

Partners in Stewardship Conference

Los Angeles, CA

November 2003

Washington:

City in the Woods

Glenn Eugster

Brian LeCouteur

Michael Lucy

Destry Jarvis



*Project
Partners*



WASHINGTON PARKS & PEOPLE



Metropolitan
Washington Council of
Governments



**A Little Bit About
Regional
Planning in the Metropolitan
Washington Area**

COG Regional Membership

Potomac River

Maryland

Founded April 11, 1957
Population: 4,211,964
Area: 3,020 square miles



Washington DC

Virginia



COG's General Membership

250 Elected Officials



- Elected Officials from 18 Local Governments
 - District of Columbia
 - Maryland (Bowie, College Park, Frederick Co., Gaithersburg, Greenbelt, Montgomery Co., Prince George's Co., Rockville, Takoma Park)
 - Virginia (Alexandria, Arlington Co., Fairfax Co., Fairfax, Falls Church, Loudoun Co., Manassas, Prince William Co.)
- Regional Delegations
 - Maryland and Virginia legislatures
 - US Congressional Representatives

COG's Mission

- Provide a forum for consensus-building and policy-making
- Implementing intergovernmental policies, plans, and programs
- Supporting the region as an expert information resource
- Policies are set by the full membership acting through its board of directors, which meets monthly to discuss area issues.

COG's Regional Priorities

- Growth
- Transportation
- Environment
- Human Services
- Public Safety/Homeland Security

**Other Washington Area
Regional Planning Agencies**

**Northern Virginia Regional Commission
NVRC**

Maryland Office of Planning

DC Office of Planning

Local Government Planning Offices

Green Infrastructure Demonstration Project Components

- ✓ **Regional Land Cover / Forest Cover Map (Green Map)**
- ✓ **Mapping Forum**
- ✓ **Green Space Forums & Workshops**
- ✓ **Regional Green Infrastructure Directory**
- ✓ **Exchange of Green Best Practices**
- ✓ **2004 Conference**

Regional Mapping Efforts

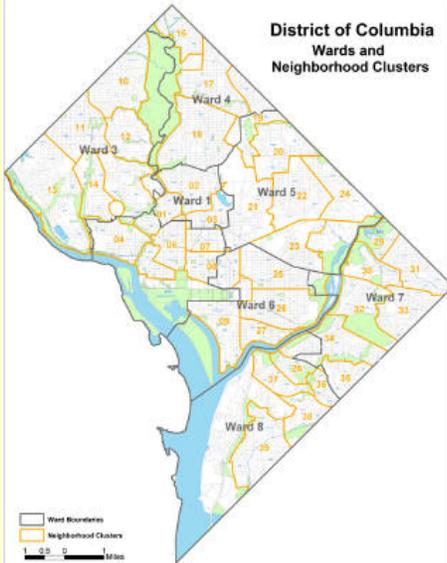
The Mapping Forum held in November 2002 featured 5 of the more than 15 different 'green' mapping efforts identified within the Washington Metropolitan Region.



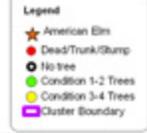
AMERICAN FORESTS conducted a Regional Ecosystem Analysis of tree cover using three carefully selected Landsat images from the years 1972, 1985 and 1997 to determine how the vegetation has changed in the Washington DC Metro area over time.

Heavy tree cover had declined more than 30 percent.

<http://www.americanforests.org/>



The Street Trees of Washington, DC 2002 Inventory



Map file:
N08



<http://www.caseytrees.org/>

URBAN FORESTRY MASTER PLAN PUBLIC FORUM

WHO: Arlington County Department of Parks, Recreation and Community Resources and The Arlington County Urban Forestry Commission

WHAT: The second public meeting to develop the Urban Forestry Master Plan. The Master Plan will analyze: Arlington's entire forest canopy; identify tree maintenance & planting needs; and will develop long-term goals for Arlington's trees.

Results from the County's recent tree inventory will be shared at this forum, as well as draft goals and recommendations to be contained in the master plan.

WHERE: Ellipse Art Gallery
4350 N. Fairfax Dr.
Arlington, VA 22203
FREE Parking available on site
or take the METRO to Ballston

WHEN: Monday, November 24, 2003
7:00- 9:30 P.M.

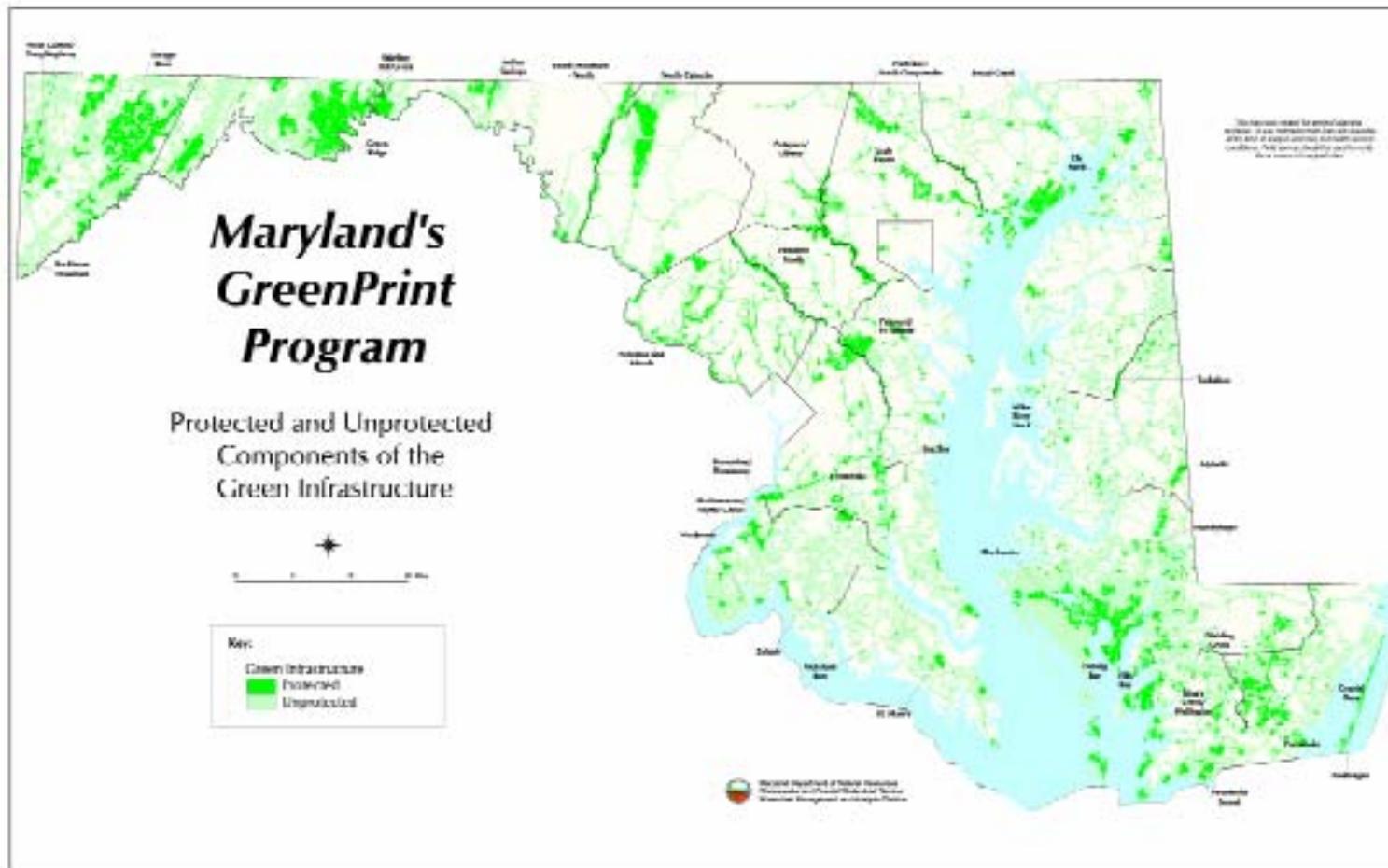
Broad participation from the community is needed to ensure our canopy's sustainability! For more information or to request accommodations for the meeting, please contact Robert Corletta at (703) 228-1863 or e-mail trees@co.arlington.va.us. Participants are asked to please RSVP.

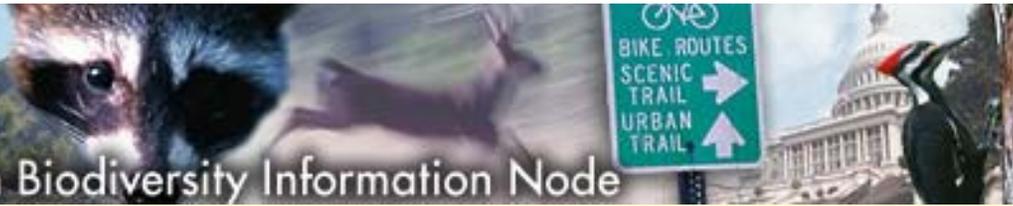
Visit us on line at www.co.arlington.va.us/forums/forest

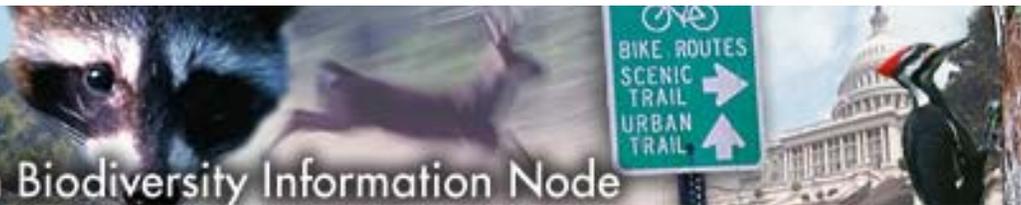
Arlington
County
Virginia
Department
of Parks,
Recreation
and
Community
Resources

A Public/ Private Partnership Effort.

Maryland DNR's statewide program to boost land conservation by 13,000 acres annually.

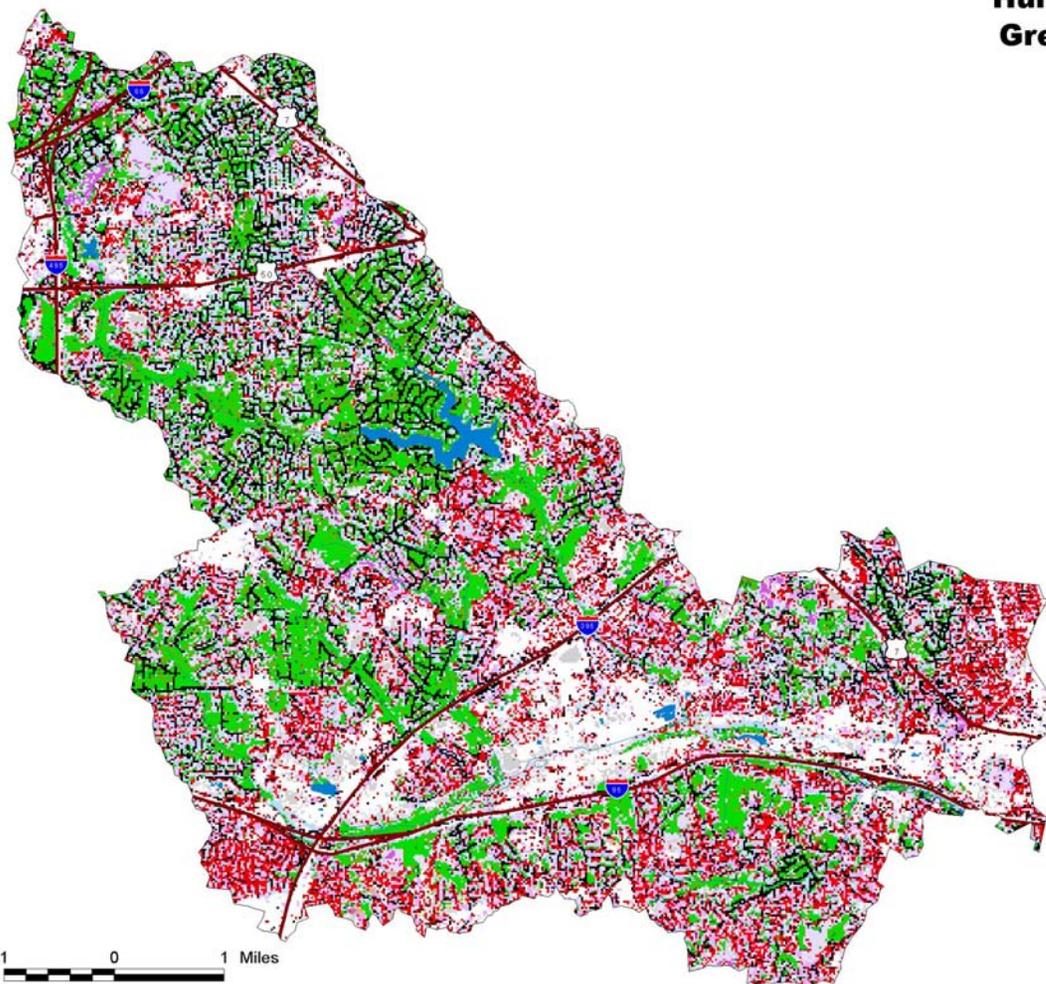






Hunting Creek Watershed Green Infrastructure Map

1999-2000
Landsat 7 Imagery



COG Jurisdictions

Categories Analyzed

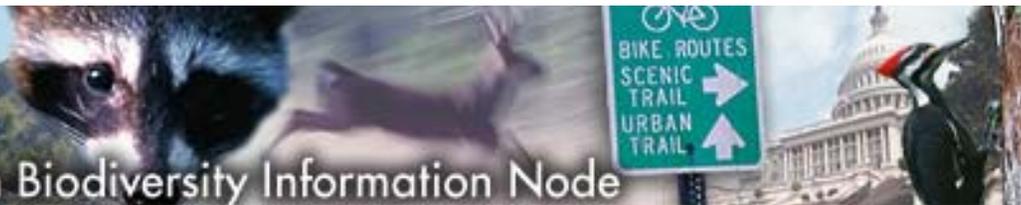
- Croplands
- Pasture
- Natural grass
- Recreational non-golf grass
- Intensively managed grass
- Shrublands
- Deciduous forests
- Evergreen forests
- Mixed forests
- Urban forest
- Wetlands
- Bare soil, sand, rock
- Water
- Low intensity residential
- Medium intensity residential
- High intensity residential
- Industrial/commercial
- Transportation

44.0 square miles



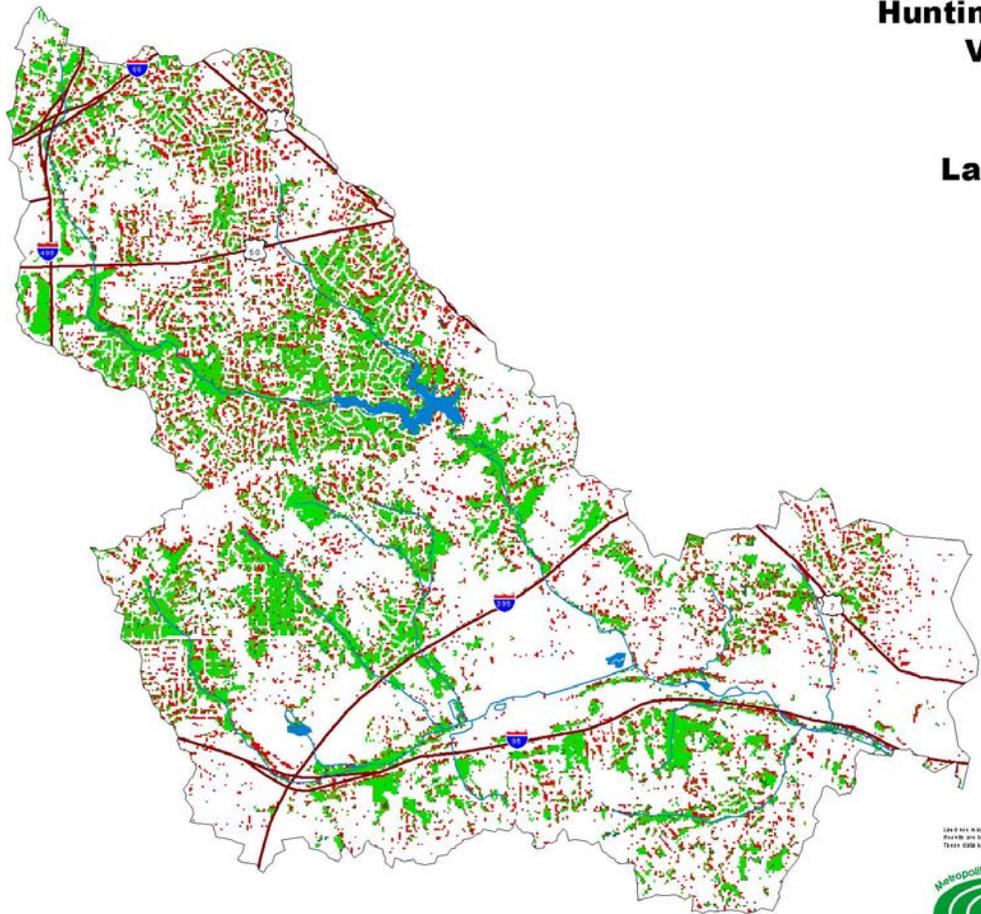
Land use map compiled by the Department of Geography at the University of Maryland. Results are based on analysis of Landsat 7 TM imagery from 1999-2000. These data have not been validated. For more information see online agreement.





Hunting Creek Watershed Vegetation Map

1999-2000
Landsat 7 Imagery



- Categories Analyzed
- COG Jurisdictions
 - Deciduous forests
 - Evergreen forests
 - Mixed forests
 - Shrublands
 - Urban forest
 - Wetlands

44.0 square miles



This map was compiled by the Department of Geography at the University of Maryland. Results are based on satellite data of Landsat 7 from the spring of 1999-2000. These data were analyzed by the authors. For more information, please contact the authors.



Green Infrastructure Mapping

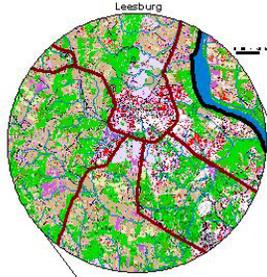
GIS Data Sources:

- **LandSat 7 Imagery – 30 Meter Resolution**
- **Ikonos Satellite Imagery – 1 Meter Resolution (2000)**
- **Project Partner: University of Maryland Department of Geography – Regional Earth Science Applications Center (RESAC)**

Frederick Co. MD

**Land Cover / Land Use
within the
COG Metropolitan
Washington Region**

**1999-2000
Landsat 7 Imagery**



Montgomery Co. MD

Loudoun Co. VA

Washington DC

*Prince
George's
Co. MD*

COG Jurisdictions

Categories Analyzed

- Low intensity residential
- Medium intensity residential
- High intensity residential
- Industrial/commercial
- Transportation
- Croplands
- Pasture
- Natural grass
- Recreational non-golf grass
- Intensively managed grass
- Shrublands
- Deciduous forests
- Evergreen forests
- Mixed forests
- Urban forest
- Wetlands
- Bare soil, sand, rock
- Water

3,020 square miles

Data was not available for the following categories: agriculture, pasture, forest, and bare soil, sand, rock. These categories were combined into the 'Bare soil, sand, rock' category. Data for the transportation category was not available.



*Prince
William
Co. VA*

Fairfax Co. VA



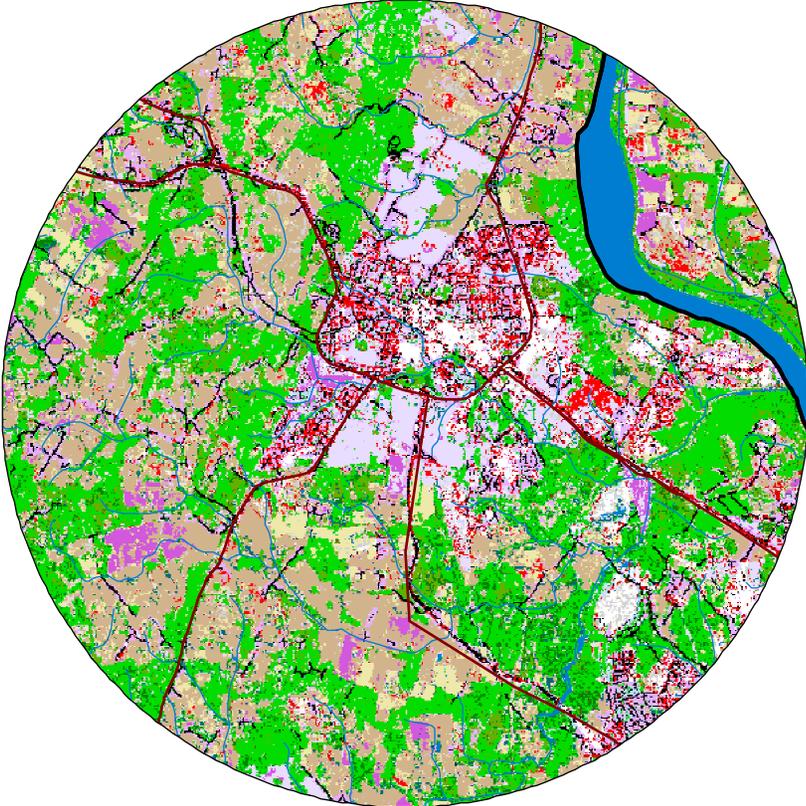
 COG Jurisdictions

Categories Analyzed

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-  Medium intensity residential
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-  Evergreen forests
-  Mixed forests
-  Urban forest
-  Wetlands
-  Bare soil, sand, rock
-  Water

Leesburg



5000 0 5000 10000 Feet



Open Space
Green Space
Green Infrastructure

What's in a name?

More importantly, what's in a definition...

Open Space is land that is not intensively developed for residential, commercial, industrial or institutional use. It serves many purposes, whether it is publicly or privately owned. It includes agricultural land, forestland, undeveloped land, shorelines, undeveloped scenic lands, public parks and preserves. It also includes water bodies such as lakes and bays. ... they are a part of our common heritage.

New York State Interagency Task Force on Open Space – George Pataki, Governor

The Metropolitan Washington Green Infrastructure Demonstration Project

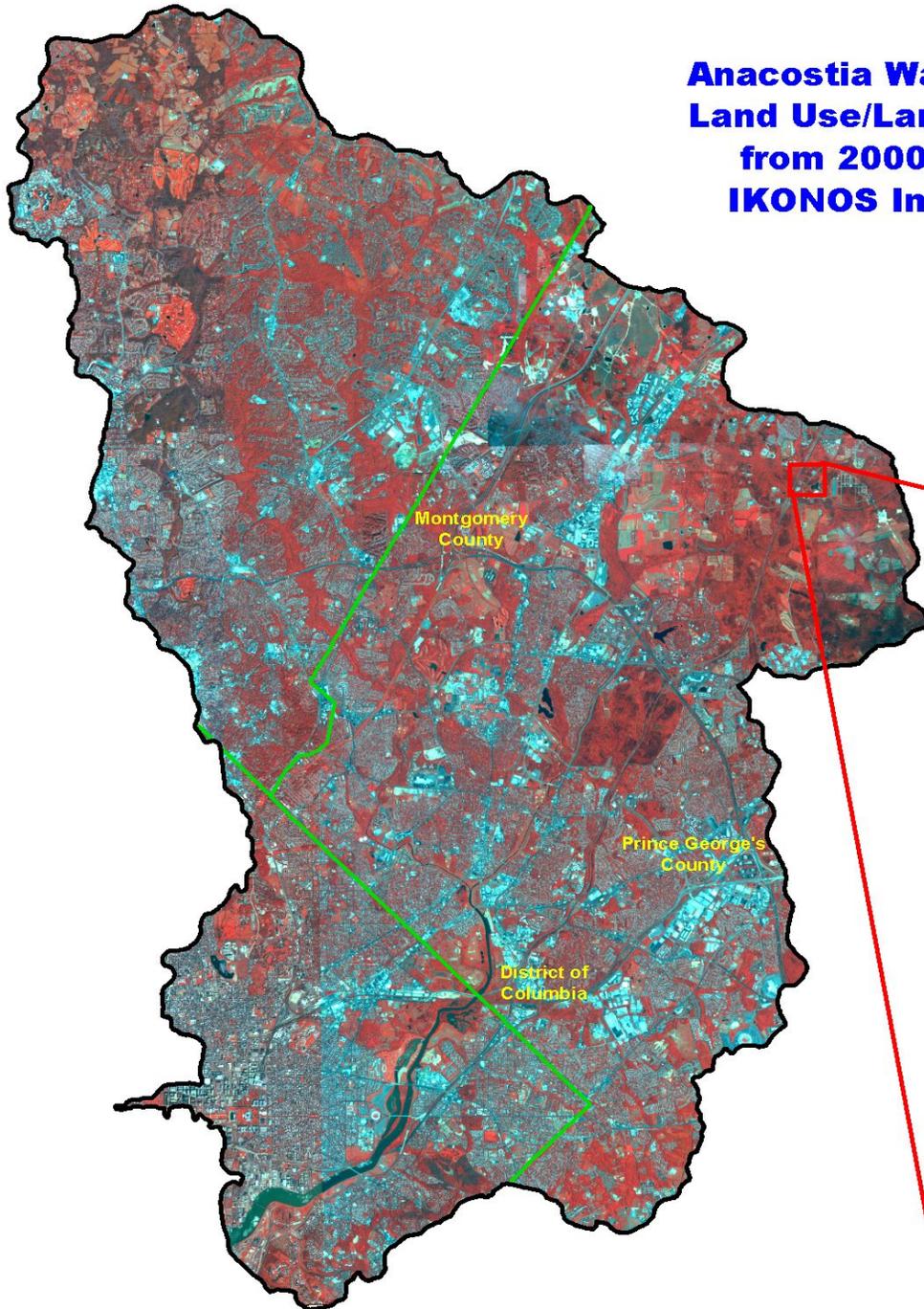
“Green Infrastructure is a network of open space, airsheds, watersheds, woodlands, wildlife habitat, parks, and other natural areas, which provide many vital services that sustain life and enrich quality of life”.

President's Council on Sustainable Development Report - 1999

“I think there’s an opportunity to look at how we regenerate communities and ecologies by looking at green space as a form of infrastructure like roads, water lines, and sewers. When we talk about green infrastructure in the Washington [D.C.] area, we talk about everything from window boxes, to Rock Creek Park and in between: it’s urban gardens, residential landscaping, pocket parks, landscaped portions of a development parcel, linear parks, riparian buffers, street trees, parkways, farms and large parks and reserves.”

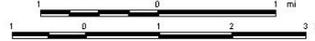
– Glenn Eugster, National Park Service - OMG Open Space Roundtable Philadelphia, 2001

Anacostia Watershed Land Use/Land Cover from 2000-2001 IKONOS Imagery



 Anacostia Watershed Boundary
 Jurisdiction Boundary

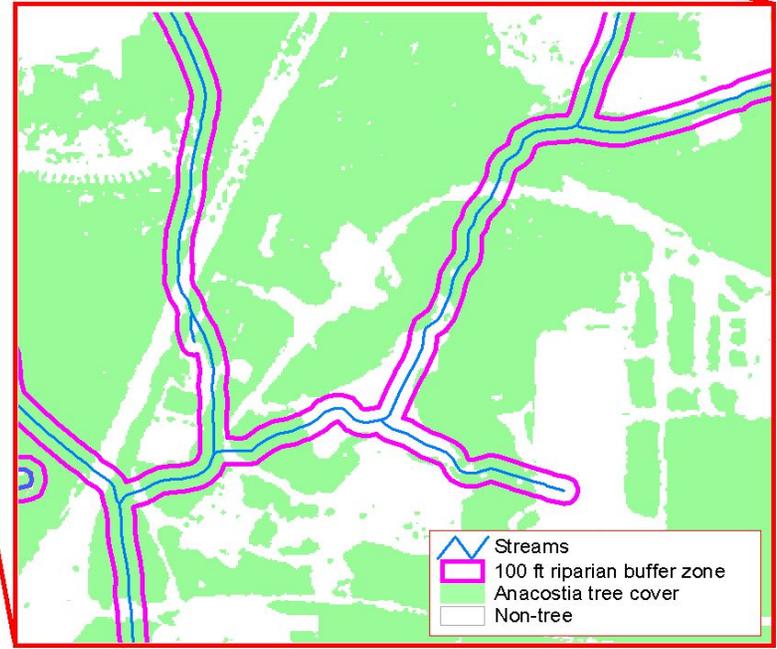
 Developed Areas
 Deciduous and Coniferous Wooded Areas
 Agricultural Areas
 Water



 Scale 1:34,500

IKONOS satellite imagery acquired April-October 2000 and May 2001.
 Background is a Landsat ETM+ image acquired on March 24, 2000.
 For more information see www.mwco.gov/environment.







Green Space Forums & Workshops

- Nanine Bilski, America the Beautiful Fund, Washington, DC
- Blaine Bonham, PA Horticulture Society, Philadelphia, PA
- Dr. John Bruce, Moses Urban Gardening, Washington, DC
- David Burke, MD Department of Natural Resources, Annapolis, MD
- Mark Buscanio, former city forester - DC Department of Public Works, Washington, DC
 - Steve Coleman, Washington Parks & People, Washington, DC
 - Christine Gilday, Virginia “Plant-A-Row”
 - Peggy Harwood, USDA, Forest Service, Washington, DC
- Shelia Hogan, formerly of the Casey Tree Endowment Fund, Washington, DC
 - Andy Lipkis, Tree People, Los Angeles, CA
- Mari Lou Livingood, formerly of the Alexandria Seaport Foundation, Alexandria, VA
 - Daniel Martin, International Communities for the Renewal of the Earth, NJ
 - Greg Moore, Golden Gate Park Association, San Francisco, CA
- Neil Owens, Metropolitan Police Department Boys & Girls Club, Washington, DC
 - Brian O’Neill, Golden Gate National Recreation Area, San Francisco, CA
 - Leslie Sauer, formerly of Andropogon Associates, Hunterdon County, NJ
 - Gerri Spilka, OMG Center for Collaborative Learning, Philadelphia, PA
- Anne Whiston Spirn, Massachusetts Institute of Technology, Cambridge, MA
 - Nancy Sturm, formerly of the National Park Foundation, Washington, DC
 - Bob Sutton, Greater Washington National Parks Fund, Manassas, VA
 - Joan Thomas, DC Ward 4 Beautification, Washington, DC
 - Robert Yaro, Regional Plan Association, NY

A Commitment To Restore Our Home River



A Six-Point
Action Plan To
Restore The Anacostia River

Prepared by:

Anacostia
Restoration
Team

Metropolitan
Washington
Council of
Governments



In cooperation with:

District of Columbia • Montgomery County, Maryland •
Prince George's County, Maryland • Interstate Commission on the
Potomac River Basin • U.S. Army Corps of Engineers

Anacostia Watershed Restoration Progress, 1987-2000



Anacostia River Watershed



5 0 5 10 Miles

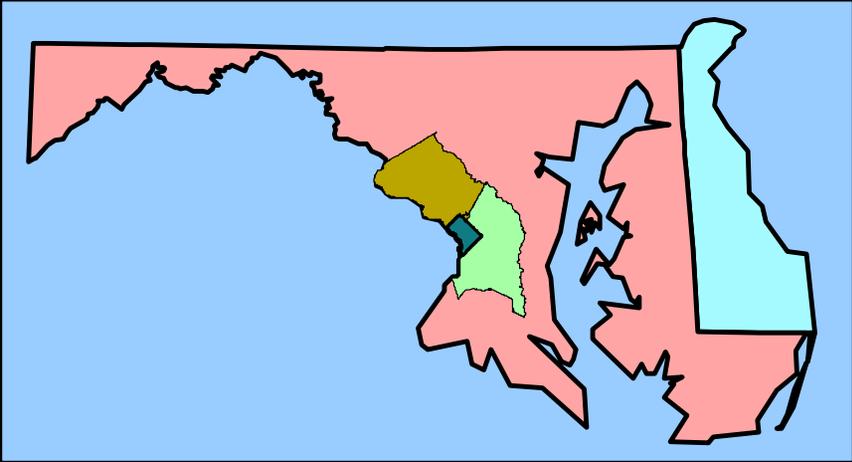
Montgomery County

Anacostia Watershed

District of Columbia

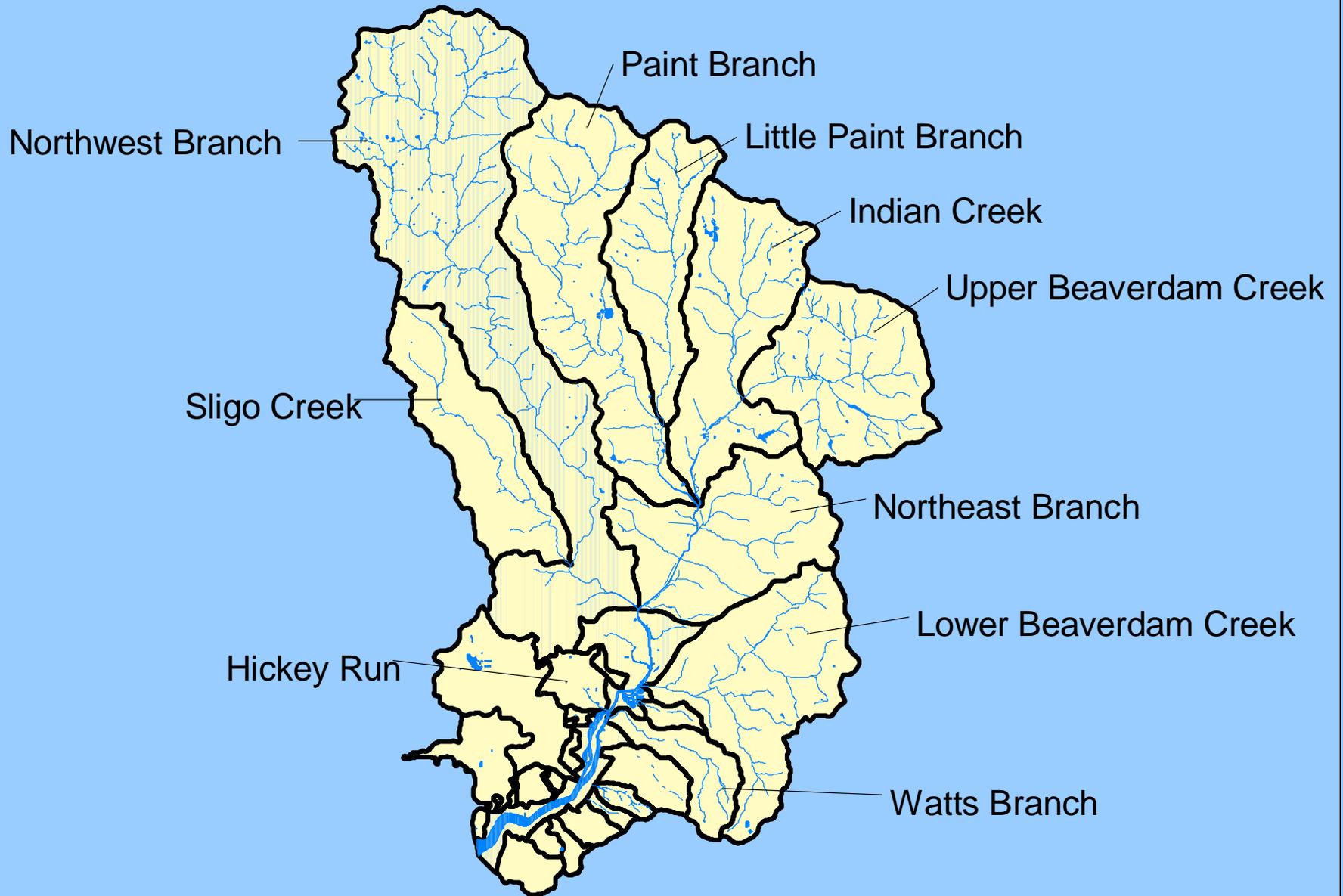
Potomac River

Prince George's County



Background on the Anacostia Watershed

- Urban, over 75% Developed
- Size : 176 mi²; avg. daily discharge: 138 cfs
- Drains both Piedmont and Coastal Plain
- 8.4 mile long tidal freshwater river portion
- Overall, approximately 25% impervious
- 805,000 residents
- Diversity of people and streams



Anacostia Watershed and Major Subwatersheds

Six Restoration Goals

- Goal 1: Reduce Pollutant Loads
- Goal 2: Enhance Aquatic diversity and Encourage a Quality Urban Fishery
- Goal 3: Restore Anadromous Fish Spawning Range
- Goal 4: Increase Acreage and Quality of Wetlands
- Goal 5: Expand Forest Cover and Riparian Buffers
- Goal 6: Increase Public Awareness and Citizen Participation



Little Paint Branch Stream Restoration



Northwest Branch of Anacostia - Migratory Fish Monitoring

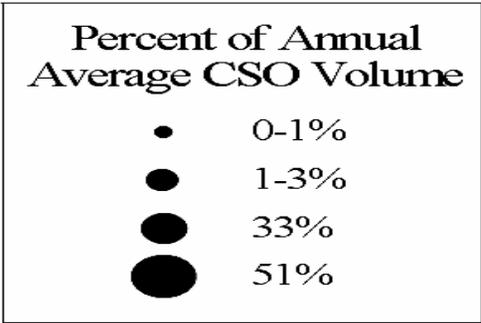
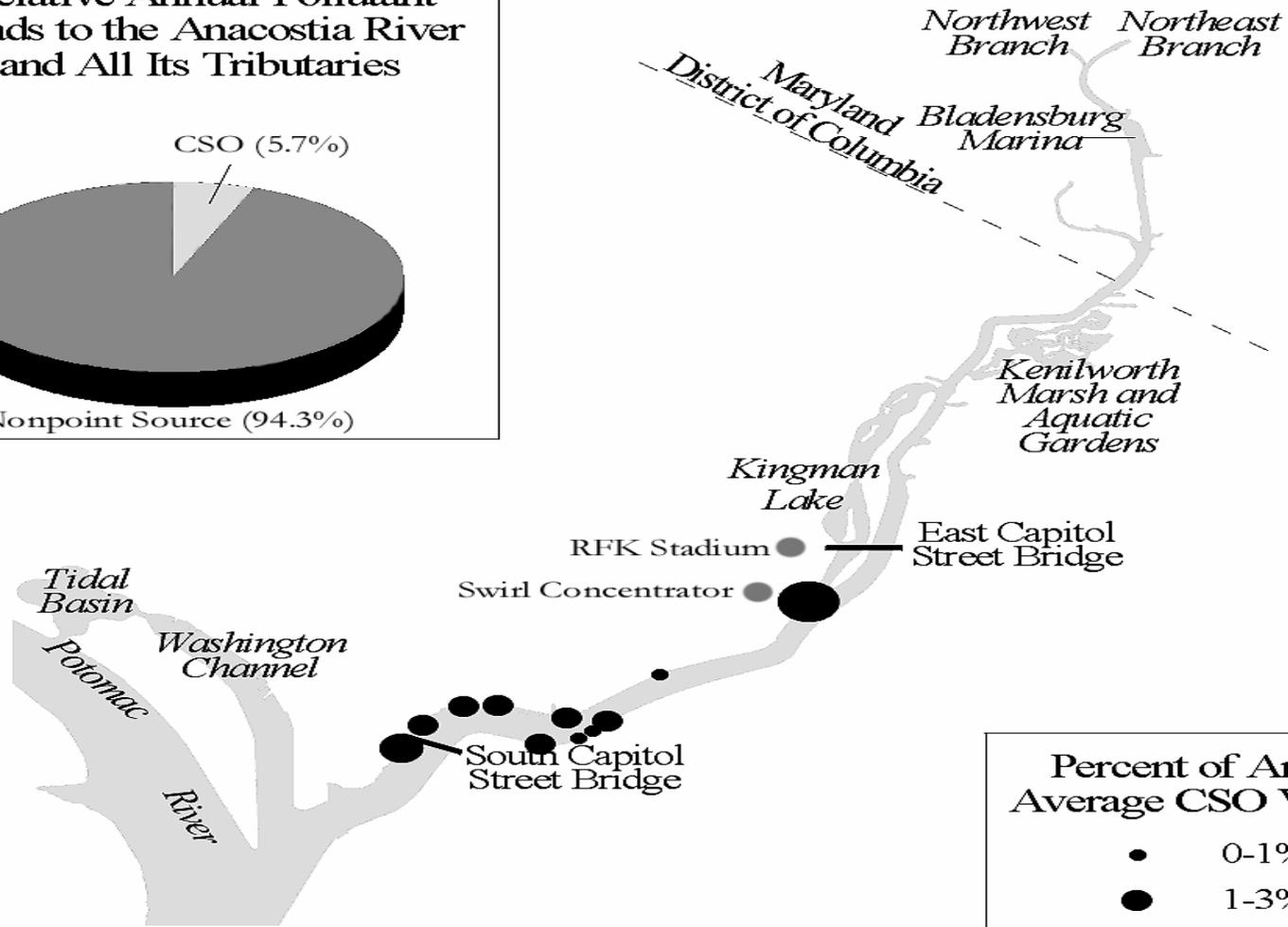
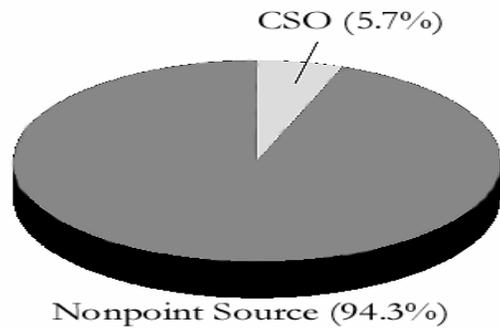


Northwest Branch of Anacostia - Migratory Fish Monitoring

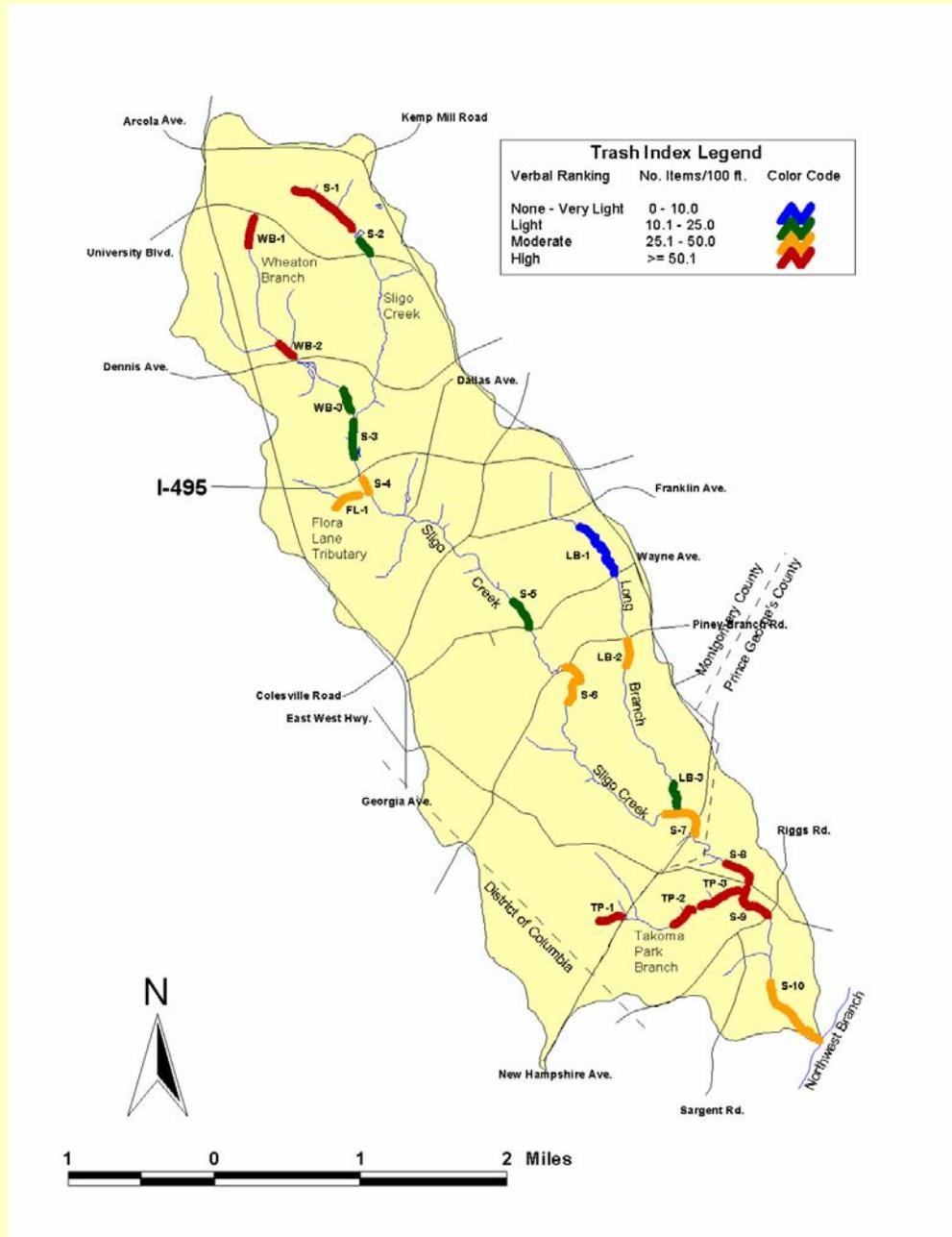


Hickey Run Oil Boom

Relative Annual Pollutant Loads to the Anacostia River and All Its Tributaries



Location and Relative Size of CSO Discharges into the Tidal Anacostia River



Sligo Creek Trash Survey, March 2000

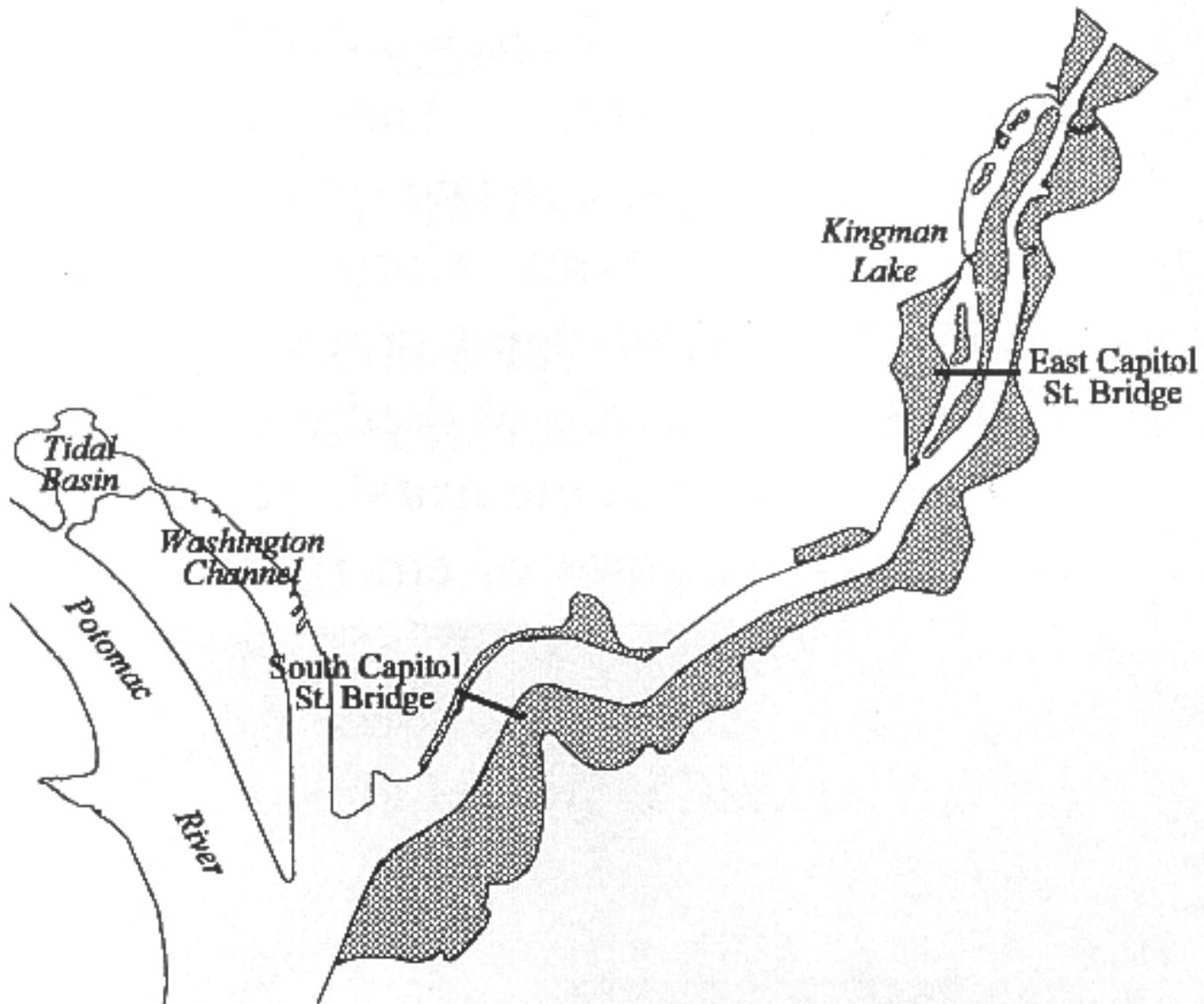








Watts Branch

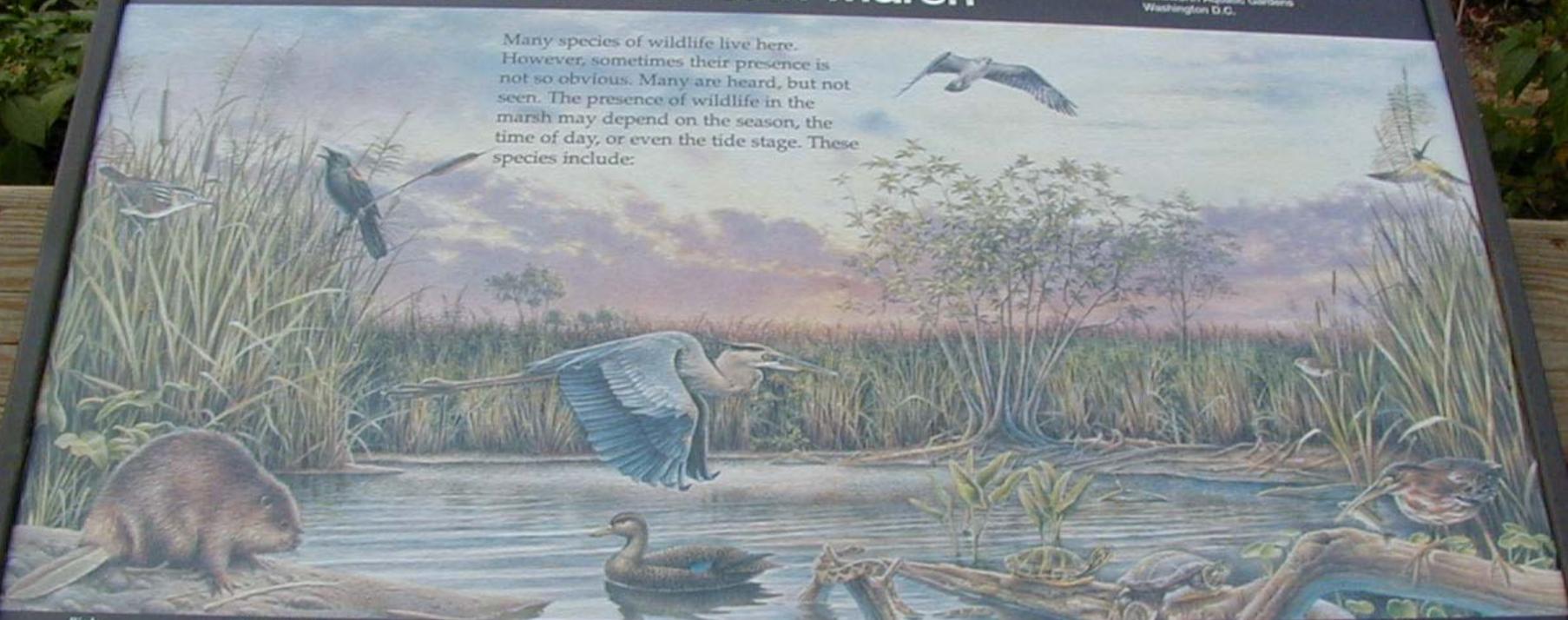


Tidal Anacostia River Wetlands Filled (shaded areas) from 1902 to 1959 (modified from ICPRB, 1993)

The Animals of Kenilworth Marsh

Kenilworth Aquatic Gardens
Washington D.C.

Many species of wildlife live here. However, sometimes their presence is not so obvious. Many are heard, but not seen. The presence of wildlife in the marsh may depend on the season, the time of day, or even the tide stage. These species include:



Birds

Bald eagle
Canada goose
Great-blue heron
Great egret
Killdeer
Mallard
Osprey
Red-winged blackbird

Amphibians/Reptiles

Bullfrog (*Rana catesbeiana*)
Greenfrog (*Rana clamitans*)
Spring peeper (*Pseudacris crucifer*)
Painted turtle (*Chrysemys picta*)
Snapping turtle (*Chelydra serpentina*)
Black rat snake (*Elaphe obsoleta obsoleta*)
Northern water snake (*Natrix sipedon sipedon*)

Fish

Banded killifish (*Fundulus diaphanus*)
Carp (*Cyprinus carpio*)
Mosquito fish (*Gambusia affinis*)

Mammals

Beaver (*Castor canadensis*)
Muskrat (*Onatra zibethica*)
Raccoon (*Procyon lotor*)
White-tailed deer (*Odocoileus virginianus*)

Some Common Plants of Kenilworth Marsh

Native

Rice cutgrass (*Leersia oryzoides*)
Spatterdock (*Nymphal advena*)
Arrow arum (*Peltandra virginica*)
Pickersweed (*Pontederia cordata*)
Duck potato (*Sagittaria latifolia*)
Narrow-leaved cattail (*Typha angustifolia*)
Broad-leaved cattail (*Typha latifolia*)
Wild rice (*Zizania aquatica*)

Non-native (Invasive)

European yellow iris (*Iris pseudacuris*)
Purple loosestrife (*Lythrum salicaria*)
Common reed (*Phragmites australis*)



Kenilworth Marsh After Restoration, Spring 2000





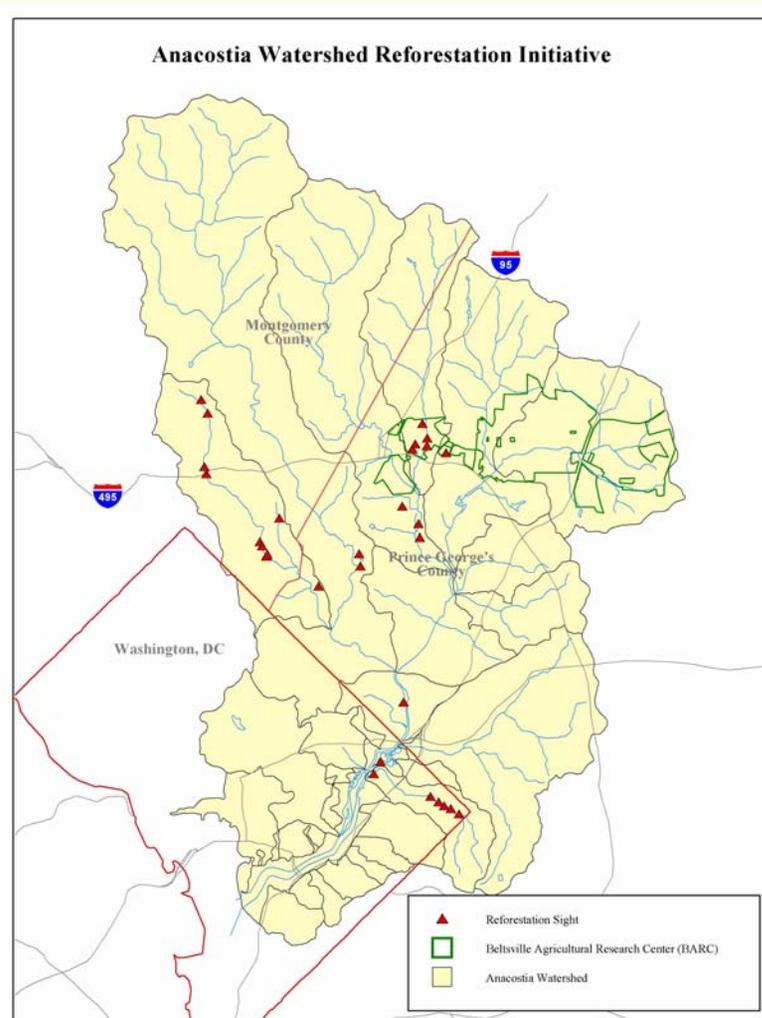


Northwest Branch of the Anacostia River



Newly Revitalized Bladensburg Marina, Ship Rope Building

49 Reforestation Sites Planted in the Anacostia Watershed from 1993-2003



Anacostia Reforestation Project



Planting







Anacostia Reforestation Project



Environmental Education

Anacostia Reforestation Project





Partners in Stewardship Conference Los Angeles, CA

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