brassica rapa**	**7**
Nettle, Stinging	**Urtica dioica**	**3**
Nettle, Tall	**Urtica procera**	**10**
Orchis, Cranefly	**Tipularia discolor**	**1,3,10**
Orchis, Showy	Orchis spectabilis	
Orchis (sp - 2 leaves, no leaves on stem)		3
Orchis (sp - 2 leaves, leaves on stem)		3
Oxeye	Heliopsis helianthoides	3
Partridge Pea	Cassia fasciculata	1,10
Partridgeberry (Two-eyed berry)	Mitchella repens	1,2,3,10
Peppergrass, Wild	Lepidium virginicum	5
Periwinkle (Myrtle)	Vinca minor	10
Phlox, Garden	Phlox paniculata	5
Phlox, Smooth	Phlox glaberrima	10

Pickerelweed	Pontederia cordata	8
Pilewort (Fireweed)	Erechtites hieracifolia	1
Pink, Rose	Sabatia angularis	3,10
Plantain, Common	Plantago major	1,3,5
Pokeweed	Phytolacca americana	1,3,10
Pond-Lily	Nuphar sp.	8
Puttyroot	Aplectrum hyemale	1
Pyrola, Round-leaved	Pyrola rotundifolia	1,3

Queen Anne's Lace (Wild Carrot)	Daucus carota	1-3,5,10
Queen-of-the-prairie (-meadow)	Filipendula rubra	10
Ragweed, Common	Ambrosia artemisiifolia	1
Ragweed, Great	Ambrosia trifida	1,3,10
Ragwort, Golden	Senecio aureus	7
Rattlesnake Plantain, Downy	Goodyera pubescens	1,2,3,10
Rosinweed, Whorled	Silphium trifoliatum	1
Rue-anemone	Anemonella thalictroides	1
St. Johnswort, Spotted	Hypericum punctatum	2,5
Saxifrage sp.	Saxifraga sp.	7
Seedbox	Ludwigia alternifolia	5,8
Silver-rod	Solidago bicolor	1
Skullcap, Hairy	Scutellaria elliptica	1
Skullcap, Hyssop	Scutellaria integrifolia	1
Skullcap, Mad-dog	Scutellaria lateriflora	1
Skunk Cabbage	Symplocarpus foetidus	1,3,5-7,1
Smartweed, Common (Water-pepper)	Polygonum hydropiper	1
Smartweed, Long-bristled	Polygonum cespitosum	1
Smartweed, Swamp	Polygonum coccineum	1
Smartweed, Water	Polygonum amphibium	10
Snakeroot, Black (Cohosh, Black)	Cimicifuga racemosa	10
Snakeroot, Clustered	Sanicula gregaria	10
Snakeroot, White	Eupatorium rugosum	?
Sneezeweed sp.	Helenium sp.	3,8
Snowflake (Paperwhite Narcissus)	Leucojum aestivum	7
Solomon's Seal	Polygonatum biflorum	1,2,3,6
Solomon's Seal, False	Smilacina racemosa	1-3,7,10
Speedwell, Corn	Veronica arvensis	7
Spider-flower (1)	Cleome spinosa	3
Spring-beauty	Claytonia virginica	5,7
Strawberry, Indian	Duchesnea indica	1,3
Strawberry, Wild (Common)	Fragaria virginiana	1
Sundrops	Oenothera fruticosa	3,10
Sunflower, Pale-leaved Wood	Helianthus strumosus	1
Sunflower, Stiff-haired	Helianthus hirsutus	1
Sunflower, Thin-leaved	Helianthus decapetalus	3
Sunflower, Woodland	Helianthus divaricatus	1
Sweet William, Wild	Phlox maculata	1
Tearthumb, Arrow-leaved	Polygonum sagittatum	1
Tearthumb sp.	Polygonum sp.	8,10
Thimbleweed	Anemone virginiana	2,10
Thoroughwort, Hyssop-leaved	Eupatorium hyssopifolium	1
Tickseed-sunflower	Bidens polylepis	1
Tick-trefoil, Hoary	Desmodium canescens	1,2
Tick-trefoil, Naked Flowered	Desmodium nudiflorum	1,3,10
Tick-trefoil, Pointed-leaved	Desmodium glutinosum	10
Tick-trefoil, Prostrate (Trailing)	Desmodium rotundifolium	1
Tick-trefoil, Showy	Desmodium canadense	1

Toothwort, Cut-leaved	Dentaria laciniata	5,7
Touch-me-not, Spotted (Jewelweed)	Impatiens capensis	1-3,5,6,8
Trout-lily (Adder's Tongue)	Erythronium americanum	5,6,7
Turtlehead	Chelone glabra	1
Vervain, White	Verbena urticifolia	1,2,5
Vetch, Crown	Coronilla varia	1
Violet, Common Blue	Viola papilionacea	5,7
Violet, Downy Yellow	Viola pubescens	7
Violet, Northern White (?)	Viola pallens	7
Violet, Smooth Yellow	Viola pensylvanica	7
Violet, Three-lobed	Viola triloba	3
Violet sp.	Viola sp.	3
Violet sp.	Viola sp.	3
Virgin's Bower	Clematis Virginiana	1
Water Hemlock	Cicuta maculata	3,5,8
Water-horehound, Cut-leaved	Lycopus americanus	1,2
Waterleaf	Hydrophyllum virginianum	7
Water Plantain (Small?)	Alisma subcordatum	10
Wingstem	Actinomeris alternifolia	1,3
Wintergreen, Spotted (Striped)	Chimaphila maculata	1-3,6,10
Wood Mint, Hairy	Blephilia hirsuta	10
Wood Sorrel, Yellow	Oxalis stricta	1,3,5,6
Yamroot, Wild	Dioscorea villosa	1,3,10
Yarrow	Achillea millefolium	5

GRASSES/SEDGES/RUSHES ETC

Bulrush	Scirpus cyperimus	8
Bulrush	Scirpus sp.	8
Bamboo (Cane) sp.	Arundinaria or Phyllostachy	3
Bluejoint (Reed Grass)	Calamagrostra sp.	8
Burreed	Sparganium sp.	8
Cattail, Common	Typha latifolia	1,3,8,10
Cattail, Narrowleaf	Typha angustifolia	8
Foxtail (grass)	Alopecurus pratensis	3
Grass, Bent	Agrostis sp.	8
Grass, Canary	Phalaris arundinacea	8
Grass, Cut	Leersia oryzoides	8
Grass, Wool	Sp.	1
Phragmites (?)	Phragmites australis	3
Purpletop (grass)	Tridens flavus	3
Reed, Wood	Cinna sp.	8
Rice, Wild	Zizania sp.	8
Rush	Juncus sp.	8,10
Rush	Juncus sp.	8

Rush, Soft	Sp.	10
Sedge	Carex sp.	8
Sedge	Carex sp.	8
Sedge	Carex sp.	8
Sedge	Cyperus sp.	8
Sedge	Cyperus sp.	8
Water Weed	Elodea sp.	8

FERNS, and Fern Allies

Bracken	Pteridium aquilinum	1,10
Beech Fern, Broad	Phegopteris hexagonoptera	1,3,10
Christmas Fern	Polystichum acrostichoides	1,3,10
Cinnamon Fern	Osmunda cinnamomea	3,8,10
Crested Fern	Dryopteris cristata	1
Grapefern, Cut-leaved	Botrychium dissectum	1,3
Hayscented Fern	Dennstaedtia punctilobula	10
Horsetail, Field	Equisetum arvense	10
Horsetail, Rough (Common Scouring Ru	Equisetum hiemale	1
Interrupted Fern	Osmunda claytoniana	1
Lady Fern, Lowland	Athyrium filix-femina	1,3,10
Maidenhair Fern	Adiantum pedatum	1,10
New York Fern	Thelypteris noveboracensis	3,10
Pine, Running (Cedar, Running)	Lycopodium complanatum	1,3,10
Polypody, Common	Polypodium vulgare	3
Rattlesnake Fern	Botrychium virginianum	1,2,3,10
Royal Fern	Osmunda regalis	1,3,10
Sensitive Fern	Onoclea sensibilis	1,3,10
Spleenwort, Ebony	Asplenium platyneuron	3
Spleenwort, Silvery	Athyrium thelypterioides	10
Woodfern, Marginal	Dryopteris marginalis	3
Woodfern, Spinulose	Dryopteris spinulosa	3

(377 listings)