



HOWARD COUNTY

MONTGOMERY COUNTY



PRINCE GEORGE'S  
COUNTY

**PATUXENT RESERVOIRS WATERSHED  
ANNUAL REPORT  
2008**

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## List of Acronyms

ac	Acres
Ag	Agriculture
BMP	Best Management Practice
CHL-a	Chlorophyll-a
CBT	Chesapeake Bay Trust
DO	Dissolved Oxygen
DPWT	Montgomery County Department of Public Works and Transportation
ea	Each
EPA	U.S. Environmental Protection Agency
ft	Feet
FY	Fiscal Year
H2O	Water
HC	Howard County
IBI	Index of Biological (or Benthic) Integrity
LID	Low Impact Development
MC	Montgomery County
mg/L	Milligrams per Liter
NFWF	National Fish and Wildlife Foundation
PGC	Prince George's County
pH	Power of Hydrogen
SCD	Soil Conservation District
TAC	Technical Advisory Committee
TBD	To be determined
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
µg/L	Micrograms per Liter
USGS	US Geological Survey

## **A MESSAGE FROM THE CHAIR**

The Patuxent Reservoirs Watershed Technical Advisory Committee (TAC) herein submits the *Patuxent Reservoirs Watershed Annual Report 2008*. The report presents TAC progress during the past year towards achieving long-term protection of priority resources. The priority resources include: reservoirs and drinking water supply; terrestrial habitat; stream systems; aquatic biota; rural character and landscape; and public awareness and stewardship. This report also presents the TAC's proposed work program and budget for the coming year.

The contract position, funded through the Washington Suburban Sanitary Commission (WSSC), solicited eight grants, totaling more than four million dollars, during this past year. Unfortunately, to date, these grant requests have not been approved; efforts to obtain project funding continues. These economically difficult conditions pose another challenge: the solicitation of grant funds increase as grant opportunities decrease. A third party providing technical assistance, also a component of the contract, has taken the first steps to create a Comprehensive Watershed Plan. This plan will be beneficial and advantageous in future grant solicitation.

The TAC accomplishments for 2008 are many and highlighted by the Reddy Branch riparian forest buffer planting, increased efforts to serve the equine community within the watershed, and numerous outreach events, including stream clean up efforts, the first ever H2O Festival and the annual family campfire. Projects that will continue into the next year include additional riparian forest buffer planting along Reddy Branch and the completion of the Comprehensive Watershed Plan.

The TAC is looking forward to 2009 and the continued efforts and accomplishments of the TAC agencies protecting the Patuxent Reservoirs Watershed.

## **1 Background**

Since 1997, the TAC has completed an Annual Report to summarize accomplishments and identify funding needs to address watershed priority resource issues. The priority resources are:

- reservoirs and drinking water supply
- terrestrial habitat
- stream systems
- aquatic biota
- rural character and landscape, and
- public awareness and stewardship.

Table 1, *Priority Resources Chart*, lists each priority resource and describes the associated issue, measures, goals, implementation items, time line, and responsible partners.

This Annual Report will be accompanied by a separate Technical Supplement to provide detailed background information and additional documentation for items summarized in this report. The Technical Supplement will be issued at the end of the year.

**TABLE 1: PRIORITY RESOURCES CHART**

<b>Resource: Reservoir/Water Supply</b>				
<b>Issue:</b> The public need for a sufficient quantity of safe and high quality drinking water calls for adopting a proactive and multi-barrier approach, which starts with utilizing raw water of the highest quality and sustainable quantity, now and in the future. To achieve this for the Patuxent water filtration plant, we need to control reservoir eutrofication, reduce disinfectant by-products precursors, and limit reservoirs capacity loss.				
<b>Measures</b>	<b>Goals</b>	<b>Implementation Items</b>	<b>Time Line</b>	<b>Responsible Partner</b>
Chlorophyll-a (CHL-a)	<ul style="list-style-type: none"> <li>CHL-a not to exceed a 10 µg/L mean during the growing season and not to exceed a 30 µg/L instantaneous concentration</li> </ul>	<ul style="list-style-type: none"> <li>Perform reservoir monitoring for CHL-a, DO, and TOC during the growing season</li> </ul>	Ongoing	WSSC
Dissolved oxygen (DO)	<ul style="list-style-type: none"> <li>DO not to fall below 5 mg/L at any time in the epilimnion, not to fall below 5 mg/L in the entire water column during completely mixed periods, and not to fall below 10% saturation at any time in the hypolimnion</li> </ul>	<ul style="list-style-type: none"> <li>Perform reservoir monitoring for CHL-a, DO, and TOC during the growing season</li> </ul>	Ongoing	WSSC
Suite of water quality parameters in reservoir monitoring protocol	<ul style="list-style-type: none"> <li>Five-year data trend analysis for other monitored water quality parameters shows no net deterioration</li> </ul>	<ul style="list-style-type: none"> <li>Enhance and fine tune model reliability for watershed management</li> <li>Develop and begin implementation of a plan to reduce nutrients, based on model/TMDL requirements</li> <li>Update trend analysis for reservoir water quality parameters on a 5-year cycle</li> </ul>	Draft TMDL submitted to EPA for Approval  2006 – 2009  2009	WSSC/MDE  TAC  WSSC
Total organic carbon (TOC)	<ul style="list-style-type: none"> <li>TOC – 20% annual reduction goal, with 40% reduction for peak quarter at the location where water is withdrawn for treatment purposes</li> </ul>	<ul style="list-style-type: none"> <li>Perform reservoir monitoring for CHL-a, DO, and TOC during the growing season</li> </ul>	Ongoing	WSSC
Sediment	<ul style="list-style-type: none"> <li>Sediment accumulation rate not to exceed previous years</li> </ul>	<ul style="list-style-type: none"> <li>Perform bathymetric survey of reservoirs at 10 year intervals or less</li> </ul>	Completed FY07	WSSC

**TABLE 1: PRIORITY RESOURCES CHART**

<b>Resource: Terrestrial Habitat</b>				
<b>Issue: Preservation of forests provides water quality benefits by reducing sediment and nutrient loading of streams from surrounding land uses.</b>				
<b>Measures</b>	<b>Goals</b>	<b>Implementation Items</b>	<b>Time Line</b>	<b>Responsible Partner</b>
Forest Cover	<ul style="list-style-type: none"> <li>• Maintain and increase forest cover</li> <li>• Increase forest interior habitat</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage private property owners to participate in tree planting programs</li> <li>• Ensure publicly owned parkland and open space is forested to the maximum extent possible</li> </ul>	Ongoing	TAC
			2006 – 2023	TAC
Forest Connectivity	<ul style="list-style-type: none"> <li>• Improve forest connectivity (larger forest tracts are connected by forest corridors)</li> </ul>	<ul style="list-style-type: none"> <li>• Target reforestation and forest conservation programs to increase forest connectivity and forest interior habitat</li> </ul>	Ongoing	TAC
Forest Size	<ul style="list-style-type: none"> <li>• Increase forest size</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage private property owners to participate in tree planting programs</li> <li>• Ensure publicly owned parkland and open space is forested to the maximum extent possible</li> </ul>	Ongoing	TAC
			2006 – 2023	TAC
Forest Diversity	<ul style="list-style-type: none"> <li>• Ensure diverse forest communities (communities contain a variety of species and ages)</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a forest management plan to ensure forest diversity and long-term natural regeneration, identifying and addressing potential problems such as excessive deer populations, invasive species and human impacts</li> </ul>	2006 – 2013  Plan completed FY08	TAC
Forest Sustainability	<ul style="list-style-type: none"> <li>• Ensure forests are self-sustaining and capable of long-term natural regeneration</li> </ul>	<ul style="list-style-type: none"> <li>• Implement deer management programs</li> <li>• Implement strategies for control of invasive plants</li> </ul>	Ongoing	TAC
			2006 – 2009	TAC

**TABLE 1: PRIORITY RESOURCES CHART**

<b>Resource: Stream System</b>				
<b>Issue:</b> Preventing stream habitat degradation - The stream system includes all intermittent and perennial streams and their adjacent floodplains. A stable stream system provides significant nutrient and sediment removal during both baseflow and stormflow events. The stream and its associated riparian buffer are also important as sources of high quality food and habitat for both aquatic and terrestrial organisms.				
<b>Measures</b>	<b>Goals</b>	<b>Implementation Items</b>	<b>Time Line</b>	<b>Responsible Partner</b>
Buffer corridor width and continuity	<ul style="list-style-type: none"> <li>A minimum 35-foot riparian buffer on all streams on properties that were developed prior to current stream buffer requirements</li> </ul>	<ul style="list-style-type: none"> <li>Establish and maintain minimum 35-foot riparian buffers on all publicly-owned land</li> </ul>	2006 – 2013	WSSC, M-NCPPC, HC, MC
		<ul style="list-style-type: none"> <li>Accelerate programs to establish and maintain streamside buffers to a minimum of 35 feet on privately-owned lands to the maximum extent possible</li> </ul>	2006 – 2023	WSSC, M-NCPPC, HC, HSCD, MC, MSCD
Stream bank and stream channel stability	<ul style="list-style-type: none"> <li>No areas of "severe" or "very severe" stream bank erosion based on the Stream Corridor Assessments and other locally collected data.</li> </ul>	<ul style="list-style-type: none"> <li>Establish and maintain streamside fencing programs to keep all livestock out of streams to the maximum extent possible</li> </ul>	2006 – 2013	HSCD, MSCD
		<ul style="list-style-type: none"> <li>Address <u>significant</u> areas of stream bank and channel instability through stream restoration projects and stormwater retrofits to the maximum extent possible</li> </ul>	2006 – 2013	HC, HSCD, M-NCPPC, MC

**TABLE 1: PRIORITY RESOURCES CHART**

<b>Resource: Aquatic Biota</b>				
<b>Issue: Biological Integrity</b> – This is the condition of the benthic macroinvertebrate communities based on a comparison to a reference stream in Montgomery County. A reference stream is relatively undisturbed and therefore the best quality to be expected in the region that includes the Patuxent Reservoirs Watershed.				
<b>Measures</b>	<b>Goals</b>	<b>Implementation Items</b>	<b>Time Line</b>	<b>Responsible Partner</b>
IBI - Index of Biological Integrity	<ul style="list-style-type: none"> <li>No subwatershed with a benthic IBI indicating "fair" or "poor" condition</li> </ul>	<ul style="list-style-type: none"> <li>Aggressively pursue cost-share funds to construct agricultural BMPs, stream restoration, and stormwater retrofit projects to address factors contributing to degraded biological integrity</li> </ul>	2006 – 2023	HC, HSCD, MC, MSCD, M-NCPPC
		<ul style="list-style-type: none"> <li>Mitigate runoff impacts from land use changes</li> </ul>	2006 – 2023	HC, MC, M-NCPPC
	<ul style="list-style-type: none"> <li>Preserve conditions in subwatersheds with "excellent" and "good" benthic IBIs</li> </ul>	<ul style="list-style-type: none"> <li>Protect existing habitat and water quality of streams in high-quality subwatersheds to the maximum extent possible by pursuing programs to maintain or increase existing land cover</li> </ul>	2006 – 2023	HC, HSCD, MC, MSCD, M-NCPPC

IBI - Index of Biological Integrity, is also referred to as Index of Biotic Integrity in Maryland Biological Stream Survey publications.

**TABLE 1: PRIORITY RESOURCES CHART**

**Resources: Rural Character and Landscape**

**Issue:** Preserving open spaces and maintaining an economically viable and environmentally protective agricultural community.

<b>Measures</b>	<b>Goals</b>	<b>Implementation Items</b>	<b>Time Line</b>	<b>Responsible Partner</b>
Agricultural Preservation Enrollment <ul style="list-style-type: none"> <li>• Total acres enrolled</li> <li>• Number of farms enrolled</li> </ul>	<ul style="list-style-type: none"> <li>• Preserve the agricultural and rural nature, and open space of the watershed</li> </ul>	<ul style="list-style-type: none"> <li>• Continue easement acquisition through agricultural land preservation programs</li> <li>• Continue agricultural economic development programs</li> </ul>	Ongoing	HC, MC
			Ongoing	HC, MC
Agricultural Demographics <ul style="list-style-type: none"> <li>• Acres of agricultural land</li> <li>• Market value of agricultural production</li> <li>• Size of farms</li> <li>• Types of farms</li> </ul>	<ul style="list-style-type: none"> <li>• Preserve the agricultural and rural nature, and open space of the watershed</li> </ul>	<ul style="list-style-type: none"> <li>• Continue zoning and land use policies in the watershed to maintain rural character</li> <li>• Continue agricultural economic development programs</li> </ul>	Ongoing	HC, M-NCPPC
			Ongoing	HC, MC
Open Space and Parkland Acquisition and Easement Programs <ul style="list-style-type: none"> <li>• Acres of open space land preserved by non-agricultural easements or acquisition</li> </ul>	<ul style="list-style-type: none"> <li>• Create a landscape that is protective of water quality</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize effective open space land management practices that are beneficial to water quality</li> </ul>	Ongoing	HC, M-NCPPC, WSSC
Participation in agricultural conservation programs and percent of conservation plans that are implemented	<ul style="list-style-type: none"> <li>• Create a landscape that is protective of water quality</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage participation in other conservation and open space preservation programs</li> <li>• Encourage enrollment in federal and state nutrient management and stream protection programs</li> <li>• Promote greater utilization of funding provided by the Reservoir Protection Group to supplement federal and state agricultural programs</li> <li>• Create and routinely update an electronic map based system to track BMP implementation</li> </ul>	Ongoing	HC, MC, M-NCPPC
			Ongoing	HSCD, MSCD
			Ongoing	HSCD, MSCD
			2006 – 2013	HSCD, MSCD

**TABLE 1: PRIORITY RESOURCES CHART**

<b>Resource: Public Awareness and Stewardship</b>				
<b>Issue: Awareness and support by residents and resource users</b>				
<b>Measure</b>	<b>Goals</b>	<b>Implementation Items</b>	<b>Time Line</b>	<b>Responsible Partner</b>
Residents participating in stewardship activities	<ul style="list-style-type: none"> <li>• Citizen action to improve watershed resources – see evidence of watershed friendly activities and practices</li> <li>• 10 to 15 stewardship offerings per year</li> </ul>	<ul style="list-style-type: none"> <li>• Identify citizen groups throughout watershed and be available for presentations upon request</li> <li>• Organize stewardship events and participate in other community events</li> <li>• Recognize good stewards through annual awards</li> <li>• Form “Friends of the Watershed” group of citizen volunteers that will take on tasks such as newsletter preparation and some Earth Month planning</li> </ul>	2006 – 2009	TAC
			Ongoing	TAC
			2006 – 2008	MC, PGC, HC, M-NCPPC
			2006 – 2009	TAC
Schools participating in mentoring	<ul style="list-style-type: none"> <li>• School and community involvement – 20 participating Green School partners by end of 2003 and 5 additional schools participating each year thereafter until all 43 are attained</li> </ul>	<ul style="list-style-type: none"> <li>• Continue and expand Green Schools Mentoring Partnership</li> </ul>	Ongoing	WSSC, HC, MC, PGC, M-NCPPC
Active support by elected officials	<ul style="list-style-type: none"> <li>• Routine communication with elected officials</li> </ul>	<ul style="list-style-type: none"> <li>• Routine communication with elected officials</li> </ul>	Ongoing	TAC
Routine coverage by media	<ul style="list-style-type: none"> <li>• Expanded media coverage of watershed events – print, radio and TV</li> </ul>	<ul style="list-style-type: none"> <li>• Increase communication with media</li> <li>• Support regional efforts to establish media-savvy campaigns that emphasize water quality protection</li> </ul>	2006 – 2009	TAC
			2006 – 2008	

Implementation dates are contingent upon adequate staff support, with limited support focus will be on Earth Month activities and Green Schools Partnership

## **2 Progress on Implementation Items**

Table 3, *Patuxent Reservoirs Watershed Work Program for FY09 and FY10*, lists ongoing implementation items and identifies the priority resource or resources that will be protected or enhanced by completion of the associated task. Progress made for each implementation item during 2008 is given below. Because 2008 was a year during which several projects were completed, it is worthwhile to note that several of the implementation items discussed below are not listed in Table 3, which only lists those implementation items that necessitate continuing work during FY09 and FY10. Completed projects include the *Sediment Study* and the *Forest Management and Recreational Use Study*. The Hillsborough Low Impact Development project was removed from the list because Prince George's County no longer intends to proceed with that project.

### **2.1 Reservoir and Tributary Water Chemistry Monitoring**

The WSSC is in the 17<sup>th</sup> year of monitoring reservoir water quality to provide data for technical analysis and long-term trend evaluation to support protection of the reservoirs and drinking water supply. Three sites on each reservoir are monitored monthly, except during winter months. The reservoirs are monitored for phosphorus, nitrogen, total organic carbon, pesticides, metals, turbidity, fecal coliform and chlorophyll. In addition, in-situ transparency and profile measurements of pH, conductivity, temperature, reduction-oxidation potential and dissolved oxygen are performed. To date, the reservoirs still show a trend towards low dissolved oxygen during the summer months.

### **2.2 Tributary and Habitat Monitoring**

Biological and habitat monitoring of the tributaries is used to track progress in protecting the stream system and aquatic biota, as land cover changes occur and stream restoration and streamside best management practices are implemented. These monitoring efforts can also locate problem areas and provide indicators for possible problem sources, to help guide future restoration efforts.

Howard County is on a five-year biological monitoring cycle for watersheds in the County. The reservoir watersheds were last monitored in 2005.

There was no Montgomery County Department of Environmental Protection (DEP) monitoring in the Patuxent watershed during 2008. Next scheduled monitoring will be during 2009 and will be for the third year after construction for the Lower Hawlings stream restoration project. The project will be assessed for success in

stabilizing streambanks and instream channel, and improving the aquatic biological community.

## **2.3 Stream Corridor Management**

Stream corridor management activities include stream channel stabilization and restoration, and implementing streamside best management practices (BMPs). These activities are targeted at stream channel reaches that were identified in stream corridor assessment surveys as severe problem areas for erosion. These activities help restore and protect the stream system, improve habitat and water quality for aquatic biota, and support protection of the reservoirs and water supply.

**2.3.1 Cherry Creek** – Howard County continues to improve the Cherry Creek Watershed, which drains directly to the Rocky Gorge Reservoir. Cherry Creek has degraded due to unmanaged stormwater runoff in the headwaters of the watershed. Stream bank and channel erosion are recognized as contributing a significant sediment load to the water supply reservoir. Howard County has completed a comprehensive watershed study of Cherry Creek and identified three stream reaches in need of restoration.

Reach 1 – Using a \$25,000 grant from the Maryland Department of Natural Resources (DNR) and \$37,600 from the Chesapeake Bay Trust (CBT), the County restored 300 linear feet of headwater stream and also constructed three new storm water management ponds in the headwaters. Construction of the ponds and the stream restoration was completed in early 2006.

Reach 2 is a 600 linear foot stream channel located near the Scotts Cove boat launch. This reach is unstable, with grade control problems and high bank erosion rates. The design for restoration of this reach is complete, with construction scheduled to begin and end in Fall/Winter of 2008 (FY09). The project construction cost for the restoration of this reach is estimated as \$330,000. A pre-application was submitted to MDE requesting \$165,000 in a Small Creeks and Estuaries Restoration Program (SCERP) grant; the remaining funds will be provided by Howard County.

Reach 3 is a 250 linear foot stream channel located upstream of the Harding Road culvert. The channel is relatively straight with a fairly high channel slope. In the lower section the channel is incised, having vertical stream banks and no riparian buffer. Implementing a meander pattern to increase sinuosity will necessitate relocation of a sewer line. The project cost for both design and construction is estimated at \$300,000. Design is planned to begin in FY09, with construction in FY11.

**2.3.2 Hawlings River** – The volunteer component to maintain the planted buffer in the Lower Hawlings has not worked out and Maryland-National Capital Park and Planning Commission (M-NCPPC) and DEP staff have had to return to the project to control invasive plants, primarily mile-a-minute and stilt grass. The coordination is ongoing through the 2008 growing season, but the survivability of the trees and shrubs will depend upon a strong long term plan for controlling mile-a-minute. The existing upstream seed bank for invasives and their continued delivery during flooding events will deposit seed into the floodplain indefinitely.

A riparian buffer was installed by M-NCPPC in March 2008 in the upper reaches of the Reddy Branch tributary to the Hawlings. Volunteers from the Sandy Spring Friends School also participated.

## **2.4 Agricultural Management Local Cost Share Initiative**

Table 2, *2008 Patuxent Reservoirs Watershed Agricultural Progress*, provides summary information on agricultural progress in the Reservoirs Watershed during the past year.

Both Montgomery Soil Conservation District (MSCD) and the Howard Soil Conservation District (HSCD) have determined that the horse industry seems to be the best potential fit for the reservoir cost-share program. Consequently, they are working together in an attempt to expand its success. Working with the WSSC contractor, HSCD and MSCD are exploring options to promote and advertise the cost share program. Grants are being sought to conduct other outreach and education to the agricultural community. These grant projects are representative of planned future collaborative efforts.

One of the most significant advances this year was direct contact with hundreds of landowners in the watershed regarding their involvement with the equine industry. Through a grant from the CBT, the Districts collaborated on a joint mailing to 2,047 landowners in the Patuxent Watershed targeting owners of small horse farms. The contacts and data garnered from this survey will be used to create future funding opportunities and develop strategies for delivering technical and cost-share assistance to this underserved group. By better understanding this sector of the agricultural community, the Districts will be better positioned to provide them with services, incentives, and programs that will help improve their conservation practices and benefit water quality throughout the watershed.

A grant application has been submitted by HSCD and Montgomery MSCD to the Chesapeake Bay 2010 Trust Fund for a project aimed at addressing the equine manure issue in the Triadelphia Reservoir Watershed. This application was completed with assistance from the WSSC contractor, Versar and Capuco Consulting. The application will use cost share funds to establish BMPs on the properties (with minimal restrictions) and set up a regional composting facility to

remove the waste from the properties and turn it into a resource for use by local residents. The total grant request is about \$3.5 Million. In addition, an application was submitted to National Fish and Wildlife Foundation (NFWF) for the Triadelphia Reservoir Equine project. Versar and Capuco Consulting assisted with that application also.

CBT also funded the development of a newsletter to be sent to equine owners in the Triadelphia Watershed from the HSCD (the MSCD already does a newsletter). Capuco Consulting assisted with the development of the grant application.

In addition, MDA has given each county \$10,000 to use toward cost sharing with operations that fall outside of the traditional Maryland Agricultural Cost Share (MACS) and Environmental Quality Incentives Program (EQIP) programs. Again, restrictions limit use of these funds. MDA has provided an Equine Specialist, Michael Calkins, to serve Howard, Frederick and Carroll Counties. Michael Calkins has extensive experience in pasture and horse management and is a welcome addition to the HSCD Staff.

MDA has also provided grant funds to employ an Equine Specialist for Howard County. Kristen Parris, a well known and respected equine eventer, has been hired and is going through a training phase along with Michael Calkins.

**Table 2 2008 Patuxent Reservoirs Watershed Agricultural Progress**

<b>Practice</b>	<b>Howard SCD*</b>	<b>Montgomery SCD</b>
Conservation Plans developed	8 (705.2)	6 (250.7 ac)
Conservation Plans Revised	8 (738.7)	3 (313.2 ac)
Landowners Contacted or Requesting information	34	0
Landowners Applying BMPs	14	10
BMPs Installed	47	140
Cover Crop	13 (824.1 ac)	1361 ac.
Conservation Tillage	1 (10.3 ac)	350.9
Grassed Waterways	2 (3.8 ac)	0
Diversion	2 (600 ft)	0
Fencing	3 (6000 ft)	1 (2600 ft.)
Filter Strip	0	2
Grade Stabilization Structure	2 (4 ea)	0
Heavy Use Area (HUA)	0	1165 ac
Nutrient Management	2 (20.5 ac)	377.5 ac
Pest Management	4 (797 ac)	0
Roof Runoff	2 (2 ea)	0
Stream Crossing	0	0
Trough	2 (4 ea)	0
Waste Storage Structure	1 (1 ea)	2
New Cost Share Agreements	1	0
Cost Share Agreements Completed	1	1
Pipeline	2 (482 ft)	0
Ag Chemical Facility	0	0
Subsurface Drainage	0	0
Educational/Outreach Events	2	4
Lined Waterway	0	0
Spring Development	1 (1 ea)	1
Wildlife Upland Habitat Management	0	77.5 ac
Pasture / Hayland Planting	1 (14 ac)	0
Pond	1 (1 ea)	0

\* Numbers provided are only projects within the Patuxent Reservoirs Watershed portion of Howard

## **2.5 Public Outreach and Involvement Initiatives**

Under the coordination of WSSC Outreach staff, there were several very successful outreach activities in 2008. The watershed festival that was held in April this year was an attempt to provide the community with information about source water protection and local environmental initiatives at one event rather than individual workshops.

**2.5.1 H2O Fest, Watershed Festival** –“Thinking Green to Protect Blue” was the theme for this year’s main April Earth Month event that was held on Saturday April 12, 2008. The event was held on WSSC property adjacent to the T.H. Duckett Dam on Brooklyn Bridge Rd. in Prince George’s County. Over 20 presenters, came out to provide environmental and watershed information to the over 200 citizens who attended. Highlights of the day were tours of the dam for over 170 people and a sewer maintenance demonstration by WSSC employees. Additional help was provided by a local school, a Girl Scout Troop and staff from several of the TAC agencies. Several presentations were made by groups that had provided workshops in the past. It is expected that we will hold this event annually and that it will provide more information for a larger audience in the future.

**2.5.2 Patuxent River Cleanup** -- In cooperation with the office of the Patuxent Riverkeeper, we participated again in the annual Patuxent River Clean up Day on Saturday, April 5, 2008. Approximately 100 watershed neighbors, school groups, and Boy and Girl Scouts formed crews at nine WSSC recreation areas and picked up hundreds of pounds of trash and recyclables. Site leaders for this effort volunteer their time to organize, recruit, and report for the cleanup event.

**2.5.3 Library Programs** – Again this year, source water protection programs for children were scheduled at two county libraries, Olney in Montgomery County and Laurel in Prince George’s County. Dozens of families, with their pre-schoolers and elementary school children received important information about the watershed and some networking was accomplished. Attendance totaled approximately 150 people plus library staff.

**2.5.4 Annual Family Campfire**- This event was held this year on October 3, 2008 at WSSC’s Brighton Dam Recreation Area in Montgomery County. It has been held annually since 2001 and has become a favorite in the community. Once again the weather cooperated with a warm autumn evening that was perfect for a classic bonfire with marshmallows and chocolate for refreshments. The over 450 attendees were greeted by WSSC Interim General Manager, Teresa Daniell, and TAC Vice-Chair, David Plummer. We provided informational posters on

watershed habitat protection and the annual Patuxent River Cleanup. Also this year we recognized site leaders for the 2008 cleanup event with a certificate and small gift. Entertainment was provided free of charge by a group called “Just 3 Guys” lead by WSSC employee Tom Kelly.

**2.5.5 IWLA-WAC** – The Montgomery County DEP and Department of Public Works and Transportation (DPWT) continued to provide assistance to the Izaak Walton League of America-Wildlife Achievement Chapter (IWLA-WAC) in Damascus for outreach events opened to the general public during 2008. This included their Annual Spring Watershed Cleanup, their annual Fall Watershed Cleanup, workshops on nest boxes, 'Make and Take' Rain Barrels, and invasive plant management, as well as the establishment of their American Chestnut tree nursery.

**TABLE 3 PATUXENT RESERVOIRS WATERSHED WORK PROGRAM FOR FY09 and FY10**

<b>PRIORITY RESOURCES PROTECTED</b>	<b>IMPLEMENTATION NEED</b>	<b>IMPLEMENTATION ITEM</b>	<b>AGENCY</b>	<b>FY 2009</b>	<b>FY 2010 (requested)</b>
Reservoir/Water Supply	Reservoir and tributary water chemistry monitoring	Reservoir monitoring and lab analysis	WSSC	In-kind	In-kind
		5 US Geological Survey (USGS) watershed flow gauge stations	WSSC	\$50,000	\$60,000
		5 year Trend Analysis	WSSC	In-kind	In-kind
Stream System Aquatic Biota	Tributary biological and habitat monitoring	Conduct second round of biomonitoring program in the reservoirs watershed	HC	\$0	TBD
		Upper Patuxent and Hawlings River	MC	\$0	TBD
		Hawlings River Restoration Monitoring	MC	\$0	TBD
Reservoir/Water Supply Stream System Aquatic Biota	Stream corridor management	Cherry Creek Implementation – Reach 2	HC	\$330,000	TBD
		Hawlings River Project Implementation	MC	\$0	TBD
		Reddy Branch Project Implementation	M- NCPPC MC MSCD DNR	\$100,000	\$50,000
Reservoir/Water Supply Stream System Aquatic Biota Rural Character and Landscape Public Awareness and Stewardship	Agricultural management local cost-share initiative	Funding for local cost-share program	HC, MC, WSSC	No additional funding	TBD
		Program oversight for voluntary implementation of agricultural BMPs	HSCD, MSCD	In-kind services	TBD

**TABLE 3 PATUXENT RESERVOIRS WATERSHED WORK PROGRAM FOR FY09 and FY10**

Reservoir/Water Supply Terrestrial Habitat Stream System Aquatic Biota Rural Character and Landscape Public Awareness and Stewardship	Public outreach and involvement initiatives	Rainscapes Program	MC	\$5,000	\$5,000
		Rainscapes Rewards	MC	Rebates available to county residents for Low Impact Development (LID)	Rebates available to county residents for LID
Reservoir/Water Supply Terrestrial Habitat Stream System Aquatic Biota Rural Character and Landscape Public Awareness and Stewardship	Public outreach and involvement initiatives	Earth Month, Annual Policy Board Meeting and other outreach activities	All TAC agencies	\$2,500	In-kind
		Green Schools Mentoring Partnership	WSSC and MC	In-kind services (WSSC and MC)	In-kind

**TABLE 3 PATUXENT RESERVOIRS WATERSHED WORK PROGRAM FOR FY09 and FY10**

Reservoir/Water Supply Terrestrial Habitat Stream System Aquatic Biota Rural Character and Landscape Public Awareness and Stewardship	Complete Annual Report	Compilation and editing	All TAC Agencies	In-kind services	In-kind
		Printing and distribution	WSSC	\$200	\$200
Partnership Coordinator and grant application		Provide admin. support, coordination among partners, secure grant funding, compile watershed management plan	WSSC	\$100,000	0
<b>TOTAL FUNDING</b>				<b>\$582,700</b>	<b>\$115,200</b>