



POTOMAC RIVER BASIN DRINKING WATER SOURCE PROTECTION PARTNERSHIP

Quarterly Meeting Summary for August 30, 2012

Location: ICPRB, Rockville, Maryland

Attendees

Utilities

DC Water:
Sarah Neiderer

Fairfax Water:
Melissa Billman
Chuck Murray
Greg Prelewicz
Niffy Saji

Prince William Co.
Service Authority:
Evelyn Mahieu (phone)

Washington Aqueduct:
Julia Battocchi
Anne Spiesman

WSSC:
Mohammad Habibian
Steve Nelson

State and Local Government

DDOE:
Shah Nawaz (phone)

MDE:
Robert Peoples
Lyn Poorman
Neil Winner

PA DEP:
Patrick Bowling

VDH:
Hugh Eggborn (phone)

WV DHHR:
Bill Toomey

Federal and Regional Agencies

EPA Headquarters:
Sylvia Malm (phone)

EPA Region 3:
Andrea Bennett
Vicky Binetti
Chuck Kanetsky
Ellen Schmitt

ICPRB:
Karin Bencala
Carlton Haywood

MWCOG:
Heidi Bonnaffon
Julie Karceski

USGS:
Cherie Miller
Susan Hutson

Others: Robert Horne (DC Office of the Chief Technology Officer), Marshall Stevenson (KCI Technologies), Christene Jennings (Salter Mitchell)

Workgroup and Committee Reports

Early Warning and Emergency Response – Carlton Haywood, ICPRB

The workgroup is using the lessons from last April's spill exercise and the 12 specific tasks from the After Action Report to guide its activities. A subset of those tasks has been identified as the near-term priority. A few of these have already been completed. Work on others has begun or will be part of an on-going effort.

One clearly identified need is a means for receiving and disseminating monitoring data that may be collected by utilities and government agencies during a spill event. MWCOG's Steve Bieber has suggested that the Partnership consider the National Capital Region Geospatial Data Exchange (GDX) as a means for doing this. This tool allows local, state, and federal agencies and other regional and emergency response organizations to share data, particularly geospatial data, in real time. The tool is available through secure internet and intranet platforms at <https://gdx.ncrnet.us>. Robert Horne with DC's Office of the Chief Technology Officer and Marshall Stevenson with KCI Technologies provided an overview of the GDX's capabilities. A key aspect of the tool is that users maintain control of their data and can decide which users can view it and whether or not and when those rights expire. GDX essentially acts as a broker between the user uploading the data and the user viewing the data. Data are never stored by GDX itself. An additional benefit of the tool is that the user can access data using ArcMap on their own computer or through another preferred viewing platform. The workgroup and ICPRB's spill response staff will continue to explore the tool and make a recommendation on whether or not Partnership members should adopt this as part of their spill response procedures.

S. Bieber has been working to set a date for a webinar with Colonial Pipeline to discuss their integrity and emergency management plans. Heidi Bonnaffon (COG) suggested that the workgroup provide a couple of dates that Steve could send to Colonial as options.

Another lesson from the exercise was that those who want to be notified of a spill need to register with RICCS (<https://riccs.mwcog.org>). Furthermore, RICCS users should periodically log in to the system to ensure they know their password and how to send and receive alerts. Karin Bencala (ICPRB) provided a brief demonstration of how to log in, view your registered devices (cell phone, email, etc.), and send an alert. H. Bonnaffon circulated a list of those registered with the water alert group. This allowed meeting attendees to verify their contact information. The [RICCS training](#) schedule is available online.

Reaching Out – Karin Bencala, ICPRB

K. Bencala provided the Reaching Out update on behalf of workgroup chair Curtis Dalpra (ICPRB) who was not able to attend the meeting.

The development of a new website template is underway. A [mocked-up version](#) of the home page was shown at the meeting.

A few watershed groups were identified as the ones workgroup chairs hope to meet with to discuss common water quality concerns. K. Bencala will work to organize a meeting for early to mid October or later in the fall. Participants also suggested holding subsequent meetings on targeted issues of interest and with groups that work directly with systems in the basin, like Rural Water.

The workgroup will start working on the 2012 Annual Report this next quarter. Meeting participants agreed that it should take a short article format since we had a number of substantive activities this year. Potential articles could cover the spill exercise, system and watershed group outreach meetings, road salt webinar, and the review of state WIPs for source water protection opportunities. Through these articles, the goal is to educate the general public on the importance of source water protection in the Potomac basin.

The Annual Meeting is scheduled for November 14. Location and topic ideas were discussed. One idea was to get an update on the Chesapeake Bay TMDL, specifically focusing on what is happening on the ground in the Potomac basin. Speakers could include someone from a soil and water conservation district and a state and/or federal representative that could cover the larger picture as well as the funding mechanisms being used to implement the WIPs.

Gettysburg, Emmitsburg, and Frederick were suggested as locations in the basin that might draw in systems that are unable to come to Rockville for the quarterly meetings. Additionally, these locations were appealing as being in the Monocacy watershed. A number of systems in the Monocacy attend the April outreach meeting and a meeting in their area might provide another opportunity to engage with them. If the meeting was held in Adams County, Pa., potential topics could include the Marsh and Rock creeks critical area water plan, agricultural BMPs, and/or the proposed interbasin transfer from the Susquehanna into the Potomac. Pat Bowling (PA DEP) is going to see if there is meeting space available in the area and also suggested touching base with ICPRB staff who are finishing the critical area plan to see if a presentation on the plan is premature.

Interest was also expressed in holding the meeting at the McMillan Treatment Plant that would include a tour of the sand filtration site. Anne Spiesman (Washington Aqueduct) will look into this option. Meeting space was also offered by MWCOC and DC Water (for a meeting and tour at Blue Plains).

Everyone is invited to weigh in on where the meeting should be held and what the focus should be. Contact Karin with ideas or to volunteer to help plan the meeting.

Urban Issues – Greg Prelewicz, Fairfax Water

The road salt webinar is scheduled for September 20 from 10 am to 12 noon. The webinar will focus on the benefits of reducing salt use and available alternative resources. A flyer will be distributed soon with the details. The target audience is environmental, transportation, and planning professionals in the basin. It will be advertised through COG and EPA's Green Highways program. Some state representatives will help get the flyer out to local-level contacts that might be interested. The Reaching Out workgroup will assist the workgroup in reaching out to the media to make them aware of the issue and the webinar.

G. Prelewicz noted that the [Maryland Integrated Report of Surface Water Quality](#) includes new Potomac listings. They cover a portion of the mainstem Potomac in Montgomery, Frederick, and Washington counties that has been listed as not meeting the requirement to protect aquatic life. This is due to impairments of chlorides and sulfates from urban runoff and storm sewers. These are Category 5 listings, meaning that if water quality does not improve soon, TMDLs will be required.

A workshop was held with the Agricultural Issues workgroup on August 23 to review the Potomac basin states' Phase II WIPs. The goal of the meeting was to gain a better understanding of the commitments

states are making to address nutrient and sediment pollution. This was in no way a formal regulatory review of the WIPs. The Partnership is solely interested in identifying areas where the WIPs could synergistically provide source water protection benefits. The meeting participants were also looking for instances where the Partnership could get involved with a specific initiative. The group found that many of the measures to address non-point sources of pollution in the WIPs are voluntary, despite setting aggressive goals for pollution reduction. Other organizations have done thorough reviews of the WIPs the workgroups might use in the future in addition to continuing their own review. Progress on these goals is being tracked by the [Chesapeake Bay Foundation](#). They evaluated Virginia, Maryland, and Pennsylvania's progress toward meeting their first set of two-year milestones.

Emerging Contaminants – Patrick Bowling, PA DEP

A joint USGS/PA DEP emerging contaminant report was recently released - [Occurrence of Pharmaceuticals, Hormones, and Organic Wastewater Compounds in Pennsylvania Waters, 2006–09](#). Sampling was done to characterize the occurrence and concentration of pharmaceutical compounds, hormones, and organic wastewater compounds (OWCs) in Pennsylvania waters between 2006 and 2009. Samples were taken at a variety of locations, including: “(1) groundwater from wells used to supply livestock, (2) streamwater upstream and downstream from animal feeding operations, (3) streamwater upstream from and streamwater and streambed sediment downstream from municipal wastewater effluent discharges, (4) streamwater from sites within 5 miles of drinking-water intakes, and (5) streamwater and streambed sediment where fish health assessments were conducted.” There were three sampling locations in the Potomac basin; two were stream and sediment sampling points downstream of wastewater plants (Rock Creek and E. Branch Antietam) and one was near a drinking water intake (E. Branch Antietam). The raw data from the study does not appear in the report, but is available in individual PA USGS annual reports. Pat will compile and circulate the data to the Partnership along with a brief synopsis of the report. When reviewing the data, it is important to note that the reporting limits were set fairly high in the study. The report was primarily a data report but some implications were discussed and it appears that wastewater discharges are significant sources of emerging contaminants compared to animal feeding operations and agricultural land use.

There was some movement on the Safe Chemicals Act in the Senate at the end of July. A vote was taken by the full [Senate Committee on Environment and Public Works](#) on July 25. The bill passed under a party-line vote, with no Republicans supporting the bill. It is not expected to move forward unless there is bipartisan support for the bill. A [hearing](#) was held the previous day on the need to update the Toxic Substances Control Act, but it primarily focused on flame retardants. There has been no progress on the EDC Exposure Elimination Act.

The workgroup continues to look into the 19 permitted discharges in the basin that may be discharging pharmaceuticals. The next steps are to verify their location and determine which, if any, are right upstream of an intake. Concurrently, some of the member utilities will look at their water quality data to determine which chemicals are seen at their intakes that may be of interest. This will help the workgroup to better articulate questions and requests of these facilities.

Planning for the emerging contaminant workshop is getting underway. On the workgroup's last call, it was decided that the meeting would focus on EDCs, be a full-day format, and target Partnership members and participants. Multiple people noted there are many EDC research projects going on right now and that it may be best to wait until 2014 when these are completed to hold the workshop. One

question that many members would like to see addressed is what utilities and the Partnership should do to address EDCs in a practical sense.

The next **DEA-sponsored take-back event** will be held on September 29, 2012. The Rule for Disposal of Controlled Substances was sent from the Drug Enforcement Administration to the Office of Management and Budget on May 15. The 90-day comment period has been extended, likely indicating on-going issues between the two agencies. Given this, there are likely to be additional take-back events in the future. The workgroup and ICPRB will work with COG's Community Engagement Campaign to release a joint press release in support of the event. K. Bencala will build another online map of the DEA take-back locations in the basin. She will also look into adapting this map into a mobile device version. The workgroup will look into reporting the collection results for the basin, instead of at the state level.

Andrea Bennett (EPA Region III) mentioned that the CDC is holding its **Get Smart about Antibiotics** week this year from November 12 through 18.

Dr. Habibian (WSSC) distributed a slide from a recent **presentation** given by Cherie Miller (USGS) to the EPA. This **handout** referred to a study by Barber et al. (2012) - **Fish Endocrine Disruption Responses to a Major Wastewater Treatment Facility Upgrade** - which appeared in the journal *Environmental Science & Technology*. The study assessed the changes in estrogenicity of wastewater effluent associated with upgrading Boulder, Colorado's WWTP from a trickling filter to an activated sludge process to achieve nitrogen removal. The study indicated that this upgrade significantly "improved the removal efficiencies of many CECs, decreased the estrogenicity of discharged effluent, [and] reduced endocrine disruption relative to pre-upgrade conditions" (C. Miller's slide). Dr. Habibian noted that almost all of the WWTPs in the Potomac River basin use activated sludge process; thus estrogenicity observed in the Potomac River is related, in all likelihood, to other sources.

The above finding indicates the need to assess the relative contribution of various sources of emerging contaminants in water bodies in order to develop an efficient program for their control. Dr. Habibian shared a summary of a new **WaterRF RFP** to assess the relative contribution of various sources to the occurrence of ECs in drinking water sources as well as the significance of other exposure pathways as compared to exposure from drinking water. This information should inform the cost/benefit assessment of the different control strategies.

Agricultural Issues – Ellen Schmitt, EPA Region III

The workgroup's outreach strategy is still in draft form awaiting a few inputs of information. These include:

- Outreach and engagement opportunities identified in the WIPs.
- Agricultural and livestock land use information. ICPRB is assisting with these questions.
- Phosphorus data from member utilities. Fairfax Water and WSSC have shared their data. If other utilities are willing, send data to Ellen. The data will be reviewed for seasonal changes and patterns.
- Results from Region III nutrient messaging project (see below).

The workgroup reviewed the state WIPs at the August 23 meeting held with the Urban Issues workgroup. The session focused on better understanding of the West Virginia and Virginia WIPs. The Virginia plan outlines multiple outreach efforts to farmers. One approach the workgroups may try is to

get the source water protection message out to the soil and water conservation districts, departments of agriculture, and Rural Water circuit riders.

EPA Region III has some funding for a water data project that is meant to relate source water protection to TMDLs, particularly focusing on how to use data to affect behavior change. They are using Salter>Mitchell to develop messages targeting land owners specifically in Lancaster, Pennsylvania, and Frederick, Maryland. The goal is to relate BMP implementation to drinking water. These messages can be used or adapted for other Potomac locations. Christene Jennings from Salter>Mitchell is requesting input from the Partnership. Please take a minute to fill out the [questionnaire](#) and email it to her at christene.jennings@saltermitchell.com.

Ellen is interested in hearing what questions you have related to agriculture issues, water quality, and drinking water. These could be addressed through information sessions and/or updates at quarterly meetings.

Government Committee – Bill Toomey, WV DHHR

The Government Committee asked for input on how to continue the Partnership’s outreach efforts to systems throughout the basin. Of the ideas discussed, meeting participants suggested that we continue to focus on those systems that attended the spring outreach meeting. This could mean holding the annual meeting or a quarterly meeting in an area where they would be more likely to attend, such as Frederick or Gettysburg. There might also be some overlap between the effort to support the WIP initiatives and outreach to upstream systems.

Issue Updates

Marcellus Shale/hydrofracking

Maryland – Lyn Poorman, MDE

The Maryland Marcellus Shale Safe Drilling Initiative Advisory Commission has not found money to study the environmental impacts of drilling in the Marcellus. The committee has requested an extension to provide recommendations on natural gas exploration and production. State legislators remain interested in legislation on this issue and some may be drafted for the upcoming session.

C. Miller mentioned that the Maryland Water Monitoring Council is hosting a workshop, [Water Resources Monitoring and Marcellus Shale Gas Development in Western Maryland: What Do We Have, What Do We Need?](#), on October 22.

Pennsylvania – P. Bowling

As of August 2012, there were over 37,000 **oil and gas wells** drilled in Pennsylvania and over 200,000 permits had been issued covering all oil and gas wells, test wells, and dry holes. To date, there have been more than 11,000 permits issued for unconventional (predominantly Marcellus) gas wells which includes new wells, re-drilling, drilling deeper, well alterations, etc. There are nearly 5,900 actual unconventional wells, of which 1,922 have been fracked. The state is seeing a decline in the rate of new drilling and activities are shifting from northern Pennsylvania to the southwestern part of the state where the gas is “wetter” and worth more since the condensates can be used to manufacture chemicals. Unconventional gas wells are classified by stratigraphy and therefore may include more than those completed in the Marcellus Shale. There are some Marcellus wells in the Potomac-portion of

Somerset County. Based on data from 2010 and 2011, maps showing [oil and gas permits issued](#) and [active wells](#) were circulated to show the distribution and number of wells and permits. A recent [USGS assessment](#) identified the East Coast Mesozoic Basins as probable areas of gas accumulation and estimated gas resources for select basins. These basins occur discontinuously from New England to Georgia and underlie portions of the Potomac basin. The potential for petroleum resources in these rocks has been known for some time but the resources were previously unquantified. A few wells have already been drilled in Bucks County in southeastern Pennsylvania prior to the “Marcellus Shale gas boom.”

The provisions of HB 1950 that would standardize land use controls over drilling at the state level have been struck down, but the case is likely to go to the state supreme court under the theory that the authority to do local land use planning comes from the state itself.

West Virginia – B. Toomey

Trends in permits and drilling are similar to what is being seen in Pennsylvania. Lots of pipeline is being put in and the state is working to let these companies know when they are in a source water protection area. Some public water suppliers are now selling water to drilling companies, leading the suppliers to request increased withdrawal amounts.

EPA – Vicky Binetti, EPA Region III

The [EPA study of the effects of hydraulic fracturing on drinking water](#) is on-going. A progress report is due at the end of the year. It will have some data in it but no conclusions. One question the study looks at is how the wastewater from fracking affects drinking water. For instance, what is the impact of the brines used in the fracking process, are they causing the high bromide levels in the groundwater? Is drilling causing the increase in DBPs that some suppliers are seeing?

Uranium - G. Prelewicz

Virginia’s interagency working group has been holding meetings around the state to get input on whether the mining can be done safely, what the regulatory framework should look like, and to hear the public’s concerns. The working group will have recommendations prior to the 2013 legislative session. The company that wants to do the mining now says it will store all the associated waste underground.

Announcements

- [Source Water Collaborative](#) is focused on figuring out the best way to communicate the importance of controlling nutrients. There has been a productive dialogue between Collaborative members and senior members at USDA. These discussions have centered on the importance of drinking water protection and what can be done through the Farm Service Agency and the Natural Resources Conservation Service.
- The Center for Watershed Protection is holding a [conference](#) in Baltimore on October 8 – 10. There will be a session on how source water protection is a part of stormwater management and watershed protection.
- Sampling under the Unregulated Contaminant Monitoring Regulation (UCMR 3) will begin in January. Two webinars are being held this month:

The United States Environmental Protection Agency (USEPA) is hosting two UCMR 3 webinars in September 2012. These webinars will provide public water systems, state UCMR coordinators, laboratories, and other stakeholders with a comprehensive overview of the

UCMR 3 rule. Along with a general introduction to the UCMR program, USEPA will present: who is subject to UCMR requirements, the contaminants that will be monitored, and the monitoring and reporting requirements.

Participants will have the opportunity to pose questions to the USEPA moderator via the webinar chat function. Registration is limited, so please sign up soon for one of the two webinars being offered.

Dates/Times: Monday, September 10, 2012 from 2:30pm to 4:00pm EST – go to <https://www2.gotomeeting.com/register/245260362> to register.

OR

Wednesday, September 19, 2012 from 1:00pm to 2:30pm EST – go to <https://www2.gotomeeting.com/register/329503842> to register.

Annual Meeting:
November 14, 2012