

# WELCOME

TO THE

# LAKE ACCOTINK PARK MASTER PLAN REVISION

NATURAL, WATER, & CULTURAL RESOURCES  
COMMUNITY DISCUSSION

APRIL 24, 2017



FAIRFAX COUNTY PARK AUTHORITY

# TONIGHT'S AGENDA

- PRESENTATION –
  - RESOURCES AND THE PARK MASTER PLAN
  - NATURAL RESOURCES – KRISTEN SINCLAIR
  - CULTURAL RESOURCES – JOHN RUTHERFORD
  - WATER RESOURCES – DANIELLE WYNNE
- OPEN HOUSE RESOURCE STATIONS





FAIRFAX COUNTY PARK AUTHORITY

# LAKE ACCOTINK PARK MASTER PLAN REVISION

## PROJECT IN A NUTSHELL

- A PARK MASTER PLANS ESTABLISHES A LONG-RANGE VISION TOWARDS FUTURE PARK USES AND SITE DEVELOPMENT, SPECIFIC TO AN INDIVIDUAL PARK
- A MASTER PLAN REVISION PROVIDES A CHANCE TO REVIEW AN EXISTING PLAN FOR A PARK AND DETERMINE HOW WELL IT IS MEETING THE NEEDS OF THE COMMUNITY TODAY AND TO FURTHER PLAN FOR THE FUTURE.
- THE LAST TIME THE MASTER PLAN FOR LAKE ACCOTINK PARK WAS UPDATED WAS IN 1992.
- WE ARE SEEKING TO UNDERSTAND HOW COMMUNITY PREFERENCES AND EXPECTATIONS HAVE CHANGED SINCE THE LAST PLAN UPDATE.



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## PUBLIC INFORMATION MEETING/OPEN HOUSE

- MARCH 14, 2016
- UNDERSTANDING OF THE PROCESS
- SHARE SOME INFORMATION ABOUT THE PARK

## LAKE SUSTAINABILITY WORKSHOP

- JUNE 16, 2016
- DISCUSSED THE DIFFICULTY OF MANAGING SEDIMENT THAT FLOWS INTO LAKE ACCOTINK
- AS A GROUP, DISCUSSED A RANGE OF POSSIBILITIES THAT COULD BE CONSIDERED.



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## FACILITIES, PROGRAMMING, AND USAGE WORKSHOP

- OCTOBER 27, 2016
- TO BETTER UNDERSTAND HOW YOU USE THE PARK
- WHAT TYPES OF FACILITIES AND PROGRAMMING BEST SUIT YOUR NEEDS

## TRAILS WORKSHOP

- DECEMBER 5, 2016
- TO BETTER UNDERSTAND HOW YOU USE TRAILS
- WHAT MIGHT IMPROVE YOUR TRAIL EXPERIENCE



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## RESOURCES

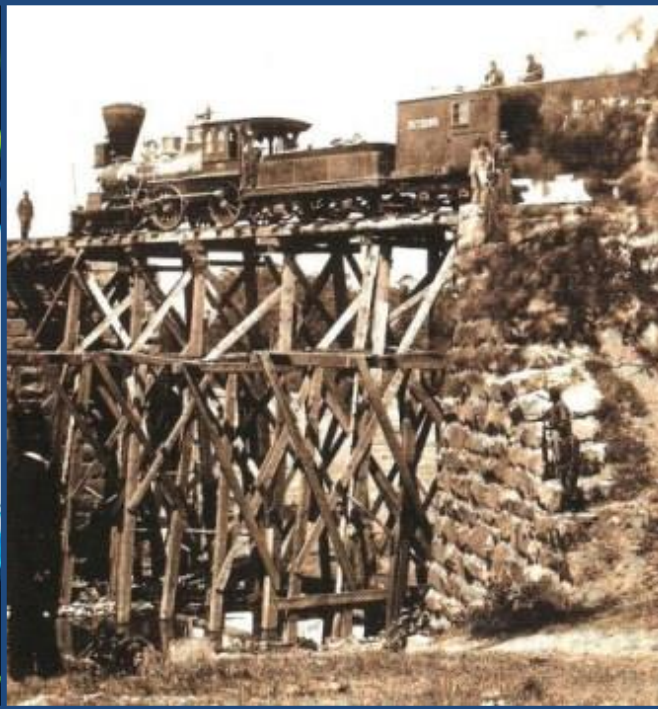
NATURAL



CULTURAL



WATER



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## PARK AUTHORITY MISSION STATEMENT

To set aside public spaces for and assist citizens in the protection and enhancement of environmental values, diversity of natural habitats and cultural heritage to guarantee that these resources will be available to both present and future generations.

To create and sustain quality facilities and services which offer citizens opportunities for recreation, improvement of their physical and mental well being, and enhancement of their quality of life

STEWARDSHIP



RECREATION





# LAKE ACCOTINK PARK MASTER PLAN REVISION



## **INCREASING STRESSES ON THE LAND FROM AREA GROWTH**

*MORE PEOPLE  
MORE DEVELOPMENT  
MORE RUNOFF  
MORE POLLUTANTS  
INVASIVE SPECIES  
HIGH LEVELS OF DEER POPULATION*



## **RESPONDING TO DECISIONS MADE 50+ YEARS AGO**

*DEVELOPMENT WITH LITTLE TO NO STORMWATER CONTROL  
DIFFERENT DEVELOPMENT STANDARDS*

## **INCREASING KNOWLEDGE AND UNDERSTANDING**



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## RESOURCE PROTECTION ZONES

- *DEFINE THE RESOURCES*
- *ANALYZE THEIR DEGREE OF SENSITIVITY*
- *DIRECT DEVELOPMENT AWAY FROM SENSITIVE AREAS*
- *FRAME THE PICTURE OF WHERE USES SHOULD BE PLACED*
- *INFORM INTERPRETIVE ELEMENTS AND PROGRAMS*
- *PROVIDE BASIS FOR FUTURE ENHANCEMENT/RESTORATION PROJECTS*

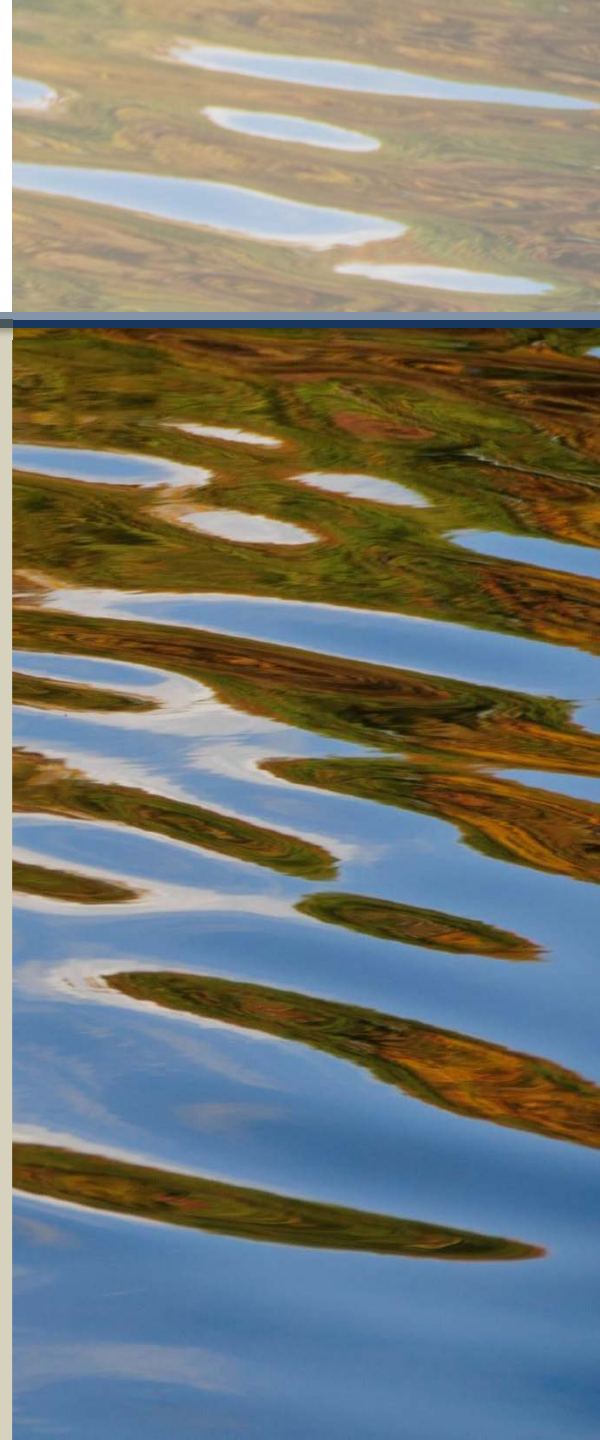


# NATURAL RESOURCES

KRISTEN SINCLAIR, ECOLOGIST III  
NATURAL RESOURCE BRANCH  
FAIRFAX COUNTY PARK AUTHORITY



FAIRFAX COUNTY PARK AUTHORITY



# LAKE ACCOTINK PARK NATURAL RESOURCES

## TOPIC OVERVIEW

- EXISTING CONDITIONS OF PARK NATURAL RESOURCES
- ONGOING EFFORTS AT LAKE ACCOTINK PARK
  - CONDUCT INVENTORY
  - MANAGE RESOURCES



# LAKE ACCOTINK PARK NATURAL RESOURCES

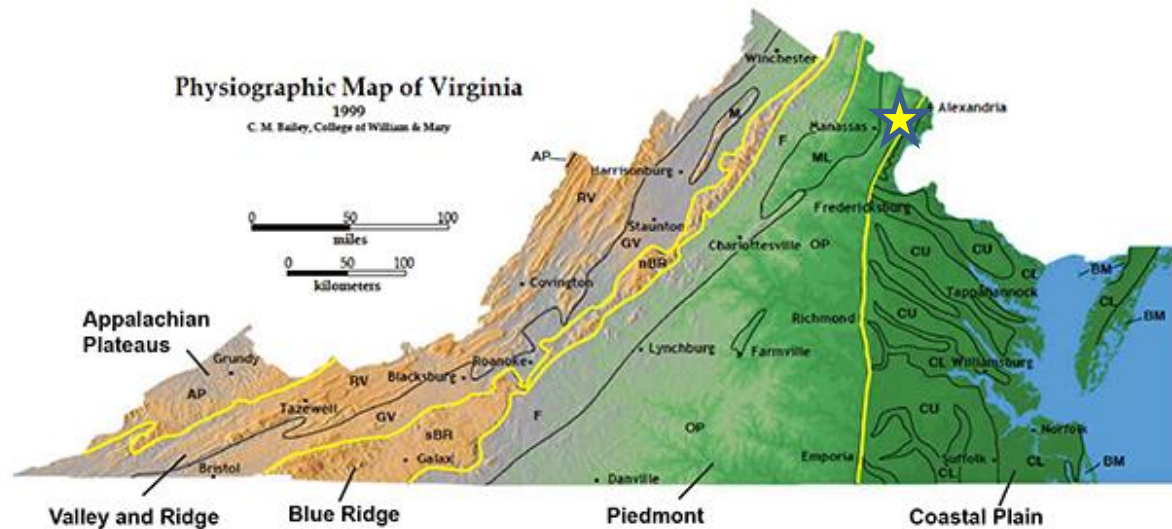
## NATURAL RESOURCES

- GEOGRAPHY, TOPOGRAPHY AND SOILS
- WATER RESOURCES
- VEGETATION
  - NATURAL COMMUNITIES
  - NON-NATIVE INVASIVE SPECIES
- WILDLIFE
- RARE, THREATENED AND ENDANGERED SPECIES



# LAKE ACCOTINK PARK NATURAL RESOURCES

- **GEOGRAPHY, TOPOGRAPHY AND SOILS**
  - **PIEDMONT PHYSIOGRAPHIC PROVINCE OF VIRGINIA**



**Appalachian Plateaus province**

AP: Appalachian Plateaus

**Valley and Ridge province**

RV: Ridge and Valley subprovince  
GV: Great Valley subprovince  
M: Masanutten Mountain

**Blue Ridge province**

nBR: northern Blue Ridge subprovince  
sBR - southern Blue Ridge subprovince

**Piedmont province**

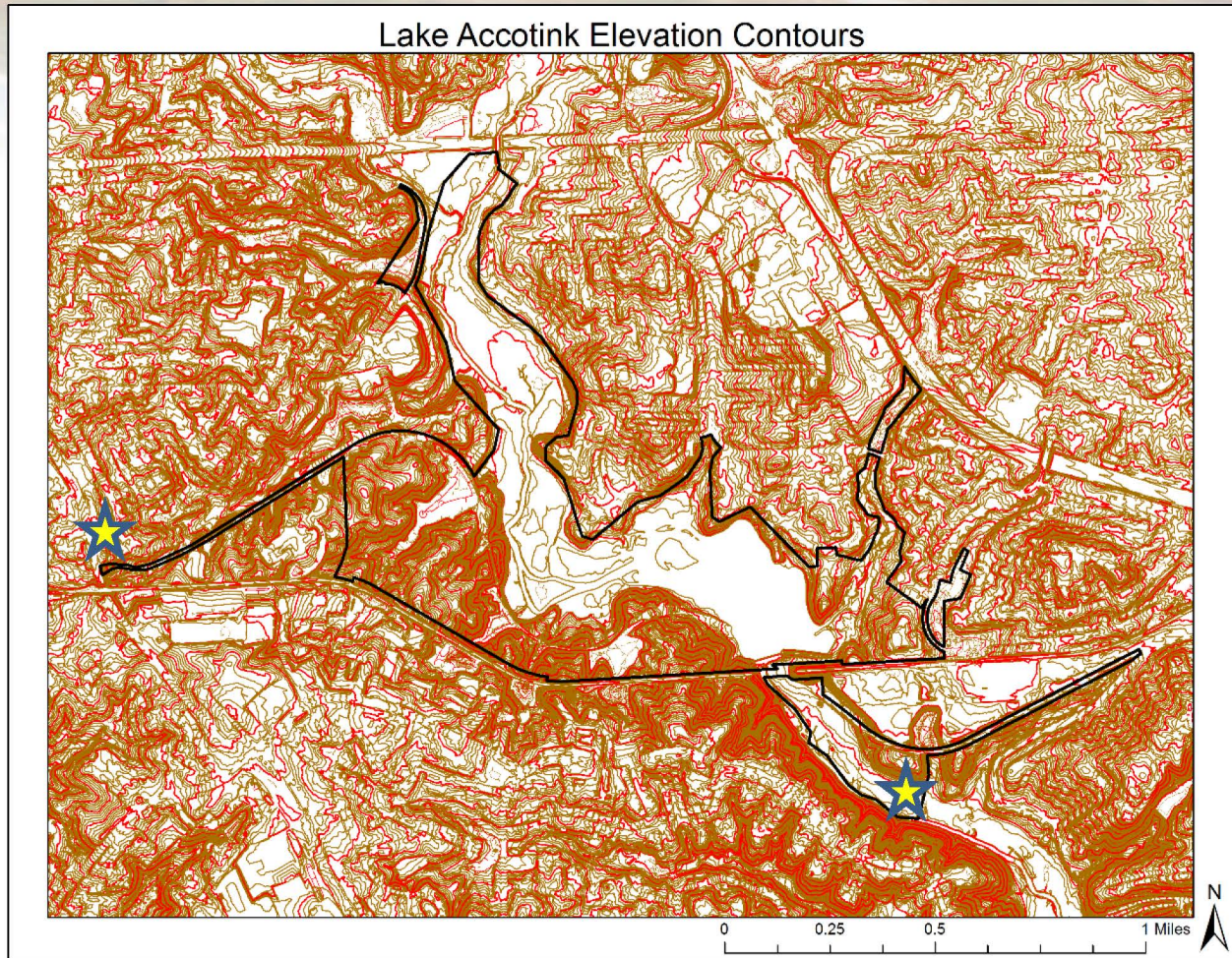
F: Foothills subprovince  
ML: Mesozoic Lowlands subprovince  
OP: Outer Piedmont subprovince

**Coastal Plain province**

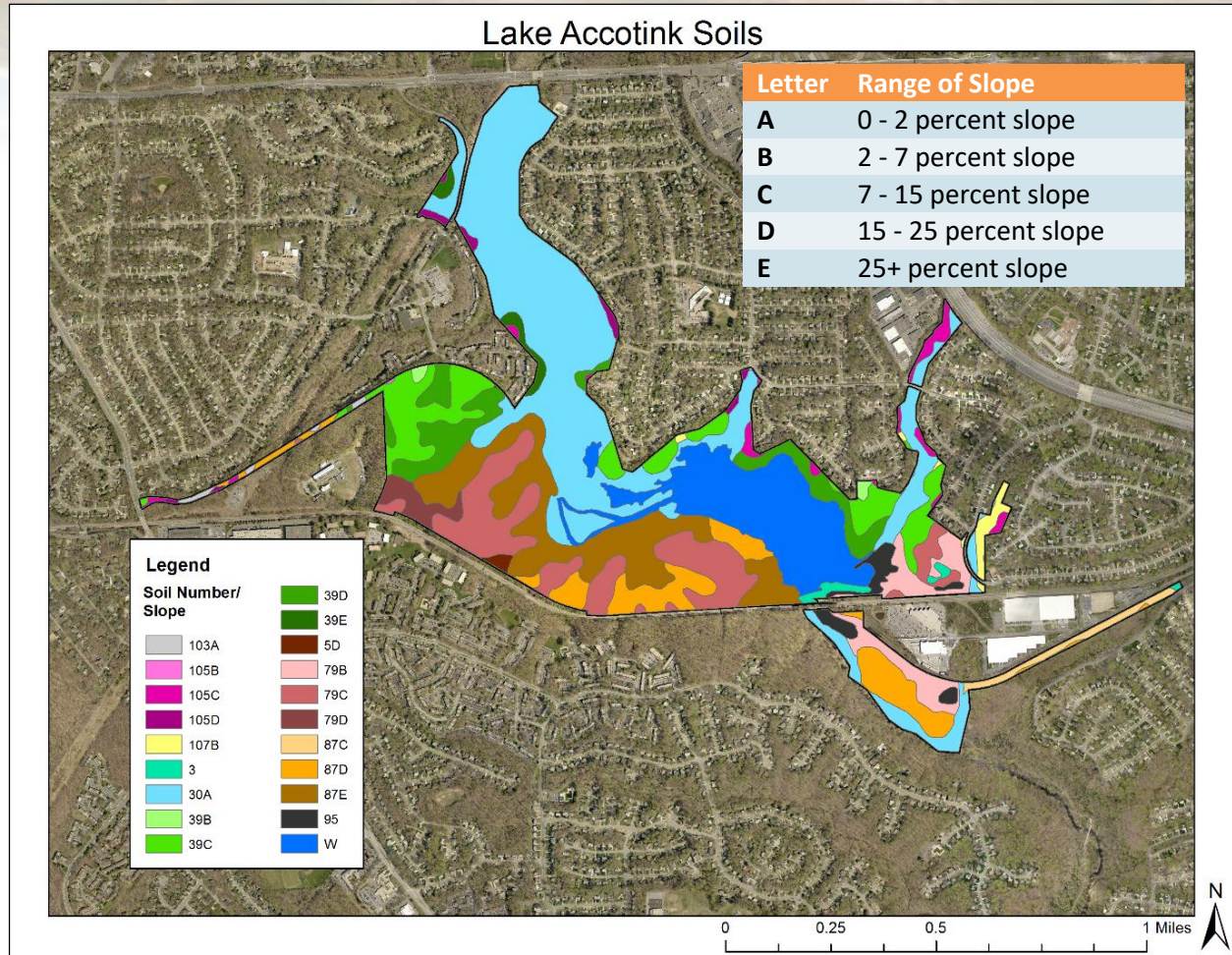
CU: Upland subprovince  
CL: Lowland subprovince  
BM: Barrier Islands and Salt Marshes



# LAKE ACCOTINK PARK NATURAL RESOURCES



# LAKE ACCOTINK PARK NATURAL RESOURCES





# LAKE ACCOTINK PARK NATURAL RESOURCES

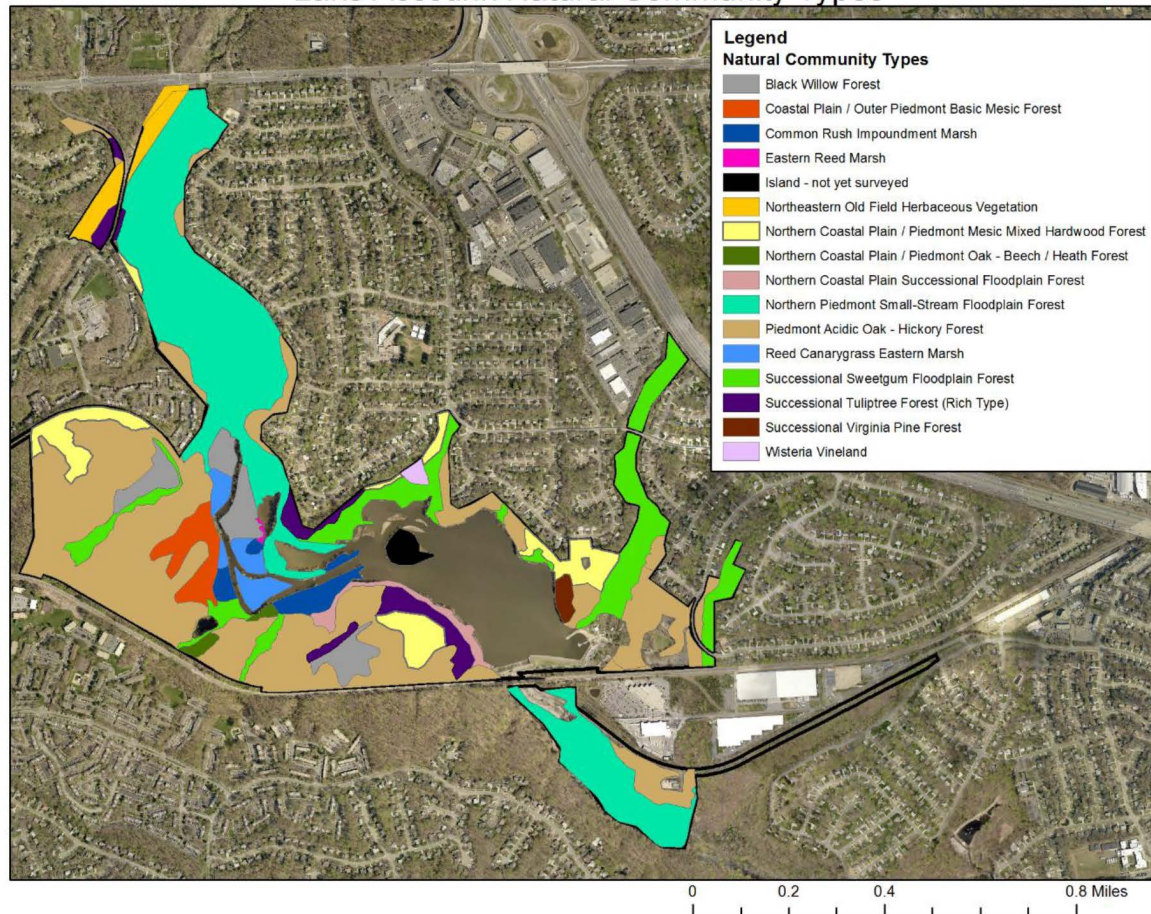
## VEGETATION

- 1992: “COMPLETE” PLANT LIST IN APPENDIX OF GENERAL MANAGEMENT PLAN WITH HABITAT TYPES
- 2001: FOREST STAND DELINEATION
- 2016: NATURAL VEGETATION COMMUNITY CLASSIFICATION



# LAKE ACCOTINK PARK NATURAL RESOURCES

Lake Accotink Natural Community Types

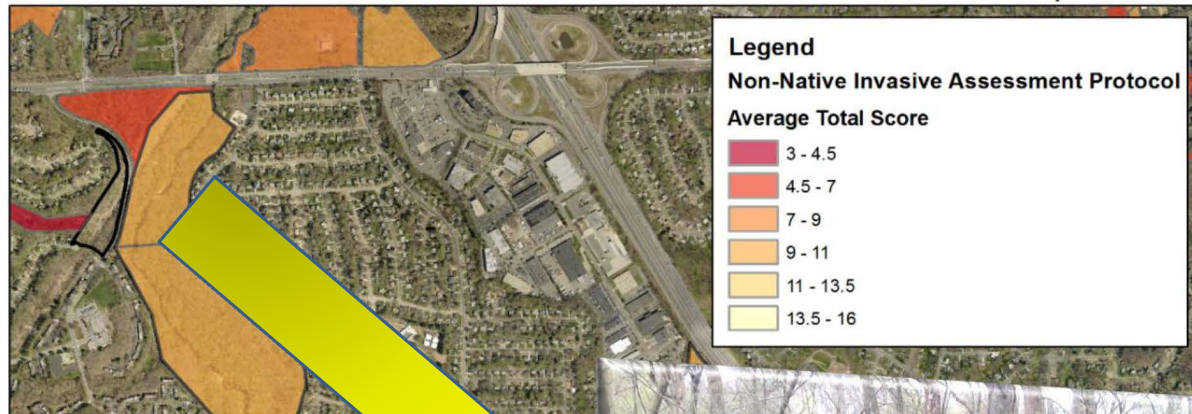


# LAKE ACCOTINK PARK NATURAL RESOURCES



# LAKE ACCOTINK PARK NATURAL RESOURCES

Lake Accotink Non-Native Invasive Assessment Protocol Map



# LAKE ACCOTINK PARK NATURAL RESOURCES

## WILDLIFE

- BIRDS, BIRDS, BIRDS!
- 146 SPECIES LISTED IN EBIRD

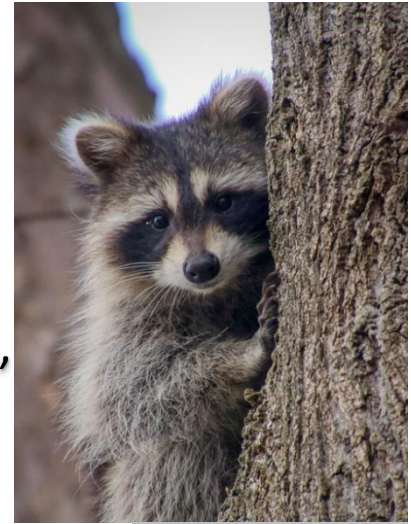


Summer residents  
Yes

# LAKE ACCOTINK PARK NATURAL RESOURCES

## WILDLIFE

- **MAMMALS:** WHITE-TAILED DEER, COYOTE, BEAVER, MUSKRAT, WOODCHUCK, RED FOX, EASTERN GRAY SQUIRREL, VIRGINIA OPOSSUM, EASTERN CHIPMUNK, EASTERN COTTONTAIL RABBIT, RED FOX, BATS.
- **REPTILES:** NORTHERN WATERSNAKE, NORTHERN COPPERHEAD, EASTERN GARTERSNAKE, EASTERN RATSNAKE, EASTERN BOX TURTLE, PAINTED TURTLE, SNAPPING TURTLE, RED-EARED SLIDER, COMMON FIVE-LINED SKINK.
- **AMPHIBIANS:** BULLFROG, WOOD FROG, GREEN FROG, SPRING PEEPER, UPLAND CHORUS FROG, PICKEREL FROG, AMERICAN TOAD.
- **AQUATIC SPECIES:** FRESHWATER MUSSELS, AQUATIC INSECTS, FISH.

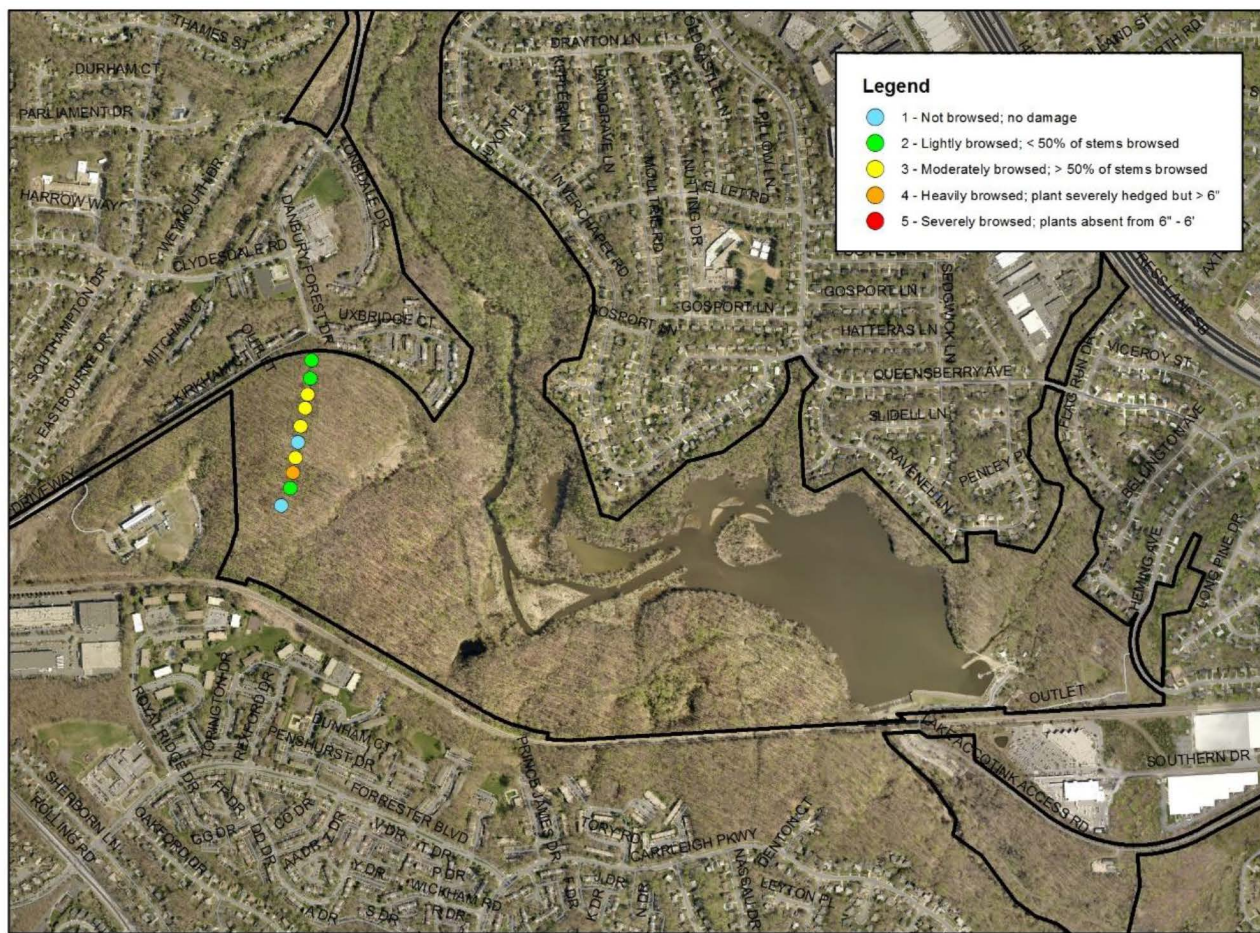


© Thomas Kinder



# LAKE ACCOTINK PARK NATURAL RESOURCES

Lake Accotink Browse Impact Survey April 13, 2017



FAIRFAX COUNTY PARK AUTHORITY

0 0.175 0.35 0.7 Miles



# LAKE ACCOTINK PARK NATURAL RESOURCES

## RARE, THREATENED AND ENDANGERED SPECIES

- NONE CURRENTLY KNOWN FROM LAKE ACCOTINK PARK
- SURVEYS FOR WOOD TURTLE AND ROUGH AVENS WERE CONDUCTED IN 2015/2016; NONE LOCATED.
- POTENTIAL FOR BATS: TRICOLORED BAT AND NORTHERN LONG-EARED BAT





# LAKE ACCOTINK PARK NATURAL RESOURCES

## MANAGEMENT OF PARK RESOURCES

- WATERSHED LEVEL
  - STREAM RESTORATION, LAKE SUSTAINABILITY
  - REQUIRES INTERAGENCY COORDINATION, REGULATORY OVERSIGHT
- PARK LEVEL
  - SITE STAFF AND PARK OPERATIONS DIVISION
    - NEW NATURALIST AND EDUCATIONAL PROGRAMMING STAFF
  - SPECIAL PROJECTS
    - TRAILS, NON-NATIVE INVASIVE SPECIES, DEER MANAGEMENT
  - VOLUNTEERS



# LAKE ACCOTINK PARK NATURAL RESOURCES

## NATURAL RESOURCE VOLUNTEERS

- INVASIVE MANAGEMENT AREA PROGRAM
- FAIRFAX COUNTY DEER MANAGEMENT PROGRAM
- RESIDENT CANADA GOOSE MANAGEMENT
- FRIENDS OF LAKE ACCOTINK PARK
  - WATERSHED CLEANUP DAYS
  - STREAM WATER QUALITY MONITORING



Volunteer Stream Monitoring Program  
Fairfax, Virginia  
Northern Virginia Soil and Water Conservation District



FAIRFAX COUNTY PARK AUTHORITY

# LAKE ACCOTINK PARK NATURAL RESOURCES

## CITIZEN SCIENCE OPPORTUNITIES

- STATE OR NATIONAL FRAMEWORK TO CREATE LARGE DATASET
- STANDARD DATA COLLECTION PROTOCOL AND ONLINE DATABASE
  - FROGWATCH USA (SMITHSONIAN NATIONAL ZOO CHAPTER)
  - VIRGINIA BREEDING BIRD ATLAS 2 (VIRGINIA TECH, 2016-2020)



# CULTURAL RESOURCES

JOHN RUTHERFORD, HERITAGE RESOURCE SPECIALIST  
RESOURCE MANAGEMENT  
FAIRFAX COUNTY PARK AUTHORITY



FAIRFAX COUNTY PARK AUTHORITY



# LAKE ACCOTINK PARK CULTURAL RESOURCES

## TOPIC OVERVIEW

- EXISTING CONDITIONS OF PARK CULTURAL RESOURCES
- EFFORTS AT LAKE ACCOTINK PARK TO INVENTORY AND MANAGE CULTURAL RESOURCES
- MASTER PLAN GOALS FOR CULTURAL RESOURCES



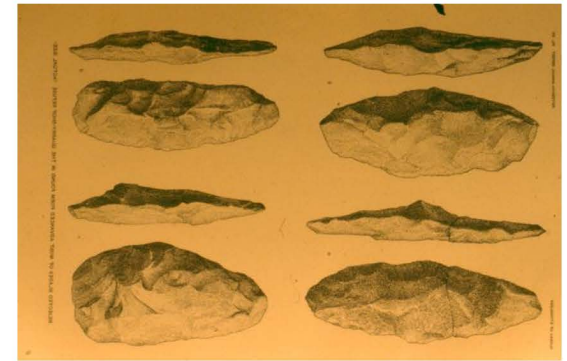
# LAKE ACCOTINK PARK CULTURAL RESOURCES

## ARCHAEOLOGICAL SITES

- NATIVE AMERICAN
- EARLY HISTORIC SITES
- CIVIL WAR SITES
- POST CIVIL WAR AND 20<sup>TH</sup> CENTURY SITES



# LAKE ACCOTINK PARK CULTURAL RESOURCES

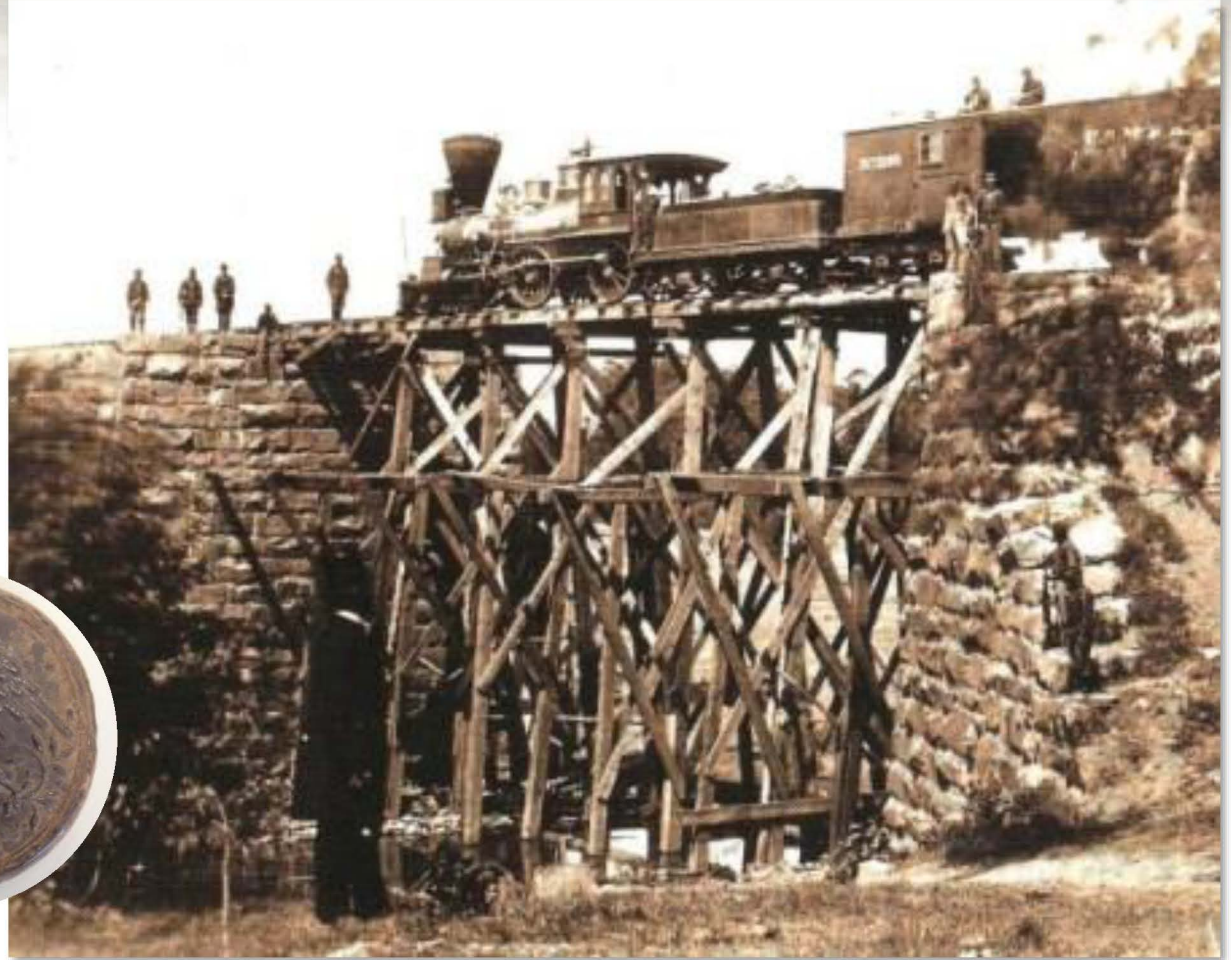


# LAKE ACCOTINK PARK CULTURAL RESOURCES

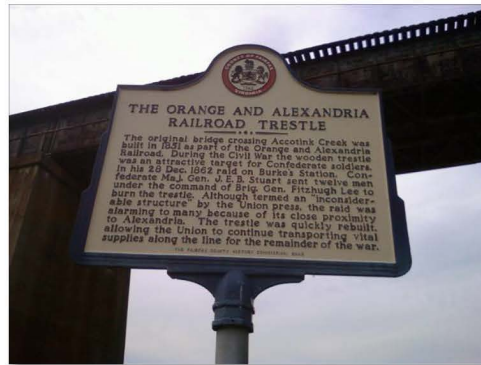




# LAKE ACCOTINK PARK CULTURAL RESOURCES



# LAKE ACCOTINK PARK CULTURAL RESOURCES



# WATER RESOURCES



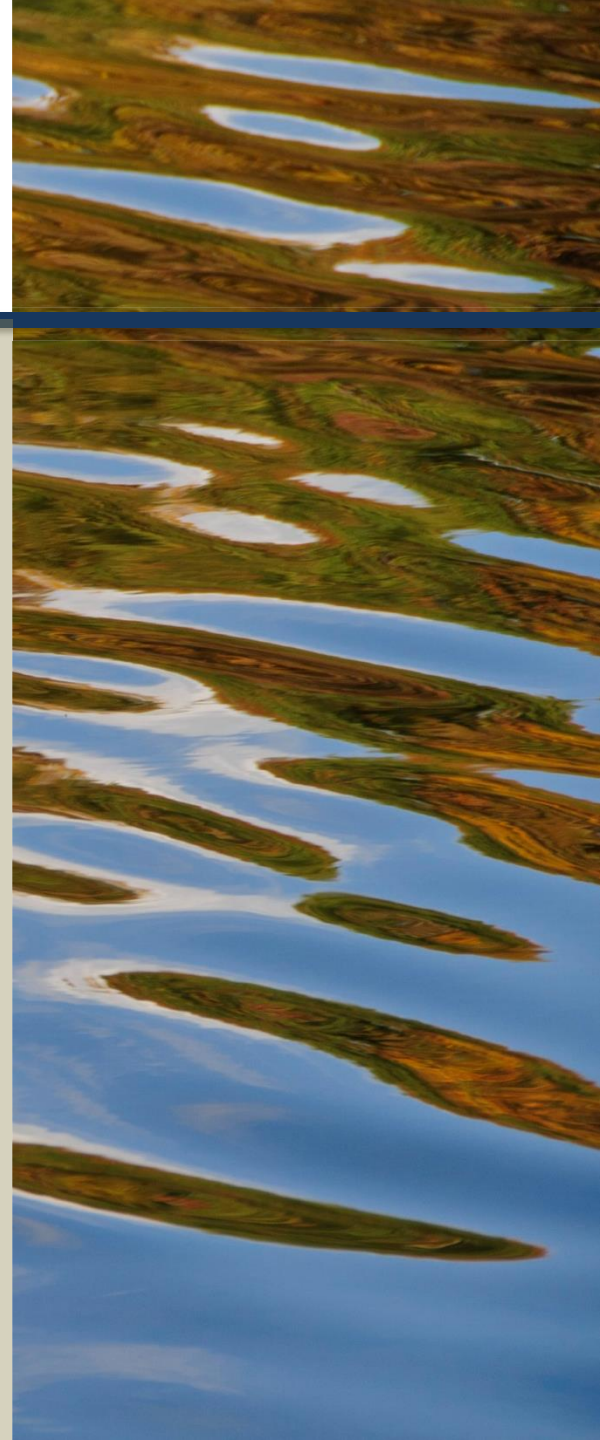
DANIELLE WYNNE, ECOLOGIST III

STORMWATER PLANNING

DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES



FAIRFAX COUNTY PARK AUTHORITY





# FAIRFAX COUNTY MONITORING





# FAIRFAX COUNTY MONITORING RESULTS

Watershed	Number of Benthic Sites	Average IBI	Rating	Number of Fish Sites	Average IBI	Rating
Accotink Creek	35	24.4	Poor	23	31.5	Poor
Belle Haven	4	24.4	Poor	1	7.1	Very Poor
Bull Run	3	50.8	Fair			
Cameron Run	31	28	Poor	18	16.7	Very Poor
Cub Run	30	32.1	Poor	22	40.9	Fair
Dead Run	6	30.4	Poor	3	7.1	Very Poor
Difficult Run	111	39.6	Poor	53	49.9	Fair
Dogue Creek	8	30.8	Poor	5	42.9	Fair
Horsepen Creek	8	32.1	Poor	4	21.4	Poor
Johnny Moore Creek	6	49.4	Fair	3	42.9	Fair
Kane Creek	6	67.8	Good	1	42.9	Fair
Little Hunting Creek	9	31.1	Poor	7	24.5	Poor
Little Rocky Run	12	27.4	Poor	7	60.2	Good
Mill Branch	10	51.2	Fair	4	23.2	Poor
Nichol Run	11	57.3	Fair	1	57.1	Fair
Occoquan	7	80.9	Excellent	1	21.4	Poor
Old Mill Branch	3	74.7	Good			
Pimmit Run	12	19.5	Very Poor	5	5.7	Very Poor
Pohick Creek	65	31.5	Poor	24	55.9	Fair
Pond Branch	10	66.2	Good	3	42.9	Fair
Popes Head Creek	31	58.5	Fair	14	67.8	Good
Ryans Dam	3	77.2	Good			
Sandy Run	14	67.7	Good	2	67.8	Good
Scotts Run	5	32.1	Poor	3	0	Very Poor
Sugarland Run	12	44.8	Fair	6	47.6	Fair
Turkey Run	2	35.7	Poor			
Wolf Run	15	79.1	Good	5	35.7	Poor
<b>FAIRFAX COUNTY PARK AUTHORITY</b>	<b>469</b>	<b>41.1</b>	<b>Fair</b>	<b>215</b>	<b>41.7</b>	<b>Fair</b>





# ACCOTINK CREEK

## Description

The headwaters of Accotink Creek are located in the center of Fairfax County and the stream drains southeast to Accotink Bay, then Gunston Cove and finally to the Tidal Potomac River.

## Watershed Size

51 square miles (38 in FC)

~27% of land is impervious

## Major Stream and Tributaries

16 WMAs: Bear Branch, Crook Branch, Daniels Run, Hunters Branch and Long Branch

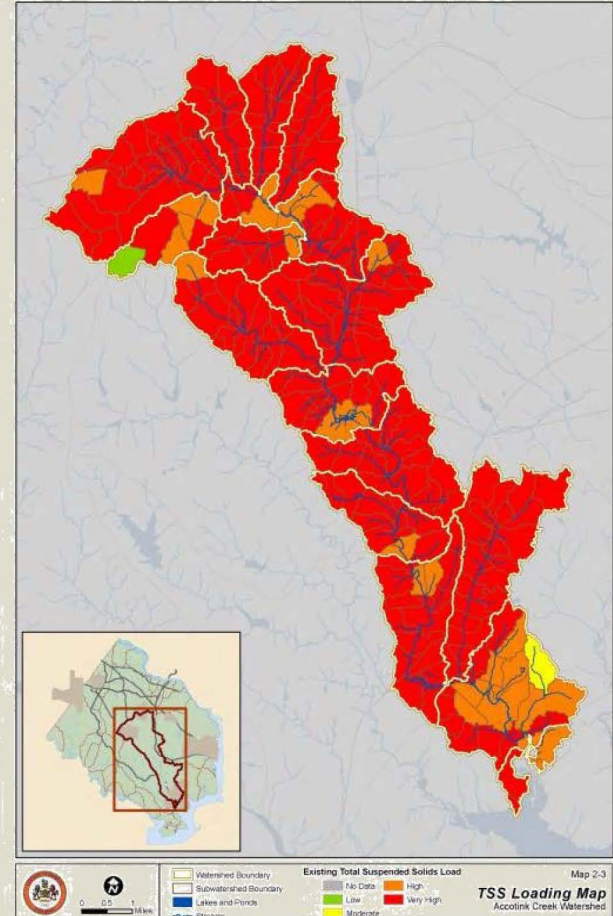
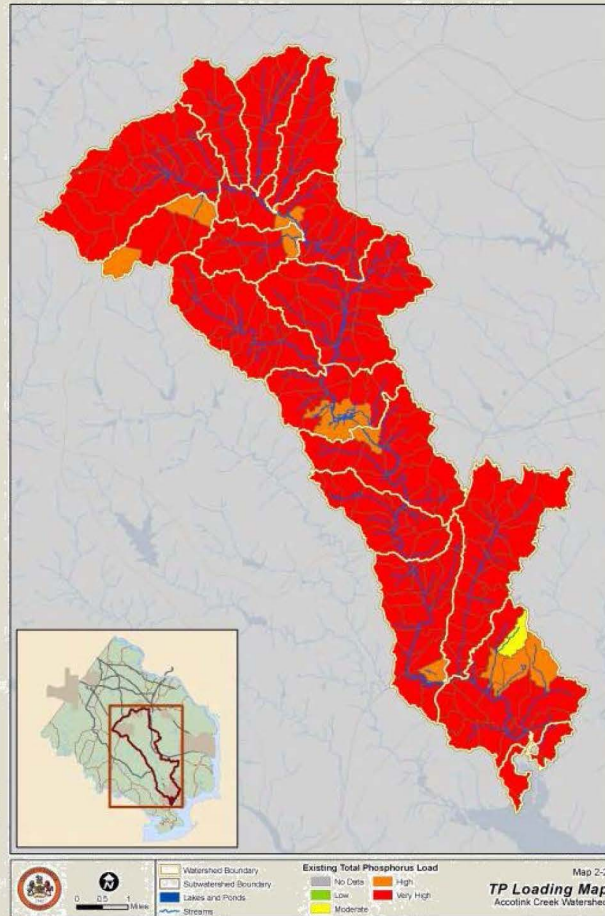
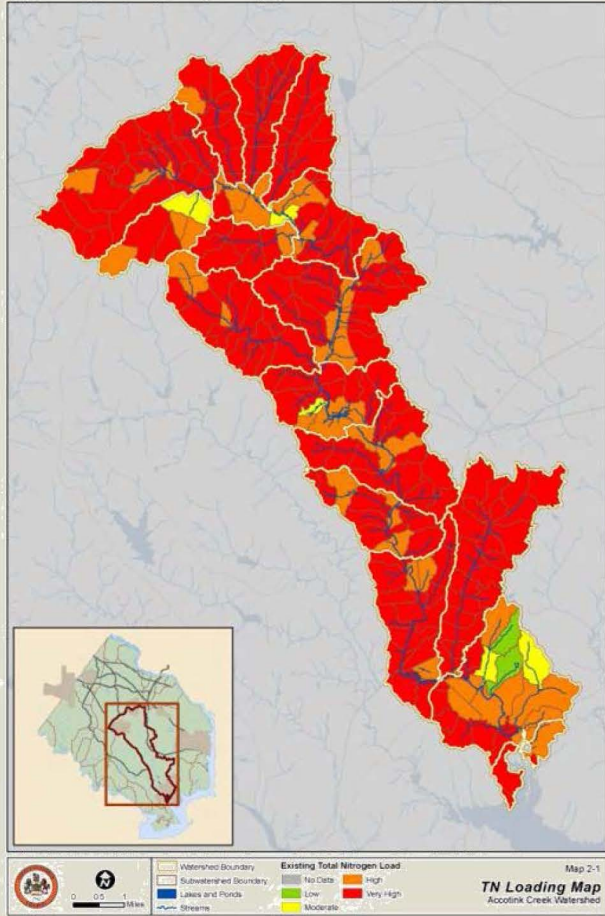
## Unique Features

Lake Accotink, with a surface area of approximately 70 acres, is located in the central portion of the watershed.





# ACCOTINK CREEK – CURRENT CONDUCTIONS





# ACCOTINK CREEK – CURRENT TREATMENT

WMA	Current Treatment Types			
	Quantity (acres)	Quality (acres)	Quantity/Quality (acres)	None (acres)
Bear Branch	13	33	48	1,298
Crook Branch	38	18	25	1,017
Daniels Run	1	0	0	1,207
Hunters Branch	9	29	111	1,054
Long Branch Central	38	8	61	2,321
Long Branch North	5	70	106	1,306
<del>Long Branch South</del>	<del>103</del>	<del>199</del>	<del>334</del>	<del>2,485</del>
Mainstem 1	163	44	155	3,291
Mainstem 2	44	24	18	1,983
Mainstem 3	106	56	55	2,911
<u>Mainstem 4</u>	<u>6</u>	<u>17</u>	<u>1</u>	<u>1,413</u>
Mainstem 5	11	42	14	1,844
Mainstem 6	122	63	38	1,309
Mainstem 7	129	129	55	1,708
Mainstem 8	89	29	35	3,081
Potomac	0	0	0	479
<b>WS Totals</b>	<b>878</b>	<b>763</b>	<b>1,056</b>	<b>28,707</b>

US of Lake  
Accotink



Quantity: 425  
Quality: 299  
Qual & Quant: 580  
None: 17,801

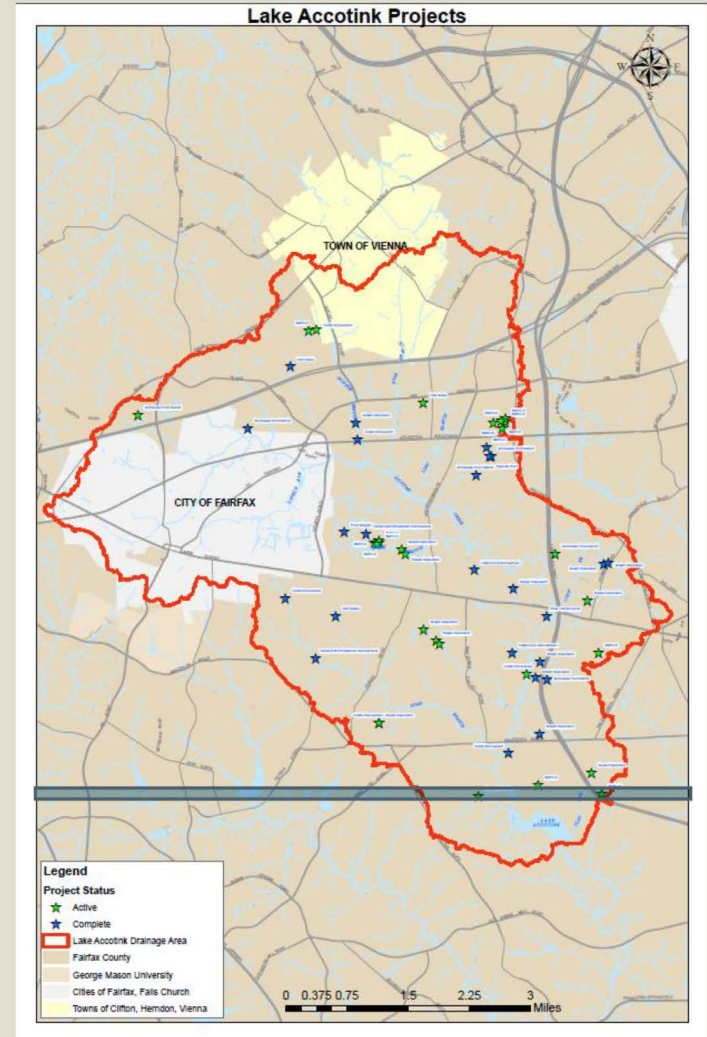
\* Lake Accotink is NOT a Stormwater Facility







# ACCOTINK CREEK – STORMWATER PROJECTS



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## MOVING FORWARD

- REVIEWING ALL THE COMMENTS RECEIVED
- WILL PREPARE A DRAFT PLAN OVER THE SUMMER
- ANTICIPATE HAVING A DRAFT PLAN FOR REVIEW LATE FALL OR WINTER



# LAKE ACCOTINK PARK MASTER PLAN REVISION

## OPEN HOUSE

- BROWSE AT YOUR OWN PACE
- ASK QUESTIONS

## COMMENT TABLE

- LEAVE US A QUESTION, A COMMENT,  
A SUGGESTION

FRIENDS OF LAKE ACCOTINK PARK  
FRIENDS OF ACCOTINK CREEK



# CONTACT INFORMATION



parkmail@fairfaxcounty.gov



Gayle Hooper, Project Manager  
Planning & Development Division, FCPA  
12055 Government Center Parkway, Suite 406  
Fairfax, Virginia 22035



703-324-8725

*This information  
is provided on the  
handout!*

Please visit the project website:

<http://www.fairfaxcounty.gov/parks/plandev/lakeaccotink.htm>



FAIRFAX COUNTY PARK AUTHORITY

**“Great things are not done by impulse,  
but by a series of small things brought together.”**

Vincent van Gogh

