

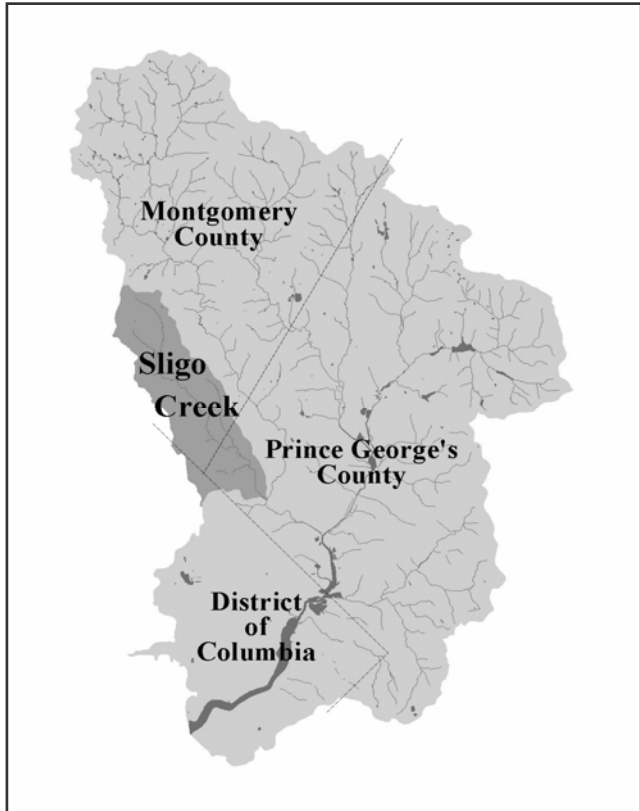


# Sligo Creek Trash Reduction Initiative

## A Pilot Project to Reduce Trash in the Anacostia River Watershed

### Anacostia Watershed Restoration Effort

The Anacostia River watershed is a 176-square mile area draining portions of Montgomery and Prince George's counties, Maryland and the District of Columbia. Over the last 300 years, farming, urbanization, loss of wetland and forest habitat, erosion, sedimentation, and toxic pollution have taken a tremendous toll on this watershed. In 1987, after centuries of neglect, a concerted and focused effort to restore and protect the Anacostia watershed began with the signing of the Anacostia Watershed Restoration Agreement and the establishment of the Anacostia Watershed Restoration Committee



Anacostia River storm drain outfall.

#### Anacostia River and Sligo Creek watersheds.

(AWRC). Since 1987, much has been accomplished through the restoration effort, including the reduction of storm flows and associated pollutants from nearly 10 square miles of developed areas, restoration of degraded habitat in over eight miles of streams, restoration of 32 acres of tidal wetlands, creation of approximately 100 acres of non-tidal wetlands, acquisition of over 300 acres of stream valley parkland, and riparian buffer reforestation of nearly 10 linear stream miles.

While great strides have been made in the restoration effort, much more remains to be accomplished. One highly visible problem is trash in the Anacostia River and its tributaries. It has been estimated that the Anacostia River=s many tributaries deliver 20,000 tons or more of trash to the Anacostia each year. Trash discarded by individuals along roadways and in parks throughout the watershed is flushed into storm drains and streams during rainstorms and ultimately drains into the Anacostia River. In response, the AWRC made a recent commitment to reduce trash levels throughout the Anacostia watershed. However, unlike many of the restoration accomplishments to date, the trash problem cannot be cured with construction crews and equipment. It requires a commitment from all watershed residents and visitors to not litter and to reduce trash levels through recycling and other methods.



**Trash along the Anacostia**

## **Sligo Creek Trash Reduction Initiative**

A major step in the AWRC=s commitment to combat the trash problem is the Sligo Creek Trash Reduction Initiative. The Metropolitan Washington Council of Governments (COG), with funding support from the Summit Fund of Washington, is developing a trash reduction strategy for the Sligo Creek watershed that promotes both environmental stewardship and the formation of partnerships between citizens, private businesses and government. The goal of the Initiative is to dramatically reduce trash levels in Sligo Creek over the next three to five years. The success of the strategy depends heavily upon the assistance and



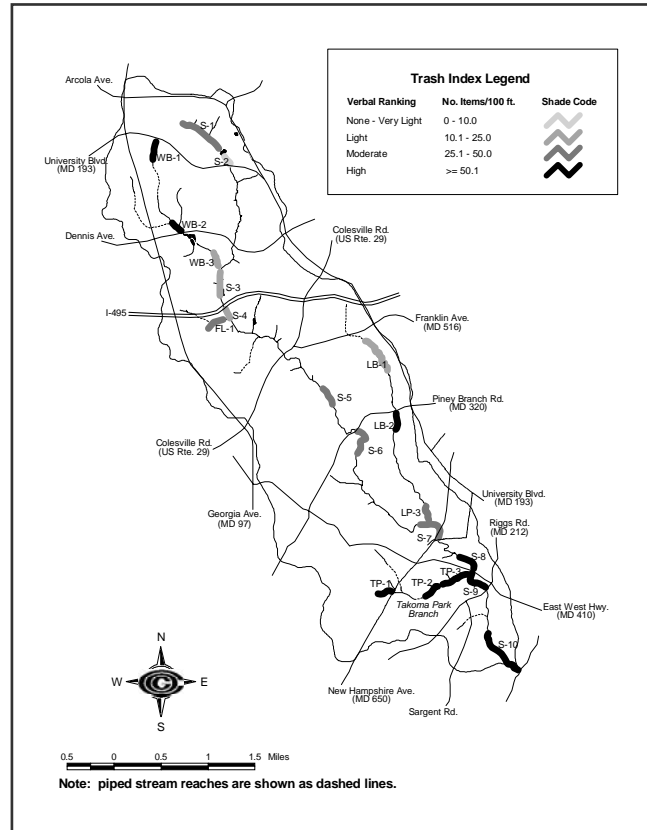
participation of all concerned residents, business owners and others, living, working and recreating in the Sligo Creek watershed. The Initiative is a pilot project that will impact future strategies for reducing trash levels in the tributary portions of the Anacostia River watershed.

Sligo Creek residents, businesses and other interested parties were introduced to the Initiative at a workshop held April 10, 1999. The workshop was a critical first step in enlisting public participation in the Initiative. Workshop participants included representatives from civic associations,

businesses and local government who live and/or work in the Sligo Creek watershed. Many excellent recommendations were made by workshop participants regarding how to effectively use volunteers, techniques for promoting the Initiative, how best to provide information to Sligo Creek residents, creating a sustainable Initiative, and coordinating with businesses. Key recommendations will be incorporated into the Sligo Creek Trash Reduction Plan which will be the guiding document for the Initiative.

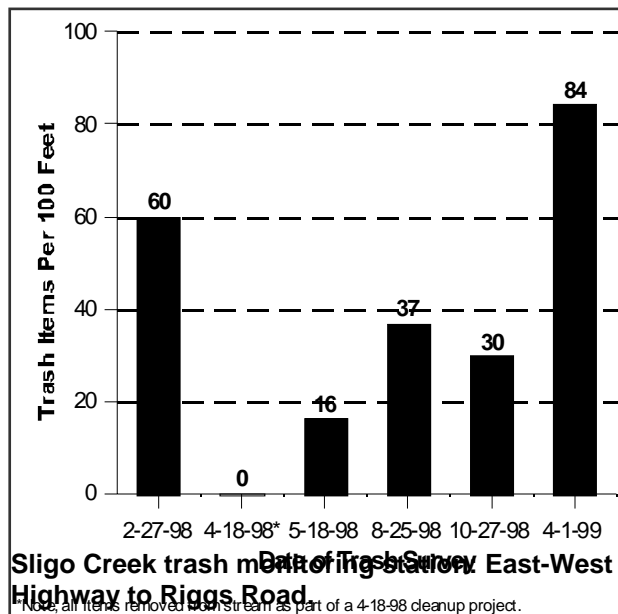
# Evaluating the Problem: Sligo Creek Trash Survey

In an effort to assess the severity of the trash problem in Sligo Creek and throughout the Anacostia watershed, COG staff developed a simple surveying technique and conducted the first annual trash survey of the major Anacostia River tributaries in 1998. As part of the Sligo Creek Initiative, a more comprehensive trash survey was conducted within the Sligo Creek watershed. The 1998 Sligo survey provided COG staff with a watershed-wide picture of the trash problem in the Sligo Creek watershed. In particular, trash hot spots (i.e., areas with high trash levels), such as the Takoma Park Branch and lower Sligo Creek mainstem, were identified. In 1999, COG staff surveyed the same sections of Sligo Creek and its tributaries with almost identical results. COG staff developed a simple surveying technique that includes tallying the total number of trash items observed along select stream reaches and cataloguing the types of items present. This technique was developed with citizen volunteers in mind in the hopes that they will perform future annual trash surveys as part of a watershed-wide commitment to reduce trash and other pollutants in their neighborhood streams.



## The Importance of Annual Surveys

### Sligo Creek trash survey conducted March



Some people argue, "Why count the trash, just pick up." However, a COG study of the Sligo Creek mainstem from East-West Highway to Riggs Road indicates that cleanups alone are not enough. Study results showed that one year after a major cleanup, trash levels were actually higher than prior to the cleanup. The annual trash survey is important on many levels. First and foremost, the initial survey provides a baseline of trash levels in Sligo Creek prior to the Initiative while the subsequent annual surveys provide data with which to both determine the frequency of cleanups needed and measure the success of the Initiative. The annual trash survey is also an important outreach and education tool for citizen volunteers because they observe first-hand the amount and type of trash in their stream. Most importantly, it is envisioned that adoption of a stream reach by citizen volunteers for annual surveying and cleanups will instill a sense of pride and stewardship in that stream.

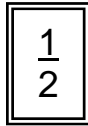
# The Initiative Needs Your Help

We need teams of volunteers throughout the watershed who are committed to protecting their local streams and can encourage others to join in the effort. The Initiative cannot succeed unless citizens become involved. If you are interested in helping with the Sligo Creek Trash Reduction Initiative please contact John Galli at 202-962-3348.

## Help Minimize the Amount of Trash Generated: Reduce, Reuse and Recycle

One of the best ways to minimize the potential for trash to make it into our streams is to reduce the amount of trash we generate in the first place. We can also reuse certain items before recycling or disposing of them. Finally, we should take care to recycle all items that we can.

### Reduce:



- < When practical, avoid purchasing products with excessive packaging. If possible, shop for bulk items. This reduces the extra packaging generated when you make several purchases of smaller quantities and it can save you money.
- < Avoid buying food in single serving containers, like drinks, puddings and apple sauce. Purchase these items in large recyclable jars and transfer single servings to reusable containers.

### Reuse:



- < Reuse plastic grocery store bags. Better yet, purchase heavy duty mesh bags at the grocery store. They last a long time and can hold much more than the plastic or paper bags.
- < Rinse out and sanitize non-recyclable containers with lids and use them for storing leftovers or taking leftovers to the office for lunch.

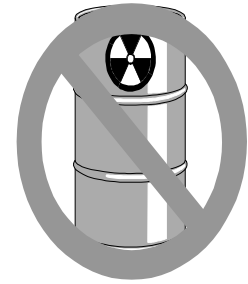
### Recycle:



- < Whenever possible, purchase products in recyclable containers, such as glass and specifically marked plastic containers. For example, a plastic milk jug is recyclable, a wax coated paper milk carton is not.
- < Dispose of hazardous materials at participating drop-off centers. Montgomery and Prince George's counties accept household hazardous wastes at specific dates during the year. In Montgomery County call 240-777-2770, in Prince George's County call 301-883-5045.
- < Recycle grocery store plastic bags at drop-off bins located at most major store chains. Use grocery store paper bags to hold your recyclable newspapers.

# Report Illegal Dumping

Illegal dumping is the depositing of refuse materials at any site that is not an approved solid waste facility. It includes not only the dumping of trash, but also the dumping of chemicals, pesticides, used automotive fluids and other pollutants into storm drains, streams and on land.



Report any act of illegal dumping to the appropriate jurisdiction. Be certain to record the vehicle license plate number, a description of the vehicle and person(s) involved, and the date, time and location of the incident. To report an incident occurring in Montgomery County call the Dept. of Environmental Protection at 240-777-3867. In Prince George's County contact Citizens Concerned for a Cleaner County at 301-883-6020. In the District report illegal activities to Solid Waste Education and Enforcement at 202-645-6179.

## Trash is Not the Only Pollutant: Other Considerations for Keeping Your Local Streams Clean and Healthy

The health of a stream is impacted not only by things you can see, like trash and sediment, but also by things you may not see, like fertilizers, pesticides and other chemicals that wash off the land and into streams during storm events. Below are some ways you can help protect Sligo Creek and the Anacostia River.

### Yard Area:

- < Reduce runoff volumes and pollutants by redirecting runoff away from paved surfaces onto well-vegetated, gently sloping areas. Also, consider converting low-use lawn areas into woodland or other vegetated, non-grass uses (e.g., wildflower beds, shrub gardens, etc.).
- < Wherever possible, encourage sheet flow (shallow, non-erosive flow) through well-vegetated areas to both help filter runoff and reduce soil erosion.
- < Mow at a high setting to maximize filtration, reduce weeds and make your lawn more resistant to drought and disease. This will reduce the need for toxic weed sprays and help conserve water.
- < Consider using a mulching-type mower to keep grass clippings on the lawn. Clippings provide soil nutrients that can decrease the need for fertilizers. **Never dispose of grass clippings in or along streams or in storm drains.**
- < If using fertilizer, make sure to use it in the proper amounts and at the optimal time. Over-fertilizing or applying when the plants cannot take up the nutrients results in unused fertilizer that eventually ends up in nearby streams.



### Car Care:

- < Motor oil, antifreeze and acid from leaking car batteries are extremely toxic to aquatic life. A quart of motor oil can pollute 250,000 gallons of water. **Keep in mind that storm drains lead to streams!** Recycle used motor oil, antifreeze and car batteries at participating drop-off centers. For household hazardous waste disposal information in Prince George's County call 301-883-5045; in Montgomery County call 240-777-6410; in



the District call 202-727-4600. Several local service stations also accept used motor oil.

- < Car wash water may contain toxic chemicals, detergents and sediments. Consider using a professional car wash where wash water is recycled or discharged to a treatment plant.
- < At home, use biodegradable and non-toxic detergents. If possible, wash your car at a site that drains to a grassy area instead of a storm drain, so that pollutants can be filtered by the soil. Remember, washing cars in Sligo Creek Park is illegal!

### **Additional Considerations For A Healthier Environment:**

- < Be certain to clean up your pet's waste.
- < During the winter, use cat litter or sand instead of salt on icy walkways. Salt is toxic to aquatic organisms.
- < Minimize your purchases of household hazardous wastes through safer alternatives. Some examples include using water-based (latex) paint instead of oil-based paint, cedar chips instead of mothballs, compost instead of chemical fertilizers, boric acid instead of toxic ant and roach killers, and a plunger instead of a chemical drain cleaner. Read product labels for proper use and disposal, and consider how you will dispose of the product before purchasing.

## **Restoration Progress in Sligo Creek**

Sligo Creek is an older, highly urbanized watershed. As such, much of its surface area is paved and lacking stormwater management (SWM) controls. Paved surfaces prevent the infiltration of rain water, resulting in large volumes of runoff and pollutants directed toward storm drains which eventually feed into local streams. The force of these storm flows scour stream beds, erode stream banks, degrade fish and benthic community habitats, and deliver myriad pollutants to local streams. Through a multi-phase restoration approach, there have been a number of restoration projects implemented in Sligo Creek to better control water quantity and quality during storm events and to restore and improve stream and riparian habitat conditions for fish and wildlife. Montgomery County's Department of Environmental Protection and the Maryland-National Capital Park and Planning Commission have been instrumental in making these projects a reality.

Under Phase I, the Wheaton Branch SWM facility (805-acre drainage area), which was originally constructed as a dry pond in 1978, was converted in 1990 into a three-celled wet pond. The pond includes wetland plantings which have improved its aesthetic



**Children stocking native fish in Wheaton Branch.**



### Vernal pool water quality monitoring in Sligo Creek

completion of the University Boulevard SWM facility (a companion, two-celled wet pond). This SWM facility provides similar water quality and quantity control for a 400-acre, 30-percent paved drainage area. In addition, Phase II included: aquatic habitat restoration of approximately 2.5 miles of the Upper Sligo Creek mainstem, construction of a 900-foot long stormflow diversion system along Flora Lane tributary, creation of a 0.25 acre marsh, reforestation of five acres along Sligo Creek and additional reintroductions of native fish species into Wheaton Branch, Flora Lane tributary and the Sligo Creek mainstem. Physical aquatic habitat conditions at 19 location sites were enhanced via the employment of stone wing deflectors, boulder fields, rootwads, placed rip-rap, log drops, streambank bioengineering and cedar tree brush bundles. The University Boulevard facility together with the Wheaton Branch facility have significantly improved control of runoff volumes and water quality in Sligo Creek upstream of US Route 29.

As previously stated, in 1991 and 1993, vernal pool and shallow marsh habitat areas were constructed for the reestablishment of native amphibian populations. By 1995, utilization of the created habitat areas by six amphibian species had been documented.

Control of stormwater runoff in upper Sligo Creek was further increased in 1996 with construction of the Sligo Creek golf course SWM facility. This one-acre wet pond provides both water quantity and quality control for a 70-acre catchment, which includes a nearby one-mile long section of the Capital Beltway.

Lastly, the recently completed (March 1999) Phase IV restoration project featured the construction of two stormwater wetlands in the vicinity of Godwin Drive and the Capital Beltway, as well as stream restoration work both in the vicinity of Old Blair High School and Park Valley Road. It should be noted that all four restoration phases have included the biological monitoring of fish and macro-invertebrates. Also, additional future Sligo Creek restoration projects are planned.

appearance and provided habitat for fish and wildlife. Other major components completed under Phase I included restoration of 1000 feet of downstream aquatic habitat, the creation of two vernal pools for amphibian breeding habitat and riparian restoration along a 1200-foot stream corridor. The improved water quality and stream channel erosion afforded by the pond and stream restoration projects made possible the reintroduction of native fish species in Wheaton Branch and Sligo Creek between 1992 and 1994. The number of established fish species in Sligo Creek has risen from a low of three species in 1988 to 12 or more by 1997!

Phase II (1992-94) restoration featured the



**Sligo Creek Phase IV Restoration.**

## For More Information or to Get Involved

To learn more about the Anacostia Watershed Restoration effort, Sligo Creek projects, or activities going on in other Anacostia tributaries, visit the Anacostia Watershed Network Web site at <http://www.anacostia.net>. You can also contact the many AWRC members, supporting agencies and other organizations involved in protecting and restoring the watershed.

### **AWRC Member Organizations, Contacts, Phone Numbers and Web Sites:**

District of Columbia, Environmental Health Admin.: James Collier, 202-645-3040, [www.dchealth.com](http://www.dchealth.com)  
District of Columbia, Water and Sewer Authority: Jerry Johnson, 202-645-6309, [www.dcwasa.com/](http://www.dcwasa.com/)  
Maryland Dept. of Natural Resources: Frank Dawson, 410-26-8810, [www.dnr.state.md.us](http://www.dnr.state.md.us)  
Maryland Department of the Environment: George Harmon, 410-631-3183, [www.mde.state.md.us](http://www.mde.state.md.us)  
Mont. Co., Dept. of Environ. Prot.: Cameron Wiegand, 240-777-7036, [www.co.mo.md.us/services/dep](http://www.co.mo.md.us/services/dep)  
PG Co., Dept. of Environ. Res.: Larry Coffman, 301-883-5839, [www.co.pg.md.us/env-resc.htm](http://www.co.pg.md.us/env-resc.htm)  
US Corps of Engineers, Balt. Dist.: Bob Lindner, 410-962-3511, [www.nab.usace.army.mil](http://www.nab.usace.army.mil)  
US EPA, Chesapeake Bay Program Office: Jon Capacasa, 215-814-5422, [www.epa.gov](http://www.epa.gov)  
US National Park Service, National Capital Parks-East: Stephen Syphax, 202-690-5162, [www.nps.gov](http://www.nps.gov)

### **AWRC Supporting Agencies:**

Maryland-National Capital Park and Planning Com.: John Hench, 301-650-4370, [www.mncppc.org](http://www.mncppc.org)  
District of Columbia, Dept. of Public Works: Vanessa Dale Burns, 202-939-8000, <http://www.ci.washington.dc.us/>  
Interstate Commission on the Potomac River Basin: Robert Bolle, 301-984-1908, [www.potomacriver.org](http://www.potomacriver.org)  
Metropolitan Washington Council of Governments: John Galli, 202-962-3348, [www.mwcog.org](http://www.mwcog.org)

### **Local Anacostia Watershed Restoration and Protection Organizations:**

Friends of Sligo Creek: David Paglin, 301-681-7443, [gmu.edu/bios/anacosti/sligo/index.htm](http://gmu.edu/bios/anacosti/sligo/index.htm)  
AFLORA (Anacostia Floodplain Restoration Alliance); Elizabeth Arnold, 202-208-0818  
Anacostia River Business Coalition: Mary Jean Brady, 703-750-5558, [potomacriver.org/arbc.htm](http://potomacriver.org/arbc.htm)  
Anacostia Watershed Society: Robert Boone, 301-699-6204, [anacostiaws.org](http://anacostiaws.org)  
Audubon Naturalist Society: Neal Fitzpatrick, 301-652-9188, [www.audubonnaturalist.org](http://www.audubonnaturalist.org)  
CCRIC (Citizens for the Conservation and Restoration of Indian Creek): Kate Spencer, 301-441-3844, [www.greenbelt.com/civic/ccric](http://www.greenbelt.com/civic/ccric)  
Earth Conservation Corps: Reginald Adams, 202-554-1960, [earthconcorps.org](http://earthconcorps.org)  
Eyes of Paint Branch: Bob Ferraro, 301-989-8749, [rokhed@erols.com](mailto:rokhed@erols.com), [gmu.edu/bios/anacosti/eopb/index.htm](http://gmu.edu/bios/anacosti/eopb/index.htm)  
HOPE (Hyattsville Organization for a Positive Environment): Elizabeth Arnold, 202-208-0818  
The Trash Force: Paul Nahay, [Paul@trashforce.org](mailto:Paul@trashforce.org), [www.trashforce.org](http://www.trashforce.org)

### **Jurisdictional Solid Waste, Recycling and Household Hazardous Waste (HHW) Info:**

District of Columbia - Solid Waste: 202-727-4600; Recycling: 202-727-4600; HHW: 202-727-4600  
Montgomery County - Solid Waste: 240-777-6410; Recycling: 240-777-6400; HHW: 240-777-6410  
Prince George's County - Solid Waste: 301-883-5848; Recycling: 301-883-5045; HHW: 301-883-5045  
Takoma Park - Solid Waste: 301-585-8333; Recycling: 301-585-8333; HHW: 301-95-CLEAN

### **Sligo Creek Park:**

Sligo Creek residents should immediately report park trash-related problems such as excessive amounts of refuse and illegal dumping to M-NCPPC Parks Maintenance. In Montgomery County, call 301-650-2630. In Prince George's County, call 301-953-0222. For organizing park clean-up events in Montgomery County, contact Michelle Grace at 301-495-2504.