

Anacostia Watershed Trash Reduction Strategy

Prepared by

Anacostia Watershed Restoration Partnership

Metropolitan Washington Council of Governments



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Photo courtesy of Earth Conservation Corps

Problem Statement

The Anacostia River watershed is a 176 square-mile area draining portions of Maryland's Montgomery and Prince George's Counties, and the District of Columbia. Over the past 300 years, dramatic increases in farming and urbanization have greatly altered the Anacostia River watershed. These land use changes have led to many environmental problems including flooding, erosion, sedimentation, destruction of forest and wetlands, stream and river channelization, combined sewer overflows, toxic pollution and the loss of river-based recreational opportunities. In addition to the loss of both aquatic and terrestrial wildlife habitat, the Anacostia River watershed is also listed as one of three watersheds of concern by the Chesapeake Bay Program for toxics-related contamination problems. Consequently, the Anacostia River is a local, state and federal priority for urban watershed restoration activities.

Over 20,000 tons of trash enters the Anacostia River every year.

Trash in the River

One highly visible problem in the Anacostia River watershed is trash and floatable debris. Recent estimates from the Metropolitan Washington Council of Governments (MWCOCG) indicate that approximately 20,000 tons of trash and debris enter the Anacostia River annually. The main source of this trash problem is people littering and illegally dumping. Considering the nature of the trash problem, reducing trash levels in the Anacostia watershed will require increased cooperation to develop a stronger environmental ethic across the entire watershed.

For the purposes of this document, the term “trash” is defined as follows.

All improperly discarded waste materials, including, but not limited to: 1) food, beverage, and other product packages or containers constructed of steel, aluminum, glass, paper, plastic, and 2) other natural and synthetic materials thrown or deposited on the street, sidewalk, water bodies and in the general environment. Modified from the Los Angeles River trash TMDL, 2001

Past and Current Trash Reduction Efforts

Cleanup and restoration efforts for the Anacostia watershed began nearly two decades ago. Formal cooperation between government agencies came in 1987 with the signing of the landmark Anacostia Watershed Agreement and the formation of the Anacostia Watershed Restoration Committee (AWRC), consisting of representatives from—

- The District of Columbia,
- Montgomery County, Maryland,
- Prince George's County, Maryland, and
- State of Maryland

Through the AWRC, a "Six Point Action Plan" was developed in 1991 to restore the Anacostia and its tributaries. The broad goals contained in the plan continue to be a blueprint for guiding restoration actions by the AWRC members and other stakeholders. A revised Anacostia Watershed Restoration Agreement and six-point plan was signed in May of 1999. The revised agreement included a new priority commitment to **"develop a comprehensive trash and floatables reduction strategy for the river and its tributaries, which includes an actual demonstration of a promising trash reduction system(s) by the year 2000."** This goal was further strengthened and codified in the subsequent 2001 Anacostia Watershed Restoration Agreement.

Following the 1999 Agreement, an Anacostia Trash Strategic Plan Group was initially formed in August 2000 at the invitation of the Maryland Department of the Environment (MDE). A draft Anacostia Watershed Trash Reduction Strategy was later developed but never finalized. In fall 2005, the National Oceanic and Atmospheric Administration's (NOAA) Marine Debris Program awarded MWCOG grant funding to update and finalize the draft document. With this NOAA funding, MWCOG re-convened an expanded Anacostia Trash Reduction Workgroup (ATRW) comprised of the following members:

- District of Columbia Department of Health (DC-DOH)
- District of Columbia Water and Sewer Authority (DC-WASA)
- District of Columbia Office of the Clean City (DC-OCC)
- Montgomery County Department of Environmental Protection (MC-DEP)
- Prince George's County Department of Environmental Resources (PG-DER)
- Maryland-National Capital Park and Planning Commission (M-NCPPC)
- Maryland Department of the Environment (MDE)
- National Park Service (NPS)
- National Oceanic and Atmospheric Administration (NOAA)
- Alice Ferguson Foundation (AFF)
- Anacostia Watershed Society (AWS)
- Earth Conservation Corps (ECC)
- Friends of Sligo Creek (FOSC)

- Anacostia Watershed Citizens Advisory Committee (AWCAC)
- Metropolitan Washington Council of Governments (MWCOG)

The updated and revised strategy presented herein includes the following: 1) a mission statement, 2) a vision statement, 3) a policy statement for consideration by the chief executives of the District of Columbia, state of Maryland, and Montgomery and Prince George's Counties and 4) six high priority trash reduction objectives, goals and strategies. Furthermore, this trash reduction strategy should be viewed as an important and integral part of the larger scale Trash Free Potomac Watershed Initiative and its 2006 Action Plan Agreement.

Mission Statement

To help address the trash problem the AWRC has developed the following unified mission statement:

We are extremely concerned about the continued proliferation of trash in the Anacostia River watershed. Trash affects individual and community self esteem, human, aquatic, and wildlife health, water quality, and overall quality of life in the watershed. We are working together to increase awareness and understanding of the trash problem, obtaining needed resources and leadership, obtaining commitments from interest groups and institutions, and undertaking cleanup, pilot demonstration projects and other efforts for a trash-free Anacostia by 2013. We have developed the Anacostia Trash Reduction Strategy for signature by the Mayor of the District of Columbia, the Executives of Montgomery and Prince George's Counties, and the Governor of Maryland.

This strategy provides a framework to reduce the amount of trash entering the Anacostia River and its tributaries. Staff from MWCOG has already developed the *Sligo Creek Trash Reduction Plan* for a subwatershed of the Anacostia. In addition, for several years the District of Columbia, Montgomery and Prince George's Counties, and the state of Maryland have been implementing various demonstration projects of promising trash reduction systems. A comprehensive trash monitoring survey is also conducted by MWCOG annually to assess the severity of the trash problem throughout the Anacostia watershed, and will allow the watershed partners to determine if the comprehensive trash reduction strategy is working.

By developing and implementing a comprehensive trash reduction strategy, the goal of the ATRW is to identify effective, inclusive, and short-and long-term approaches to significantly reduce the amount of trash and floatable debris entering the Anacostia River watershed, thereby improving aesthetics, habitat, and water quality. The strategy also identifies activities that foster environmental stewardship and a commitment to community, as well as promotes partnerships between citizens, private businesses, and government agencies at the local, state, federal and regional levels.

Vision

The ATRW has remained focused on its goals of increased awareness and understanding, commitments of resources for the prevention and removal of trash, and partnering through the development of the *Anacostia Watershed Trash Reduction Strategy* by maintaining a clear vision:

We have made impressive achievements in restoring the Anacostia River watershed. But trash continues to be a persistent and expensive blight on communities and the environment. Our vision is to have a clean Anacostia River watershed by 2013 that is trash-free.

Policy Statement

We the Signatories will work together to provide the leadership and seek the resources necessary for reducing trash problems across the entire Anacostia watershed, so that we may achieve a clean Anacostia for the enjoyment and benefit of all by 2013.

Trash affects individual and community self esteem, human, aquatic, and wildlife health, water quality, and overall quality of life in the watershed.

Anacostia Watershed Trash Reduction Strategy

The following sections describe six objectives that are subjects of concern for those who are working to significantly reduce trash in both the Anacostia and Potomac River watersheds by 2013. Each objective includes one or more goals to address the challenge, with each goal followed by one or more strategies designed to reach the goal. It is recognized that the successful implementation of this strategy will require additional financial and human resources, and commitments outside of the AWRC, from other governmental agencies and departments in each jurisdiction including but not limited to: Public Works, Transportation, Solid Waste Management and Public Participation/Outreach.

Objective 1: Significantly increase funding for trash reduction programs

GOAL 1A: Include trash in each jurisdiction's Pollution Prevention Program.

Strategy 1A1: The Anacostia Watershed Restoration Signatories will seek congressional funding to implement the *Anacostia Watershed Trash Reduction Strategy*. In addition, the AWRC will seek grant funding from USEPA, NOAA, the Anacostia Waterfront Corporation, the Summit Fund of Washington and other funding organizations and institutions.

GOAL 1B: Include a trash removal component for all urban stormwater management and storm drainage programs funded by each jurisdiction.

Strategy 1B1: Trash and stormwater runoff control best available technologies (BATs) and best management practices (BMPs) should be

utilized throughout the watershed to the maximum extent practicable. Among the many candidate BATs and BMPs are: low impact development (LID), pond and wetland systems, hydraulic disconnection and/or reduction of impervious surfaces, and increased street and parking lot sweeping. In high trash generation areas, other BATs and BMPs to consider include: storm drain inlet grates, netting and trash rack systems, and trash catching booms.

GOAL 1C: Require equitable funding support from all appropriate agencies and departments within each jurisdiction for implementing trash control projects, initiatives and programs.

Strategy 1C1: The AWRC and its partners will develop information materials and conduct briefings for the *Anacostia Trash Reduction Strategy* Signatories, and local and state elected officials.

Strategy 1C2: Encourage both new and redevelopment projects to incorporate trash reduction-related measures into their designs.

GOAL 1D: Engage, by January 2008, all major businesses and grant institutions in the watershed to provide financial and other support for trash reduction-related projects and initiatives.

Strategy 1D1: The AWRC becomes a defacto information clearinghouse for funding opportunities for community and stakeholder-based groups.

Strategy 1D2: Encourage stakeholder groups to pursue trash reduction-related funding opportunities.

Objective 2: Create and enhance regional partnerships and coordination among businesses, environmental groups, individual citizens, and government at all levels and in all jurisdictions

GOAL 2A: All jurisdictions in the watershed will work together to prevent and reduce littering and illegal dumping.

Strategy 2A1: Include the commitment in the policy statement for executive signatures to this strategy, as well as the Potomac River Watershed Trash Treaty.

GOAL 2B: Establish new and enhance existing partnerships among all stakeholders.

Strategy 2B1: Use the AWRC's existing Trash Workgroup, MWCOG, Anacostia Watershed Society (AWS), Anacostia Watershed Citizen Advisory Committee (AWCAC), Earth Conservation Corp (ECC), Alice Ferguson Foundation (AFF), subwatershed groups, private and public landowners, and others to help coordinate efforts across the entire watershed and region.

Strategy 2B2: Each jurisdiction and the AWRC will work with stakeholder groups to prioritize needs and provide technical assistance and training.

Objective 3: Improve people's awareness, knowledge, and behavior relating to littering and illegal dumping

GOAL 3A: Create a common inter-jurisdictional environmental education and social marketing campaign and evaluation system. These efforts should be multilingual, multicultural, and include opportunities for tailoring the marketing efforts to specific local needs.

Strategy 3A1: Enhance and expand environmental education programs in both schools and parks, with an emphasis on youth-derived trash education modules.

Strategy 3A2: Increase public awareness (i.e., regional public service announcement campaigns) and publicize good behavior at both a watershed and regional level.

Strategy 3A3: Create incentives to change littering and illegal dumping behaviors (e.g., recognition and cash awards, gift certificates, community service hour credits, etc.).

Objective 4: Promote the greater introduction and use of effective trash reduction technologies and approaches

GOAL 4A: Investigate different Best Available Technologies (BATs) such as street sweeping, inlet grates, end-of-pipe devices (e.g., trash traps/booms), and skimmer boat as well as innovative outreach and incentive programs. Share and disseminate information about their costs and effectiveness.

Strategy 4A1: Coordinate the evaluation of technologies and trash reduction approaches and the dissemination of information through the AWRC, AFF and others.

Strategy 4A2: Publicize, via agencies and organizations' web sites, information about evaluations, pilot projects, and proven technologies that are currently in use.

GOAL 4B: Promote intra-jurisdictional and public/private contracting for equipment purchases and maintenance cost-sharing for expensive equipment such as street sweepers.

Strategy 4B1: Coordinate through the AWRC, local jurisdictions and municipalities to facilitate share programs similar to the "Four Cities Coalition" (i.e., Greenbelt, College Park, Berwyn Heights and New Carrollton, Maryland), which share the purchase and operating cost of a large, efficient street sweeper.

GOAL 4C: Expand, update, and use Geographic Information System (GIS) information about trash hot spots, via the Internet.

Strategy 4C1: Promote the dissemination and use of trash-related GIS information (such as MWCOG's annual trash survey and AWS and various subwatershed group cleanup efforts).

Objective 5: Improve enactment and enforcement of laws to reduce trash

GOAL 5A: Investigate the experiences of other states that provide payments for the return of glass bottles and plastic containers.

Strategy 5A1: Fund the AWRC to contract with a leading independent research organization to conduct research to determine implementation feasibility in both the watershed and neighboring jurisdictions.

Strategy 5A2: Consider implementation across the Anacostia watershed and beyond.

GOAL 5B: Investigate financial and other incentives for expanding current business improvement districts (BIDs) and central business districts (CBDs) litter reduction efforts and programs into other non-BID/CBD commercial and business areas within the Anacostia watershed.

Strategy 5B1: The Montgomery County, Prince George's County and the District of Columbia Governments should investigate the costs and benefits of such programs and distribute their findings through the AWRC.

GOAL 5C: Enhance anti-littering/dumping codes and enforcement across jurisdictions.

Strategy 5C1: The AWRC will investigate the feasibility of creating more common anti-litter/dumping codes and penalties. If warranted, the AWRC in partnership with MWCOG will take the lead in convening a meeting of local, state, federal and regional law enforcement agency representatives (e.g., environmental crime units) to consider this goal.

Strategy 5C2: Provide better surveillance of known dumping hot spots through the installation of real-time video cameras, which can be monitored by environmental crime unit officials.

GOAL 5D: Expand the number of "Friends of..." groups in the watershed to take ownership of their areas, thereby increasing vigilance and reporting illegal dumping.

Strategy 5D1: Form at least seven additional "Friends of" groups to complement the seven existing citizen subwatershed groups.

Strategy 5D2: The Anacostia Watershed Citizen Advisory Committee (AWCAC) will take the lead in helping establish subwatershed group expansion initiatives. The AWCAC will work with both existing and future citizen subwatershed groups to increase watershed networking, membership, stewardship, advocacy, and effectiveness.

GOAL 5E: Urge the adoption of trash-related community service as an alternative to the imposition of environmental crime-related fines.

Strategy 5E1: Place this goal in each jurisdiction's Executive Policy Statement.

Objective 6: Increase trash monitoring-related data collection, generation, and dissemination efforts

GOAL 6A: Increase the types and intensity of evaluative measurements.

Strategy 6A1: Provide adequate funding for conducting long-term stream (such as MWCOG'S) and land-based trash surveys throughout the watershed.

Strategy 6A2: Monitor trash catching devices to measure their effectiveness.

Strategy 6A3: Record and document tonnage numbers from programs, projects and initiatives designed to capture, collect and remove trash, such as skimmer boats, street sweeping, and roadside litter collection and stream cleanup efforts.

Strategy 6A4: Develop and evaluate companion baseline ecological and sociological data to better quantify the impacts and consequences of littering and illegal dumping on human and environmental health.

Strategy 6A5: Develop cost-effective, web-based approaches for the dissemination of trash monitoring-related data and findings.



Appendix



Photo courtesy of Anacostia Watershed Society

Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Table 1. Anacostia Watershed Trash Reduction Strategy Objectives (June, 2006)

1:	Significantly increase funding for trash reduction programs
2:	Create and enhance regional partnerships and coordination for trash reduction efforts among businesses, environmental groups, individual citizens, and governments at all levels and in all jurisdictions
3:	Improve people's awareness, knowledge, and behavior relating to littering and illegal dumping
4:	Promote the greater introduction and use of effective trash reduction technologies and approaches
5:	Improve the enactment and enforcement of laws to reduce trash
6:	Increase trash monitoring-related data collection, generation and dissemination efforts

Montgomery County

The following information provides a brief overview of Montgomery County's trash reduction-related activities.

The Department of Public Works and Transportation (DPWT) is the lead agency for most of these objectives. The Adopt-A-Road program shown in Figure 1 is one example of programs that focus on increasing public awareness and involvement in trash and litter management to meet Objectives 2 and 3.

Figure 1 is a partial display of the Adopted Road Segments (in bright blue and gold) Cleaned by Volunteers in Montgomery County. This map shows the eastern part of the County including most of the drainage to the Anacostia. The Adopt A Road Program is one sponsored through the Keep Montgomery County Beautiful Task Force. Members of the Task Force include citizens; local business people; garden club representatives; the Montgomery County Conservation Corps members; area bottling companies and recycling representatives; civic association officers; and County staff. The Task Force functions to educate and change citizen attitudes about littering; support cleanup and beautification projects; encourage citizens and businesses to extensively recycle; and improve awareness about graffiti in the community. Currently, there are approximately 205 participants in the program who have agreed to keep the segment of road of their choice as clean as possible, with at least six major road clean-ups per year

The Maryland-National Capital Park and Planning Commission (MNCPPC) also provide anti-litter and anti-dumping enforcement and support to volunteer clean ups on County parkland. During 2005, there were cleanups at 71 sites representing about 5,700 volunteer hours. The Department of Parks also sponsors a variety of outreach programs that include an anti-litter and anti-dumping component. These include an Earth Day workshop (about 40 participants per year) and the EcoExplorer Boy Scouts program (about 120 participants per year).

The DPWT, the DEP, and the MNCPPC are all three represented on the interjurisdictional Anacostia Trash Reduction Workgroup. Through the mix of programs shown in Tables 2-5, Montgomery County maintains a significant effort for objectives 2,3, and 5 in the Strategy.

The Department of Environmental Protection (DEP) provides support for the illegal dumping enforcement program, for outreach, and for research and monitoring for enhanced or innovative trash management techniques. During 2005, the EPA awarded \$1 million to Prince George's County with a focus on trash management and low impact design implementation in the Anacostia watershed.

The DEP will receive \$500,000 of that award, about half of which will support a pilot study on the implementation and monitoring of structural and operational best management practices to control trash in one small subwatershed, the White Oak subwatershed in Lower Paint Branch. The trash management component includes both water chemistry and solids (trash) characterization pre- and post-implementation. This will provide data to help achieve Objectives 4 and 6 of the Anacostia Trash Reduction Strategy.

Additional Montgomery County trash reduction-related information is summarized in Tables 2-5.



Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Figure 1. Montgomery County Adopt-A-Road Segments

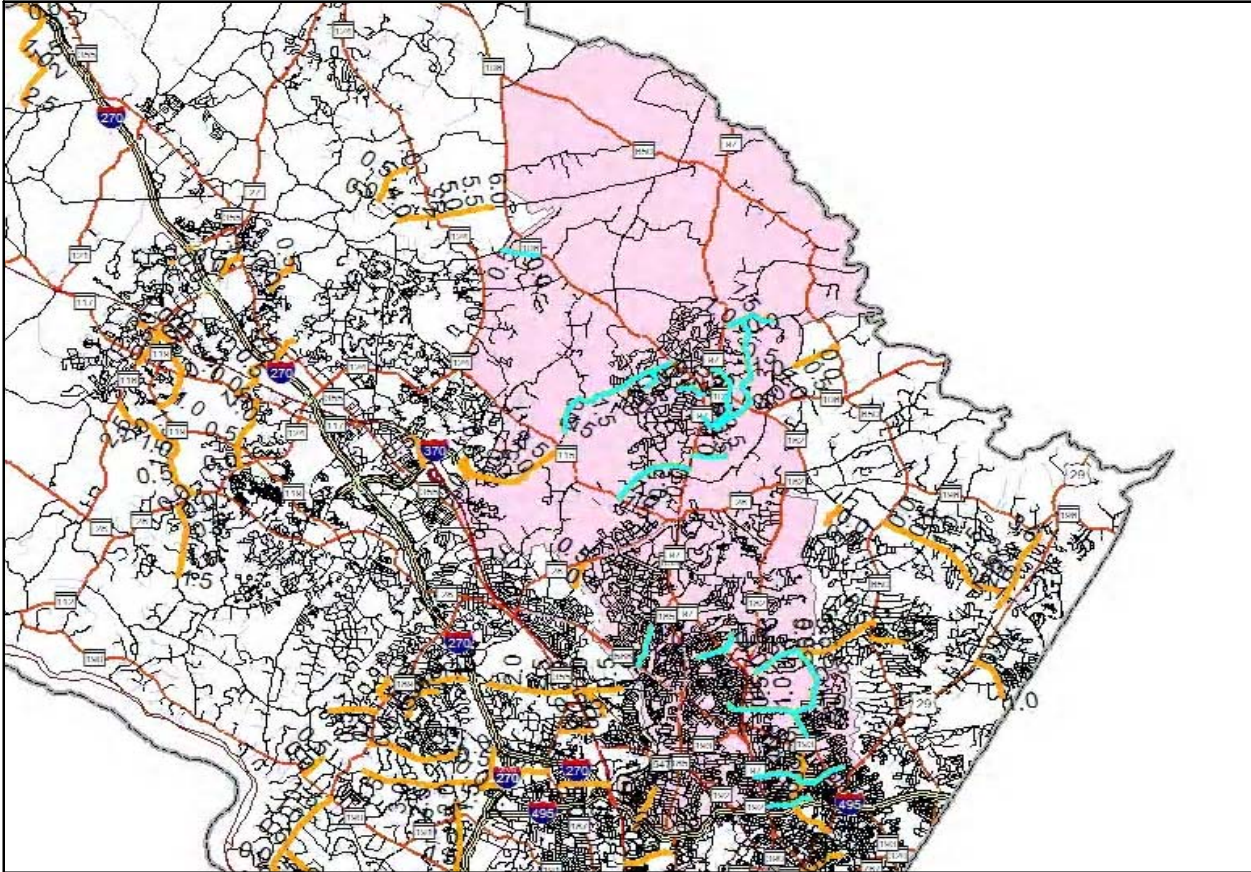


Table 2. Montgomery County Solid Waste Program

Responsible Agency	Facility Name	Approximate Annual Budget (\$K)	Age (years)	Type	Tonnage Handled
DPWT	Transfer Station	2,200	24	Transfer/Processing	700,000
DPWT	Resource Recovery Facility	43,872	10	Disposal	620,000
DPWT	Compost Facility	2,777	14	Recycling	77,600
DPWT	Recycling Center	2,911	15	Recycling	96,534



Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Table 3. Montgomery County Recycling

Responsible Agency	Activity	Approximate Annual Budget FY05	Recycling % Goal By 2010	Recycled % Actual FY05	Tons Recycled FY05
DPWT	Recycling	\$1,770,300 (excludes collection)	50% overall	41% (all sectors combined)	517,400 (all sectors combined)
	Single-family Residential Recycling	\$420,700 (excludes collection, and included in total above)	included above	55%	294,400
	Multi-family Residential Recycling	\$382,500 included in total above)	included above	12%	12,400
	Non-Residential Recycling*	\$967,100 (included in total above)	included above	34%	210,600
	*includes all businesses (non-profit or for-profit), organizations, and local, state, and federal government facilities				



Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Table 4. Montgomery County Enforcement

Responsible Agency	Activity	Approx. Annual Budget (\$K) FY05	Frequency	Coverage	Message	Method
DEP, DPWT	Streetsweeping	300	once per year	about 2,200 curb miles		
Urban Business Partnership	Streetsweeping	130	three times per week	about 55 curb miles		
DPWT	Adopt-A-Road	3	at least once per quarter	about 225 road miles	Clean up Roadsides	Print; website
MNCPPC-D-epartment of Parks	Volunteer Clean-ups		varies	71 sites, about 5,700 volunteer hours	Clean-up County Parkland	
DPWT/DEP	Storm Drain Marking	3		countywide	Don't dump into storm drains	Decals; print; website
DPWT	Recycling and Waste Reduction	1,414		countywide	Reduce waste stream	print and video

Table 5. Montgomery County Litter And Waste Reduction

Responsible Agency	Activity	Number of Staff	Number of Enforcement Actions per Year	Revenues from Enforcement
DPWT	Recycling Enforcement	3	400	\$1,100
PARK POLICE	Illegal Dumping	59	11	\$550
DEP	Illegal Dumping	2	300-400	\$1,000



Prince George's County

The following information provides a brief overview of Prince George's County's trash reduction-related activities.

Livable Communities Initiative Blight Control Program

Under the County's LCI umbrella, the Blight Control Program was initiated to assist communities identified in crisis, areas with conditions so adverse that there is little hope of progress or prosperity, with County services to assist with the removal of the litter and debris located in illegal dumping areas. This program is a wonderful example of litter control that results in pollution reduction to our waterways. Once these areas are restored to a clean state, the community is encouraged to proliferate.

Twice a year, a task force is set up to look for areas of the County in crisis. Once these areas are selected, a team composed of local and State government agencies, as well as community civic and homeowner's associations, municipalities, businesses and churches, move in and begin to clean up (Table 1).

Table 1. Prince George's County Livable Communities Initiative Spring and Fall Cleanups

	Spring (April 16, 2005)		Fall (September 24, 2005)	
Number of volunteers	730		764	
Number of sites	35		33	
Tons of trash collected	9.93		7.11	
County maintenance staff	41		30	
Number of trucks provided by the County	22		15	
	Spring (April 16, 2005)		Fall (September 24, 2005)	
	Sponsoring Groups	Number of Volunteers	Sponsoring Groups	Number of Volunteers
Homeowner associations	1	6	3	66
Civic organizations	21	427	18	400
Service groups	4	155	7	226
Religious organizations	4	63	2	27
Corporate	3	38	1	10
Family groups	1	10	1	10
Municipalities	1	31	1	25



Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Anacostia River Watershed Cleanup

Prince George's County joined with the AWS and partners to clean up the Anacostia River and surrounding areas on April 16, 2005. This joint effort took place on Earth Day at eight sites along the Anacostia River mainstem and tributaries, providing the community, business and government organizations with a great "hands-on" opportunity to participate in proactive environmental stewardship in the surrounding Prince George's and Montgomery Counties, as well as District of Columbia communities. The accomplishments for this one-day event accounted for 80% of the total number of volunteers, 88% of the tonnage of trash collected, and 99% of the number of tires collected in the Anacostia River watershed in 2005. See Table 2 for a statistical summary of all cleanup projects within the Prince George's County portion of the Anacostia River Watershed. Table 3 shows cleanup projects outside of the County.

Table 2. Prince George's County Anacostia River Cleanups

Project Date	Number of Volunteers	Pounds of Trash Collected	Number of Tires Collected
10/15/2004	15	800	3
03/29/2005	100	525	0
04/02/2005	30	1,500	2
04/16/2005 (Earth Day)	1,070	52,900	268
04/20/2005	31	475	0
06/18/2005	19	750	4
10/15/2005	73	2,600	0
Total	1,338	59,550	277

Table 3. Prince George's County Anacostia River Cleanups Outside Of Prince George's County

Project Date	Number of Volunteers	Pounds of Trash Collected
03/19/2005	200	8000
07/15/2005	36	150
07/27/2005	20	1000
Total	256	9,150



Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Department of Environmental Resources Cleanup Programs

The Department sponsors may volunteer events that enable DER to partner with community civic and homeowner's associations, local businesses and non-profit organizations to remove and control litter—beautifying their neighborhoods. The accomplishments for the *Keep America Beautiful* campaign and the Neighborhood Cleanup Program are summarized below in Table 4.

Table 4. Prince George's County DER Cleanup Programs

Sponsoring Agency	Number of Cleanups	Number of Volunteers	Volunteer Hours	Pounds of Trash
Citizens Concerned for a Cleaner County, KAB	8	65	150	15,000
Neighborhood Cleanup Program, ESD	6	36	108	8,300
Totals	14	101	258	22,300

Comprehensive Community Cleanup

This Program is designed to revitalize, enhance and help maintain unincorporated areas of the County. DER works with community civic and homeowner's associations to provide a wide range of County clean up and maintenance services to a community over a two-week to one-month period during the spring and fall. Services provided by this program include bulky trash collection; the tagging and removal of abandoned vehicles; roadside litter pick-up; tree trimming; stormdrain maintenance, to include outfall screening and sampling; and Housing Code violation surveys. Although the focus of the program is aesthetic improvement of the communities, non-point pollution sources are targeted in the program including eliminating trash and debris on private property, the removal of heavy metal sources by towing abandoned vehicles, and street sweeping and inlet cleaning that remove hydrocarbons and heavy metals.

Household Hazardous Waste, Recycling, Waste Reduction and Composting

The County's Recycling Section (RS), located within the WMD of DER, manages the County's household hazardous waste, recycling, waste reduction and composting programs for the County. Staff from the RS regularly and continually distributes outreach materials, and offers giveaways at County sponsored events to reinforce their recycling message. Accomplishments for this reporting year include the following programs or services:

ReMix

By far the biggest recycling accomplishment in 2005 was the County's participation in the pilot program "ReMix" (Recycling Magazines is Excellent!), a unique campaign with business and non-profit partners to increase recycling of magazines and catalogs in the County. National partners created this pilot program and include the National Recycling Coalition, Time, Inc., International Paper, recyclers FCR, Inc., a wholly-owned subsidiary of Casella Waste Systems, Inc. and Recycle America Alliance.

Building on our area's strong record of recycling and high magazine readership, the ReMix campaign is designed to inform citizens and residents that they can easily include magazines and catalogs with their other paper recycling. By doing this, they can divert magazines and catalogs from landfills and provide meaningful economic benefits to the local community. Jack B. Johnson, Prince George's County Executive, agrees. "The ReMix campaign reflects the goals of my Livable Communities Initiative—citizens and residents taking a vested interest in improving the environmental and economic health of the County by recycling."



Appendix 1 - Provisional Trash Reduction Program Description and Summary Information

Public Service Announcements (PSAs) were designed to encourage curbside recycling of magazines and catalogs. Print ads were also placed in various magazines including *TIME*, *Sports Illustrated*, *Newsweek*, *GQ*, *InStyle* and *House Beautiful*, and specifically targeted residents both in Prince George's County and the Washington DC Metropolitan area.

eCycling

A robust postcard mailing to community civic and homeowner's associations this year addressed the subject of eCycling (a consumer electronics outreach campaign working to increase the number of electronic devices collected and safely recycled) and hazardous waste recycling. The message urged citizens and residents to bring their unwanted items to the Brown Station Road Sanitary Landfill to be disposed of in an environmentally safe manner by trained professionals.

Source Reduction

A "Source Reduction" pamphlet and table top/wall mountable display was designed and produced. The pamphlet and display demonstrate tips for reducing waste at home, in the yard and in the office. This display is housed at the Materials Recycling Facility (MRF) and travels to various special events throughout the year.

Materials Recycling Facility

The County distributed postcards to all Prince George's County Public Schools advertising County outreach and education programs to schoolchildren. Literature encouraged teachers to schedule tours of the MRF, as well as three other facilities, and offered classroom recycling presentations to the students. This year 1,850 individuals, some of which were students, took a tour of the MRF to learn more about reducing, reusing, and recycling waste.

Go Recycle

The "Go Recycle" regional radio campaign, sponsored in conjunction with the Metropolitan Washington Council of Governments (COG), featured four 30-second radio clips designed to educate the general public about recycling. This two-week campaign aired on popular local radio stations such as WTOP, WBIG, WMMJ, WJZW and WRQZ, and was broadcast on the days leading up to America Recycles Day on November 15.

Recycle Right Contest

The contest, also hosted in partnership with COG in celebration of America Recycles Day, was designed to encourage responsible recycling and provided recyclers with public recognition of their efforts. Nine winners, one representing each council election district, were chosen to receive a "Certification of Appreciation" along with other tokens of appreciation provided by COG and DER. The contest was advertised on the community calendar managed by our local County cable station, global email to County employees, press releases and PSAs.

Thingamajig Invention Convention

In partnership with the YMCA of Metropolitan Washington, the County annually promotes this program that encourages our youth to use their imagination and skills to create products using recycled materials.

Recycle-Rama at Kinderfest

This program, sponsored by the Maryland-National Capital Park and Planning Commission (M-



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NCPPC), also uses fun and creative methods to introduce and reinforce the importance of recycling in our everyday lives.

Kaleidoscope Kids

This traveling performing arts troop was hired to provide County school children with exciting and talented performances of “The Earth Protectors”. This creative performance emphasizes the importance of protecting the environment by practicing reducing, reusing and recycling everyday at home.

Yard Waste Composting

The Western Branch Composting Facility maintains a Visitor Center, which houses a display on composting as well as literature on backyard composting and source reduction. For examples of these outreach materials, as well as other outreach materials produced on household hazardous waste, recycling, waste reduction, or composting.

Stormdrain Stenciling

The link between our streets and local waterways is promoted through the volunteer Stormdrain Stenciling Program. While the County’s stormwater management program requires stenciling on all new developments, this program focuses on retrofitting older communities built prior to stormwater regulations with the “Don’t Dump – Chesapeake Bay Drainage” message. The County utilizes Chesapeake Bay Trust funding to purchase the paint, tools and stencils used by the volunteers (Table 6).

Table 6. Prince George’s County Stormdrain Stenciling

Project Date	Volunteer Group	Number of Volunteers	Number of Inlets Stenciled
01/12/2005	Larry School of Virginia	15	4
05/01/2005	Presley Road	12	22
05/06/2005	Riverbend Civic Association	10	50
Total		37	76

Citizens Concerned for a Cleaner County

Every spring, during KAB’s Great American Cleanup™, volunteers nationwide get together to clean-up, green-up, and fix-up their communities, the nation’s largest annual community improvement program. The CCCC focuses on cleaning up, greening up and fixing up blight ridden, environmentally deteriorated areas of the County under the LCI umbrella. Volunteers from the CCCC regularly visit County school students helping them to understand the importance of litter control and the proper way to dispose of their trash. They look for opportunities for students to get involved in litter reduction, recycling and beautification projects.

This year, the CCCC announced a new environmental initiative for the 2005-2006 school year. The “Litter Free School” initiative supports the PGCPs Quality Schools Program Strategic Plan, Goal 4, to provide a safe and orderly school environment that is supportive of teaching and learning, and is endorsed by the Interim Chief Executive Officer, PGCPs. Once the initiative is approved and put in place by the PGCPs system, students and families of elementary level students as well as school system staff and employees, will learn more about the benefits of litter control and recycling.

Additionally, the CCCC participates in monthly Community Services Division (CSD) community planning meetings where citizens and residents of the County receive training on the many services avail-



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able within DER. This program focuses on explaining how the County receives and responds to complaints about tall grass and weeds, trash and debris, removal of abandoned vehicles, property maintenance of improved and unimproved commercial and industrial properties, and single family and multi family Housing Code violations, as part of an overall DER “cleanup” strategy.

Household Hazardous Waste

The County maintains a permanent Household Hazardous Waste Acceptance Site, open and free of charge to County citizens and residents to dispose of household hazardous waste, at the Brown Station Road Sanitary Landfill. The County contracts with Care Environmental Corporation, a licensed hazardous waste disposal company, to ensure the proper handling and disposal of all hazardous materials collected at the site. The professional team from Care Environmental Corporation oversees both the collection of items and materials at the drop-off facility, as well as materials collected during Household Hazardous Waste community collection events. Accomplishments for 2005 include:

- 3,975 vehicles dropped off waste;
- 175 tons of electronics;
- 57,549 gallons of household hazardous waste liquids; and
- 23 tons of household hazardous waste solids.

Other Watershed Cleanups:

Patuxent River Watershed Cleanup

The Patuxent Riverkeeper coordinates the Patuxent River cleanup with a core group of volunteers from local citizen groups in each of the seven counties that share the Patuxent River. The cleanup is funded by grants and in-kind support from a variety of groups including the bi-county agency, M-NCPPC, that serves both Prince George’s and Montgomery Counties, WSSC, MDNR, the Patuxent River Commission (PRC) and many others.

Annual planning efforts include preparing bi-lingual promotional materials, mobilizing new cleanup locations, recruiting and training site leaders, arranging for supplies and dumpsters, and other such tasks that are needed at the many cleanup sites. It is worth noting that the Patuxent Riverkeeper is working in conjunction with the Prince George’s Community College to win greater involvement in the cleanup efforts from the Latino community. The watershed cleanup sites act as teaching laboratories for English as a second language. The event engages students in outreach activities to help raise their level of interest in hands-on stewardship for the County’s river resources.

This year, citizens and residents hauled several tons of trash and manmade debris from the Patuxent River. Volunteers pulled over 600 bags of trash, plus 2 dumpster loads and 12 pick-up trucks of bottles, cans, household and bulk litter from the River. As in past years, the leading bulk items were auto tires, grocery carts and household appliances, including items such as propane tanks, space heaters, carpeting, foam insulation and auto parts of nearly every kind. The cleanup has undergone an estimated 30 % growth each year since inception in terms of the tonnage and volume of trash removed with many of the regular volunteers who work at the same sites each year reporting their perennial disappointment that their locations remain as trashy each New Year.

Potomac River Watershed Cleanup

The County continues to be one of many sponsors of the annual Potomac River Watershed Cleanup organized by the Alice Ferguson Foundation. The Foundation’s educational programs, along with the annual cleanup, unite students, educators, park rangers, communities, regional organizations and government agencies throughout the Washington DC Metropolitan Area to promote the environmental



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sustainability of the Potomac River Watershed.

A total of 296 sites in Maryland, Virginia, Pennsylvania, West Virginia and Washington, DC were targeted for cleanup with 5,450 volunteers participating. Thirty-two of these cleanup locations were located in Prince George's County with the CCCC providing County level coordination that included meetings with site leaders, serving as a liaison between these leaders and the Alice Ferguson Foundation, the distribution of supplies, and the reporting of cleanup results. The County also provided roll-off containers at various cleanup sites and the landfill waived all tipping fees for this event.

Over 412,000 pounds of trash were removed from sites up and down the Potomac River with each volunteer collecting an average of 75 pounds of trash. There were over 65,925 bottles, cans and containers collected that could have been recycled, as well as over 800 tires. Partners and volunteers worked hard to clean up trash that would otherwise end up in the River, impacting water quality. Their efforts make a positive contribution to the community and the River, helping fulfill the mission set forth by the Alice Ferguson Foundation.

Additional Prince George's County trash reduction-related information is summarized in Tables 7-9.

Table 7. Prince George's County Solid Waste Program

Responsible Agency	Facility Name	Approximate Annual Budget (\$K)	Age (years)	Type	Tonnage Handled
PGDER	Brown Station Road Sanitary Landfill	Data Currently Not Available	Data Currently Not Available	Landfill	Data Currently Not Available
Private	Ritchie Land Reclamation	Data Currently Not Available	Data Currently Not Available	Rubble (Construction and Demolition) Landfill	Data Currently Not Available
Private	Sheriff Road	Data Currently Not Available	Data Currently Not Available	Transfer Station	Data Currently Not Available



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Table 8. Prince George's County Recycling

Responsible Agency	Activity	Approximate Annual Budget FY05	Recycling % Goal By 2010	Recycled % Actual FY05	Tons Recycled FY05
DER	Recycling	Data Currently Not Available	50% overall	Data Currently Not Available	Data Currently Not Available
	Single-family Residential Recycling	Data Currently Not Available	included above	Data Currently Not Available	Data Currently Not Available
	Multi-family Residential Recycling	Data Currently Not Available	included above	Data Currently Not Available	Data Currently Not Available
	Non-Residential Recycling*	Data Currently Not Available	included above	Data Currently Not Available	Data Currently Not Available
	*includes all businesses (non-profit or for-profit), organizations, and local, state, and federal government facilities				

Table 9. Prince George's County Litter And Waste Reduction

Responsible Agency	Activity	Number of Staff	Number of Enforcement Actions per Year	Revenues from Enforcement
M-NCPPC PARK POLICE	Illegal Dumping	Data Currently Not Available		
US PARK POLICE	Illegal Dumping			



District of Columbia

The following information provides a brief overview of District of Columbia trash reduction-related activities.

Watershed Protection Division's trash initiatives

RFP for development of Anacostia watershed trash reduction plan

The WPD is providing funds for surveying trash hotspots and issues, assessing all existing studies and reports, outreach to the community in regards to the plan, identification of trash reduction schemes, development of a 5 year implementation plan for reduction of trash, development of a monitoring and evaluation process to assess the implementation, evaluation and integration of other trash reduction initiatives (MS4, ATRW).

Anacostia Environmental Fair

The WPD has organized the Anacostia Environmental Fair for 10 years. One component of the fair is an activity that teaches youth about the sources of trash in the watershed as well as the longevity of trash that is improperly disposed. The "Urban Leave No Trace" program has been a component of the Environmental Fair for its entirety and reaches approximately 300 District schoolchildren each year.

Anacostia River Business Coalition (ARBC)

The ARBC was organized by WPD and has taken up some initiatives related to trash. On June 21st, 2006, the ARBC picked up two truckload of tires and three truckloads of trash from the Buzzard's Point neighborhood. The ARBC is also alerting other business owners about persistent illegal dumping and how to document and hopefully identify the violators.

Trash fences at River Fringe wetlands

As part of the River Fringe wetland project, the WPD installed two fences at the outfalls of large storm sewer outfalls. WPD has been monitoring these fences for the accumulation of trash. Most trash in the wetland has floated in from the river rather than from these two outfalls.

Stream cleanups

As part of its outreach to local community groups, the WPD has encouraged and facilitated stream cleanups in two tributaries to the Anacostia River, Watts Branch and Pope Branch. Community members and local non-profits have provided the muscle for these clean up events, while DPW has removed the accumulated trash.

WPD supports the annual trash clean ups of both the Anacostia Watershed Society and the Alice Ferguson Foundation. It has provided funding, planning expertise, and people to assist with the efforts.



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Office of the Clean City Coordinator

The Office of the Clean City Coordinator serves as a coordination and outreach element within the Office of the City Administrator. The Office was initially established by the Mayor to coordinate and accelerate efforts to improve the cleanliness of the District. The Clean City Office has undertaken these initiatives:

Clean City Ratings

Quarterly, the Clean City office conducts cleanliness ratings of streets and alleys within the District, as well as evaluations of the 16 major corridors. Using a sample of streets and alleys in each Ward, volunteer raters conduct a visual inspection of the city, rating streets and alleys for four items: trash and litter, posters and graffiti, overgrowth, and litter cans. The results are placed on maps, provided to DPW, and made available on the Clean City web site. The results are used by DPW to target areas for cleaning, and by Clean City to focus Adopt a Block and outreach efforts.

“clean&green DC” Program

“clean&greenDC” is Clean City’s educational and outreach program geared towards improving and maintaining cleanliness in the District. One of the goals is to get residents involved in making positive changes throughout the city. These are part of the clean&green DC initiatives:

- Adopt-A-Block Program
- Get the Facts! (Series of facts sheets)
- “Trash Talk” newsletter for ages 5 to 11
- “One Person’s Trash” bi-lingual newsletter for ages 11 to adult
- clean&Green DC Day, part of DC Green Week
- clean&GreenDC Workshops

Collectively, these present a comprehensive program for keeping communities clean and include an emphasis on environmental awareness and protection, recycling, tree planting, and enhanced service delivery.

Adopt a Block Program

Groups wishing to adopt blocks in their community are able to participate in the Adopt a Block program, which requires quarterly clean ups and weekly litter pick up. The Clean City Office provides signs for groups wishing to Adopt a Block, as well as outreach materials. This expanding program is intended to foster community involvement and awareness, as well as support, in keeping streets and alleys clean and litter free.

Get the Facts!

The clean&greenDC fact sheet series serves as a guide to create an environmentally clean and safe community while changing attitudes towards maintaining a clean community. We encourage everyone to read the tip sheets and do what they can to help keep their community clean and green. The information sheets are published in English and Spanish and we distribute them in paper and electronic format. Topics include:

- Clean Neighborhoods
- Clean Businesses
- Prevent Graffiti
- Signs and Posters
- Wind Blown Litter



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These have been widely distributed to residential properties and businesses as well as during many events and formal outreach activities. The information sheets present a comprehensive program for keeping communities clean and well maintained.

Wind Blown Litter Initiative: Trash, litter and debris blown from trucks and other vehicles is a large component of the trash and litter along our roadways. Clean City has undertaken an ambitious public education effort, focused on the transportation industry, in an effort to encourage vehicle operators to securely cover their loads. To date, we have mailed the Wind Blown Litter Tip Sheet to over 165 regional transportation companies. The Metropolitan Police Department's Motor Carrier Unit is a partner in this initiative, and is taking action to enforce both Federal and District of Columbia regulations on load securement. As well, MPD reproduces and distributes the Wind Blown Litter Tip Sheet, and has produced a training video for educating the entire force on this subject.

Agency Support and Program Integration: The Office of the Clean City, since its inception, has worked very closely with other District of Columbia agencies to sponsor and support resident councils in DC Housing Authority public housing areas, with the Department of Human Services in ongoing community development events, with the Department of Public Works in community clean-ups, with the Fire Department in nuisance abatement and code compliance, and has participated in information fairs, service fairs, feeding programs and neighborhood celebrations in neighborhoods throughout the city. We provide our Clean&Green DC Tip Sheets, support the residents with Agency assets, and follow up to make sure resident requests are met. We work very closely with the National Park Service at many locations.

Technology Transfer: Clean City looks for and forwards information on new and emerging technologies to the appropriate Agencies and organizations. Clean City identified and evaluated a nonstick, poster resistant coating for metal street light bases that was adopted by the DPW, has obtained and distributed information on advanced storm water catch basin design that will trap the trash inside, and is evaluating advanced litter cans that incorporate a solar powered trash compactor. Clean City also procured and fielded litter pick up tools which have proven to be very effective.

Additional District of Columbia trash reduction-related information is summarized in Tables 1-4.

Table 1. District of Columbia Solid Waste Program

Responsible Agency	Facility Name	Approximate Annual Budget (\$K)	Age (years)	Type	Tonnage Handled
DCDPW	Benning Road	12,300	34	Transfer Station	475,000

Table 2. District of Columbia Recycling

Responsible Agency	Activity	Approximate Annual Budget FY05	Recycling % Goal By 2010	Recycled % Actual FY05	Tons Recycled FY05
DPW	Residential	\$520,000	22	17	28,810
	Business	\$200,000	20	19.6	79,588
	Government	\$30,000	45	21.0	3,065



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Table 3. District of Columbia Enforcement

Responsible Agency	Activity	Approx. Annual Budget (\$K) FY05	Frequency	Coverage	Message	Method
DPW	Streetsweeping	\$22.2	Varies	4,000 lane miles		
	Recycle Here	\$100.0	N/A	N/A	Recycling	Print
DOE	SWEEP	\$3.0	At least once per quarter	about 225 road miles	Proper Sanitation	Print
DC Soil and Water Conservation District	Storm Drain Marking	\$2.5	Varies	Citywide	No Dumping: Drains to the Anacostia and Potomac Rivers	Decals; print; website
Clean City Coordinator	DC Public School Outreach	\$8.0	Varies	Citywide	Anti-littering and environmental awareness	Print
	"Tip-Sheets"/Packets	\$4.0	Varies	Citywide	Anti-littering, environmental protection, city services, recycling	Print and Electronic
	Community Outreach	Data Currently not Available	Varies	Citywide	General awareness and education about anti-littering and environmental protection	Community Meetings
Business Improvement Districts	Streetsweeping	Data Currently not Available	Varies	Varies		

Table 4. District of Columbia Litter And Waste Reduction

Responsible Agency	Activity	Number of Staff	Number of Enforcement Actions per Year	Revenues from Enforcement
DOE	SWEEP	36	8300	\$850,000
US PARK POLICE	Illegal Dumping	Data Currently Not Available	Data Currently Not Available	Data Currently Not Available

