



Local governments working together for a better metropolitan region

Chesapeake Bay and Water Resources Policy Committee

Date: Friday, May 16, 2008

Time: 10:00 a.m. – 12 noon *

Place: Third Floor Board Room
777 North Capitol Street, NE
Washington, DC 20002

- District of Columbia
Bladensburg*
Bowie
College Park
Frederick
Frederick County
Gaithersburg
Greenbelt
Montgomery County
Prince George's County
Rockville
Takoma Park
Alexandria
Arlington County
Fairfax
Fairfax County
Falls Church
Loudoun County
Manassas
Manassas Park
Prince William County

*Lunch will be available for committee members and alternates after the meeting.

Meeting Agenda

- 10:00 1. Introductions and Announcements..... Hon. Martin Nohe
Chair, Prince William County
10:05 2. Approval of Meeting Summary for March 14, 2008..... Chair Nohe
Recommended action: Approve DRAFT Meeting Summary (Att. 2).
10:10 3. Water Quality Metrics for Greater Washington 2050..... Stuart Freudberg
DEP Director
..... COG staff

The Greater Washington 2050 Coalition is scheduled to address environmental issues at its May 30 meeting. Mr. Freudberg will discuss the potential role of water quality issues within this forum. Working with the Water Resources Technical Committee, COG staff has developed several proposed water quality-related benchmarks that could be used to help assess alternative scenarios for the future growth of the region, which is expected to be one of the major projects of the Coalition. COG staff members will review several proposed metrics endorsed by the WRTC at its May 8 meeting.

Recommended Action: Approve recommended water quality metrics for presentation to the Greater Washington 2050 Coalition.

- 10:40 4. Update on Emerging Contaminant Response to Board Steve Bieber, Tanya Spano
COG staff

The COG Board passed Resolution R19-08 (Att. 4) directing the CBPC to work with various COG committees and other stakeholders to prepare recommendations for how the region can address the issue of endocrine disrupting compounds and other "emerging contaminants" on the region's water resources and report to the Board in June. Mr. Bieber and Ms Spano will brief members on the status of these efforts

Recommended action: Provide guidance on COG Board response

11:05 **5. Review of Proposed FY 09 Work Program and Budget.... Ms. Spano
for the Regional Water Fund**

Pursuant to its bylaws, the committee is charged with approving the annual work program and budget allocations for the Regional Water Fund. Ms. Spano will summarize the proposed FY 09 work program (*Att. 5*) and review plans for conducting a vote of committee members.

Recommended Action: Approve transmission of budget documents and ballot to committee members

11:15 **6. Comment on Loudoun County Septic System Ordinance. . COG staff**

The Loudoun County Health Department has requested that the CBPC review a proposed ordinance (*Att. 6*) regulating septic systems in the county. COG staff has circulated the ordinance to officials in other member governments that deal with septic systems and will summarize their comments.

Recommended action: Approve transmission of comments in response to Loudoun's request.

11:25 **7. Bay Program Updates..... Ms. Spano**

- Water Quality Steering Committee/TMDL development
- Bay Program 2030 land use model

Ms. Spano will highlight recent Bay Program developments that could eventually affect local governments

11:40 **8. Old Business Members**

- Letters regarding federal financing issues discussed at March 18 meeting
- Approval of meeting summary for Jan. 18, 2008 (*Att. 8*)

11:55 **9. New Business Members**

- July 18 meeting date conflicts

12:00 **10. Adjourn**

The next meeting is scheduled for Friday, July 18, 2008, 10 a.m. - 12 noon.

Enclosures/Handouts:

- Item 2 DRAFT meeting summary of March 14, 2008
- Item 4 COG Board Resolution R19-08
- Item 5 DRAFT FY 2008 Water Resources Work Program and Budget
- Item 6 "Ordinance to Regulate the Establishment, Operation and Maintenance of Non-conventional Onsite Sewage Disposal Systems"
- Item 8 DRAFT meeting summary of Jan. 18, 2008

CHESAPEAKE BAY and WATER RESOURCES POLICY COMMITTEE
777 North Capitol Street, N.E.
Washington, D.C. 20002

MINUTES OF MARCH 14, 2008, MEETING

ATTENDANCE:

Members and alternates:

Vice Chair J Davis, City of Greenbelt
Vice Chair Hamid Karimi, District of Columbia
Penelope Gross, Fairfax County
Tim Lovain, City of Alexandria,
Cathy Drzyzgula, City of Gaithersburg
Bruce Williams, City of Takoma Park
Meo Curtis, Montgomery County
Beverly Warfield, Prince George's County
Carole Larsen, Frederick County
Mark Charles, City of Rockville
Mohsin Siddique, District of Columbia WASA
J. L. Hearn, WSSC

Staff:

Stuart Freudberg, DEP Director
Paul DesJardin, HSPPS Chief of Housing and Planning
Ted Graham, DEP Water Resources Program Director
Steve Bieber, DEP
Tanya Spano, DEP
Heidi Bonnaffon, DEP
Karl Berger, DEP

1. Introductions and Announcements

In the Chair's absence, Vice Chair J Davis called the meeting to order at 10:05 a.m. Mr. Graham provided notice of a stormwater workshop that COG is planning to host in conjunction with the city of Rockville on April 28. Ms. Davis noted that the week from March 30 – April 5 has been designated as "litter enforcement week" by local government participants in the Alice Ferguson Foundation's Potomac trash initiative.

2. Approval of Meeting Summary for Jan. 18, 2008

Acting as a committee of the whole in the absence of a quorum, the committee approved the draft summary with two corrections. The committee directed COG staff to identify a third Virginia member who could review the draft minutes and potentially vote to approve the minutes as well, thus meeting quorum requirements.

3. Update on Greater Washington 2050

Mr. DesJardin, who serves as the main COG staff to the new Greater Washington 2050 Coalition, summarized the discussion at the coalition's inaugural meeting on Feb. 21. Among the discussion items he noted were plans to develop a regional compact that would enunciate a vision for the future of the region, confirming a schedule of

coalition meetings for the next 18 months and developing a survey to gather citizen input on the most important issues facing the region.

Mr. Graham provided DEP staff's perspective on the first meeting, noting that none of the coalition members in attendance mentioned water-related issues. He said staff sees a risk that this effort may lose sight of water issues as it focuses on climate change and growth and transportation. Among the issues that DE P staff believes are important to consider are those of drinking water and wastewater capacity as well as increases in impervious surface and decreases in natural resources such as tree cover.

Discussion: Mr. Gross said that the coalition does not have anyone representing the region's drinking water agencies and suggested that a member of the group that oversees the coordinated use of the Potomac River water for drinking water in the region be named to the coalition. Mr. Karimi later supported this suggestion as well.

Mr. Siddique recommended that the coalition focus broadly on the idea of sustainability, noting how difficult it is to predict specific changes over a 50-year period.

Mr. Karimi noted the need to focus on global warming and air quality issues as being more broadly regional issues than water quality issues are. Members also should spurn the oft-repeated notion that achieving both environmental quality and economic growth are incompatible.

Mr. Freudberg said that the coalition intends to devote one of its upcoming meetings to a discussion of environmental issues, which presents an opportunity to discuss the importance of water-related issues. He also noted that the coalition will use the future scenario projections developed by COG's transportation planning staff. To date, these scenarios have examined a number of metrics related to transportation performance and air quality, but they have not addressed water quality. Later, Mr. DesJardin confirmed that the coalition plans to focus on environmental issues at its May 23 meeting.

Ms. Curtis said that Montgomery County currently has a staff member who is working on sustainability issues and is looking at the Denver regional compact that has been cited as a potential model for the local coalition. She also said that there have been a number of recent surveys of public attitudes about the environment and asked that thought be taken to avoid duplicating efforts.

Action item: The committee directed staff to work with its representatives on the 2050 coalition (Chair Nohe represents the committee directly; Ms. Davis and Ms. Favola are also on the coalition representing other groups) to develop water quality-related metrics that could be used in the scenario analysis work. This group should report back to the CBPC at its May 16 meeting, so as to formulate recommendations for the May 23 coalition meeting.

4. Discussion of Bay Commission's Congressional Agenda

Mr. Bieber noted that the Chesapeake Bay Commission recently issued a set of 18 recommendations for congressional action on pending federal legislation and appropriations and he highlighted a COG staff document that lists what staff considered to be the most important priorities for the region. These include support for the establishment of a specific stormwater mitigation fund in the new version of the bill that authorizes federal transportation funding, more federal funds to assist the Blue Plains Wastewater Treatment Plant in its efforts to increase ongoing nutrient reduction efforts and funding for the U. S. Geological Survey to investigate the causes of fish kills in the Potomac River basin in recent years.

Mr. Bieber also made several recommendations for actions that the committee could take to advocate for those items it considers to be priorities for the region. These include sending letters to Congress, holding a briefing on

local water issues for staff members from local Congressional offices and working with other groups on certain issues, such as the provision for stormwater mitigation funding within a new transportation funding bill.

Discussion: Mr. Graham noted that in addition to those items on the CBC agenda cited by Mr. Bieber, COG staff is working with members of the Anacostia Watershed Restoration Partnership to secure \$9.9 million under the Water Resources Development Act, which is the main vehicle for funding work by the U. S. Army Corps of Engineers.

Mr. Siddique noted that DC-WASA staff has been working with members of the Bay Commission on securing funds for Blue Plains.

Ms. Gross, responding to a CBC and COG staff recommendation to fund a “circuit rider” program for local governments that has been sponsored by the Bay Program’s Local Government Advisory Committee, said the recommendation has gotten a lot of support within the Bay community. However, she added, Bay Program officials said obtaining funding for the program should wait for a more normal budget year. She also discussed the overall status of the LGAC, which she currently chairs, within the various proposals for Bay Program re-organization. The future of the committee, she said, is no longer on life support and its members have been asked to put together recommendations for how it can interact more frequently with the Bay Program. In response to questions, Ms. Gross said funding remains a major issue for local governments.

Returning directly to the issue of potential action by COG on these federal policy recommendations, the members discussed whether the recommendations made by staff would require Board action. Staff noted that many of the funding recommendations are consistent with existing Board policy and previous actions. The committee has written letters in past years in support of federal funding for various Bay Program initiatives.

Regarding the stormwater initiative, Ms. Davis said COG staff should check with the National League of Cities, which has made this one of the group’s five priorities for federal legislation. Mr. Lovain noted that Virginia Sen. John Warner, who was a key supporter of the measure when it was debated in 2005, has announced his retirement and will not be in a position to support it after 2009.

Action item: The committee directed COG staff to pursue all three actions recommended by Mr. Bieber in advocacy for the priorities recommended by staff. These include sending letters to the appropriate congressional committees, holding a briefing on water issues for congressional staff and working with partners on the stormwater mitigation funding provision of a new transportation funding bill.

5. Discussion of Potential Committee Tour

Based on the committee’s interest in holding another tour, Mr. Berger presented a staff recommendation that the committee tour the Blue Plains Advanced Wastewater Treatment Plant in Washington, D.C.

Discussion: Members discussed the timing and scheduling of such a tour. Mr. Siddique, who represents the agency that operates the facility, the District of Columbia Water and Sewer Authority (DC-WASA), recommended that the tour be held in the spring before the weather becomes hot.

Mr. Karimi asked that a briefing on the regional aspects of Blue Plains be held as part of the tour, noting that more than 50 percent of the capacity of the plant comes from jurisdictions other than the District of Columbia.

Action item: The committee directed staff to work with staff from DC-WASA on scheduling a tour of Blue Plains. Staff will circulate a number of dates in early May to committee members and choose a tour date in

conjunction with Chair Nohe.

6. State Legislative Update

Mr. Berger distributed a staff summary of the status of Bay-related legislation in the Virginia and Maryland general assemblies. He noted that the only legislative effort that the committee supported in Virginia – to create a new state fund to provide money to farmers to install best management practices – was approved. However, the new fund lacks a dedicated revenue source and was created as a sub-fund of the Water Quality Improvement Fund, the mechanism for providing state grants to wastewater treatment plants installing nutrient removal technology. In its support for the new fund, COG had stipulated that funds not be diverted from the WQIF. The Virginia General Assembly already has directed that \$6 million in interest from the WQIF be diverted to this new fund. Mr. Bieber noted that the Maryland General Assembly has taken action to approve a “Chesapeake Bay 2010 Trust Fund,” which would provide funds for various types of bay restoration projects, including those involving urban stormwater. COG had supported this bill, Mr. Bieber said, but, as currently proposed, the legislation does not provide a guaranteed percentage of the fund to be used for local governments, as COG had advocated. Also, he added, the General Assembly reduced the initial appropriation for the fund from \$50 to \$25 million.

Discussion: Mr. Hearn noted that there is potential action in the Maryland General Assembly to delay the effective implementation date of the phosphate dish detergent ban it passed the previous year.

Mr. Karimi noted that a similar bill to limit the amount of phosphorus allowed in such products has been introduced in the District of Columbia Council.

7. Progress Report from the Anacostia Watershed Restoration Partnership

Mr. Graham briefly reviewed the status of restoration measures in the Anacostia watershed since a revised governance structure to oversee collective efforts, the Anacostia Watershed Restoration Partnership, was created with support from COG in 2006. Parties to the partnership created a three-tiered governance structure headed up by a policy-level steering committee with representatives of federal, state and local governments, according to Mr. Graham. The steering committee has overseen the development of a new watershed-wide restoration plan in conjunction with the Army Corps of Engineers and the ongoing development of various sub-watershed plans as well. The steering committee also hired a full-time executive director and is actively working to obtain funds for local projects from the Water Resources Development Act, as noted previously under item #4. In doing so, he said, the group is trying to develop a set of priorities for funding.

Discussion: Mr. Karimi said that the new structure is proving to be a very successful arrangement.

8. Updates

Mr. Bieber provided a brief summary of the Potomac Monitoring Forum that COG sponsored March 10-11. He said the conference was designed to achieve better coordination of the individual government monitoring efforts in the Potomac River basin and to see if current programs are addressing the right issues. COG staff is developing an action agenda from the meeting, he said.

Vice Chair Davis said monitoring efforts also need to focus on potential enforcement actions if they uncover evidence of water quality efforts, citing a new development project in Prince George’s County.

Mr. Graham noted that various Bay Program partners are in the process of developing ground rules for the widely

expected implementation of a bay-wide Total Maximum Daily Load regulatory process in 2011. To date, these discussions have occurred behind closed doors with no input from local government interests, he said.

Mr. Graham also noted that the Bay Program will study whether the various tributary-specific loads for meeting its overall nutrient reduction targets should be re-allocated. This prompted a discussion of the difficulty local agencies face in trying to meet a moving target when they plan reduction efforts, such as nitrogen removal at Blue Plains, a concern expressed by Mr. Siddique.

As a last update, Mr. Berger brought to the committee's attention a recent article in the *Washington Post* that noted that various human substances, such as pharmaceuticals, have been found in area tap water derived from the Potomac River. In a brief discussion, Vice Chair Davis noted that authorities are not clearly telling people what they should do with their unused prescription drugs to avoid this problem.

9. New Business

Ms. Gross noted two items: she will be participating in a national environmental summit to be held in Baltimore in May and the EPA advisory committee on which she serves has produced a 15-minute video on water infrastructure that may be of interest to committee members.

10. Adjourn

The meeting was adjourned at 12:05 p.m.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
777 N. Capitol Street, NE
Washington, DC 20002

**RESOLUTION CONCERNING ENDOCRINE DISRUPTING COMPOUNDS AND
PHARMACEUTICALS IN THE POTOMAC RIVER WATERSHED**

WHEREAS, endocrine disrupting compounds and other “emerging contaminants,” including pharmaceuticals and personal care products, have been identified in waters throughout the United States including the Potomac River; and

WHEREAS, recent studies by the U.S. Geological Survey have identified adverse effects on certain fish species resident in the Potomac; and

WHEREAS, potential sources of these contaminants are highly diverse and include agricultural, urban stormwater runoff, and wastewater sources; and

WHEREAS, since its inception in 2004, the Metropolitan Washington Council of Governments (COG) has been actively engaged with a consortium of federal and state agencies and water suppliers formed the Potomac Drinking Water Source Protection Partnership (Partnership) pledging “vigilance and cooperation” in meeting “emerging challenges and ensuring a reliable (water) supply for the future;” and

WHEREAS, in October, 2006, the COG adopted Resolution R46-06, underscoring its concerns regarding the impacts of such compounds on the endocrine systems of living organisms and emphasizing the need for further research on the possible public health effects; and

WHEREAS, systematic monitoring, research and analysis is critical to determining amounts, sources and risks posed by such contaminants and is essential in addressing solutions; and

WHEREAS, public awareness and education is an important part of any program for pollution prevention and control.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS THAT:**

1. The Chesapeake Bay and Water Resources Policy Committee (CBPC) in cooperation with COG’s Health Directors Committee, Public Information Officers, the Partnership and the region’s water and wastewater utilities are directed to prepare recommendations for:
 - Enhancing public awareness, focused on interpretation of scientific information, as well as advice concerning proper disposal of unused medications and household hazardous waste;
 - Tracking and reporting on the relevant efforts of EPA, USGS and other agencies and national professional organizations including recent workshops;
 - Hosting or cooperating in conducting information exchange workshops;
 - Supporting collaborative efforts by regional water treatment plants to conduct additional monitoring, testing, and reporting; and
 - Assisting in obtaining additional funding for research and monitoring.
2. The CBPC shall present these recommendations to the COG Board of Directors at the June 2008 meeting.

Metropolitan Washington Council of Governments

Environmental Programs

Water Resources FY 2009 Work Program and Budget

July 1, 2008 to June 30, 2009

CBPC Briefing Draft [May 16, 2008]

COG FY 2009 Water Resources Work Program and Budget Table of Contents		
Program Area	Activity	Page
I. Policy and Program Development	A. Chesapeake Bay and Water Resources Policy Committee	11
	B. Water Resources Technical Committee	12
	C. COG Board and Member Support	13
	D. Work Program and Budget Development	14
	E. Development of Regulatory Policies and Priorities	15
II. Development/Application of Technical Tools and Outreach	A. Application of the Chesapeake Bay Water Quality and Watershed Models and Other Load Models	17
	B. Development and Application of the Regional Wastewater Flow Forecast Model	18
	C. Technical Workshops and Seminars	19
	D. Wastewater and Stormwater Program Requirements and Regulatory Analysis	20
	E. Growth, Sustainability and Climate Change	21
	F. Regional Outreach and Coordination	22
III. Water Quality Monitoring	A. Regional Monitoring Program	24
	B. Chain Bridge and Little Falls Monitoring	25
IV. Water Supply, Drought Management and Water/Wastewater Security	A. Water Supply Task Force and Water Security Work Group	27
	B. Wise Water Use Campaign	28
V. Urban Watershed Management	A. Urban Stormwater and Eco-Landscaping	30
	B. Watershed Stream Ecology, GIS Applications and Forestry	31
	C. Planning for Green Infrastructure and Sustainable Agriculture, and Related Database Management	32

COG FY 2009 Water Resources Work Program and Budget Activity Products		
Program Area	Activity	Product(s)
I. Policy and Program Development	A. Chesapeake Bay and Water Resources Policy Committee	<ul style="list-style-type: none"> • Presentations to COG Board (as appropriate) • Updated state and federal legislative priorities for the region (1st half of year) • Legislative briefing on regional water issues (1st half of year) • Report on regional implication of continued growth on prospects for meeting anticipated water quality regulations (2nd half of year)
	B. Water Resources Technical Committee	<ul style="list-style-type: none"> • CBPC Agendas and meeting summaries (quarterly),
	C. COG Board and Member Support	<ul style="list-style-type: none"> • Reports (as needed)
	D. Work Program and Budget Development	<ul style="list-style-type: none"> • Draft WP&B (March 2009) • Final WP&B (June 2009)
	E. Development of Regulatory Policies and Priorities	<ul style="list-style-type: none"> • Technical briefings (Bi-monthly) • Develop regional input (as required)
II. Development/ Application of Technical Tools and Outreach	A. Application of the Chesapeake Bay Water Quality and Watershed Models and Other Load Models	<ul style="list-style-type: none"> • Beta testing of the COAST tool. • Technical assessment and memorandum on Bay model results for the Potomac (quarterly). • Presentations regarding the status of the Phase 5 WSM, the Chesapeake Bay Water Quality Model (WQM), and application of the COAST tool (Quarterly).
	B. Update and Application of the Regional Wastewater Flow Forecast Model	<ul style="list-style-type: none"> • Updated projections & presentations (1st & 4th Quarters)
	C. Technical Workshops and Seminars	<ul style="list-style-type: none"> • Climate Change – Wastewater Workshop (Fall 2008); Stormwater/Drinking Water Impacts Workshop (TBD) • Potomac Water Quality Futures Forum (Winter 2008) • Coast/Local Watershed Modeling (Winter 2008) • Growth, Water Quality & Planning (Spring 2009) • EDCs & Related (TBD) • TN Bioavailability (Spring 2009) • Others (TBD, based on grant \$)

	<p>D. Wastewater and Stormwater Program Requirements and Regulatory Analysis</p>	<ul style="list-style-type: none"> ● Assessment of CBP/state Bay TMDL implementation schedule assumptions (Quarterly) ● Presentations on to WRTC, CBPC, and other COG committees (Ongoing)
	<p>E. Growth, Sustainability and Climate Change</p>	<ul style="list-style-type: none"> ● GW2050 Indicators (Fall 2008) ● CBP 2030 Land Use Projection Assessment (Fall 2008)
	<p>F. Regional Outreach and Coordination</p>	<ul style="list-style-type: none"> ● Integrated Wastewater Collection System & Pharmaceuticals Disposal Outreach Plan & Budget (Fall 2008)
<p>III. Water Quality Monitoring</p>	<p>A. Regional Monitoring Program</p>	<ul style="list-style-type: none"> ● Updates to COG's Monitoring Web Site (Monthly) ● Expanded RMS membership (to include SW representation)
	<p>B. Chain Bridge and Little Falls Monitoring</p>	<ul style="list-style-type: none"> ● Trends Report (December 2008) ● Final technical memo on prior year data and loads (4th Quarter)
<p>IV. Water Supply, Drought Management and Water/Wastewater Security</p>	<p>A. Water Supply Task Force and Water Security Work Group</p>	<ul style="list-style-type: none"> ● Management and coordination of Water Supply Task Force meetings and Water Security Work Group (2008-9) ● Stand-up and management of Drought Coordination Committee and Drought Tech Committee during periods of drought (as needed) ● Tracking and monitoring of Potomac basin drought conditions and website updates (continuing year around effort) ● Management and coordination of Communications Work Group (quarterly) ● Continued tracking and analysis of Low Flow Allocation Agreement, Water Supply Coordination Agreement, Washington Region Demand and Flow Forecast, MD-DNR Flow-by study; MDE Consumptive Use study and other major water supply related studies (continuing effort) ● Monthly Regional Drought Reports (Seasonal, May-Oct.) ● Staff support and management coordination to the Water Supply Task Force's Water Security Work Group (continuing effort) ● Continue to seek and secure

		<p>Department of Homeland Security, Urban Area Security Initiative and federal earmark water/wastewater security grant funds for NCR utilities</p> <ul style="list-style-type: none"> ● Continued management, and coordination of regional Water Security Monitoring Network ● Plan and conduct a regional Water Supply Emergency Plan Exercise (Winter 2009) ○ Implementation of a one day regional functional exercise (Winter 2008) ○ WSEP Exercise Summary After-Action Report (Spring 2009) ○ Participation in Critical Infrastructure Protection Interdependency Seminar and Training Exercise (Spring and Summer 2008)
	<p>B. Wise Water Use Campaign</p>	<ul style="list-style-type: none"> ● Continued implementation of a regional year-around wise water use ad campaign (Ongoing – Spring /Summer 2009 focus); ● Major water resource awareness and wise water use program in local elementary/middle schools (Spring 2008/Winter-Spring 2009); ● Major efforts to develop public/private campaign partnerships for ongoing and future conservation efforts and funding (ongoing); ● Maintain and update COG water conservation/wise water use website (ongoing) ● Partnership promotional events (ongoing)
<p>V. Urban Watershed Management</p>	<p>A. Urban Stormwater and Eco-Landscaping</p>	<ul style="list-style-type: none"> ● Individual meetings with COG jurisdictional members to educate and encourage the adoption of healthy lawn care principles and practices. ● Development and dissemination of a broadly accepted and endorsed set of guidelines or principles for responsible lawn care and landscaping to lawn care operators, public policy officials, home builders, and consumers. ● Development of one or more

		<p>local/regional demonstration projects, working in collaboration with private business and university researchers.</p> <ul style="list-style-type: none"> • Presentation(s) to the Water Resources Technical Committee, Chesapeake Bay Policy Committee and Bay Program committees as appropriate (bi-monthly/as needed) • Grant project deliverables (as specified in grants)
	<p>B. Watershed Stream Ecology, GIS Applications and Forestry</p>	<ul style="list-style-type: none"> • Upper and Lower Beaverdam Creek Benthic Assessment Study • Regional Water Resources Indicators Database • Herring Restoration, Festival Outreach • Watts Branch Benthic Stream Assessment • Urban Tree Canopy Goal Development • Regional Forest Cover Benefits Assessment • Urban Forest Resource Recovery Analysis • Support for CFN
	<p>C. Planning for Green Infrastructure and Sustainable Agriculture, and Related Database Management</p>	<ul style="list-style-type: none"> • Regional Green Infrastructure Database Update • Support for Regional Agricultural Workgroup • Regional Farmers Market Vendor Base Maintenance • Regional Agriculture Web Site Enhancements • Regional Agriculture Marketing Initiative

COG FY 2009 Water Resources Work Program and Budget					
Budget Summary					
Program Area	¹RWF	²REF	COG Local	Grant; other	Total
I. Policy and Program Development					
A – Chesapeake Bay and Water Resources Policy Committee	220,000		10,000		230,000
B – Water Resources Tech. Committee	220,000		10,000		230,000
C – COG Board and Member Support	56,911		28,157		85,068
D – Work Prog. and Budget Devel.	50,000		10,000		60,000
E – Legislative Policies and Priorities	40,000				40,000
II. Development/Application of Technical Tools and Outreach					
A –Application of the Chesapeake Bay Water Quality and Watershed Models and Other Load Models	85,000				85,000
B – Upgrade and Application of the Regional Wastewater Flow Forecast Model	50,000				50,000
C - Technical Workshops and Seminars	60,000			25,000	85,000
D - Wastewater and Stormwater Program Requirements and Regulatory Analysis	40,000				40,000
E – Growth, Sustainability and Climate Change (NEW)	40,000				40,000
F. Regional Outreach and Coordination (NEW)	10,000			15,000	25,000
III. Water Quality Monitoring					
A – Regional Monitoring Program	150,000				150,000
B – Chain Bridge and Little Falls Monitoring	127,000				127,000
IV. Water Supply, Drought Management and Water/Wastewater Security					
A – Water Supply Task Force/Water Security Work Group	80,000			85,000	165,000
B – Wise Water Use Campaign	30,000			70,000	100,000
V. Urban Watershed Management					
A. Urban Stormwater and Eco-Landscaping		20,000	25,000		45,000
B. Watershed Stream Ecology, Forestry and Watershed GIS Applications		45,250	33,157	50,000	128,407
C. Planning for Green Infrastructure and Sustainable Agriculture, and Related Database Management			58,157	150,000	208,157
Total	1,258,911	65,250	174,471	395,000	1,893,632

¹ Regional Water Fund

² Regional Environmental Fund

COG FY 2009 Water Resources Work Program and Budget

Overview

Purpose – Since its inception, COG’s water resources (WR) program has focused on regional water resources policies and programs. It is designed to help protect and conserve the region’s water resources while providing COG’s members access to emerging policies, technology and regional environmental information. Among the program’s strengths is its ability to project a local government voice to help shape regional water resources policies and programs, which are substantially the subject of state and federal law and regulation.

COG’s Water Resources program responds directly to COG’s mission of enhancing the quality of life and competitive advantages in the global economy through:

- Providing a forum for consensus-building and decision-making;
- Implementing intergovernmental policies, plans and programs; and
- Supporting the region as an expert information resource.

Organization - COG’s WR program is organized in five broad areas: Policy and Program Development; Development/Application of Technical Tools; Outreach; Water Quality Monitoring; Water Supply, Drought Management AND Water/wastewater Security; and Urban Watershed Management. Each of these is designed to provide a coherent focus for gathering and analyzing regional WR information and preparing appropriate regional program and policy recommendations.

Focal Points for FY 2009 – The FY 2009 WR program will emphasize three focal points for achieving water quality goals: the Potomac River, local streams and the Chesapeake Bay. Whether policy-, program- or project-oriented, water quality conditions at each of these three levels will be considered. COG will be paying particular attention to several issues that are gaining heightened importance. Among these are:

- Reconciling continued rapid growth with water quality goals;
- Linking water quality issues and human health concerns;
- Widespread system management concerns as epitomized by WSSC’s “Can the Grease” program;
- Accelerating the preservation of green infrastructure, land conservation and sustainable agriculture, each of which has a direct tie to regional water quality; and
- Addressing the impacts of climate change on the region’s water resources.

The connection between continued growth and water quality remains a severe challenge. It’s clear that the Chesapeake Bay restoration targets set in the Chesapeake 2000 agreement will not be met by 2010. Absent changes to current (non-regulatory) Tributary Strategy implementation plans, they may never be met.

COG FY 2009 Water Resources Work Program and Budget

Overview

Accordingly, a much more regulatory Bay Program, including a strong focus on growth and growth management, is rapidly emerging. COG has been actively participating in the Bay Program's "2030 Analysis" which is likely to affect local wastewater, stormwater and possibly land use programs in unprecedented ways. COG's participation is designed to ensure that the voice of local governments and utilities helps shape new programs and policies being developed at the federal and state levels. COG's Chesapeake Bay Policy Committee (CBPC) has identified "Growth and Water Quality" as one of priority issues, in recognition of the forecast growth in population of 1.6 million and employment of 1.2 million by 2030.

To address each of these, COG's program is designed to collect and analyze regional information; provide regional water resources information to the media and the general public; work with COG members to provide information and develop a local government voice on critical issues; and work with appropriate state and federal entities to ensure that that voice is heard and has an impact. Among specific actions proposed for FY 2009 are:

- Publishing of a **Potomac River Water Quality report** reflecting the multi-year data collected at Chain Bridge;
- A series of **workshops and worksessions relating growth and water quality** addressing and helping to shape programs and policies that are likely to affect local wastewater, stormwater and land use programs. It will also include the potential implications of COG's Climate Change initiative via various workshops that will require grant funding.
- Development of a **proactive legislative tracking and advocacy program** designed to anticipate federal and state legislative initiatives critical to regional water quality and local WR programs and to develop policy direction to ensure that the local government voice is incorporated into the legislative process. This will include an assessment of the regional funding needs identified in EPA's Clean Watersheds Needs Survey and development of policy recommendations to address critical infrastructure and funding needs for the region.
- One or more workshops on **water quality and human health**, in conjunction with other COG departments and committees; and
- Preparation of specific products and workshops to promote **green infrastructure and sustainable agriculture** in the region.

COG FY 2009 Water Resources Work Program and Budget

I. Policy and Program Development

The Policy and Program Development program area includes five discrete activities:

- Chesapeake Bay and Water Resources Policy Committee (CBPC);
- Water Resources Technical Committee (WRTC);
- COG Board and Member Support;
- Work Program and Budget Development; and
- Development of regulatory Policies and Priorities

The common thread to these activities is the support by the COG staff on behalf of the CBPC and the WRTC to develop water resources programs and policies.

FY 2008 Water Resources Work Program and Budget	
Program Area	I. Committee Support
Activity	A. Chesapeake Bay and Water Resources Policy Committee
Committee Oversight	Chesapeake Bay and Water Resources Policy Committee; COG Board of Directors
Staffing	Lead: Karl Berger Staff Resources: Stuart Freudberg, Ted Graham, Tanya Spano, Steve Bieber
Activity Description	
<p>The committee has established four broad priorities for action in calendar 2008: advocate for funding and policy initiatives at the state and federal levels, identify links between growth policies and water quality, support regional public outreach efforts with a water quality focus and help coordinate the Trash-Free Potomac Watershed Initiative.</p> <p>Within these broad areas, the committee will continue its lead role in supporting appropriate state and federal legislation, commenting on policy issues to the Chesapeake Bay Program, concentrating on Potomac River water quality issues, providing a water quality focus to the Greater Washington 2050 Initiative and helping to frame the issue of compounds of emerging concern for the public and elected officials. In addition, the committee will evaluate water/wastewater and related infrastructure funding needs that have been identified for the region, and consider potential regional support for a national Clean Water Trust Fund that would be established to address these needs.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> ● Presentations to COG Board (as appropriate) ● Updated state and federal legislative priorities for the region (1st half of year) ● Legislative briefing on regional water issues (1st half of year) ● Report on regional implication of continued growth on prospects for meeting anticipated water quality regulations (2nd half of year) 	
Budget	
\$220,000	Regional Water Fund
10,000	COG Local Funds
\$230,000	Total

FY 2009 Water Resources Work Program and Budget	
Program Area	I. Policy And Program Development
Activity	B. Water Resources Technical Committee
Committee Oversight	Chesapeake Bay and Water Resources Policy Committee
Staffing	Lead: Tanya Spano Staff Resources: Tomlyne Malcolm, Heidi Bonnaffon, Ted Graham, Karl Berger, Steve Bieber; COG planning and public health staff
Partners	Chesapeake Bay Program, Northern Virginia Regional Council, ICPRB
Activity Description	
<p>The WRTC is the lead technical resource to the CBPC on all regional water quality management issues. COG staff support to this committee entails evaluation and technical analysis of regulations, policies and other initiatives that affect or may affect COG member wastewater, stormwater and related water quality and water resource programs.</p> <p>The technical support required to address specific water quality issues is outlined under other FY 2009 project write-ups. This project element supports COG staff's work with the WRTC to:</p> <ul style="list-style-type: none"> • Assess the cumulative impact of these initiatives; • Synthesize data and conduct analysis; • Define the key technical issues and identify the potential impact to the COG region and COG's members; • Make presentations, prepare technical summaries, and prepare and submit technical comments on behalf of the WRTC; and • Develop policy recommendations from the WRTC to the CBPC and ultimately the COG Board. <p>Key topics that the WRTC expects to address in FY 2009 will include assessments of:</p> <ul style="list-style-type: none"> • The Chesapeake Bay Program's (CBP) Bay updates to all of its models, reevaluation of water quality impairments, potential revisions to the nutrient/sediment load caps, potential reallocation of existing tributary and source loads, and development of the Bay TMDL; • State Tributary Strategy implementation and development of local jurisdictional loads; • Funding needs for point source, non-point source and agricultural sectors; • Water quality/water resource assumptions and implications of predicted 'growth' in the region – including the CBP's 2030 Land Use Change Model, linkages to the Bay TMDL, and development of water quality indicators for COG's Greater Washington 2050 initiative. • EPA's <i>Clean Watersheds Needs Survey</i> - both the recently released 2004 report and as well as input on development of the 2009 report; to quantify regional infrastructure funding needs, as well as to consider whether to recommend that the CBPC consider regional support for a national Clean Water Trust Fund. • Continued monitoring of various water quality challenges and regulatory initiatives for the Potomac and Anacostia Rivers – including pharmaceuticals/personal care products (e.g., EDCs), PCBs, bacteria, etc. to assess linkages between water quality and other environmental issues/initiatives (e.g., air quality, environmental and human health, etc.). <p>In addition to coordination and integration of these many issues, emphasis will be given to continue to address specific wastewater and stormwater topics through special technical work sessions. This will include continued efforts to integrate water quality issues with other COG Departments' programs/activities/committees to expand stakeholder input and to develop more holistic assessments of impacts and benefits of various environmental initiatives.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Meetings of the WRTC (Bi-monthly), and conference calls/meetings of work groups (as required) • Technical work sessions to address specific wastewater & stormwater issues (2-3 times per year) • Briefing material, presentations, technical analyses and comments, and policy recommendations to the WRTC, and to the CBPC on behalf of the WRTC (Bi-monthly) • Priority recommendations for COG's FY 2010 Regional Water Work Program & Budget (spring 2009) 	
Budget	
\$ 220,000	Regional Water Fund
\$ <u>10,000</u>	COG Local Funds
\$ 230,000	Total

FY 2009 Water Resources Work Program and Budget	
Program Area	I. Policy and Program Development
Activity	C. COG Board and Member Support
Committee Oversight	Chesapeake Bay and Water Resources Policy Committee
Staffing	Lead: Ted Graham
Activity Description	
<p>Project Description/Objectives: This task enables COG to fulfill its role as a member service organization by responding to member requests for information on regional programs and policies and serving as a clearinghouse for environmental information. It provides for COG staff to respond to special requests for technical assistance or other support from the COG Board and COG members. Typical examples include reporting on the latest regulatory requirements under the Clean Water Act or proposed funding strategies at the federal and state level. It provides funds for staff support in developing water resources presentations to the COG Board and other COG committees and COG members. It also provides for preparation of presentations by elected official leaders at the COG Board, to Congressional committees and state legislative bodies.</p>	
Outcomes and Major Products	
<p>Major Products:</p> <ul style="list-style-type: none"> ● Response to requests (as requested) ● Federal and state legislative and regulatory summaries (as requested) ● Briefings and presentations to COG Board and others (4-6 per year) ● Preparation of presentations and testimony for use by elected official leaders (4-6 per year) 	
Budget	
\$ 56,911	Regional Water Fund
\$ <u>28,157</u>	COG Local Funds
\$ 85,068	Total

FY 2009 Water Resources Work Program and Budget	
Program Area	I. Policy and Program Development
Activity	D. Work Program and Budget Development
Committee Oversight	Chesapeake Bay and Water Resources Policy Committee
Staffing	Lead: Ted Graham
Activity Description	
<p>Project Description/Objectives: This task funds management and administrative activities in support of the FY 2009 work program and covers the preparation of the FY 2010 regional water resources work program and budget in collaboration with the Water Resources Technical Committee. It also includes preparation of performance appraisals participation in internal staff meetings and program wide direct costs.</p> <p>This task will also help support COG staff in submitting certain work program proposals or grant applications designed to secure funding support from outside agencies. This also helps support costs associated with proposal writing or preparation of RFPs for certain pass-through contracts such as for special water quality studies.</p>	
Outcomes and Major Products	
<p>Major Products:</p> <ul style="list-style-type: none"> ● Preliminary FY 2009 budget (1st quarter) ● Midyear Budget Review (3rd quarter) ● Proposed FY 2009 final work program and budget (3rd quarter) ● Final FY 2009 work program and budget (4th quarter) ● Grant Proposals (Ongoing) 	
Budget	
\$ 50,000	Regional Water Fund
\$ 10,000	COG Local Funds
\$ 60,000	Total

FY 2008 Water Resources Work Program and Budget	
Program Area	I. Policy and Program Development
Activity	E. Development of Regulatory Policy and Priorities
Committee Oversight	Chesapeake Bay and Water Resources Policy Committee; Water Resources Technical Committee
Staffing	Lead: Tanya Spano, wastewater; Ted Graham, stormwater Staff Resources: Steve Bieber, Tomlyne Malcolm, Karl Berger Partner organizations <ul style="list-style-type: none"> • Northern Virginia Regional Commission (NVRC) • Virginia Association of Municipal Wastewater Agencies (VAMWA) • Maryland Association of Municipal Wastewater Agencies (MAMWA) • Virginia Association of Stormwater Management Agencies (VAMSA) • Stormwater Association of Maryland (SWAM).
Activity Description	
<p>Working with members of COG's Chesapeake Bay and Water Resources Policy and Water Resources Technical committees (CBPC and WRTC, respectively), COG staff will participate in or otherwise monitor the various forums at the state and federal levels that determine or influence water quality regulations at the local level. Policy implications will be presented to member government officials for review and, where appropriate, regional comment developed by the CBPC and COG Board. (Technical aspects of these policies are tracked under work program task II.D and discussed by the WRTC.)</p> <p>Among the key issues and forums in which COG staff will participate are efforts by the Chesapeake Bay Program/Water Quality Steering Committee to: analyze new water quality modeling results, determine if the Bay Program's nutrient and sediment caps should be revised or reallocated, and determine how to implement the Bay-wide Total Maximum Daily Load. Another major focus is ongoing efforts by Maryland and Virginia to revise their stormwater permitting regulations.</p> <p>COG staff will coordinate with a number of related stakeholders in which our members also participate in tracking these issues and developing regional positions. See partner organizations under "Staffing."</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Participation in federal and state agency meetings regarding nutrient and sediment reallocations • Participation in federal and state agency meetings regarding development of Bay TMDL guidelines • Participation in the Wastewater Workgroup of the Chesapeake Bay Program's Nutrient Subcommittee; • Coordination with local and regional entities providing input on the development of new stormwater regulations in Maryland and Virginia. 	
Budget	
\$40,000	Regional Water Fund

COG FY 2009 Water Resources Work Program and Budget
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II. Development and Application of Technical Tools; Outreach

COG's effectiveness in helping to shape and implement regional WR programs and policies depends in large measure on access to and participation in the use of a variety of technical modeling tools. It is also important to ensure that COG's members are kept abreast of emerging technical and policy issues, generally through workshops.

FY 2009 Water Resources Work Program and Budget	
Program Area	II. Development and Application of Technical Tools; Outreach
Activity	A. Application of the Chesapeake Bay Water Quality and Watershed Models and Other Load Models
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Steve Bieber & Karl Berger
Activity Description	
<p>The Chesapeake Bay Water Quality Model (WQM) is the primary tool used by the Chesapeake Bay Program (CBP) to set nutrient and sediment load caps to meet water quality requirements. The CBP's Watershed Model (WSM) divides the 64,000 square mile Chesapeake Bay drainage basin into much smaller model segments (about the size of a county) and simulates soil erosion and pollutant loads from the land to the rivers. These modeling tools are being upgraded and will be used in fiscal 2009 to evaluate nutrient and sediment load caps to meet State water quality standards. It is anticipated that new regulatory requirements will result in adding specific and lower permit limits to regulated entities in the COG region, subject to the terms of TMDL consent decrees in Virginia and the District of Columbia and a Maryland/EPA MOU. To fully evaluate the implications of these anticipated regulatory and permit changes, it is essential to have a comprehensive understanding of the development and application of modeling tools used by the CBP to set nutrient and sediment load caps.</p> <p>Participation in this effort will greatly enhance the active role of the region in development of the technical tools underlying major water quality management decisions, particularly related to Blue Plains, local watershed management efforts, and State-led basin and small tributary TMDLs. Some of the expected benefits include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Proactive and direct involvement in applying the modeling tools used to guide regulatory decisions for our region, the Potomac River and the Chesapeake Bay. • A geographic focus on the COG region and the Potomac to insure that the modeling tools and regulatory decisions affecting the region are based on the "best available science." • Serving as a research test bed for applying the Chesapeake Online Assessment Support Tool (COAST), a web based version of the CBP watershed model, at the local scale. • Ability to test alternative watershed management scenarios at the local level, edit data, submit model runs, and perform analysis at a variety of scales, including small land/river segments that are highly relevant to local water quality management. <p>The Regional Fund contribution will ensure that a full spectrum of local impacts will be explored, including the tidal fresh Potomac and embayments in the Washington area. This effort will support staff efforts to: a) ensure that the most appropriate technical assumptions and data have been utilized; b) characterize the resulting water quality impacts in the tidal fresh Potomac and embayments in the Washington region; and c) identify management implications for pollutant loadings for various sectors (e.g., wastewater, urban stormwater, air deposition, etc.). This will also provide for briefings and worksessions with the WRTC and CBPC related to the regional implications of the upgrade and application of the Phase 5 WSM and the WQM.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Participate in Beta testing of the COAST tool to develop staff proficiency. • Technical assessment and memorandum on Bay model results for the Potomac as they become available. • Regular updates to the WRTC regarding the status of the Phase 5 WSM, the Chesapeake Bay Water Quality Model (WQM), and application of the COAST tool (Quarterly). 	
Budget	
\$ 85,000	Regional Water Fund

FY 2009 Water Resources Work Program and Budget	
Program Area	II. Development and Application of Technical Tools; Outreach
Activity	B. Development and Application of the Regional Wastewater Flow Forecast Model
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Tanya Spano Staff Resources: Tomlyne Malcolm, Mukhtar Ibrahim; Lana Sindler
Activity Description	
<p>COG staff will continue to update the Regional Wastewater Flow Forecast Model (RWFFM) inputs for the COG region, including working with each jurisdiction/agency to:</p> <ul style="list-style-type: none"> • Update and verify the GIS sewershed and septic area boundaries; • Develop accurate baseline year flow figures for areas outside of the Blue Plains Service Area; and • Update the wastewater flow factors if required. <p>COG staff will then utilize the latest demographic figures from COG's approved Cooperative Forecast (Round 7.1) to generate updated wastewater flow and nutrient load projections for the COG region and compare the results with various local, state, and Chesapeake Bay Program projection methodologies.</p> <p>COG staff will also work with the WRTC members to assess the potential impact of the flow projections to the region in terms of: nutrient load caps versus expected growth; wastewater plant capacity constraints; as well as watershed permit and trading options. It will also serve as an important check on the flow and load information assumptions in the state Tributary Strategies and CBP's 2010/2030 projection assumptions and alternative growth scenarios.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Preliminary regional wastewater flow projections (based on approved Round 7.1 Cooperative Forecasts) (1st Quarter) • Analysis of projected population trends, wastewater flow figures, and related nutrient loads (1st Quarter) • Updated RWFFM (incorporating updated demographic data, revised wastewater flow factors & hydraulic base flows for COG region) (4th Quarter) 	
Budget	
\$50,000 Regional Water Fund	

FY 2009 Water Resources Work Program and Budget	
Program Area	II. Development and Application of Technical Tools; Outreach
Activity	C. Technical Workshops and Seminars
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Tanya Spano Staff Resources: Tomlyne Malcolm, Heidi Bonnaffon, Karl Berger, Steve Bieber, Ted Graham
Partners	WEF, WERF, AWWA, AwwaRF, NVRC, ICPRB, CBP, COG wastewater/stormwater/drinking water organizations and utilities
Activity Description	
<p>The technical workshops and seminars proposed for FY 2008 are anticipated to include:</p> <ul style="list-style-type: none"> • <i>'Climate Change/Sustainability – Impacts and Options for Wastewater Plants'</i> – in collaboration with WEF/WERF, DC-WASA, and COG's other wastewater utilities to highlight potential local impacts of Climate Change and local mitigation and adaptation efforts that can be utilized locally) – Fall 2008 • <i>'Potomac Water Quality – Futures Forum</i> (explore wide spectrum of issues: Bay TMDL, local impairments, EDC concerns, drinking water issues, Climate Change impacts, growth implications, expanded stormwater requirements). <i>It will also address policy issues such as adaptive management (see III. A. Potomac Monitoring Program).</i> — Fall/Winter 2008 • <i>'Climate Change and Stormwater/Drinking Water Implications'</i> (workshop to assess the potential supply needs, water quality, and runoff impacts associated with potential changes in precipitation patterns) - TBD • Stormwater Workshops (to address monitoring, programmatic, regulatory issues, etc.) - TBD • Contaminants of Emerging Concern (e.g., EDCs) & Other Future Water Quality Challenges (<i>as appropriate, continue FY 2008 efforts to reflect ongoing developments regarding endocrine disruptor compounds and water quality/water resources/watershed protection challenges – in collaboration with the CBP, EPA, the states, WERF & AwwaRF and COG's members</i>) – <i>specific workshops TBD</i> • <i>'Nitrogen Bio-Availability, Modeling and Fate in the Environment'</i> (to focus on nitrogen-specific issues as part of the upgraded CBP Potomac Model – in support of DC-WASA and WERF priority research issues) – Spring 2009 • <i>'COAST & Other Localized Watershed Modeling Tools'</i> (present benefits and challenges of using various modeling tools available to evaluate water quality impacts at a local/regional-scale – in collaboration with the CBP, state agencies, universities, and other local governments) – Winter 2008 (tentative) • <i>'Growth, Planning & Water Quality Impacts'</i> (a continuation of FY 2007's workshop – in collaboration with the CBP, states, regional authorities, and COG's members. Will include both technical and policy workshops to: (a) review year 2030 Bay projection results; (b) develop local growth scenarios; and (c) investigate how other localities have incorporated water resource issues into their planning efforts.) – Spring 2009 <p>Collaborative efforts, co-sponsoring, and grant funding to supplement these efforts will also be sought in order to leverage COG's RWF monies. These efforts, in particular those associated with growth, climate change, and EDCs will also be coordinated with other COG environmental staff, committees, and stakeholders.</p> <p>This activity is to provide an in-depth discussion of critical and complex issues. By providing a forum for outside speakers and presentations, this approach also supports COG's members' efforts to increase the dialogue with state regulators and other interested parties on these issues. This approach builds on FY 2007's highly successful workshops on wastewater and EDC issues, drinking water and risk communication, and stormwater workshops.</p> <p>CBPC and WRTC members will be asked to indicate their priorities and areas of interest.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Workshops and/or seminars (3-5 during the year) • Presentation and background material (for each event) • Summary documents (after each event) • Feedback/evaluation process (for each event) • Policy and technical recommendations as appropriate (as needed) 	
Budget	
\$ 60,000	Regional Water Fund
\$ 25,000	Potential EPA/WERF/State Grants and/or Cost-share opportunities
\$85,000	Total

FY 2009 Water Resources Work Program and Budget	
Program Area	II. Development and Application of Technical Tools; Outreach
Activity	D. Wastewater and Stormwater Program Requirements and Regulatory Analysis
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Tanya Spano - Wastewater, Ted Graham - Stormwater Staff Resources: Tomlyne Malcolm, Heidi Bonnaffon
Partners	WEF, VAMWA, VAMSA
Activity Description	
<p>Regional water quality requirements, pollutant loads and permit limits are defined by: water quality standards; the Chesapeake Bay Program (CBP) "tributary strategies" and their related implementation plans; TMDLs; and NPDES permitting policies. In addition to ongoing implementation of CBP nutrient and sediment standards and the Bay TMDLs, EPA also will continue its national program to implement nutrient standards in non-tidal waters (e.g., streams and lakes) that are likely to have local impacts. EPA and the states also are developing enforcement policy guidance to address 'annual' nutrient load limits at WWTPs as well as potential load requirements for MS4 stormwater permits. COG staff also will continue to track the development and implementation of local TMDLs, including those focused on PCBs, trash and bacteria, as well as those addressing nutrients and sediment</p> <p>COG staff will address the potential impacts of these developing policies on wastewater and stormwater permits as well as implications for Potomac modeling and water quality monitoring programs. In addition, staff will continue to address local concerns as several new permit options develop (e.g., annual load limits, watershed permits, interstate trading potential, etc.). Particular focus will be on the potential impact these initiatives will have on the Blue Plains WWTP, the region's other wastewater plants and municipal stormwater programs. COG staff will continue to work with the WRTC members to refine cost estimates, rate impacts and associated issues for the region's wastewater treatment plants and stormwater management programs that reflect final tributary strategy load allocations, technology commitments and water quality standards. Whenever appropriate, these efforts will include coordination with other DEP staff and COG departments to address multi-media issues (such as air controls and land use planning).</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Assessment of CBP/state Bay TMDL implementation schedule assumptions (Quarterly) • Presentations on to WRTC, CBPC, and other COG committees (Ongoing) 	
Budget	
\$40,000 Regional Water Fund	

FY 2009 Water Resources Work Program and Budget	
Program Area	II. Development and Application of Technical Tools; Outreach
Activity	E. Growth, Sustainability and Climate Change
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Tanya Spano and Ted Graham Staff Resources: Tomlyne Malcolm, Karl Berger, COG planning staff
Partners	NVRC; MD-NCPPC; WERF, NACWA, AwwaRF; local water and wastewater authorities and organizations
Activity Description	
<p>COG staff will continue to evaluate the CBP's '2030 Land Use Change' modeling efforts to assess the validity of the data inputs and projection methodologies, to ensure that projections are reasonable valid, and whether the resultant nutrient/sediment loads generated for the COG region are reliable for assessing water quality impacts. This effort will also continue to assess the validity of assessing such loads at a local level and linking this information to local land use decisions. The goal of this work effort is to assess the technical veracity of the modeling and the potential policy implications of using the model to assess local impacts. This work will be done in conjunction with local partners and COG's Planning Directors and their staff.</p> <p>COG staff will continue to evaluate local, state and federal initiatives related to growth, sustainability and Climate Change issues, and to work with local officials and organizations to identify potential issues, impacts and options for addressing these issues. As needed specialized workshops will be organized to share this information (see II. C.). In addition, environmental indicators – specifically water quality related metrics, will be developed for potential inclusion in COG Greater Washington 2050 (GW2050) scenarios.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> ● Preparation of initial water quality indicators for GW2050 application (Fall 2008) ● Presentations on '2030 Land Use Change' model and results (As required, and September 2008) ● Presentations on to WRTC, CBPC, and other COG committees (Ongoing) 	
Budget	
\$40,000 Regional Water Fund	

FY 2009 Water Resources Work Program and Budget	
Program Area	II. Development and Application of Technical Tools; Outreach
Activity	F. Regional Outreach and Coordination
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Tanya Spano Staff Resources: Tomlyne Malcolm, Jim Shell
Partners	Local drinking water and wastewater authorities and organizations
Activity Description	
<p>COG staff will work with COG's members and local utilities to develop an integrated public outreach plan to address various water quality-related initiatives related to the proper disposal of oil and grease, disposal of other material that may cause problems in wastewater collection systems, as well as the disposal of unused pharmaceuticals and personal care products. The development of this outreach plan will be coordinated with COG member wastewater, collection system, and pretreatment staff, drinking water staff, as well as public information staff. The objective will be to utilize any existing local efforts and national guidance, and to develop an integrated multi-year plan that would help enhance existing efforts and ensure regionally consistent messaging. The plan would allow each participant to select the specific outreach elements that would best meet their jurisdiction/agency needs while benefitting from the cost savings that a regional effort could provide.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Preparation of a proposal for conducting an integrated public outreach plan (Fall 2008) • Implementation of the plan elements (TBD, based on funding) 	
Budget	
\$10,000 Regional Water Fund <u>\$15,000</u> Grant funds/Local contributions \$25,000	

COG FY 2009 Water Resources Work Program and Budget

III. Water Quality Monitoring

COG has served as the water quality monitoring coordinator and regional repository for water quality and wastewater data in the Washington metropolitan region for more than two decades, a role formalized under the Blue Plains Intermunicipal Agreement of 1985. COG now serves as the repository for physical/chemical water quality data, hydro-meteorological data, and wastewater loadings for the COG region, as produced by federal, state, and local government agencies. Data exists for 99 stations on the mainstem of the Potomac River and the mouths of its tributaries (Point of Rocks to Point Lookout), and 46 stations in the Anacostia watershed. More than 33 wastewater treatment plants also send their monthly discharge monitoring reports (DMRs) and monthly operating reports to COG. COG supplements this data with flow gage data from the USGS and meteorological data from the National Weather Service.

Through analysis of data and modeling, COG can participate in regional planning studies to best address water quality issues in the near and long-term. There are two main elements under the Planning and Monitoring Program: the Regional Monitoring Program, and the Chain Bridge Monitoring Program. While always important, these issues have taken on a greater importance as the new criteria are developed and are transformed into standards. Monitoring will be instrumental in determining whether or not attainment of water quality standards has been achieved and to provide input into the proposed Potomac River Water Quality Model and updated Chesapeake Bay program Sediment Model. These will have major implications for additional water pollution prevention and control requirements. A key element of this program is the ready availability of and access to water quality data by COG members.

FY 2009 Water Resources Work Program and Budget	
Program Area	III. Water Quality Monitoring
Activity	A. Regional Monitoring Program
Committee Oversight	Water Resources Technical Committee and Regional Monitoring Subcommittee
Staffing	Lead: Steve Bieber Staff Resources: Christine Howard; Mukhtar Ibrahim
Activity Description	
<p>COG will continue storing and managing the region's water quality monitoring data in a central, readily accessible database encompassing the region's water quality and wastewater information for the Potomac and Anacostia Rivers. This item also covers support to the Regional Monitoring subcommittee, support for COG staff to respond to information requests by members, and support for COG staff to participate in regional monitoring efforts, such as specialized efforts by USGS, EPA, and others.</p> <p>A highlight for fiscal year 2008 was COG's first ever Potomac Monitoring Forum, which was held on March 10 & 11, 2008 at the Cacapon Resort State Park in Berkeley Springs, WV. This forum was attended by over a hundred water monitoring professionals from local, state, and federal government, academia, private industry, and non-profit organizations.</p> <p>The Forum concluded with a group facilitated discussion to identify action steps that could be taken by COG and Forum participants to help chart the future direction of Potomac River monitoring. Some of those actions will be the focus of new activity for COG in fiscal 2008. Specifically, COG staff will be working with COG's member jurisdictions and Forum participants to:</p> <ul style="list-style-type: none"> • Inventory ongoing watershed efforts and make a directory available on the COG web site so all interested parties can leverage from other programs and optimize what is already being done. • Review historical data to identify trends and examine underlying causes. • Identify successful monitoring approaches from watersheds from the COG region and elsewhere, and promote their application in the Potomac and Chesapeake Bay. • Hold an Adaptive Management 101 Workshop to explain and provide examples of how this approach could be used in the Potomac River. <p>COG staff will continue to coordinate local government involvement in the Potomac shallow-water monitoring effort that began in 2006. In addition, COG staff will examine whether other long-term monitoring programs need to be established to develop baseline assessments for the Potomac TMDL programs being developed by Virginia, Maryland and the District of Columbia. COG will continue working with other agencies to improve data sharing and reporting.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Inventory ongoing watershed efforts and make a directory available on the COG web site. • Review historical data to identify trends and examine underlying causes. Complete and publish a regional stream condition status and trends report. • Update COG's Water Quality Procedure Guide to reflect changes in member protocols. • Convene meetings of the Regional Monitoring Committee (at least twice a year) • Reporting to WRTC in areas of need for regional monitoring, focusing on long-term Chain Bridge monitoring and other potential programs. • Hold an Adaptive Management 101 Workshop to explain and provide examples of how this approach could be used in the Potomac River. 	
Budget	
\$ 150,000	Regional Water Fund

FY 2009 Water Resources Work Program and Budget	
Program Area	III. Water Quality Monitoring
Activity	B. Chain Bridge and Little Falls Monitoring
Committee Oversight	Water Resources Technical Committee and Regional Monitoring Subcommittee
Staffing	Lead: Steve Bieber Staff Resources: Christine Howard; Mukhtar Ibrahim Cooperators: Virginia Tech's Occoquan Watershed Monitoring Laboratory; USGS MD-DE-DC Water Science Center; U.S. Army Corps of Engineers.
Activity Description	
<p>This project continues to maintain the single most important Potomac estuary pollution monitoring station (at Chain Bridge). It involves operation of an automated storm monitoring and grab sampling system for conventional pollutants and nutrients at the Chain Bridge monitoring station on the Potomac River. Data collected by this project are used to measure and estimate pollutant loads entering the Potomac estuary, calculate trends, and calibrate the Chesapeake Bay Watershed Model. It also provides an important "reality check" on modeled load estimates that are critical to the Chesapeake Bay Program's load allocation process. The monitoring program is subject to modification as necessary to supplement regional monitoring needs for regulatory and cooperative programs.</p> <p>This project also covers the local share of the USGS gage at Little Falls, which is a cooperative project between COG and the U.S. Geological Survey. Access to the gage site is provided by the Baltimore District, U.S. Army Corps of Engineers. Water temperature and specific conductance monitoring are also supported by the U.S. Army Corps of Engineers.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> ● Operation of Chain Bridge Monitor ● Final technical memo on prior year data and loads (4th Quarter) ● Presentations to technical committees as requested. ● Potomac River Water Quality Report analyzing fall line data and loadings, including presentation to the Water Resources Technical Committee and the Regional Monitoring Committee. (4th Quarter) 	
Budget	
\$ 120,000 (Chain Bridge - OWML)	Regional Water Fund
\$ 7,000 (Little Falls - USGS)	Regional Water Fund

COG FY 2009 Water Resources Work Program and Budget

IV. Water Supply, Drought Management, and Water/Wastewater Security

The COG Board of Directors adopted the regional Water Supply and Drought Awareness Response Plan, which provides for coordination of action by local jurisdictions and water utilities during periods of drought. The Plan also calls for the implementation of a year round "Wise Water Use" campaign. Overseeing this plan and regional drinking water issues is the Water Supply Task Force (WSTF), established by the COG Board in 1999. The WSTF acts as the central clearinghouse and coordinator of programs related to regional water supply, as well coordination with the Drought Coordination Committee and its Technical Committee, and a Communication Work Group that was established to assist the WSTF in handling media requirements and the implementation of the wise water use campaign. The WSTF, through the COG staff will, during FY 2009, continue to monitor and assess regional water resource conditions, distribute up-to-date information through seasonal monthly drought reports, presentations and briefings, and maintenance of an informational website. In addition, the COG staff will assist the WSTF continue to address a number of other important areas including Response Plan expansion to incorporate wastewater utilities and non-Potomac water utilities, resource information and messages, continued coordination and communication with Maryland and Virginia environmental agencies, continued water security activities, tracking and assessment of drought related technical studies, periodic and often frequent media contact and response and assessment of long-range needs as identified by the water utilities. A spin-off of the WSTF was its Regional Water Security Work Group whose mission continues to be in addressing regional water/wastewater security. Since 2001, the Work Group has been focusing efforts to secure funding to address water/wastewater security needs. To date, the group has been able to secure several million dollars in UASI grants and an additional \$906K in federal earmark grants. These funds have been used for important river and transmission pipeline modeling assessments, transmission and back-up power redundancy studies, as well as the establishment and operation of a regional water security monitoring network, upgrade of emergency mobile response lab capabilities, the development of a BMP Guide, and Regional Emergency Ops Plan.

During FY 2009, there will be continued efforts to maintain and update the Water Supply Emergency Plan (WSEP). The completed 2005 WSEP provides important coordination and communication guidance in the event of a regional water/wastewater incident and is an annex to the Regional Emergency Coordination Plan. During FY2008 the region's water utilities and local governments through the Water Security Work Group continued to oversee regional projects designed to address drinking water security and reliability. These projects have included the establishment of a regional water security monitoring network, spill model upgrades, distribution system modeling, and the assessment of emergency water interconnections and storage as well as power supply and capabilities. Additional efforts to enhance regional water supply operations plans and best management practices for water security will continue in FY 2009. During 2009 staff intends to seek grant funds to conduct a Regional Emergency Plan Exercise that will involve water and wastewater utilities, health officials and emergency managers. Additional efforts will continue to secure grants to address regional water and wastewater security needs.

Since its launch in 2003, the regional year-round Wise Water Use Campaign has become an integral component of water conservation education and drought response in the National Capital Region. The campaign continues to be comprehensive, reaching out to residents and businesses throughout the region, providing information on area water resources and tips on simple ways to save water. The Wise Water Use campaign involves broadcast media, theater and transit ads, internet, as well as public school education and community outreach, and partnership development. During FY2009, these activities will continue, with a strong emphasis on partnership development and coordinated activities as well as public school education.

FY 2009 Water Resources Work Program and Budget	
Program Area	IV. Water Supply, Drought Management, and Water/Wastewater Security
Activity	A. Water Supply Task Force Management and Support
Committee Oversight	Water Supply Task Force/ Water Security Work Group
Staffing	Lead: Jim Shell Staff Resources: Steve Bieber; Christine Howard; Stuart Freudberg
Activity Description	
Provide continued technical, policy, and staff support to COG's Water Supply Task Force for monitoring, assessment, and implementing a water supply work program addressing regional water supply and drought management issues. Work activities will also include: the continued coordination and oversight for regional water security and reliability; continued monitoring of regional water supply conditions; preparation of monthly drought outlook and conditions reports; response to media requests; briefings to the COG Board; CAO's, EPC, WSWG, WRTC; support and coordination of the Drought Coordination Committee, Drought Technical Committee and Communication Work Group; maintenance of the COG water supply web page; and participation and coordination in the annual drought and water security emergency exercises.	
Outcomes and Major Products	
<ul style="list-style-type: none"> ● Management and coordination of Water Supply Task Force meetings and Water Security Work Group (2008-9) ● Stand-up and management of Drought Coordination Committee and Drought Tech Committee during periods of drought (as needed) ● Tracking and monitoring of Potomac basin drought conditions and website updates (continuing year around effort) ● Management and coordination of Communications Work Group (quarterly) ● Continued tracking and analysis of Low Flow Allocation Agreement, Water Supply Coordination Agreement, Washington Region Demand and Flow Forecast, MD-DNR Flow-by study; MDE Consumptive Use study and other major water supply related studies (continuing effort) ● Monthly Regional Drought Reports (Seasonal, May-Oct.) ● Staff support and management coordination to the Water Supply Task Force's Water Security Work Group (continuing effort) ● Continue to seek and secure Department of Homeland Security, Urban Area Security Initiative and federal earmark water/wastewater security grant funds for NCR utilities ● Continued management, and coordination or regional Water Security Monitoring Network ● Plan and conduct a regional Water Supply Emergency Plan Exercise (Winter 2009) <ul style="list-style-type: none"> ○ Implementation of a one day regional functional exercise (Winter 2008) ○ WSEP Exercise Summary After-Action Report (Spring 2009) ● Participation in Critical Infrastructure Protection Interdependency Seminar and Training Exercise (Spring and Summer 2008) 	
Budget	
\$80,000	Regional Water Fund
\$85,000	DHS Urban Area Security Initiative Grants (ETOP); EPA
\$165,000	

FY 2009 Water Resources Work Program and Budget	
Program Area	IV. Water Supply, Drought Management, and Water/Wastewater Security
Activity	B. Wise Water Use Campaign
Committee Oversight	Water Supply Task Force; Communication Work Group
Staffing	Lead: Jim Shell Staff Resources: Christine Howard; Brian LeCouteur
Activity Description	
Implementation of a regional and District of Columbia educational and information campaign for water conservation. Continued implementation of a multi-year regional wise water use campaign that 1) increases awareness of area water resources and their suppliers and engender support for wise water use and 2) maximize the use of existing infrastructure, defer unnecessary and wasteful uses of water, and/or delays the need to identify and select new drinking water supplies, 3) reduced wastewater flows to wastewater facilities; and 4) provide support to educational programs in area public schools; 5) continued implementation of a major educational program to enhance wise water use awareness among local elementary/middle schools; 5) conduct water conservation information workshops; 6) develop public/private partnerships and implementation of promotional outreach events with those partners; 7) print and distribution of a regional water conservation landscaping guide; and 8) continued design and maintenance of a COG water conservation/ Wise Water Use website.	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Continued implementation of a regional year-around wise water use ad campaign (Ongoing – Spring /Summer 2009 focus); • Major water resource awareness and wise water use program in local elementary/middle schools (Spring 2008/Winter-Spring 2009); • Major efforts to develop public/private campaign partnerships for ongoing and future conservation efforts and funding (ongoing); • Maintain and update COG water conservation/wise water use website (ongoing) • Partnership promotional events (ongoing) 	
Budget	
\$ 30,000	Regional Water Fund
<u>\$ 70,000</u>	Other sources (water utilities, partners)
\$100,000	Total

COG FY 2009 Water Resources Work Program and Budget

V. Urban Watershed Management

The Urban Watershed Management program addresses a range of local watershed management activities, including: improving the principles and practice of regional urban storm water controls, the integration of local storm water management control programs into a regional context, and support for urban forestry. It provides a focus for roughly one-third of C2K's 100 or so commitments, which have a direct effect on local government watershed management programs.

The funding for watershed management activities is a combination of local membership funds, Regional Environmental Funds, and external grants, thus supporting a core watershed management program coupled with grant-funded activities involving COG matching money as required. The Regional Environmental Fund is a key component of this funding, with a focus on the stormwater management interests of the Water Resources Technical Committee including technical exchange through timely workshops. A portion of the funds is intended to support member-endorsed activities and attract external funding contributions. Recent grant activity includes the Pope Branch and Fort Chaplin baseline stream assessment projects and the Holmes Run/Cameron Run biodiversity project.

There are three components of the Urban watershed Management Program: (1) Urban Stormwater & Site Design; (2) GIS Applications, Watershed Stream Ecology and Forestry; and (3) Green Infrastructure.

FY 2009 Water Resources Work Program and Budget	
Program Area	V. Urban Watershed Management
Activity	A. Urban Stormwater and Eco-Landscaping
Committee Oversight	Water Resources Technical Committee
Staffing	Lead: Ted Graham Staff Resources: Steve Bieber; Karl Berger; Heidi Bonnaffon
Activity Description	
<p>Promote technical information exchange and provide support for COG members in the area of urban stormwater management and environmentally responsible lawn and landscaping practices. Provide focus regarding the implications of urban stormwater pollution to the region's water quality. Continue to pursue grant opportunities that promote COG member urban stormwater, environmentally responsible lawn and landscaping practices, and environmentally sensitive site design (ESSD) objectives and initiatives. Identify opportunities to partner with members on increasing the awareness of the general public concerning the benefits and practices of responsible lawn care and landscaping including the appropriate use of chemical inputs, water, and plant species.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Individual meetings with COG jurisdictional members to educate and encourage the adoption of healthy lawn care principles and practices. • Development and dissemination of a broadly accepted and endorsed set of guidelines or principles for responsible lawn care and landscaping to lawn care operators, public policy officials, home builders, and consumers. • Development of one or more local/regional demonstration projects, working in collaboration with private business and university researchers. • Presentation(s) to the Water Resources Technical Committee, Chesapeake Bay Policy Committee and Bay Program committees as appropriate (bi-monthly/as needed) • Grant project deliverables (as specified in grants) 	
Budget	
\$20,000	Regional Environmental Fund
<u>\$25,000</u>	COG Local Funds
<u>\$45,000</u>	Total

FY 2009 Water Resources Work Program and Budget	
Program Area	V. Urban Watershed Management
Activity	B. Watershed Stream Ecology, GIS Applications, and Forestry
Committee Oversight	Water Resources Technical Committee, Community Forestry Network
Staffing	Lead: John Galli Staff Resources: Phong Trieu; Brian LeCouteur; Aubin Maynard
Activity Description	
<p>Project Description/Objectives: This work element provides for limited direct staff support and opportunities to leverage grant support covering watershed monitoring studies, assessment of physical, chemical and biological conditions of local streams, riparian forest buffer and watershed evaluations using various environmental indicators, remote sensing and GIS applications, evaluation of the performance of various urban stormwater Best Management Practices and/or other watershed water quality enhancement-related projects and initiatives. COG staff will continue to pursue grant opportunities which promote and/or enhance COG member watershed & forest protection, restoration and management objectives and initiatives. Based upon such grant support, COG staff will continue to provide stream restoration, fish passage, stormwater management, wetland creation and riparian habitat restoration design and technical, GIS-related watershed evaluation expertise and guidance to COG members.</p> <p>Activities supported in this work element, (some with grant support), include staff support to the Community Forestry Network (CFN); amend and update the green infrastructure database for the Washington Metropolitan Area; and several stream and riparian buffer assessment studies.</p>	
Outcomes and Major Products	
<p>Major Products:</p> <ul style="list-style-type: none"> • Prince George’s County – Upper and Lower Beaverdam Creek Benthic Assessment Study (4th quarter) • COG Region Water Resources Indicators Database Development (4th quarter) • Northwest Branch- Herring Restoration, Festival and Outreach (3rd quarter) • District of Columbia- Watts Branch Benthic Stream Assessment Study (3rd quarter) • Urban Tree Canopy Goal Development • Regional Forest Cover Benefits Assessment • Urban Forest Resource Recovery Analysis (Urban Timber Utilization) • Support for CFN (three meetings, total) <p>Other potential grant supported project deliverables (TBD)</p>	
Budget	
\$45,250	Regional Environmental Fund
\$33,157	COG Local Funds
<u>\$50,000</u>	External Grant Support (TBD)
\$128,407	Total

FY 2009 Water Resources Work Program and Budget	
Program Area	V. Urban Watershed Management
Activity	C. Planning for Green Infrastructure and Sustainable Agriculture; Related Database Management
Committee Oversight	Water Resources Technical Committee, Chesapeake Bay Policy Committee, and Regional Agriculture Workgroup
Staffing	Lead: John Galli Staff Resources: Phong Trieu; Brian LeCouteur; Aubin Maynard
Activity Description	
<p>Project Description/Objectives: This work element provides for direct staff support and opportunities to leverage grant support covering green infrastructure projects for the Metropolitan region. This will include project areas such as maintaining current land cover mapping databases using remote sensing and GIS applications as well as supporting ongoing regional Green Infrastructure initiatives. This element is also designed to support ongoing work for the Regional Agricultural Initiative including marketing of local agriculture, mapping agricultural lands, further analysis of farm markets and support of the Regional Agricultural Workgroup (RAW) to explore opportunities that support agricultural-related activities. COG and the National Park Service are currently pursuing joint funding opportunities through their ongoing cooperative agreement. COG staff will continue to pursue other grant opportunities which promote and/or enhance COG member green infrastructure and agricultural programs and initiatives for the protection and enhancement of green space for agriculture, recreation, wildlife habitat and watershed protection. Based upon such grant support, COG staff will continue to provide expertise and guidance to COG members.</p> <p>Activities supported in this work element, include pursuit of grant matching funds, staff support for the Regional Agricultural Workgroup, assisting COG membership on Green Infrastructure and Agriculture programs, as well as maintenance and expansion of the green infrastructure database for the Washington Metropolitan area.</p>	
Outcomes and Major Products	
<ul style="list-style-type: none"> • Regional Green Infrastructure Database Update and Expansion (Fall - Winter 2008/09) • Support for the Regional Agricultural Workgroup (4 Workgroup meetings per annum) (Summer 2008 – Spring 2009) • Regional Farmers Market Vendor Database Maintenance (Fall-Winter 2008) • Regional Agriculture Web site Enhancements (Winter 2008/09) • Regional Agriculture Marketing Initiative (Winter 2008, Spring 2009) • Other potential grant supported project deliverables (TBD) 	
Budget	
\$58,157	COG Local Funds
\$150,000	External Grant Support (TBD)
\$208,157	Total

**Ordinance to Regulate the Establishment, Operation and Maintenance of
Non-conventional Onsite Sewage Disposal Systems**

References: Code of Va. §§ 15.2-1200, 15.2-2157

Section 1. INTENT.

The intent of this ordinance is to protect water quality and water supplies; prevent the contraction or spread of infectious, contagious and dangerous diseases; prevent the spread of failing non-conventional onsite sewage disposal systems; and otherwise further the health, safety, morals and general welfare of the citizens of Loudoun County. Pursuant to these goals, the Board of Supervisors hereby exercises its power, as granted by § 15.2-2157 VA Code Ann., to regulate onsite sewage systems.

Section 2. DEFINITIONS

For the purposes of this section, the following words and phrases shall have the meanings respectively ascribed to them by this subsection:

- A. "Alternative discharging sewage system" shall mean any device or system which results in a point source discharge of treated sewage for which the State Board of Health may issue a permit authorizing construction and operation when such system is regulated by the State Water Control Board pursuant to a general Virginia Pollutant Discharge Elimination System permit issued for an individual single family dwelling with flows less than or equal to 1,000 gallons per day.
- B. "Conventional onsite sewage disposal system" shall mean a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity distributed subsurface drainfield, intended to serve one or more uses on a single parcel, and not maintained by a public entity.
- C. "Health officer" shall mean the Director of the Loudoun County Health Department or his designee.
- D. "Non-conventional onsite sewage disposal system" shall mean a treatment works that is not a conventional onsite sewage disposal system or an alternative discharging sewage system. The term does not include (1) any communal system serving three or more lots or users and approved in conformance with any applicable federal, state and local regulations, or (2) any treatment works maintained by a public entity.
- E. "Public groundwater supply source" shall mean a well, spring or other groundwater source that is owned by a public utility and is currently utilized as a water supply for domestic, agricultural, industrial or other beneficial purposes.

The term shall exclude any source utilized as a water supply for a transient or other non-community water system.

- F. "Source water protection area" shall mean an area within 250 feet of a public groundwater supply source, established by a public utility to protect such source.
- G. "Treatment works" means any device or system used in the storage, treatment, disposal or reclamation of sewage or combinations of sewage and industrial wastes, including but not limited to pumping, power and other equipment and appurtenances, septic tanks, and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for ultimate disposal of residues or effluents resulting from such treatment.

Section 3. LIMITATION ON THE USE OF NONCONVENTIONAL SYSTEMS

The approval and permitting of non-conventional onsite sewage disposal systems is prohibited in Loudoun County, with the following exceptions:

- A. Any non-conventional onsite sewage disposal system which was installed prior to the effective date of this ordinance under a permit issued by the Loudoun County Health Department;
- B. Any proposed non-conventional onsite sewage disposal system which is the subject of a valid, unexpired permit from the Loudoun County Health Department issued prior to the effective date of this ordinance, but which has not been installed as of the effective date of this ordinance;
- C. A non-conventional onsite sewage disposal system replacing a failing onsite sewage disposal system or a privy, where no other alternative is reasonably practicable;
- D. A habitable building that has been destroyed by circumstances beyond the control of the owner or occupant of the building that was previously served by a non-conventional onsite sewage disposal system, provided that said system must be installed within three (3) years from the date of issuance of the certification letter;
- E. A building which is eligible to be on the Virginia Landmarks Register or the National Register of Historic Places or is eligible to be a contributing landmark in an historic district listed in the Virginia Landmarks Register or the National Register of Historic Places, so as to ensure that historic landmarks are not destroyed or rendered unusable by lack of sewage disposal;
- F. A public building or facility; or
- G. Any lot that was identified as to be served by a non-conventional onsite sewage disposal system by the Loudoun County Department Health Department during its review

of a proposed subdivision, prior to the effective date of this ordinance or any lot that has been issued a Health Department Certification Letter where the lot was identified to be served by a non-conventional onsite sewage disposal system, prior to the effective date of this ordinance.

Section 4. MAINTENANCE OF NON-CONVENTIONAL SYSTEMS UNDER PERMITS ISSUED AFTER [effective date of the ordinance]

Any non-conventional onsite sewage disposal systems permitted under the provisions of Section 3 after the effective date of this ordinance, must comply with the following conditions and requirements:

- A. The installation and operation of any non-conventional sewage disposal system must be approved by the health officer as compliant with this section and the applicable regulations of the Virginia Department of Health.
- B. Prior to the installation and operation of any non-conventional sewage disposal system, an agreement, in a form approved by the county attorney and executed by the health officer and the property owner, must be recorded in the land records of the Office of the Clerk of the Circuit Court of Loudoun County. Such agreement shall, at a minimum:
 1. permit the installation and operation of such non-conventional sewage disposal system,
 2. provide notice to the public, including, without limitation, subsequent owners of the property, that the property is served by a non-conventional sewage disposal system,
 3. impose installation, operation and maintenance conditions determined by the health officer or the Board of Supervisors, as applicable, based on the maintenance requirements of such system, including, without limitation, a requirement for a maintenance contract or professional operator,
 4. require the property owner annually on the anniversary date of such agreement to procure an inspection to ensure such system continues to operate as designed and in accordance with this section and such agreement, which inspection shall be performed by an individual:
 - (i) licensed by the Virginia Department of Professional and Occupational Regulation or certified by the Virginia Department of Health as an authorized onsite soil evaluator,
 - (ii) licensed by the Virginia Department of Professional and Occupational Regulation as a professional engineer,

- (iii) qualified as an accredited septic system inspector, as such term is defined in title 59.1, chapter 24.2 of the Code of Virginia (1950), as amended, or
 - (iv) employed by the system manufacturer or designated by the system manufacturer as an authorized service provider, as demonstrated by evidence acceptable to the health officer,
- 5. require the property owner annually, within thirty (30) days of the anniversary date of such agreement, or such longer period as may be permitted by the health officer, to file with the health officer a copy of the inspection report, in a form approved by the health officer, and to repair or replace such system, as necessary, to correct any deficiencies identified in the inspection report in compliance with this section and the applicable regulations of the Virginia Department of Health,
- 6. require the property owner to obtain approval of any modifications, alterations, and expansions of such system from the health officer,
- 7. provide that in the event of the failure of such system, as determined by the health officer, the repair or replacement of such system shall be subject to the applicable regulations of the Virginia Department of Health or the State Water Control Board, to the extent such regulations are not inconsistent with this section and such agreement,
- 8. permit the health officer to enter the property to inspect such system and to determine whether such system is installed, operated and maintained in accordance with this section and such agreement,
- 9. provide that the property owner's obligations under such agreement shall run with the land and bind the property owner, and the property owner's heirs, personal representatives, successors and assigns, and
- 10. permit the termination of such agreement, and the revocation of the authorization under this section of the installation and operation of such system, in the event the property owner fails to cause the continued operation of such system, as designed and in accordance with this section and such agreement.
- 11. provide that failure to comply with the terms of the agreement are violations of this ordinance subject to the penalties and other remedies provided herein.

- C. No non-conventional onsite sewage disposal system shall be permitted within a source water protection area unless the Virginia Department of Health determines that an existing sewage system serving an occupied structure has failed and cannot be repaired or replaced by a conventional onsite sewage system, and that the only available means of providing sewage disposal to such dwelling is by an alternative onsite sewage system.
- D. No alternative discharging sewage system shall be permitted unless the Virginia Department of Health determines that an existing sewage system serving an occupied structure has failed and cannot be repaired or replaced by a conventional onsite sewage disposal system or non-conventional onsite sewage disposal system, and that the only available means of providing sewage disposal to such dwelling is by an alternative discharging sewage system.
- E. Pursuant to the agreement required under Section (4)(B) above, the health officer may enter any property served by a non-conventional onsite sewage disposal system to inspect such system and to determine whether such system is installed, operated and maintained in accordance with this section and such agreement.

Section 5. MAINTENANCE OF NON-CONVENTIONAL SYSTEMS UNDER PERMITS ISSUED PRIOR TO [effective date of ordinance].

For a non-conventional onsite sewage disposal system approved prior to the effective date of this ordinance, the property owner is required to comply with the following maintenance responsibilities:

- A. procure an annual inspection to ensure such system continues to operate as designed and in accordance with this section and such agreement, which inspection shall be performed by an individual:
 - (i) licensed by the Virginia Department of Professional and Occupational Regulation or certified by the Virginia Department of Health as an authorized onsite soil evaluator,
 - (ii) licensed by the Virginia Department of Professional and Occupational Regulation as a professional engineer,
 - (iii) qualified as an accredited septic system inspector, as such term is defined in title 59.1, chapter 24.2 of the Code of Virginia (1950), as amended, or
 - (iv) employed by the system manufacturer or designated by the system manufacturer as an authorized service provider, as demonstrated by evidence acceptable to the health officer,

- B. file with the health officer no later than July 1 of each calendar year a copy of the inspection report, in a form approved by the health officer, and to repair or replace such system, as necessary, to correct any deficiencies identified in the inspection report in compliance with this section and the applicable regulations of the Virginia Department of Health,
- C. make modifications, alterations, and expansions of such system only with the approval of the health officer and in compliance with Section 4 of this ordinance.
- D. in the event of the failure of such system, as determined by the health officer, repair or replace such system in compliance with the applicable regulations of the Virginia Department of Health or the State Water Control Board, and the provisions of Section 4 of this ordinance.
- E. permit the health officer to enter the property to inspect such system and to determine whether such system is installed, operated and maintained in accordance with this section and the regulations of the Virginia Department of Health.

The provisions of this Section 5 shall apply to any owner of any non-conventional onsite sewage disposal system who has been notified by the county health official or a department, agency or official of the County of Loudoun of his maintenance responsibility for such systems.

Section 6. ENFORCEMENT AND PENALTIES.

- A. The owner of property on which is located a non-conventional onsite sewage disposal system is subject to civil penalties for violations of this Sections 3 and 5 of this ordinance, as follows:
 - 1. Failure to procure an annual inspection report in accordance with Section 4(B)(4) or Subsection 5(A) -- \$100 for an initial summons and \$150 for each additional summons.
 - 2. Failure to file an annual inspection report in accordance with Section 4(B)(5) or Subsection 5(B) -- \$100 for an initial summons and \$150 for each additional summons.
 - 3. Failure to obtain the approval the health officer for any modification, alteration or expansion of such system in accordance with Section 4(B)(6) or Subsection 5(C) -- \$100 for an initial summons and \$150 for each additional summons.

4. Failure to repair or replace a failing system in accordance with Section 4(B)(7) or Section 5(D)-- \$100 for an initial summons and \$150 for each additional summons.

Each day during which the violation is found to have existed shall constitute a separate offense. However, specified violations arising from the same operative set of facts shall not be charged more frequently than once in any 10-day period, and a series of specified violations arising from the same operative set of facts shall not result in civil penalties exceeding a total of \$3,000. If the violation is not abated after the imposition of the maximum fine, the locality may pursue other remedies as provided by law. Designation of these particular ordinance violations for a civil penalty are in lieu of criminal penalties, except for any violation that contributes to or is likely to contribute to the pollution of public or private water supplies or the contraction or spread of infectious, contagious, and dangerous diseases.

The health officer may issue a civil summons ticket as provided by law for a scheduled violation. Any person summoned or issued a ticket for a scheduled violation may make an appearance in person or in writing by mail to the Treasurer of Loudoun County, Virginia prior to the date fixed for trial in court. Any person so appearing may enter a waiver of trial, admit liability, and pay the civil penalty established for the offense charged.

If a person charged with a scheduled violation does not elect to enter a waiver of trial and admit liability, the violation shall be tried in the general district court in the same manner and with the same right of appeal as provided for by law. In any trial for a scheduled violation, the locality shall have the burden of proving by a preponderance of the evidence the liability of the alleged violator. An admission of liability or finding of liability under this section shall not be deemed an admission at a criminal proceeding.

B. Except as otherwise provided in this section, whoever violates any provision of this ordinance is subject to the General Code Penalty provisions in Section 202.99 of the Codified Ordinances of Loudoun County.

C. In addition to the enforcement of the penalties provided in this section, the health officer may bring a civil action for injunction, abatement or any other legal or equitable remedy to prevent, enjoin, abate or remove a violation of the provisions of this ordinance or any agreement under Section 3.

**DRAFT ORDINANCE TO REGULATE THE ESTABLISHMENT, OPERATION AND MAINTENANCE OF NON-
CONVENTIONAL SEWAGE DISPOSAL SYSTEMS []**

P. 8

[Note: The section numbers in this draft will be conformed to the Codified Ordinances of Loudoun County either in a draft noticed for adoption, or as part of the annual codification.]

Attachment 2

Section 1066.xx Maintenance of Sewage Disposal Systems.

The owner of an individual sewage disposal system that includes a septic tank shall have the septic tank (i) pumped out at least every five (5) years by a sewage handler, or (ii) inspected at least every five (5) years by an inspector approved by the Health Director and have the septic tank pumped out when specified by the inspector, or (iii) pumped out as specified in the permit for the system.

CHESAPEAKE BAY and WATER RESOURCES POLICY COMMITTEE
777 North Capitol Street, N.E.
Washington, D.C. 20002

MINUTES (revised) OF JANUARY 18, 2008, MEETING

ATTENDANCE:

Members and alternates:

Chair Martin Nohe, Prince William County
J Davis, City of Greenbelt
~~Penelope Gross, Fairfax County~~
Barbara Favola, Arlington County
Tim Lovain, City of Alexandria,
Sheila Besse, District of Columbia
Meo Curtis, Montgomery County
Beverly Warfield, Prince George's County
Carole Larsen, Frederick County
Mark Charles, City of Rockville
Mohsin Siddique, District of Columbia WASA
J. L. Hearn, WSSC

Staff:

Stuart Freudberg, DEP Director
Ted Graham, DEP Water Resources Program Director
Steve Bieber, DEP
Tanya Spano, DEP
Heidi Bonnaffon, DEP
Karl Berger, DEP

1. Introductions and Announcements

In the Chair's temporary absence, Vice Chair J Davis called the meeting to order at 10:05 a.m. Chair Nohe joined the meeting a few minutes later.

Although delayed until later in the meeting, Chair Nohe eventually called for announcements. Steve Bieber of COG staff noted that COG will be hosting a Potomac River water quality monitoring forum on March 10-11. He said the forum is designed to produce recommendations on the future direction of the region's monitoring efforts.

Mr. Berger circulated the proposed meeting schedule for the year, which was based on meetings on the third Fridays of January, March, May, July, September and November.

Action item: Committee members directed staff to change the date of the March meeting from March 21 to March 14 to avoid conflicts with the weekend of Easter.

2. Approval of Meeting Summary for Nov. 30, 2007

The committee approved the draft summary.

3. Selection of Committee Vice Chairs for 2008

Action item: The members voted to extend the terms of J Davis as vice chair for Maryland and Hamid Karimi as vice chair for the District of Columbia.

4. Climate Change, Green Building and Water Quality

Mr. Graham of COG staff distributed a memo that he had written for COG's Climate Change Steering Committee, which outlines how climate change is expected to affect water and wastewater treatment agencies and the priorities these agencies have developed at the national level for research on this issue. Mr. Graham noted that he recently attended a workshop on this issue sponsored by the national research arms of the water and wastewater industries.

Mr. Graham listed a number of challenges that climate change may pose for such agencies in the Washington region. These include the potential for disruption to water supplies caused by unusually severe drought, the potential salinization of ground water supplies in coastal areas and the likely need to decrease the "carbon footprint" or the amount of energy use and associated greenhouse gas emissions, of the plants themselves.

Discussion: Mr. Siddique noted that greenhouse gas emissions arise not just from the energy used by such plants, but also from the treatment process itself, particularly in the case of wastewater plants. He said there may be a trade off between increasing levels of treatment for water quality benefits and the increased amounts of carbon dioxide and methane, both potent greenhouse gasses, that such treatment will generate.

Mr. Lovain said a recent article in *Governing* magazine discussed the impact that the increasing frequency of so-called "100-year storms" may have on municipal stormwater systems. The likely increase in such extreme weather events has for the most part not been taken into account in this area, he said.

Ms. Favola said that climate change should be a priority issue for the CBPC because it is a way to address at a broader level a lot of the issue in which the committee is interested. Ms. Davis said she agrees to a point; however, she is concerned that water quality issues may be lost in the broad focus on climate change.

Mr. Freudberg noted that the water quality-climate change connection is also being addressed in another COG forum. COG's Green Building initiative recently produced a series of reports that recommend adoption of regional standards that include innovative approaches to stormwater management designed to minimize the amount of runoff leaving developed areas.

Ms. Favola asked if future changes in land use in the region, which has implications for both climate change and water quality, is being addressed by COG, whether in the Greater Washington 2050 initiative or by other committees, such as the Metropolitan Development Policy Committee. She said she would like to see a specific standing committee take on the climate change issue rather than have it be addressed by ad hoc groups or through the Greater Washington 2050 process.

Mr. Freudberg noted that there is interest in assessing whether the current committee structure is appropriate to the range of issues confronting the region. He said the Board has directed staff to review the committee structure and has tentatively scheduled a discussion of this issue for its July retreat. One of the revisions being suggested is to recreate an overall environmental policy committee, which COG has had in the past, to deal with cross cutting issues such as climate change.

Chair Nohe said he would be opposed to creation of such a new committee if it is simply added on to the existing committee structure. He said it would make more sense to create an environmental policy committee with

multiple responsibilities, although that could lead to fights over what part of the environment on which to focus.

Earlier in his presentation, Mr. Graham had noted that climate change issues will be woven into the fiscal 2009 work program for the Regional Water Fund, so members will have the opportunity to address it again there.

5. Committee Focus for 2008

Mr. Berger briefly outlined staff recommendations for the committee's priorities in 2008, which were based on a continuation of most of the 2007 list.

Discussion: Chair Nohe asked that the committee take a further look at the water quality issues associated with septic systems (which was the subject of one presentation to the committee in 2007). In particular, he said, he would like to focus on whether local governments use the provision of sewer service as a de facto growth control tool and what are the environmental implications of such a practice. Ms. Curtis noted that Montgomery County recently conducted a study on the implications of extending sewer service to institutions that are located outside of the area currently served by sewer systems. Mr. Hearn noted that under Maryland law utilities must provide service to properties that are located next to existing sewer lines.

Ms. Gross It was noted that the distinction in the staff recommendations between advocacy for funding and local government voice is somewhat artificial and said that the two items be combined.

Mr. Berger noted that staff is again recommending a committee tour as part of the focus document, despite limited attendance at tours during the past two years. Members agreed to keep the possibility of a tour as part of the committee's focus for now, but they said that it is very difficult to commit to an entire day for such an event.

Action item: The committee directed staff to revise the priorities list to include the septic system issue and to combine the committee's advocacy and funding roles into one overall priority.

6. Introduction to Water Quality Metrics

Mr. Berger distributed a staff memo that outlines potential indicators of water quality that could be used as part of the Greater Washington 2050 effort to evaluate future growth scenarios.

Mr. Freudberg noted that Greater Washington 2050 is supposed to examine the impacts of so-called alternative growth scenarios in which the pattern of new development is different than what is currently predicted. Ms. Favola asked if this analysis would be done at a local level; not necessarily, according to Mr. Freudberg. He also said that such scenarios typically have not accounted for all of the growth that occurs just outside the borders of the COG region.

Staff did not ask for any committee action on the list of potential indicators. Mr. Berger said that COG's Water Resources Technical Committee will be asked to provide feedback on the list to the CBPC.

7. Response to Concerns about Local Government Role

Ms. Gross On behalf of committee member Penelope Gross of Fairfax County, staff distributed a summary of the Chesapeake Executive Council meeting held in December in Annapolis, in which she participated as chair of the Bay Program's Local Government Advisory Committee. In her summary, she noted that her remarks to the EC members as LGAC Chair focused on the continuing lack of connection between state and local governments. The

LGAC, she said, proposed creation of a circuit rider program that could improve the sharing of information among local government officials. She also commented briefly on Bay Program restructuring proposals, stressing the importance of continuing the LGAC as a separate committee. (COG commented on this issue in 2007 in a letter to Bay Program Director Jeff Lape.)

8. Legislative Update

Mr. Bieber briefed the members on the status of efforts in the Maryland General Assembly to define how the new Chesapeake Bay Trust Fund created during the legislature's special session in the fall would actually work. He said Del. Maggie McIntosh has introduced a bill that would allocate a portion of the funds among different state agencies and distribute the remainder to potential recipients including local governments in a grant process overseen through the new BayStat criteria. He added that staff recommends that COG adopt a position that would call for as much of the money as possible be used for implementation activities at the local level.

Ms. Curtis noted that most of the money for the fund would be derived from taxes and fees in the urban areas of the state and yet it is not clear how much of its money would be spent in these areas on stormwater projects. She suggested that COG adopt the same position on the fund as have the Maryland Association of Counties and the Maryland Municipal League, which are asking that a specific percentage be set aside for local government projects.

Mr. Berger briefed the members on legislation in the Virginia General Assembly, concentrating on proposals to create a new fund to support the implementation of agricultural water quality practices. Although COG support for such legislation would be consistent with existing policy, he noted, the members might want to condition support on the caveat that the new fund not siphon funding from the existing Water Quality Improvement Fund, which is used to pay the state's share of cost-share agreements with municipal wastewater plants for the implementation of enhanced nutrient removal technology.

Action item: The members agreed to recommend to the COG Board support for the two bills noted, with the caveats reflected in their discussion.

9. New Business

Mr. Bieber distributed a summary of a research project on pesticide use in the District of Columbia that COG is conducting with George Washington University with support from the District's Department of the Environment. He said results should be available in the fall of 2008.

10. Adjourn

The meeting was adjourned at 12:05 p.m.