



# Working Together to Restore the Anacostia Watershed

ANACOSTIA WATERSHED RESTORATION COMMITTEE · ANNUAL REPORT 2001

# 2001 Annual Report



## The Restoration Partners

### AWRC Members

District of Columbia  
Department of Health/Environmental Health  
Administration (DC-DOH/EHA)

District of Columbia  
Water and Sewer Authority (DC-WASA)

Maryland Department  
of the Environment (MDE)

Maryland Department  
of Natural Resources (MDDNR)

Montgomery County Department  
of Environmental Protection (MCDEP)

National Park Service (NPS)

Prince George's County Department of  
Environmental Resources (PGDER)

U.S. Army Corps of Engineers (USACE)

U.S. Environmental Protection Agency (EPA)

National Park Service (NPS)

### Key Affiliates

Maryland-National Capital Park  
and Planning Commission (M-NCPPC)

Anacostia Watershed Toxics Alliance (AWTA)

Anacostia Watershed Society (AWS)

Beltsville Agricultural Research Center  
(BARC)

Chesapeake Bay Foundation (CBF)

Eyes of Paint Branch (EOPB)

Friends of Sligo Creek (FOSC)

Interstate Commission on the Potomac  
River Basin (ICPRB)

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## Fellow Anacostia Stakeholders:



CATHERINE RAPPE,  
2002 AWRC CHAIR

The current condition of the Anacostia watershed reflects over 300 years of environmental degradation. Its restoration is a truly daunting task that will, in all likelihood, cost over \$1 billion and require a concerted multi-jurisdictional effort over many years. Faced with such challenges, the small signs of positive environmental change in nearly every corner of the watershed are especially gratifying. Many of these improvements have their origins in the signing of the 1987 and 1991 Anacostia Watershed Restoration Agreements, which established the Anacostia Watershed Restoration Committee (AWRC) and created the six guiding restoration goals still employed today.

In 1999, recognizing the need for more specific measures of progress, the original signatories reconvened to draft a new restoration agreement. This document, signed on May 10, 1999, reaffirmed and updated the six original restoration goals and added a new provision to develop “through a public participation process, a suite of specific, long-term restoration indicators and targets.” The signatories further agreed to reconvene every two years to “assess progress, provide general direction and examine the needs and means to further the goals of the restoration effort.” That same year, the AWRC and its affiliates, environmental and community groups, and private businesses began the “Indicators and Targets” (I & T) Project, a highly public process that resulted in the development of a suite of 50, measurable restoration indicators and related targets to guide the restoration effort to the year 2010. Once completed, the I & T Project was adopted by the four Anacostia signatory jurisdictions, Montgomery and Prince George’s Counties, the state of Maryland, and the District of Columbia during a formal signing ceremony held on December 3, 2001. It established frameworks for both watershed-wide monitoring and restoration reporting to elected officials and the public. This document reflects that framework and represents the first in an annual series that promises to provide Anacostia stakeholders with honest and timely appraisals of Anacostia watershed restoration progress.

To date, the AWRC and others have identified over 700 stormwater retrofit, wetland creation, stream restoration, riparian restoration, combined sewer overflow (CSO) abatement, trash and toxics reduction, and other restoration-related projects designed to correct existing environmental problems and enhance overall ecosystem quality. Of these, approximately one-third have either been completed or are in progress. Recently, the AWRC has also worked to encourage ‘greener’ land use and business practices by institutions and agencies within the Anacostia watershed. One example is the AWRC-University of Maryland agreement signed in early 2002.

Collectively, the restoration partners have spent roughly \$35 million on restoration project implementation, as well as approximately \$30 million on land acquisition, planning, monitoring, engineering design, and maintenance since 1987. An additional, \$65 million has funded engineering controls designed to reduce the impacts of CSO’s on the tidal river and of leaking, aging sewer lines on the tributary streams. Notable accomplishments include the creation of approximately 75 acres of tidal and 25 acres of non-tidal wetlands and the control of stormwater runoff from 200 acres in the District of Columbia, 2,700 acres in Montgomery County, and 3,000 acres in Prince George’s County. Also significant was the planting of approximately 12 miles of riparian forests (~100 acres) and the restoration of over 15 miles of stream channel throughout the watershed.

Despite the aforementioned accomplishments, the Anacostia watershed still falls far short of the vision of an ecologically healthy system benefiting all of its residents. Fortunately, through the continuing efforts of the AWRC, its member jurisdictions, affiliates such as the Anacostia Watershed Toxics Alliance (AWTA), and many other environmental and business groups and individuals, improved environmental conditions and an increasing range of recreational opportunities are helping to transform the Anacostia into one of the metropolitan Washington area’s greatest natural assets.



Catherine M. Rappe, Chair  
Anacostia Watershed Restoration Committee



ANACOSTIA PADDLERS: A SIGN OF INCREASING INTEREST AND RECREATIONAL OPPORTUNITIES ON THE TIDAL RIVER

## The Annual Reporting Process

The annual watershed restoration reporting process was developed by the AWRC's Anacostia Restoration Potential Workgroup (ARPW). It is based on the Anacostia Watershed Restoration Indicators and Targets adopted by the Anacostia member jurisdictions on December 3, 2001 and ensures that annual progress toward the 2010 goals is monitored, and that related information is compiled and disseminated to all interested Anacostia stakeholders. It also calls for the biennial convening of signatories.

In addition to this annual report, the Metropolitan Washington Council of Governments (COG) and the ARPW have developed a two-page Anacostia watershed restoration progress summary sheet. Both the annual report and summary sheet represent the AWRC's attempt to simplify the annual restoration reporting progress and to more effectively disseminate restoration-related information to diverse target audiences.

To facilitate systematic and consistent reporting from year to year, the ARPW developed a numerically-based scoring system. The following figure graphically depicts the maximum number of points possible for each of the six restoration goals, as well as the overall restoration progress level, which is measured on a scale of 0-108 points.

The responsibility for generating the annual restoration progress report and summary sheet rests with the ARPW, which solicits and receives input from key environmental, business, citizen groups, and organizations active in the watershed restoration effort. The following pages, while necessarily limited to the restoration highlights, reflect this input and summarize restoration progress made during Calendar Year 2001, only.

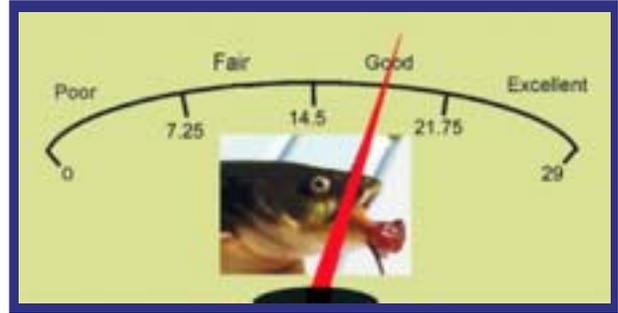
For Calendar Year 2001, the overall Anacostia effort received a total score of 62.7 points, placing restoration progress in the "Good" range.

Restoration Goal		Maximum Points
	1. Reduce Pollutant Loads	29
	2. Restore Ecological Integrity	29
	3. Improve Fish Passage	9
	4. Increase Wetland Acreage	9
	5. Expand Forest Cover	10
	6. Increase Public and Private Participation	22
Progress Level	Point Total	Interpretation
 Excellent	81.1 - 108	Exceeding restoration target and schedule
 Good	54.1 - 81.0	Meeting restoration target and schedule
 Fair	27.1 - 54.0	Partially meeting restoration target and schedule
 Poor	0.0 - 27.0	Not meeting restoration target and schedule

## Goal 1: Reduce Pollutant Loads

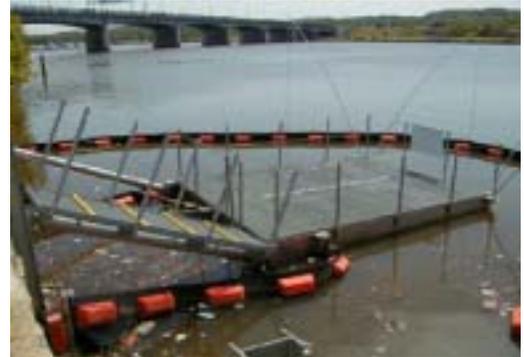
The Anacostia restoration partners made "Good" progress toward achieving Goal 1-related restoration targets in 2001. This level of progress is reflected in a score of 18.0 (Good = 14.5 - 21.74) out of a total of 29 possible points. Among the specific Goal 1 objectives are reductions in Total Suspended Solids, nutrients, bacteria, trash, toxics and metals, and Combined Sewer Overflows (CSO), an increase in Dissolved Oxygen levels, and no major fish kills. A few of the major accomplishments for 2001 are listed below.

GOAL 1 RESTORATION PROGRESS FOR 2001



### District of Columbia

- No Anacostia River fish kills in 2001
- Stormwater management (SWM) retrofit projects controlling 87.8 ac/0.14 square miles (mi<sup>2</sup>)
- Stream bank stabilization along a 0.38-mile segment of Watts Branch (\$180,000)
- Completion by the U.S. Army Corps of Engineers (USACE) of a 41-acre \$5.2 million wetland restoration project at Kingman Lake
- Development of a Biochemical Oxygen Demand (BOD) Total Maximum Daily Load (TMDL) plan by the District of Columbia Department of Health/Environmental Health (DC-DOH/EHA)
- Draft Total Suspended Solids TMDL plan developed by DC-DOH/EHA
- Completion of the CSO Long Term Control Plan and various system upgrades, as well as an evaluation of a floating CSO trash netting system and completion of a rain barrel and rooftop-type analysis (\$10 million)
- Removal of approximately 700 tons of trash and debris from the tidal river by the District of Columbia Water and Sewer Authority (DC-WASA) skimmer boat fleet



FLOATING CSO TRASH NETTING SYSTEM ON THE TIDAL RIVER (DISTRICT OF COLUMBIA)



SNOWDENS MILL II STORMWATER MANAGEMENT RETROFIT (MONTGOMERY COUNTY)

### Montgomery County

- SWM retrofit projects controlling 425 ac/0.66 mi<sup>2</sup> (\$1.46 million)
- Stream restoration along 4.01 miles of the Paint Branch, NW Branch, and Sligo Creek mainstems (\$1.75 million)

### Prince George's County

- SWM retrofit projects controlling 372 ac/0.58 mi<sup>2</sup> (\$865,000)
- Installation of the first trash skimmer system in the levee floodway pump station system by the Prince George's County Department of Environmental Resources (PGDER) and the Maryland Department of the Environment (MDE) (\$337,000)
- Hyattsville relief sewer project design completed
- Completion of the Little Paint Branch Relief Sewer Project by the Washington Suburban Sanitary Commission (WSSC) (\$1.45 million)



RECENT BIORETENTION STORMWATER SYSTEM INSTALLED IN PRINCE GEORGE'S COUNTY

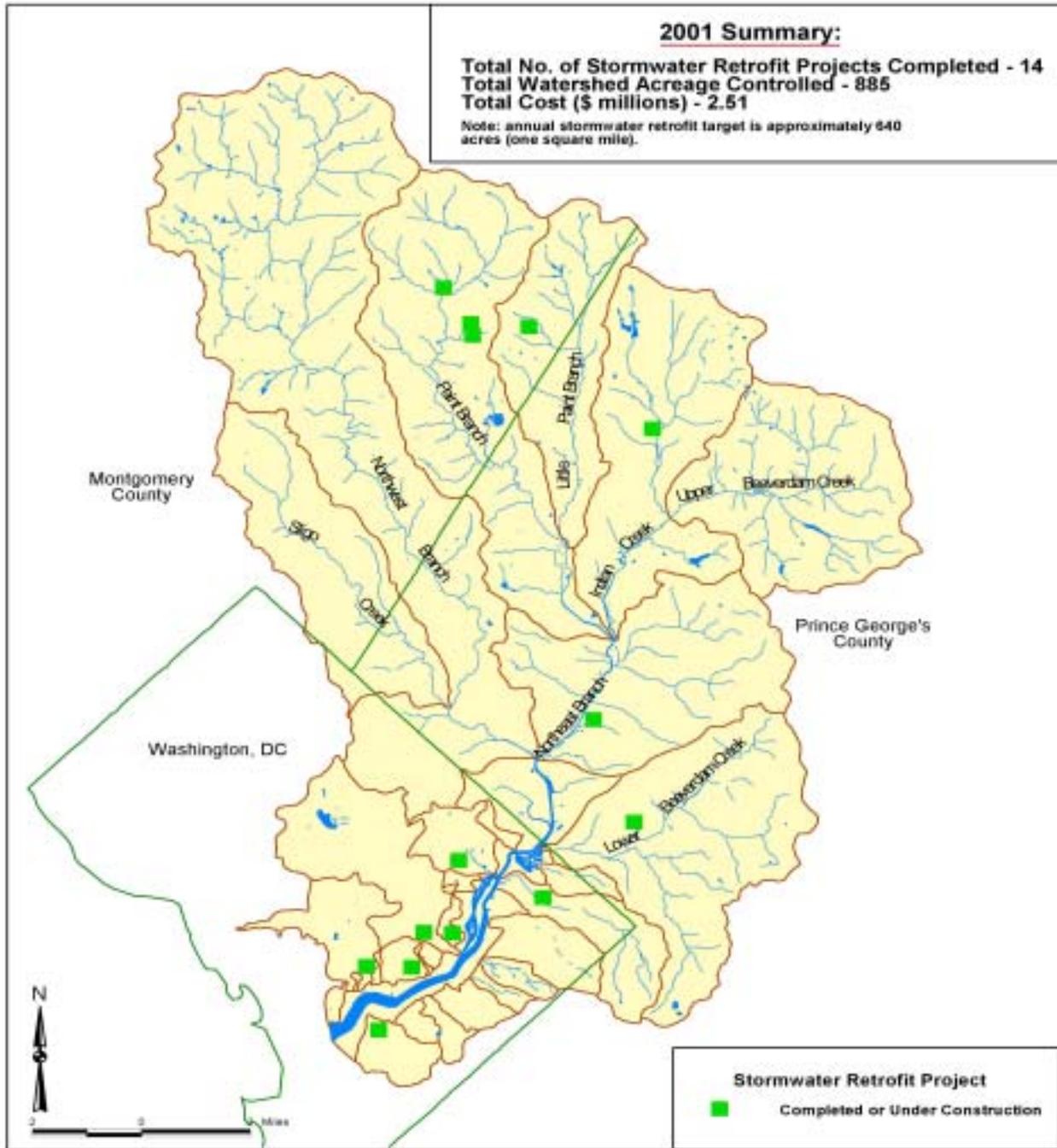
### Watershed Wide

- Completion of Phase I monitoring and a draft Toxic Sediments Management Plan by the Anacostia Watershed Toxics Alliance (AWTA)
- Draft Trash Reduction Strategy plan completed by MDE

SUMMARY: 2001 STORMWATER RETROFITTING

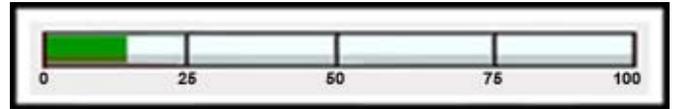
Project Status	No. of Projects/Acreage Controlled					
	Montgomery		Prince George's		District of Columbia	
Planning	35	TBD	43	TBD	20	TBD
Design	7	541	10	TBD	10	250
Construction/Completion	4	425	5	372	7	87.8

TBD - To be determined



## Progress Made Toward 2010

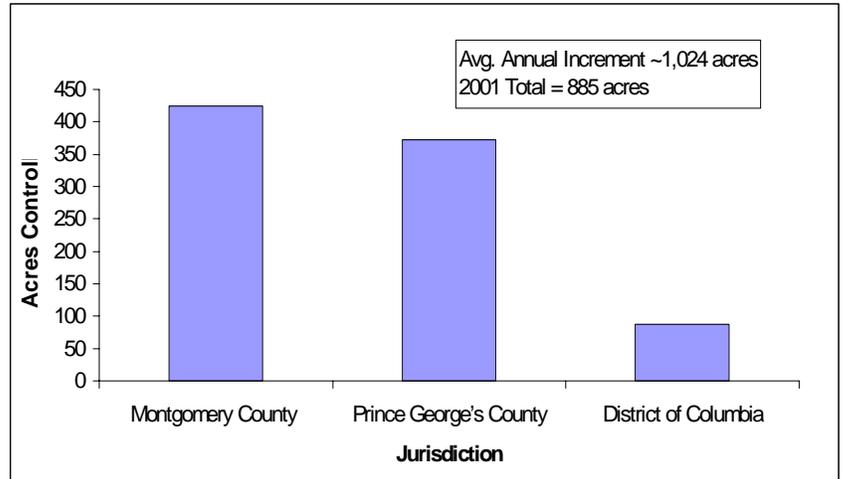
Stormwater management projects in 2001 added water quality/quantity controls to 1.38 mi<sup>2</sup> (885 acres) of developed land in the watershed. As a result, the restoration partners are 16 percent of the way toward the 2010 goal of controlling runoff from an additional 10.0 mi<sup>2</sup> (6,400 acres). It should be noted that the total area controlled in the watershed since 1987 is approximately 9.4 mi<sup>2</sup> (6,000 acres).



OVERALL PROGRESS TOWARD 2010 = 16 PERCENT (GOOD = 15.1 - 25.0)

## Areas of Concern

While much was accomplished in 2001, continuing problems include but are not limited to the lack of automated water quality monitoring stations on the lower Northeast and Northwest Branches, the annual accumulation of thousands of tons of floatable trash and debris in the tidal river, continued high levels of coliform bacteria, and toxic sediments that, according to a recent study by the United States Fish and Wildlife Service (USFWS), resulted in a 60 percent mortality rate among American shad larvae and inadequate funding levels needed for major pollution reduction initiatives, such as CSO control (estimated at over \$600 million) and toxics sediment remediation (estimated at \$206 million).



SUMMARY: 2001 ANACOSTIA STORMWATER RETROFITTING ACTIVITY LEVEL

## Goal 2. Restore Ecological Integrity

The restoration partners also made "Good" progress toward achieving Goal 2 during 2001. The score of 18.3 out of a total of 29 possible points (Good = 14.5 - 21.74) is based on improvements in a range of quantitative and qualitative factors including, but not limited to the frequency and severity of deformities and other indications of poor health among fishes, pH, water clarity, the overall health of fish and macroinvertebrate communities, the level of stream restoration progress, the amount and quality of submerged aquatic vegetation, stormwater management, and the level of recreational use. While much work remains to be done, signs of progress include:

GOAL 2 RESTORATION PROGRESS FOR 2001



### District of Columbia

Completion of SWM retrofits (various BMP types and sites) controlling 87.8 ac/0.14 mi<sup>2</sup> (\$180,000)

The continued presence of pollution sensitive *Amphinemura sp.* stoneflies and evidence of recruitment by reintroduced blacknose dace in the Fort Dupont tributary

Stream restoration project completion along 0.38 stream miles of Watts Branch in the District of Columbia (\$180,000)

The addition of 33 acres of emergent aquatic vegetation and 6.2 acres of bottomland and upland forest in Kingman Lake

Expansion of Submerged Aquatic Vegetation (SAV) via the planting of 800 wild celery (*Valisneria americana*) plants by DC-DOH/EHA at Anacostia River Park

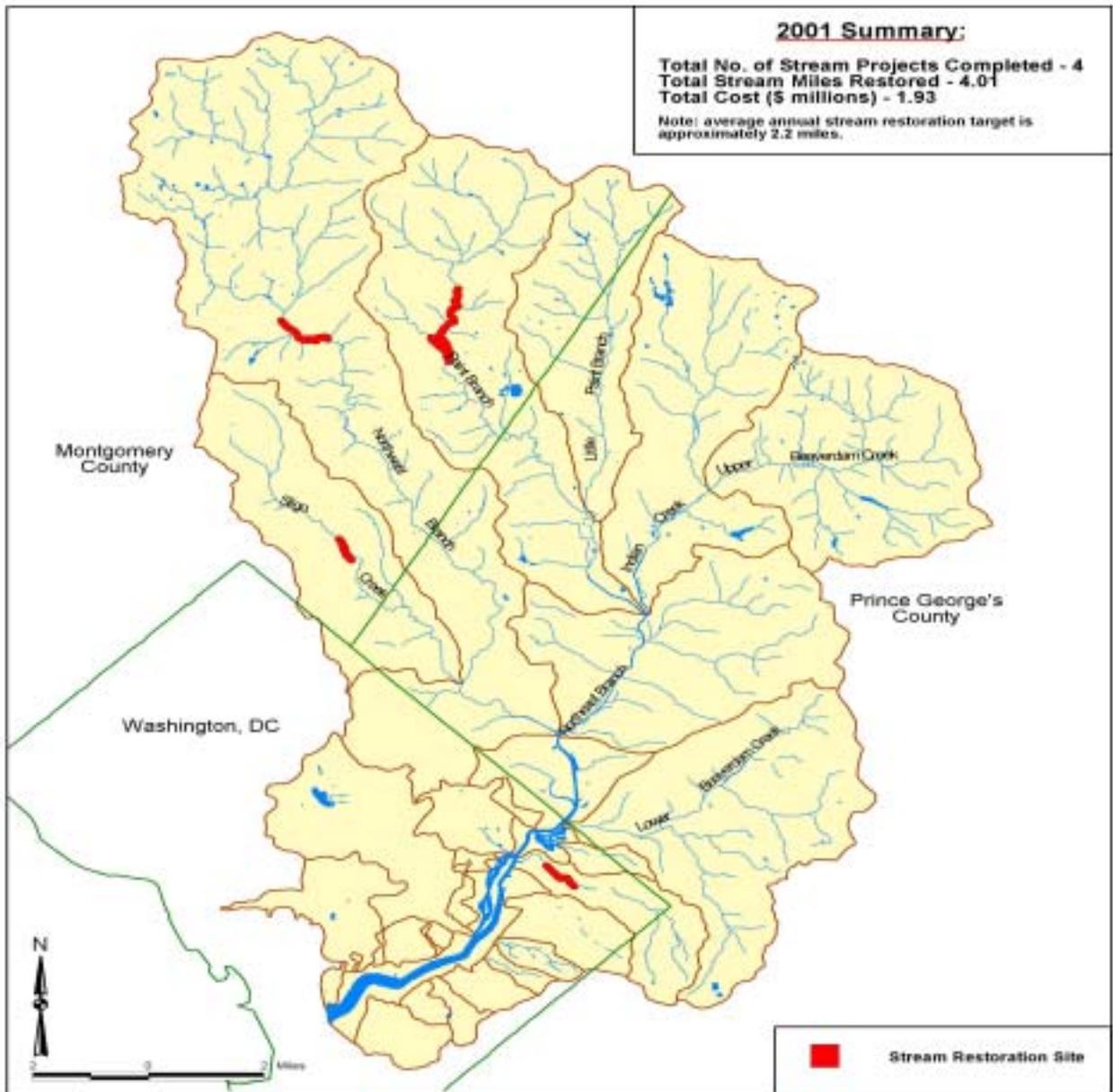
Increases in recreational river fishing and boating-related activities



PAINT BRANCH APPROXIMATELY 2000FT BELOW RANDOLPH ROAD - BEFORE STREAM RESTORATION



PAINT BRANCH - AFTER STREAM RESTORATION



**SUMMARY: 2001 STREAM RESTORATION/STABILIZATION**

Project Status	No. of Projects/Stream Miles Restored					
	Montgomery		Prince George's		District of Columbia	
Planning	158	TBD	4	1.62	2	4.00
Design	26	7.00	4	2.16	2	5.00
Construction/Completion	5	4.01	0	0	0	0.38

TBD - to be determined

**Montgomery County**

Completion of SWM retrofit projects in the Paint Branch and Little Paint Branch subwatersheds controlling 425 ac/0.66 mi<sup>2</sup> (\$1.46 million)

Improved conditions for brown trout in the Gum Springs tributary of Upper Paint Branch as a result of the recently completed parallel pipe stormflow diversion system

Completed restoration projects along 4.01 stream miles (\$1.75 million)

Sligo Creek, Northwest Branch, Paint Branch, and Little Paint Branch park acquisition 55.5 acres (\$2.3 million)

**Prince George's County**

Completion of SWM retrofits controlling 372 ac/0.58mi<sup>2</sup> (\$865,000)

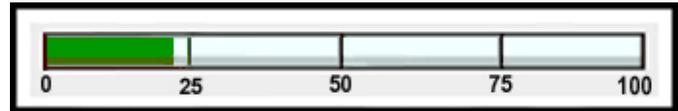
Electrofishing survey results showing that middle and lower Northwest Branch is now supporting a small, resident smallmouth bass population

**Areas of Concern**

A number of factors indicate that the effort to restore the ecological integrity of the watershed is far from complete. Among these are the lack of adequate physical instream habitat and riparian buffers along many streams, poor water quality and contaminated sediments in the tidal river, the large number of bottom dwelling tidal river fish such as brown bullheads with deformities, erosions, lesions, and tumors, and a decline in macroinvertebrate community health in the Right Fork of Paint Branch.

**Progress Made Toward 2010**

The restoration partners restored an impressive total of 4.39 stream miles in 2001. This represents an achievement of approximately 23 percent of the 2010 goal of restoring 20 additional stream miles (at an annual rate of 2.2 miles)!



OVERALL PROGRESS TOWARD 2010 = 23 PERCENT (GOOD = 15.1 - 25.0)

**Goal 3. Improve Fish Passage**

Overall, the restoration partners made "Good" progress toward reaching Goal 3 in 2001. This is reflected in a score of 4.8 (Good = 4.5 - 6.74) out of a total of 9 possible points. Although no additional anadromous fish spawning habitat was opened during 2001, 15 Woodrow Wilson Bridge Replacement mitigation projects are currently in the planning or design stages and approximately \$4 million has been allocated for fish passage-related work. A few of the major restoration accomplishments for 2001 include:

GOAL 3 RESTORATION PROGRESS FOR 2001



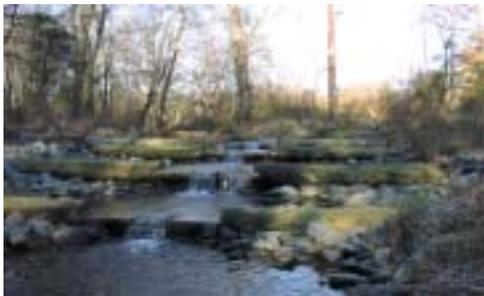
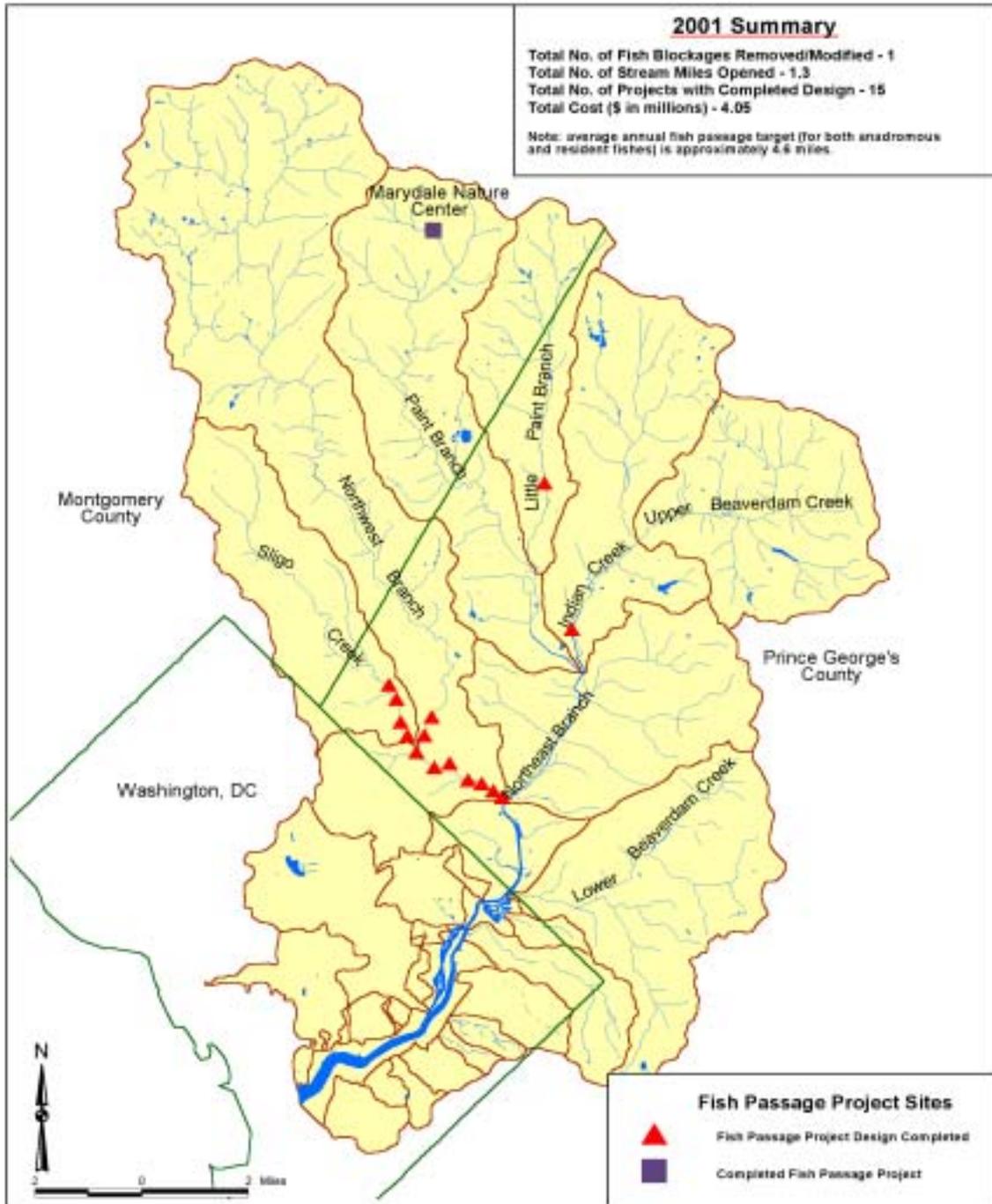
**District of Columbia**

Ongoing design work on the DC-DOH/EHA Anacostia Fish Hatchery

Development of restoration plans for Fort Dupont and Pope Branch as part of the U.S. Army Corps of Engineers (USACE) Lower Anacostia River Park restoration study

**Montgomery County**

The opening of 1.3 stream miles to resident fishes as a result of a blockage modification project at the Maydale Nature Center in Upper Paint Branch (\$45,000)



COMPLETED PAINT BRANCH STEP POOL FISH PASSAGE PROJECT AT MAYDALE NATURE CENTER



COLLECTING HERRING EGGS FOR SPRING 2001 STOCKING INTO ANACOSTIA TRIBUTARIES

## Prince George's County

Ongoing design work on 15 fish passage-related projects

The relative strength of the 2001 herring run was in the "Fair/Good" range. This facilitated the herring stocking work of the Interstate Commission on the Potomac River Basin (ICPRB), COG, and others and allowed for the release of approximately 2 million herring larvae into the following five Anacostia tributaries: Sligo Creek, Northwest Branch, Paint Branch, Little Paint Branch, and Indian Creek

SUMMARY: FISH PASSAGE PROJECTS

Project Status	No. of Projects/Stream Miles Restored					
	Montgomery		Prince George's		District of Columbia	
Planning <sup>1</sup>	21	15.10	20	22.40	7	2.00
Design	TBD	TBD	15	14.00	0	2.00
Construction/Completion	1	1.30	0	0	0	0

<sup>1</sup> Values shown for MOCO and PGCO are preliminary and based on the 2002 ARPW inventory. TBD - to be determined

## Watershed Wide

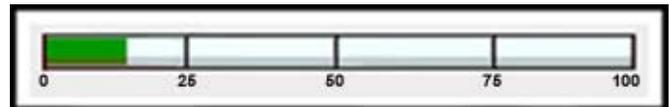
Before the dramatic population declines that resulted from overfishing, pollution, and the loss of spawning habitat, annual runs of millions of individuals of various anadromous fish species, including American and hickory shad and alewife and blueback herring, played an integral role in the ecology and economy of the Anacostia River and its tributaries.

With guidance from the AWRC's interagency Anacostia Fish Passage Workgroup (AFPW) and \$4 million in environmental mitigation funding from the Woodrow Wilson Bridge Replacement Project, 15 fish blockages in the Prince George's County portion of the Anacostia will be modified or removed within the next two years. In addition, a small amount of funding has been set aside for a five-year larval herring stocking and monitoring project. By releasing and imprinting millions of larval herring upstream of existing blockages each year, it is expected that these fish will return to their new "natal" streams as spawning adults in four or five years. By that time, the 15 downstream blockages will have been eliminated, opening approximately 14 miles of stream.

In 2001, efforts were focused on both monitoring and restocking. Most of the spawning alewife herring were captured in the Northwest and Northeast Branches between early April and mid-May.

## Progress Made Toward 2010

The 2010 goal is to open 20 additional stream miles to migratory fish species, including all mainstem reaches, at an increment of 2.2 miles per year. In addition to the opening of approximately 1.3 stream miles in 2001, the restoration partners completed design work for all 15 Woodrow Wilson Bridge project and began the construction bid process for both the Little Paint Branch and Indian Creek project sites. Together, these achievements comprise approximately 16 percent of the 2010 goal.



OVERALL PROGRESS TOWARD 2010 = 16 PERCENT (GOOD = 15.1 - 25.0)

## Areas of Concern

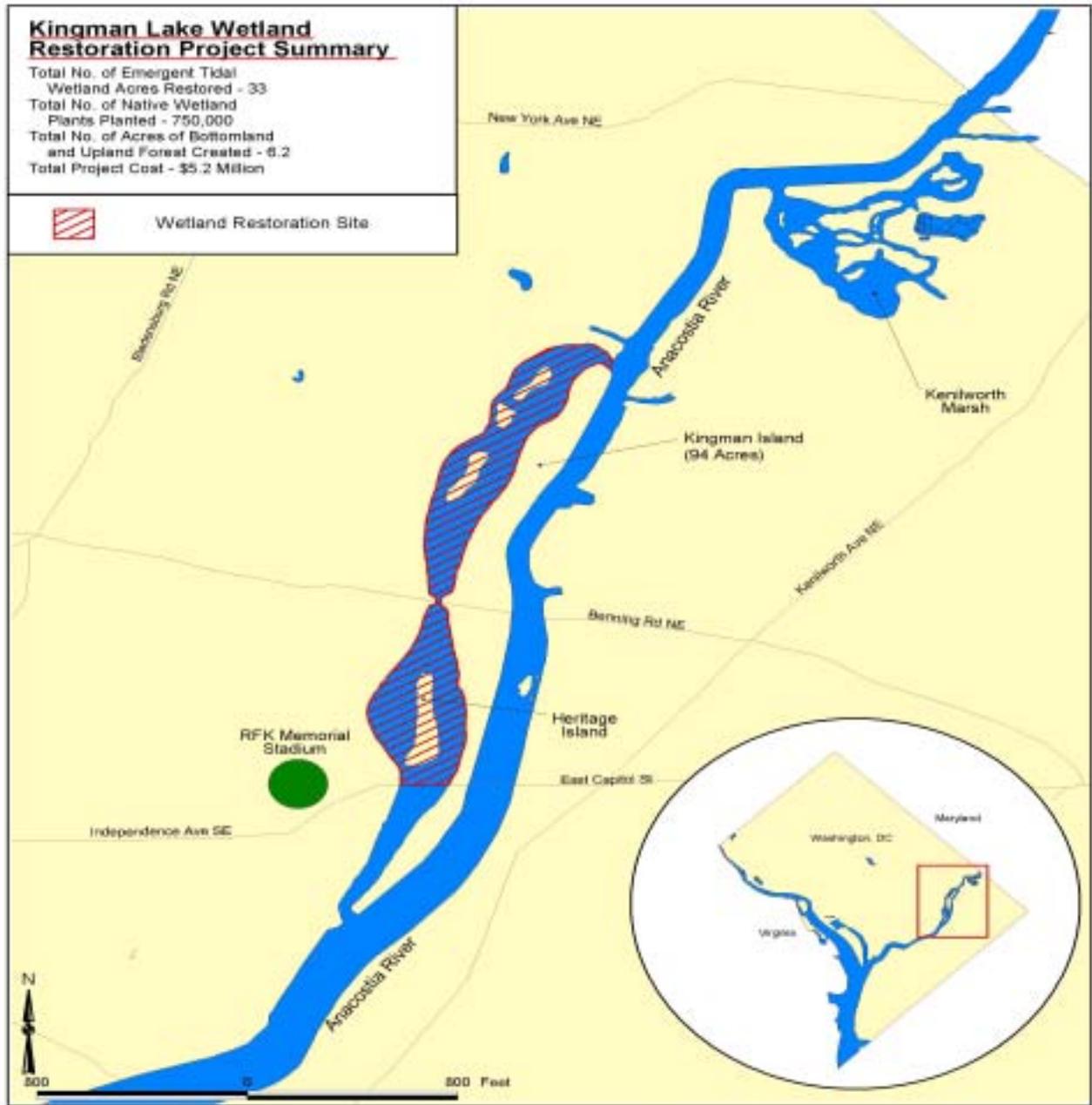
At present, no sources of funding for either blockage removal/modification or herring run monitoring and larval stocking have been identified beyond that of the Woodrow Wilson Bridge Project. This casts doubt on the restoration partner's ability to remove or modify the 35 additional key fish blockages located on AWRC priority stream sites.

## Goal 4. Increase Wetland Acreage

Overall, the restoration partners made "Good" progress toward reaching Goal 4 in 2001. The 2001 score of 5.9 (Good = 4.5 - 6.74) out of a total of 9 possible points reflects the completion of tidal wetland creation and enhancement projects, as well as both tidal and non-tidal project planning and design efforts. A few of the year's achievements in this area are highlighted here.

GOAL 4 RESTORATION PROGRESS FOR 2001





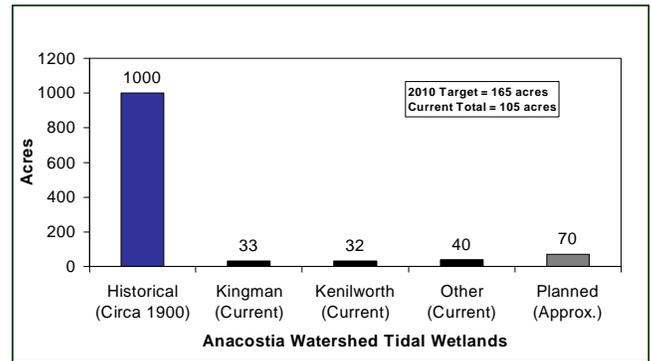
SUMMARY: TIDAL/NON-TIDAL WETLAND CREATION/RESTORATION

Project Status	No. of Projects/Acres Created or Restored					
	Montgomery		Prince George's		District of Columbia	
Planning	TBD	TBD	0	0	4	24.00
Design	TBD	TBD	3	TBD	0	24.00
Construction/Completion	0	0	0	TBD	1	33.00

TBD - to be determined

**District of Columbia**

Creation/restoration of 33 acres of emergent tidal wetlands at Kingman Lake by the USACE (\$5.2 million)  
 Continuation of flora and fauna studies at Kenilworth Marsh, Kingman Lake, Heritage Island, and Dueling Creek by United States Geological Survey (USGS), NPS, UMCP and others  
 Ongoing planning/design work for non-tidal wetland creation/restoration projects: Heritage Island and River Terrace tidal fringe wetlands



CHANGES IN ANACOSTIA WATERSHED TIDAL WETLAND ACREAGE

**Montgomery County**

Non-tidal wetlands monitoring in upper Sligo Creek by the Montgomery County Department of Environmental Protection (MCDEP)

**Prince George's County**

Ongoing planning/design work for three non-tidal wetland creation/restoration projects  
 Non-tidal wetlands monitoring in Upper Beaverdam Creek by the U.S. Fish and Wildlife Service (USFWS)



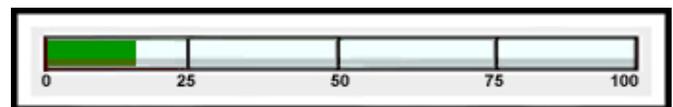
KINGMAN LAKE IN 2001 FOLLOWING RESTORATION

**Watershed Wide**

The restoration partners spent a total of approximately \$6 million on tidal wetland (approx. \$5.2 million for Kingman Lake, alone) and \$20,000 on non-tidal wetland creation/restoration in 2001. In another important step toward meeting Goal 4, the ARPW began work on the development of a suite of potential Index of Biotic Integrity (IBI) metrics for both wetland assessment and the long-term monitoring of created and natural Anacostia wetlands.

**Progress Made Toward 2010**

The 2010 goal is to create 60 tidal wetland acres and 15 non-tidal acres (in addition to the 33-acre Kingman Lake project) at an annual increment of 5.6 tidal acres and 1.7 non-tidal acres. In 2001, the restoration partners began either planning or design work on six wetland creation/restoration projects (i.e., river fringe wetlands, Anacostia site 11-A, Bladensburg (2), Anacostia River Park (2)) and spent a total of approximately \$6 million on project implementation. In addition, they committed approximately \$175,000 for a 5-year tidal wetlands flora and fauna study at Kenilworth Marsh, Kingman Lake, Heritage Island, and Dueling Creek. Overall, the accomplishments of 2001 account for 17 percent of the 2010 goal.



OVERALL PROGRESS TOWARD 2010 = 17 PERCENT (GOOD = 15.1 - 25.0)

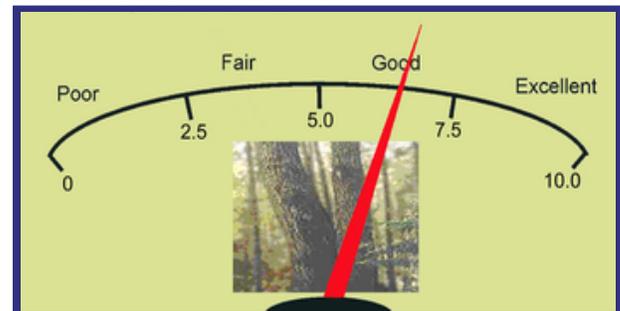
**Areas of Concern**

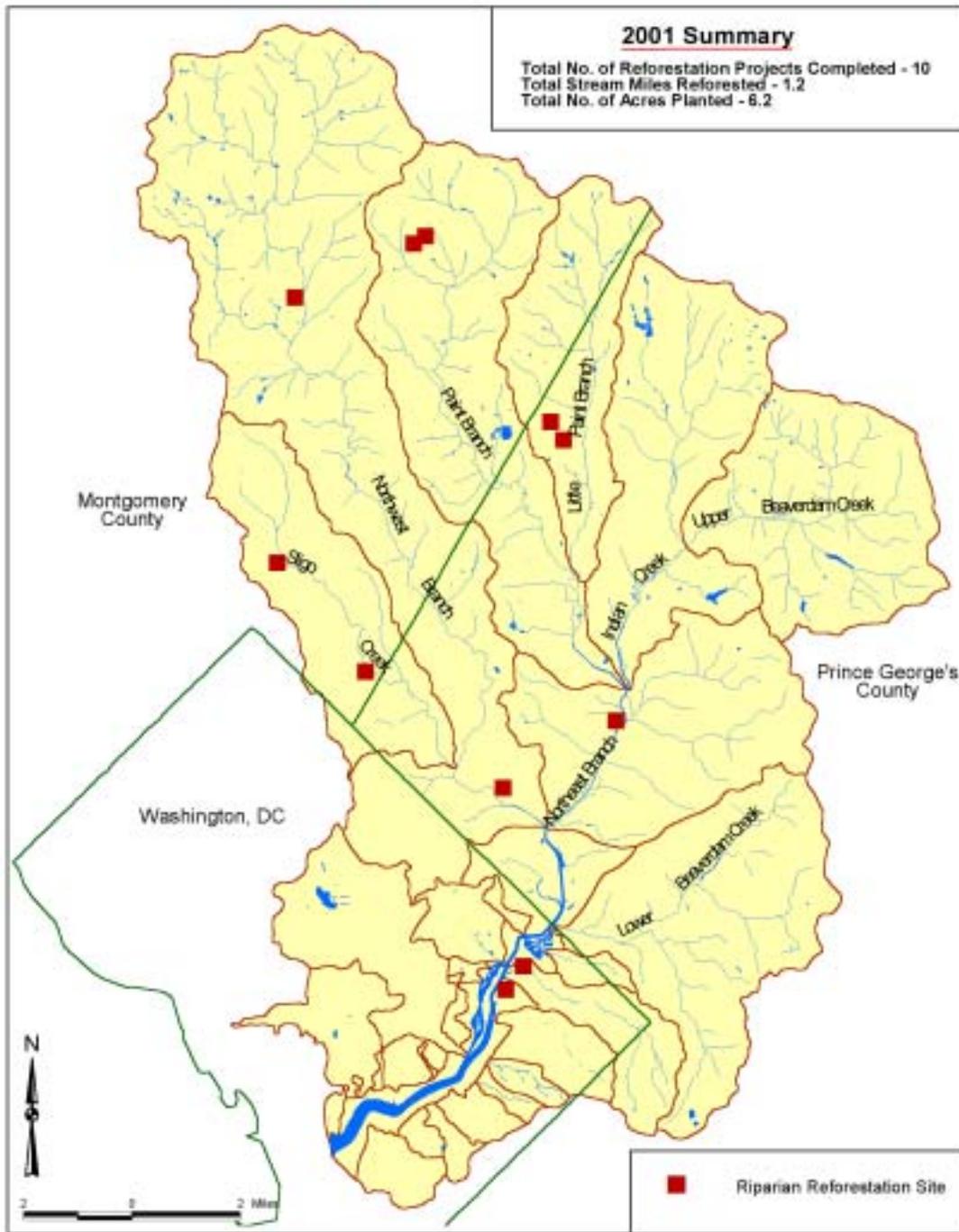
No actual non-tidal wetland acreage was created in 2001, and current non-tidal wetland planning and design efforts lag behind those for tidal wetland.

**Goal 5. Expand Forest Cover**

The restoration partners also made "Good" progress toward achieving Goal 5 during 2001. This is reflected in a score of 6.4 (Good = 5.0 - 7.4) out of a total of 10 possible points, which is based on increases in riparian and upland forest coverage, as well as on efforts to identify and protect existing forests. While a great deal of work remains, examples of progress in 2001 include:

GOAL 5 RESTORATION PROGRESS FOR 2001





SUMMARY: RIPARIAN REFORESTATION

Project Status	Linear Feet/Acres Planted					
	Montgomery		Prince George's		District of Columbia	
Planning <sup>1</sup>	1,500	2.5	3,000	3.5	700	0.5
Completion	1,400	2.3	2,400	2.5	300	0.10

<sup>1</sup> Note: Planning values shown are approximate

**District of Columbia**

Riparian reforestation along approximately 300 feet of Watts Branch by DC-DOH/EHA

**Montgomery County**

Riparian reforestation along approximately 600 feet of the Northwest Branch by MCDEP/USACE  
Preservation of existing mature upland and riparian hardwood forest acreage along Upper Paint Branch and Upper Northwest Branch  
Forest inventory and forest cover study in progress  
Establishment of upland forest and riparian acreage goals in the new Montgomery County Forest Preservation Strategy  
Upland reforestation of 0.5 acres (Gum Springs) by the Council of Governments (COG), MDDNR, and M-NCPPC



EARTH CONSERVATION CORPS AND UNIVERSITY OF MARYLAND VOLUNTEERS PLANTING TREES ALONG A LITTLE PAINT BRANCH TRIBUTARY, FALL 2001

**Prince George's County**

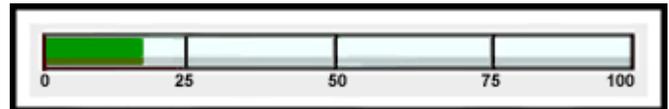
Riparian reforestation along approximately 500 feet of the Northwest Branch  
Preservation of existing mature upland and riparian hardwood forest acreage (Park acquisition - Greenbelt Metro, Jaeger Tract (in progress))

**Watershed Wide**

Other accomplishments include the reforestation of a total of 4,100 linear feet (4.9 acres) of stream channel by COG, MDDNR, M-NCPPC, the NPS, Beltsville Agricultural Research Center (BARC), and volunteer groups and an estimated 0.5 acres by the Anacostia Watershed Society (AWS). It is also important to note that watershed riparian forest buffer criteria are under development along with the AWRC's Anacostia Forest Management Protection Strategy.

**Progress Made Toward 2010**

The 2010 goal is to reforest an additional 45 acres (12 linear miles) of riparian buffers at an annual rate of 4.6 acres. Reforestation projects encompassing approximately 6.15 acres, along with other 2001 accomplishments represent 18 percent of the 2010 goal.



OVERALL PROGRESS TOWARD 2010 = 18 PERCENT (GOOD = 15.1 - 25.0)

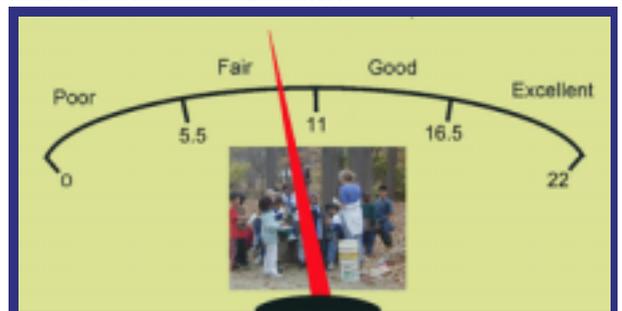
**Areas of Concern**

The restoration partners are encountering increasing difficulty in finding available publicly owned sites for reforestation. At present, there is no major private land initiative underway in the watershed. The current level of stream valley park maintenance, including watering, the removal of exotic/invasive plants and the control of excessive browsing by deer and voles, is generally inadequate to support a healthy forest buffer ecosystem. Additional funding is needed for the purchase of larger trees and shrubs to reforest environmentally sensitive areas more rapidly and more effectively.

**Goal 6. Increase Public and Private Participation**

Overall, the restoration partners made only "Fair" progress toward reaching Goal 6 in 2001. The score of 9.3 (Fair = 5.5 - 10.9) out of a total of 22 possible points reflects the mixed success of efforts to increase the use of the Anacostia and its tributaries for recreational purposes, to engage businesses and the public in watershed restoration-related projects and activities, and to encourage additional watershed restoration spending and the adoption of 'greener' land use and business practices by federal, state, and local governments. A few of the year's achievements in this area are highlighted below.

GOAL 6 RESTORATION PROGRESS FOR 2001

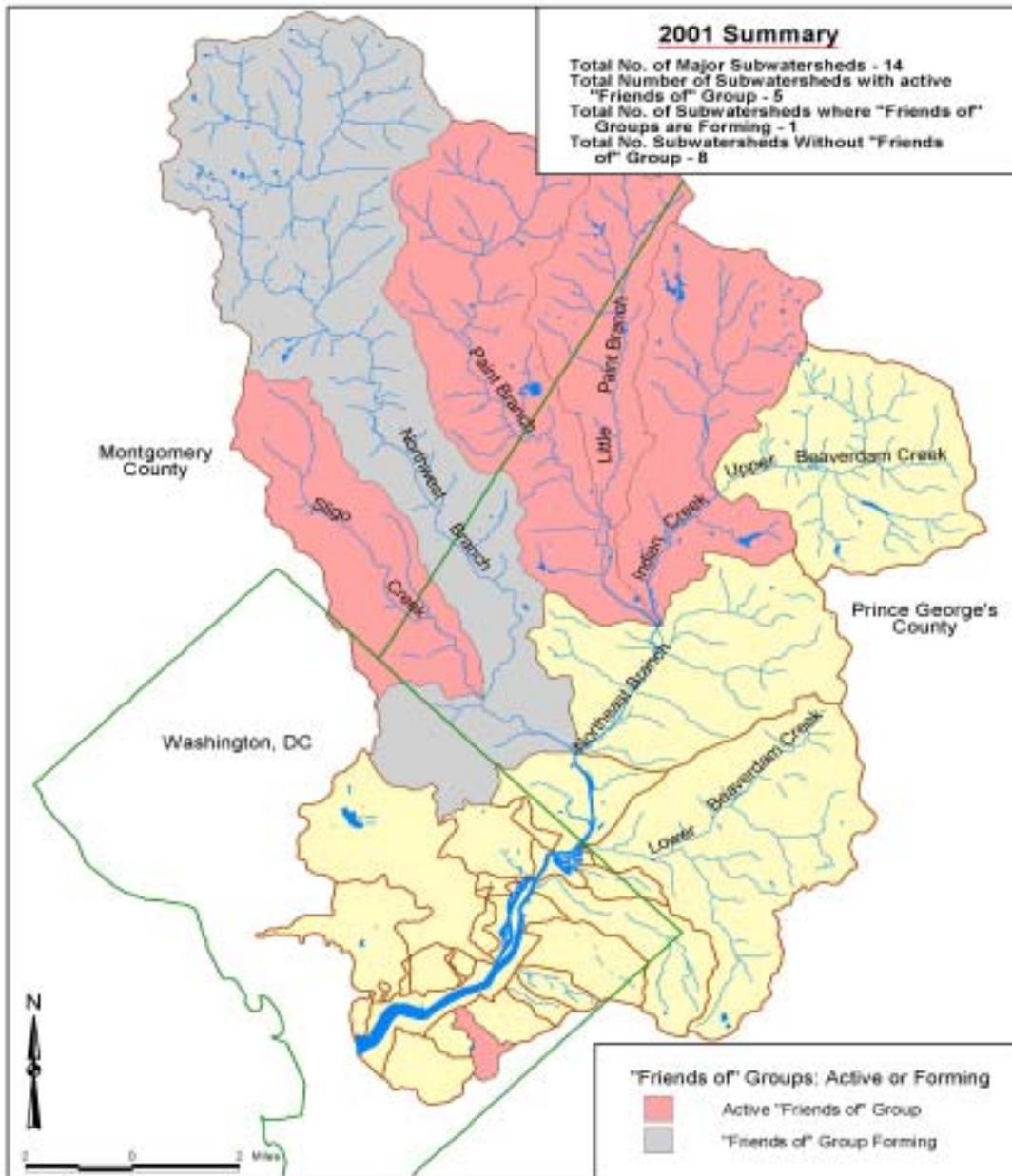


## District of Columbia

Low Impact Development-Retrofit (LID-R) projects under design  
U.S. Navy Yard - various LID-R parking lot retrofit projects completed  
DC-DOH/EHA tidal river angler survey completed  
River Terrace boardwalk under design (pending approval by DC-DOH/EHA and the NPS)  
Boat house constructed at Earth Conservation Corps (ECC) headquarters  
ICPRB rain garden at Buzzard Point under design  
Watts Branch tree plantings and stream cleanup (multiple groups - e.g., Washington Parks and People, etc.)  
District of Columbia/ECC cleanups and tree plantings  
DC-DOH/EHA environmental education for 868 youths and 719 public school teachers



ONE OF SEVERAL EYES OF PAINT BRANCH VOLUNTEER TREE PLANTING EVENTS IN 2001



DC-DOH/EHA distribution of environmental education information to 6,918 District residents  
 Anacostia Waterfront Revitalization Initiative in planning stage  
 Southeast Federal Center redevelopment planning, design, and construction  
 Watts Branch restoration planning, design, and construction



THE FRIENDS OF SLIGO CREEK GATHER FOR A STREAM CLEANUP AND OUTREACH EVENT IN THE SUMMER OF 2001

### Montgomery County

Proactive stream restoration and stormwater retrofit projects funded at \$3 million per year  
 NW Branch trout fishing and pond angler surveys at Pine Lake in Wheaton Regional Park  
 Regular cleanups of Long Branch/Sligo Creek by Blair H.S.-Students for Global Responsibility and the Friends of Sligo Creek (FOSC)  
 Silver Spring Central Business District revitalization design and construction  
 Stewardship projects involving over 300 County residents

### Prince George's County

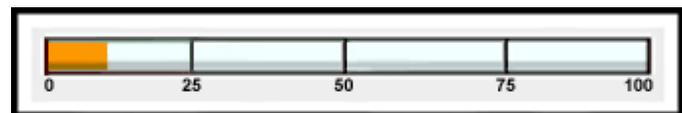
\$1.0 million in LID-R demonstration projects proposed for Anacostia watershed through PGDER/EPA/AWTA funding  
 AWRC/University of Maryland one-day workshop held at College Park Campus  
 Port Towns redevelopment planning, design, and construction  
 Boat house constructed at Bladensburg Waterfront Park  
 PGDER supported usage, stewardship and advocacy-related activities totaling 140 projects and 1,155 participants

### Watershed Wide

Other significant news and events from 2001 include the signing of the most recent Anacostia Restoration Agreement on Dec. 3, 2001 by the state of Maryland, the District of Columbia, and Montgomery and Prince George's Counties, the establishment of a new Chesapeake Bay Foundation (CBF) Anacostia Program, and the increasing number of tree plantings, stream cleanups, watershed tours, exotic/invasive plant management efforts by the Anacostia Watershed Society, Eyes of Paint Branch and FOSC and other environmental groups.

### Progress Made Toward 2010

Goal 6 addresses three principle areas: usage, stewardship, and advocacy. Overall, the restoration partners have achieved 10 percent of the 2010 goal.



OVERALL PROGRESS TOWARD 2010 = 10 PERCENT (FAIR = 7.1 - 15.0)

### Areas of Concern

There are currently only five active subwatershed "Friends of " groups in the Anacostia watershed. This number falls far short of the goal of establishing a group in each of the 14 major Anacostia subwatersheds. Other areas of concern include the general lack of District of Columbia representation in the Anacostia Watershed Citizens Advisory Committee (AWCAC), with the exception of the fledgling Anacostia River Business Coalition (ARBC), limited involvement of the business community in the restoration effort, the inadequate level of watershed restoration funding at the federal, state, and local levels, and the typically poor availability of current, comprehensive information on recreational use, stewardship, and advocacy in the watershed.

## ***Other AWRC Anacostia Restoration Highlights, 1987 - 2000***

Publication of Prince George's County LID technologies manual

Allocation of over \$20 million by state and local governments for the purchase of additional parkland in the Upper Paint Branch

Completion of DC-WASA's CSO monitoring and modeling studies

Formation of DC-WASA's CSO Stakeholders Committee

Completion of a review of Best Management Practices (BMPs) for solids and floatables control in the District of Columbia

Adoption of the 1999 Anacostia Watershed Restoration Agreement

Submission by DC-WASA of a Nine Minimum Controls plan to EPA

Completion by the USACE of the first Biennial Federal Workplan for the Anacostia River

Commencement of work on the Anacostia Federal Facilities Impact Assessment study

Approval by Montgomery County Council of an Environmental Overlay Zone with a 10 percent imperviousness cap for the Upper Paint Branch

Completion of Montgomery County Upper Paint Branch Watershed Stormwater Management/Stream Restoration Assessment Report.

Formation of the Little Paint Branch Workgroup by the MDDNR to help develop a suite of watershed protection and restoration recommendations

Completion by the ICPRB of a District of Columbia Toxics Action Plan for managing toxics in Anacostia River sediments

Formation of the Anacostia Watershed Citizen Advisory Committee

Completion by Montgomery County of its Countywide Stream Protection Strategy

Completion by the USACE of the Section 1135 Anacostia Floodway Rehabilitation Project consisting of fish barrier modifications, instream habitat enhancement and tree plantings along the lower portions of the Northeast and Northwest Branches

Approval by Montgomery County Council of both a Special Protection Area designation and additional stream valley park acquisition to protect Upper Paint Branch's naturally reproducing brown trout population

EPA Region III creates an Anacostia community liaison position to work with citizens, community leaders, and restoration groups in the watershed

Upper Paint Branch Workgroup watershed protection and restoration recommendations endorsed and distributed by the AWRC

USACE completes its Anacostia Watershed Feasibility I Study identifying various stormwater, stream restoration and wetland creation/restoration projects

White House panel designates the Anacostia restoration effort as a National Ecosystem Management Model

Adoption of an agreement on Ecosystem Management in the Chesapeake Bay and Anacostia River by Federal Agencies

Thirty-two acre Kenilworth Marsh restoration project completed in the District of Columbia

Completion of Sligo Creek Phase II (Montgomery County) and Greenbelt (Prince George's County) stream restoration projects

Launch of the Prince George's County Bladensburg Marina and Port Towns (Bladensburg, Colmar Manor, Cottage City) environmental restoration and economic revitalization initiatives

Formation of Prince George's County citizen-based Stream Teams

In concert with stormwater retrofit, stream restoration, wetland creation and riparian buffer enhancement projects, restoration and phased reintroduction of both native fish and amphibian species into the Montgomery County portion of Sligo Creek.

Adoption of the 1991 Anacostia Watershed Restoration Agreement, which committed the signatories to accomplishing the goals developed in *A Commitment to Restore Our Home River: A Six-Point Action Plan to Restore the Anacostia River*

Construction of the Wheaton Branch and University Boulevard SWM projects in Montgomery County and Indian Creek projects in Prince George's County

Completion of COG's retrofit inventory for the District of Columbia

Commencement of design and/or construction work on stormwater retrofitting projects to control runoff from 9,000 acres of developed areas in Montgomery and Prince George's Counties and the District of Columbia

Elimination of a major Anacostia anadromous fish barrier through modification of the Northeast Branch grade control weir by the M-NCPPC

Completion of Montgomery and Prince George's County retrofit inventories by COG

Completion of fish and macroinvertebrate surveying by the ICPRB to determine biological health of the tributary system

Construction of the District of Columbia's \$32 million swirl concentrator located near RFK stadium

Adoption of the 1987 Anacostia Watershed Restoration Agreement, which established the Anacostia Watershed Restoration Committee (AWRC) and outlined the six guiding restoration goals

## List of Acronyms

ARBC	Anacostia River Business Coalition
ARPW	Anacostia Restoration Potential Workgroup
AWRC	Anacostia Watershed Restoration Committee
AWCAC	Anacostia Watershed Citizens Advisory Committee
AWS	Anacostia Watershed Society
AWTA	Anacostia Watershed Toxics Alliance
BARC	Beltsville Agricultural Research Center
BOD	Biochemical Oxygen Demand
COG	Metropolitan Washington Council of Governments
CSO	Combined Sewer Overflow
DC-DOH/EHA	District of Columbia Department of Health/Environmental Health Administration
DC-WASA	District of Columbia Water and Sewer Authority
DO	Dissolved Oxygen
ECC	Earth Conservation Corps
EOPB	Eyes of Paint Branch
EPA	United States Environmental Protection Agency
FOSC	Friends of Sligo Creek
ICPRB	Interstate Commission on the Potomac River Basin
LID-R	Low Impact Development-Retrofit
MCDEP	Montgomery County Department of Environmental Protection
MDDNR	Maryland Department of Natural Resources
MDE	Maryland Department of the Environment
M-NCPPC	Maryland-National Capital Park and Planning Commission
NPS	National Park Service
PGDER	Prince George's County Department of Environmental Resources
SAV	Submerged Aquatic Vegetation
SWM	Stormwater Management
SHA	Maryland State Highway Administration
TMDL	Total Maximum Daily Load
UMCP	University of Maryland, College Park
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WSSC	Washington Suburban Sanitary Commission

For additional information visit the Anacostia website at [www.anacostia.net](http://www.anacostia.net) or contact the Metropolitan Washington Council of Governments at 202-962-3200 or 777 North Capitol St., N.E. Suite 300, Washington DC 20002-4239  
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