

## POTOMAC RIVER BASIN DRINKING WATER SOURCE PROTECTION PARTNERSHIP

#### **Annual Meeting Summary for November 20, 2014**

Adams County Emergency Services Training Facility Gettysburg, Pennsylvania

**KR Young** 

Heidi Moltz

#### **Attendees**

State and Local Government Utilities Federal and Regional Agencies

Borough of Chambersburg: DDOE: EPA Region 3: **Travis Amsley** Collin Burrell **Bill Arguto** 

Vicky Binetti City of Rockville: MDE: Jon Capacasa **Judy Ding Brigid Kenney** Tom Damm

**Robert Peoples** DC Water: Lyn Poorman

Nicole Condon EPA:

Chitra Kumar PA DEP: Fairfax Water: Dana Aunskt Sylvia Malm

**Chuck Murray Patrick Bowling Greg Prelewicz** Lisa Daniels

ICPRB: Niffy Saji Joe Lee Karin Bencala

Lori Mohr Curtis Dalpra

**Gettysburg Municipal Authority:** Catherine Port Carlton Haywood Amanda Whitman

Loudoun Water: VDH: MWCOG:

Mark Peterson John Aulbach Steve Bieber

**USGS:** Washington Aqueduct:

**Roy Soto** 

Tom Jacobus WV DHHR: Jim Campbell Anne Spiesman Scott Rodeheaver Cheryl Dieter **Curtis Schreffler** 

Bill Toomey

WSSC:

Jeff Patterson

Priscilla To

Martin Chandler

Other Interested Parties

Joe Hoffman Adams County Conservation Land Conservancy of Adams

District: Co./Adams Co. Water Resources

Maryland Rural Water: Adam McClain Advisory Committee: Pat Naugle

Joe Everd

**Ginny Siemer** Penn State Extension: Water Research Foundation:

**Bryan Swistock** Kim Linton

#### Welcome and Introductions

Tom Jacobus, General Manager, Washington Aqueduct; Potomac DWSPP Chairman

#### **Welcome to Pennsylvania**

Dana Aunkst, Acting Secretary, Pennsylvania Department of Environmental Protection (Pa. DEP)

#### **Information Session: Shale Gas Development**

Handouts: Speaker Bios, Marcellus Shale Development, Drilling for Natural Gas in the Marcellus Shale Formation FAQs

- Moderator: Patrick Bowling, Source Water Protection Coordinator, Pa. DEP
- Water Resources Issues Related to Shale Gas Development Bryan Swistock, Water Resources Coordinator, Penn State Extension
- Environmental Protection and Unconventional Shale Well Development in the Commonwealth of Pennsylvania - Joe Lee, Chief, Oil and Gas Subsurface Activities, Pa. DEP
- The Marcellus Shale Safe Drilling Initiative: The Process, The Results, The Future -Brigid Kenney, Senior Policy Advisor, Policy and Planning, Maryland Department of the Environment

#### **Safe Drinking Water Celebration**

- 10th Anniversary of Potomac DWSPP T. Jacobus; Collin Burrell, Associate Director for Water Quality Division, District Department of the Environment
- 30th Anniversary of Pennsylvania's Safe Drinking Water Act D. Aunskt
- 40th Anniversary of the Federal Safe Drinking Water Act Jon Capacasa, Director, Water Protection Division, EPA Region 3

#### **2015 Work Plan Discussion** – Workgroup Chairs

See Attachment 1 for complete summary of 2014 accomplishments and 2015 work plans.

Utility outreach and regional committees – C. Burrell (Government Committee)

The committee is planning to hold at least one outreach meeting in the Monocacy watershed and one in the Potomac portion of West Virginia to explore interest in source water protection and in creating regional utility committees.

UCMR3 results and messaging – Martin Chandler, WSSC (Emerging Contaminants workgroup)

UCMR3 monitoring has been completed by approximately half of the systems required to monitor under the rule. The others will wrap up monitoring by the end of 2015. Preliminary data indicate the common presence of chlorate and trace metals

(chromium, strontium and vanadium). The public health implications of these trends are not currently known. EPA has made a preliminary determination to regulate strontium. Following a 60-day public comment period, a final determination will be made.

Once all the data is in for Potomac basin systems, the workgroup will have to decide what to do with the information collected. Options include posting information to the Partnership's website, providing resources to basin utilities, or summarizing the findings for internal use only. The workgroup will coordinate with the Reaching Out workgroup on any public materials.

Source Water Assessment – Carlton Haywood, ICPRB (Early Warning & Emergency Response workgroup)

The workgroup followed a number of emergency events this year to learn from others' preparations and response, including the Charleston/Elk River chemical spill, Dan River coal ash spill, and Lynchburg/James River train derailment. These events spurred discussions with EPA Region 3 and other Partnership members on updating the D.C. source water assessment. Efforts were made to figure out what needs to be done and who could contribute resources. On a parallel track, MWCOG and some member utilities are participating in Water Research Foundation project #4581, Using Geographic Information System (GIS) to Identify and Catalog Potential Contaminants Stored in Tanks Upstream of Drinking Water Intakes. Outcomes of the project will be a method for determining the location and type of chemicals stored in source water areas and a pilot tool for providing this information to a user. The project will largely consist of a needs assessment and data gathering. This group is also likely to contract with Corona Environmental Consulting (CEC), the project consultant, to develop a Potomac-specific storage tank identification tool. Once it is known exactly what the CEC and WRF projects can provide and who will have access to the information, the Partnership will have to decide if this project meets everyone's needs. The workgroup will need to stay informed on other mapping efforts, specifically EPA's DWMAPs project, to avoid duplication.

In 2015, the workgroup will continue to engage Colonial Pipeline on spill prevention and response preparedness. As discussed at the July 2014 meeting with Colonial, a joint exercise would be valuable. The region's incident commander Charlie Fitzsimmons has reached out to the local Colonial contacts and they are on board to make this happen within a year or two.

Harmful Algal Blooms – M. Chandler (Workgroup Chairs)

Interested workgroup chairs are meeting periodically to address HABs. This group will determine the needed tasks and divide up the work. There are five main areas of interest:

- 1. Detection and monitoring What is being done by state and federal agencies and utilities in the basin?
- 2. Track legislation and regulations There is currently a bill to require a health advisory on Microcystin and a proposal to include it on the UCMR4 monitoring list. HABs will be regulated in Ohio; Kim Linton can provide contacts if the group wants to learn more.
- 3. Public health issues in reservoirs Need to know more about the risks and possible ways to reduce the risk, such as limiting public access.
- 4. Treatment How can utilities treat toxins?
- 5. Manage outreach on findings for both the Partnership and individual utilities.
  - Explain difference between toxin and taste and odor issues. DC
     Water has some experience with this and found it difficult.
  - WRF and AWWA have a guidance document on toxin and taste and odor issues.

The group plans to have another discussion in January.

Forest Proposal – Greg Prelewicz, Fairfax Water (Utility Committee)

Fairfax Water, WSSC, Washington Aqueduct, and DC Water have submitted a tailored collaboration pre-proposal application to the Water Research Foundation for a project titled, An Assessment of Forest Protection Opportunities and Potential Reductions in Sediments, Nutrients, and Total Organic Carbon in the Freshwater Potomac River Watershed. If this application is successful, the funds would be combined with funds from the U.S. Endowment for Forestry and Communities and from the four participating utilities. The purpose of the study is to look at the conditions in the basin, specifically, at implications of future land use scenarios to provide insight on whether or not land cover affects utility treatment costs. Depending on the success of the application and the timing of WRF funds, work could begin mid-year.

#### Financial Report – C. Haywood

See Attachment 2 for complete summary of 2014 expenses and the 2015 budget. Due to increased activity this year, expenses ran over budget. State and utility contributions were last increased in 2008. If the increased level of activity continues, we may have to reconsider contributions for fiscal year 2016.

#### **Announcements**

Source Water Collaborative Toolkits

- Opportunities to Protect Drinking Water Sources and Advance Watershed Goals through the Clean Water Act (See Attachment 4)
- How to Build and Maintain Effective Partnerships to Protect Sources of Drinking Water

Water Research Foundation Technical Transfer Workshop - Analyzing Condition Assessment, Economics, and Risk Leads to Better Rate Adjustments - Wednesday, December 3 Registration List Links:

Subscribers: http://collab.waterrf.org/Workshops/Risk-Analysis-

Economics/Lists/Registration/

Non-subscribers: http://collab.waterrf.org/Workshops/Risk-Analysis-

Economics/Lists/NonSubscriberRegistration/



## Potomac River Basin Drinking Water Source Protection Partnership Annual Meeting – November 20, 2014

### **Work Group Accomplishments and Work Plans**

#### **Government Committee**

#### **2014 Accomplishments**

#### Completed

Held a meeting on Harmful Algal Blooms in May 2014. In addition to providing information to
Partnership members, this meeting served as an opportunity to engage water systems and other
professionals in source water protection discussions. Over 50 people participated, including multiple
individuals from eight non-member systems.

#### 2015 Work Plan

**Major Initiatives** 

- Explore the Partnership's role in supporting the development of regional utility committees.
  - Host an exploratory meeting with water systems in the Monocacy watershed to determine interest in:
    - Forming a regional utility source water protection committee and
    - working together to develop an implementable watershed-based source protection action plan that leverages other existing programs and provides opportunities to collaborate with the full Partnership.
  - Hold one or more meetings with West Virginia water suppliers to discuss their source water concerns and interest in joining the Partnership.
- Explore opportunities for potential source water protection improvements through collaboration among state and federal regulatory and non-regulatory tools, as described in *Opportunities to Protect Drinking Water Sources and Advance Watershed Goals Through the Clean Water Act*.

#### **Emerging Contaminants**

The role of the Emerging Contaminants workgroup is to support the Partnership by tracking and reporting on findings of research and monitoring of persistent and newly identified threats posed to source water quality in the Potomac River basin. A primary focus of the workgroup shall be on endocrine disrupting chemicals (EDCs), pharmaceuticals and personal care products (PPCPs), and on other chemicals or contaminants of concern – specifically, their identity, sources, distribution, possible human and ecological health effects, treatability, and control through management practices to limit their occurrence in the Potomac River and its tributaries.

#### **2014 Accomplishments**

#### Completed

- Tracked UCMR3 data as it became available for Potomac Basin utilities to understand trends. This
  information was disseminated to all participants of the October 2013 seminar. They were also
  provided examples of public messages to explain what is being done in the region to better
  understand the presence and implications of emerging contaminants. Links to how some utilities are
  reporting UCMR3 monitoring results were also provided.
- Considered developing a list of literature citations on emerging contaminant topics for internal use by DWSPP members. It was determined that maintaining an on-going list was not practical. Research updates will continue to be provided to the workgroup and at quarterly meetings.
- Tracked status of Drug Enforcement Administration (DEA) rules for disposal of controlled substances and assisted with promotion of DEA take-back events.
- Verified and mapped locations of pharmaceutical and endocrine disrupting chemical point source discharges identified within the basin.
- Made presentations from October 2013 UCMR3 seminar available on the DWSPP website.

#### 2015 Work Plan

#### **Major Initiatives**

- Track UCMR3 data as available from Potomac Basin utilities to identify and understand trends.
- Consider holding an information session for other watershed groups during 2015 to share UCMR3 data
- Participate in ad hoc group on algae and algal toxins.
- Participate in or track DC Water's new research project on "Assessing the Impact of Anthropogenic Discharges on Endocrine Disruption in the Potomac River Watershed."

#### On-Going

- Support Water Research Foundation projects related to emerging contaminants through cash or inkind contributions as individual agencies.
- Track significant research on emerging contaminants; review published articles, and add website links to relevant reports.
- Track legislation on emerging contaminants.
- Support and promote any future DEA drug take-back events.
- Support Urban Issues workgroup with NPDES facility permit renewals, commenting on any with potential issues related to emerging contaminants.

#### Agricultural Issues

The Agricultural Issues (Ag) workgroup was formed to take an active role in building alliances with the agricultural community in order to minimize water pollution in the region's sources of drinking water. The Ag workgroup will work primarily with state and local academic institutions and agencies that can provide technical, extension, and veterinarian support. The Agricultural workgroup's central focus is on Cryptosporidium and developing a message to convey the importance of preventing this pathogen from entering source waters. However, the workgroup's interests extend to the prevention of other difficult-to-treat drinking water contaminants (e.g. Phosphorus, pesticides, and pharmaceuticals) from agricultural land as well. One of the workgroup's main challenges is to determine the most effective methods to engage the agricultural community.

#### **2014** Accomplishments

Completed

- Monitored state-level activities regarding implementation of the Chesapeake Bay TMDL.
- Members attended NRCS State Technical Committee meetings to represent source water protection interests.

#### 2015 Work Plan

**Major Initiatives** 

- Hold an information session at a quarterly meeting on the Chespeake Bay TMDL, focusing on Phase 1 and Phase 2 of the Watershed Implementation Plans, including tier milestones.
- Based upon interest following the information session described above, decide on possibilities for additional efforts including workshops, webinars, and the like.
- Engage point source community to discuss the fate and transport of residuals particularly from wastewater treatment plants.
- Discuss efforts to verify implementation of agricultural BMPS for the purposes of the Chesapeake Bay Watershed Model and TMDL.
- Report out on interim progress from the Pennsylvania targeted watershed enforcement initiative under which each landowner is visited to check compliance with state erosion and sediment and manure management requirements.

#### **Urban Issues**

This workgroup is intended to position the Partnership to better communicate drinking water needs in the Potomac River Basin to the agencies who oversee implementation of point and non-point source discharges of urban runoff, including Municipal Separate Storm Sewer (MS4) programs. These agencies may include state agencies, local jurisdictions, or regional planning districts or planning commissions. This workgroup shall focus on urban stormwater including urban and highway runoff and other point and non-point discharges associated with storm activity. The goal of this workgroup is to promote implementation of better stormwater management and better integrate Clean Water Act and Safe Drinking Water Act water quality programs to protect sources of drinking water in the Potomac. The workgroup's activities include ongoing efforts to evaluate the impact of road deicers and salts on the Potomac. The workgroup will periodically update information on urban land use trends and on current stormwater management practices throughout the basin. This workgroup will also develop and maintain a list of recommended urban stormwater practices to be used for advocacy throughout the watershed.

#### **2014 Accomplishments**

#### Completed

- Updated list of water discharge permit applications and renewals within the Potomac watershed and educated members on significant permits. Updated and maintained a comparison of state stormwater regulations within the Potomac watershed.
- Sponsored an informational session during the summer quarterly meeting on the Montgomery County, Maryland, MS4 permit.
- Updated the list of state Public Water Supply (PWS) criteria under each state's Water Quality Standards (WQS) program. Solicited feedback from Partnership water utilities regarding water quality contaminants that may be candidates for PWS criteria under the state's WQS programs.

#### 2015 Work Plan

**Major Initiatives** 

- Use the feedback from Partnership water utilities regarding water quality contaminants that may be candidates for Public Water Supply criteria to develop a summary of potential issues. Present the survey results to educate the Partnership members.
- Update list of water discharge permit applications and renewals within the Potomac watershed and educate the Partnership on significant permits.
- Develop one new initiative on best management practices regarding deicing chemicals to reduce their impact on sources of drinking water supply.
- Sponsor or co-sponsor at least one informational session during a quarterly meeting of the Partnership on an urban issues related topic.
- Finalize maps and report on projected trends of urban areas in the Potomac watershed.

#### **Early Warning and Emergency Response**

This workgroup is intended to better prepare the Partnership's member utilities to respond in the event of a spill or other incident that affects their water supplies. The workgroup also will open dialogs with emergency response agencies and with operators/owners of significant hazardous materials and waste sources to improve the mutual understanding of water supply vulnerabilities and emergency response preparedness.

#### **2014** Accomplishments

#### Completed

- Held an all-day meeting with Colonial Pipeline in July 2014. Topics discussed included Colonial's
  general operations and integrity management and emergency response plans. Planned follow-up
  activities include joint spill exercises, reviewing Occoquan and Patuxent Emergency Response Plans
  and Tactical Response Plans, and sharing spill modeling information between Colonial and ICPRB.
- Maintained RICCS and ICPRB spill-notification contact lists.
- Tracked source water assessment and protection and spill response lessons from the Charleston,
  WV/Elk River spill. This led to discussions of updating assessments in the Potomac Basin. Work was
  initiated with EPA R3 to scope out an update to the D.C. source water assessment that would
  provide updated potential contaminant source (PCS) information across the basin. Members also
  participated in other efforts to provide PCS information, such as EPA's DWMAPs and Water
  Research Foundation/Corona Environmental Consulting inventory tool.

#### 2015 Work Plan

**Major Initiatives** 

- Track on-going efforts to update potential contaminant source (PCS) inventories. Determine the best means of obtaining PCS information for all Partnership members and how this information can inform source water protection activities in the basin.
- Participate in efforts to hold a joint spill exercise with Colonial Pipeline.

#### On-going

Maintain RICCS and ICPRB spill-notification contact lists.

#### **Water Quality Data**

This is the newest workgroup in the Partnership. This workgroup was created for the purpose of determining and compiling a list of resources leading to available datasets on water quality data in the Potomac Basin. Different agencies and groups in the Basin are involved in diverse data collection efforts. Many of these datasets are available publically and can be usefully utilized by other agencies and organizations for their analysis and can help in filling data gaps. The challenge is to know what data is available. The main aim of the workgroup is to maintain a repository of links to the different databases that are available, to list information on what is available in each database and any other information that might be helpful in accessing the database. This workgroup will support the other workgroups of the Potomac DWSPP by serving as a resource that will provide links to water quality databases, help with analysis of data as required, mapping, and other information regarding source water quality in the Potomac River Watershed.

#### **2014** Accomplishments

#### Completed

- Completed a trend analysis for alkalinity in the Potomac basin and summarized the results in a report and for the website.
- Updated the spreadsheet containing a summary of the parameters for which utilities collect data.
- Sponsored an informational session at the spring quarterly meeting on alkalinity trends in the eastern U.S.
- Updated and maintained the data inventory spreadsheet and factsheet.

#### 2015 Work Plan

#### **Major Initiatives**

- Have conference calls or information sessions for the workgroup with each basin state to talk about the data they collect, their monitoring programs, and findings on water quality conditions in general.
- Create maps related to water quality data in the basin.
- Participate in the ad hoc workgroup on algae and algal toxins.
- Sponsor or co-sponsor at least one informational session during a quarterly meeting of the Partnership on any water quality data related topic.

#### On-going

- Update and maintain the data inventory spreadsheet and factsheet.
- Support other workgroups in the Partnership by maintaining an inventory of water quality data in the basin and help with analysis as required.

#### **Reaching Out**

The Reaching Out workgroup informs and educates the public and water professionals about DWSPP activities and initiatives, supporting the activities of the other workgroups. The workgroup also produces materials and conducts outreach activities to help move DWSPP toward its goals. The group can also help to attract new membership and input to DWSPP. Much of the group's work is continuous in nature.

#### **2014 Accomplishments**

#### Completed

- Determined if there was interest in developing a regional message related to the UCMR3 monitoring. Supported Emerging Contaminants work group in disseminating information.
- Compiled list of source water protection best practices and authored a related blog post for the Potomac Conservancy.
- Produced the 2013 Annual Report.
- Planned the 2014 annual meeting.

#### 2015 Work Plan

#### **Major Initiatives**

- Assist the Emerging Contaminants workgroup with UCMR3 communications efforts.
- Develop outreach goals and a strategy to meet them.
- Produce the 2014 Annual Report.
- Plan the 2015 annual meeting.

#### On-going

- Assist workgroups and committees holding outreach meetings.
- Coordinate with workgroups to maintain and upgrade Partnership web presence.

#### **Disinfectant By-product Precursors**

Disinfection-by-products (DBPs), generated when a disinfectant such as chlorine reacts with organic matters (the precursors) in water, are considered potential carcinogens and are strictly regulated under the Safe Drinking Water Act. The current practice takes the precursors as a given and attempts to lower the DBP formation via treatment steps. This workgroup proposed that limiting precursors in raw water, via source water protection, may provide another option for limiting DBPs in finished water.

#### 2015 Work Plan

No activities currently planned.



## **Potomac River Basin Drinking Water Source Protection Partnership**

# Administrative Revenue and Expenses Update\* October 1, 2013 through September 30, 2014

REVENUE FROM VOLUNTARY CONTRIBUTIONS	Budgeted	Received
States		
District of Columbia	6,157.41	6,157.41
Maryland	6,157.41	6,157.41
Pennsylvania	6,157.41	6,157.41
Virginia	6,157.41	6,157.41
West Virginia	6,157.41	Expected Dec. 2014
States subtotal	30,787.05	24,629.64
Utilities		
Fairfax Water	10,262.35	10,262.35
Washington Aqueduct	10,262.35	10,262.35
WSSC	10,262.35	10,262.35
City of Frederick	0.00	0.00
City of Hagerstown	752.40	752.40
City of Rockville	330.00	330.00
DC Water	0.00	1,100.00
Frederick County DUSWM	375.00	375.00
Loudoun Water	1,380.00	1,380.00
Town of Leesburg	375.40	375.00
Washington County	300.00	300.00
Utility subtotal	34,299.85	35,399.45
Federal & Regional Agencies		
ICPRB contribution	13,188.22	28,683.16
Total FY 2014	79,475.12	94,869.66
EXPENSES	Budgeted	Actual*
ICPRB staff (salary + fringe)	47,892.00	56,059.21
Supplies & Office Expenses	1,600.00	1,318.50
Communications	350.00	306.12
Meeting Expenses & Travel	2,500.00	3,209.66
Contracts - website	500.00	2,000.00
ICRPB Indirect	26,633.12	<u>31,976.17</u>
Total FY 2014	79,475.12	94,869.66

<sup>\*</sup>Expense figures subject to accounting review during ICPRB's annual audit.

## 2015 Budget

REVENUE FROM VOLUNTARY CONTRIBUTIONS	Budgeted
States	
District of Columbia	6,157.40
Maryland	6,157.40
Pennsylvania	6,157.40
Virginia	6,157.40
West Virginia	6,157.40
States subtotal	30,787.00
Utilities	
Fairfax Water	10,262.35
Washington Aqueduct	10,262.35
WSSC	10,262.35
City of Frederick	0.00
City of Hagerstown	752.40
City of Rockville	330.00
DC Water	6,600.00
Frederick County DUSWM	375.00
Loudoun Water	1,380.00
Town of Leesburg	375.00
Washington County	300.00
Utility subtotal	40,899.45
Federal & Regional Agencies	
ICPRB contribution	<u>7,849.35</u>
Total FY 2015	79,535.80
EXPENSES	Budgeted
ICPRB staff (salary + fringe)	46,692.00
Supplies & Office Expenses	1,600.00
Communications	350.00
Meeting Expenses & Travel	2,500.00
Contracts - website	500.00
ICRPB Indirect	27,893.80
Total FY 2015	79,535.80