

# POTOMAC RIVER BASIN DRINKING WATER SOURCE PROTECTION PARTNERSHIP

#### Quarterly Meeting Summary for July 19, 2011

Location: ICPRB, Rockville, MD

#### **Attendees**

VDH:
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City of Rockville: Wes Kleene (phone)

Judy Ding Barry Matthews (phone)

Fairfax Water: WV DHHR: Melissa Billman Bill Toomey Greg Prelewicz

Niffy Saji Federal and Regional Agencies

Frederick County: Vicky Binetti
Mark Schweitzer Kelly Moran
Ellen Schmitt

Loudoun Water:

Beate Wright ICPRB:

PWCSA: Carlton Haywood Evelyn Mahieu Curtis Dalpra
Joe Hoffman

Washington Aqueduct:
Shabir Choudhary
Anne Spiesman

MWCOG:
Julie Karceski

State and Local Government UDC:

DDOE: Tolessa Deksissa

George Onyullo

MDE: Cherie Miller

Lyn Poorman

Jason Zhao

PADEP:

**Patrick Bowling** 

Joe Lee

USGS:

#### 1. Workgroup and Committee Reports

#### Water Quality Data

The ad-hoc group is focused on three efforts: updating records on the data member utilities collect on a routine basis, identifying all NPDES permits in the basin, and summarizing data collection efforts in the basin. The group plans to hold a call in August to follow up on these initiatives.

Utility data list – This will update the existing spreadsheet that contains information on which constituents utilities are testing for and the frequency. Actual data points are not being collected. Greg sent the utilities an email on July 19 that explains the purpose of the effort and requests specific information. The group will remind utilities of the request in a couple of weeks. The hope is to have the updated information by September 1.

NPDES permit information – Collecting this information is not straightforward. After talking with the appropriate EPA database contacts and the states, it has been determined that going through the EPA is the best option. The group needs to decide where this information will be housed. ICPRB has offered to map the information.

Other data collection efforts – The Partnership will collaborate with MWCOG on this effort. They have already begun a similar project. The ultimate product will be detailed information on what data are being collected, by whom, and the frequency. This information will be available to a limited group of organizations. A public website will be created with which organizations are collecting data and contact information. The workgroup could use help pulling together this information. If you have staff or interns who can help, contact Ellen Schmitt or Greg Prelewicz.

#### *Urban Issues* – Greg Prelewicz, Fairfax Water

The workgroup is starting to work on a webinar presentation on the environmentally sensitive application of deicing materials and the potential benefits for source waters.

The group is looking for an urban stormwater project related to the Chesapeake Bay TMDL requirements that the Partnership can champion and highlight source water protection benefits. G. Prelewicz has been following recent stormwater webinars and will distribute relevant information.

- Ground Water Protection Council – Stormwater Management and Source Water Protection: http://vimeo.com/2669300

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

Updates from Jin Shin, WSSC:

WSSC is currently participating in two WaterRF projects in an advising role (member of Project Advisory Committee). These projects focus on characterizing watershed sources of DBPs and assessing the feasibility of fluorescene spectroscopy as continuous monitoring tool. The first project, titled "Watershed Analysis of Dissolved Organic Matter and Control of Disinfection By-Products" and led by University of Colorado at Boulder and the City of Fort Collins, aims at characterizing the sources of NOM in their Rocky Mountain watershed, primarily allochthonous

in nature. Recent pine beetle epidemic and resulting massive fallout of pine litter caused increase in THM levels at the plants. Treatability study was performed by means of laboratory jar tests, and indicated that NOM from fresh litter leachate, found in areas close to the infected region, were the hardest to remove by coagulation, while coagulation efficiency improved as NOM characteristics changed by biodegradation further downstream of the watershed. The fresh leachate showed the lowest DBP yield while the old established leachate showed the highest. The results are consistent with the fluorescent and other optical analysis of the NOM that indicated high correlation between DBP formation and NOM aromaticity, which was more abundant in old leachates. The project team has completed most of the planned sampling and analytical work. The final report was due April 2011.

The second project, titled "Sources and Characterization of Organic Carbon in the Clackamas River Basin, Oregon, and their Effects on the Formation of Disinfection By-Products in Finished Drinking Water", and conducted by USGS and several utilities in the Clackamas River Watershed, Oregon, investigates the autochthonous organic matter, primarily caused by the seasonal algal activity in the watershed. The project objectives include characterizing the quantity and quality or NOM in the Clackamas River Basin and its tributaries, identifying potential sources of DBPs in the watershed, and assessing the use of optical proxies including continuous in-situ fluorescene dissolved organic matter (FDOM) sensor. The batch sampling and real time data collection from FDOM have continued and have been on target timeline. The monthly and synoptic sampling results showed good correction with conventional monitoring parameters for NOM, such as SUVA, DOC, and DBPFP. They have also continued treatability studies on the synoptic samples. Two additional rounds of basin-wide sampling and treatability study will occur this summer. The project team plans to hold in-person meeting with the PAC in September 2011 to have more detailed discussion of the project results and progress.

### **Early Warning/Emergency Response** – Carlton Haywood, ICPRB Exercise/training

There are funds available through the EPA to have Horsley Witten assist with a spill exercise or training. The funds must be spent by May 31, 2012. The workgroup will develop a set of desired options and work with Horsley Witten to select one or, possibly, two. A proposal will be circulated to Partnership members in early August for approval. The goal is to have a work plan in place by the end of August. It was recommended that the group wait until after the July 27 meeting with Colonial Pipeline to discuss topics. Ideas/needs may arise at this meeting.

Possible exercise/training topics: notification procedures, emergency event (i.e. radionuclides), droughts or floods related to climate change, communication systems (RICCS and/or WARN), upstream event (need to determine what threats are), tracer study to get a better idea of what would happen during a spill.

Ellen Schmitt is going to get a list of existing exercises and trainings from Horsley Witten. This will be sent to Partnership members.

#### **Colonial Pipeline**

Member utilities are meeting with Colonial Pipeline on July 27. This is a follow-up meeting to the last one held in January. Both Colonial and the utilities will bring their Emergency Response Plans for discussion. The utilities have requested that preventative measures also be on the agenda, including a review of Colonial's Integrity Management Plan. They would also like to discuss the recent spill in Yellowstone to find out what went wrong and how a similar event is being prevented in this area.

#### Maryland State Hazard Mitigation Plan

Carlton Haywood attended a recent Maryland Emergency Management Agency meeting on the update of the state's Hazard Mitigation Plan. The plan is set to be completed by the end of the summer. Most of the discussion at the meeting focused on climate-related natural disasters. The plan's main focus is on property damage and loss of life. Public health issues and terrorism were not a priority. They were not aware of source water protection plans or designated areas. C. Haywood is following up with the agency's consultant to see if there is an avenue for including these issues in the plan.

#### Ag Issues - Ellen Schmitt, EPA Region 3

The workgroup has been focusing on its strategic plan update. The plan for the rest of the year is to review the comments from the *Crypto* webinar to inform the group's outreach strategy.

E. Schmitt will distribute information on a proposed EPA rule to create a NPDES permit for pesticides. The Partnership or individual members may be interested in submitting comments.

Vicky Binetti, EPA Region 3, noted that the EPA has granted a pesticide application exemption for the control of stinkbugs in Virginia, Maryland, Pennsylvania, West Virginia, Delaware, and New Jersey. The chemical allowed is dinotefuran and can be used in orchards. It is known to be very soluble and mobile. Pennsylvania has requested the risk assessments for the chemical because they have drinking water intakes close to orchards. The expected concentrations are below those known to cause human health effects. The EPA does not have an analytic method for this yet. Melissa Billman, Fairfax Water, is going to look into available information from the USDA, and Cherie Miller, USGS, will see if there are any existing USGS methods.

#### Reaching Out - Curtis Dalpra, ICPRB

The workgroup is assisting the Government Committee in its outreach efforts. The committee is interested in engaging watershed/environmental organizations and upstream utilities. The committee and the workgroup have identified a set of possible options for meeting with watershed organizations.

The next step is to get feedback from the Partnership on the preferred approach and which groups to reach out to first. The outreach options have been distributed for comment. The Government Committee is also working on a purpose statement that should be distributed to members in August.

A suggestion was made that we focus on getting drinking water information into schools. Most utilities already have outreach programs that meet this need. Maryland's new environmental education requirement may provide another opportunity for source water protection education.

#### **Emerging Contaminants** – Pat Bowling, PADEP

#### <u>Identifying Pharmaceutical Manufacturing Facilities</u>

Efforts to identify pharmaceutical plants in the basin via EPA data on NPDES permits are confounded by pre-treatment schemes and a plethora of standard industrial classification codes that a pharmaceutical plant could be listed under. Originally, the search for pharmaceutical plant discharges yielded nothing significant but further investigation prompted by a subsequent news release about a Merck plant in the basin reaching a settlement in a pollution case revealed that the plant was listed under "Medicinal Chemicals and Botanical Products," not "Pharmaceutical Manufacturer." Ellen Schmitt is currently acquiring data on all permitted dischargers in the basin (both with and without pre-treatment) that could be used for various reasons including the identification of any pharmaceutical-related facilities.

#### **EDC** legislation

New legislation has been introduced into the Senate and House of Representatives to address endocrine disrupting chemicals. The Endocrine-Disrupting Chemicals Exposure Elimination Act of 2011, introduced by Senator John Kerry (D-MA) and Congressman Jim Moran (D-VA), would set up a research program to investigate up to ten potential endocrine disrupting chemicals per year and possibly ban those most harmful to public health unless human exposure is mitigated. The bill can be reviewed at:

http://i2.cdn.turner.com/cnn/2011/images/07/08/endocrine.disrupting.chemicals.exposure.elimination.act.of.2011-jun.24.pdf

#### Chromium+6

Anne Spiesman reported that EPA is expected to have the results of its health assessment in late 2011. Once the results have been reviewed, EPA will decide whether or not to revise the Cr+6 standard. National organizations, like AWWA, are working to get recent research on how the human digestive system reduces Cr+6 to the less toxic Cr+3 thereby decreasing health concerns into EPA's analysis. P. Bowling will share an EPA-compiled spreadsheet of facilities with Cr+6 limits in the basin. There are only a few in West Virginia and Maryland.

The EPA plans to work on how to communicate the risk of Cr+6 to the public prior to the final ruling. Messaging recommendations should be coming out soon.

#### WaterRF project #4169 workshop

The workshop for WaterRF project #4169 to review the project's results was held on June 10 at ICPRB's office. Much of what was presented for how utilities should respond to emerging contaminants is already being done by the metro area utilities. The tool does compile resources that may be useful. Despite comments from WSSC and other DWSPP members, it does not

appear that a set of national recommendations for addressing the issues will come out of the project.

#### 2. Strategic Plan update

Each workgroup summarized any changes since the spring meeting to their section of the strategic plan. The updated version for comment was emailed to the Partnership following the meeting. Please send the workgroup chair or Karin Bencala any comments on this draft by August 1. The final draft for approval will be circulated shortly thereafter.

#### 3. Annual Meeting planning - Tuesday, October 4

The Annual Meeting is scheduled for Tuesday, October 4. Both USGS (at UMBC) and MDE offered to hold the meeting. Suggested topics for the meeting are MS4 permits and urban stormwater management, regional impact of climate change, and deicing chemicals and application techniques. We will soon have to select a topic and location. Volunteers are needed to help plan the meeting. If you are interested, contact Karin Bencala.

# 4. Draft George Washington National Forest Management Plan – comments due September 1

Two documents are available for review for the update to the George Washington National Forest Management Plan. The plan includes specific references to using the forest to ensure high quality drinking water. One proposed management measure is prohibiting horizontal hydrofracking in the forest.

The Partnership will submit a comment regarding listing all downstream intakes in the reports. Currently, only West Virginia and Virginia intakes are listed. Other comments can be submitted if anyone is interested.

Draft Plan: http://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb5297819.pdf Draft Environmental Impact Statement: http://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb5297825.pdf

## **5.** Update on COG Regional Contaminant Warning Coordination project See attached flyer for information.

#### 6. Announcements

E. Schmitt announced that a new paper, Survey on the Temporal and Spatial Distribution of Perchlorate in the Potomac River, has been published in the Journal of Environmental Monitoring. The paper's authors are EPA's Dr. Jennie Perey Saxe and Dr. Christopher Impellitteri. The paper analyzes the 2007-2008 Potomac River perchlorate monitoring project data collected from the Potomac River and from the treated drinking water at eight voluntary public water systems along the River. The full article is available to institutional journal

subscribers in both HTML and PDF formats at the following link: http://xlink.rsc.org/?doi=C0EM00678E

Joe Lee, PA DEP, noted that the Ground Water Protection Council's annual meeting will be held on September 26-28, in Atlanta. There is now a formal source water protection committee and a source water protection session will be part of the program. For more info, visit <a href="https://www.gwpc.org">www.gwpc.org</a>

Bill Toomey, WV DHHR, announced the annual karst conference to be held on September 12 – 14, in Shepardstown, West Virginia. A flyer is attached.

The American Water Works Association's Sustainable Water Management Conference in Portland, Oregon, will have a session dedicated to source water protection. The meeting will be held March 18-12, 2012.

**7. Information Session: EPA Radionuclides Rule and the RadNet Program** Kelly Moran, Pennsylvania Drinking Water Program Manager, Office of Drinking Water and Source Water Protection, EPA Region 3

The presentation and handouts are available on the Partnership's website.

Upcoming meetings: Annual Meeting - Tuesday, October 4

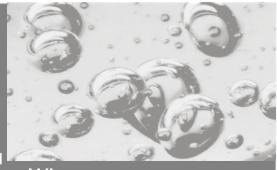
# Metropolitan Washington Council of Governments Communication Project

#### To

Metropolitan Area Water Utilities

#### What

COG is partnering with Aqua Vitae to develop coordinated regional communication protocols and messages. This will strengthen utility response contaminant warning and result in better messages and communication for the region.



#### Why

Regional contamination planning entails response and recovery operations, AND coordination of communications.

#### When

May 2011 - June 2012

#### Kick-off Workshop

Attend project kickoff, learn the detail and provide input @COG

#### Gap Analysis

Complete utility wide assessment of practices and planning

#### Contacts

Provide local, regional and state contacts to project

June 6, 2011

July 15, 2011

June 20, 2011

#### **Project Contacts**

#### Steve Bieber

sbieber@mwcog.org 202. 962-3219

#### Lisa Ragain

ragain@aquav.net 503.927.3322

#### Jennifer Breedlove

breedlove@aquav.net 202-271-2062

#### **Project Background**

As drinking water utilities in a diverse region, we are aware of the effects of a regional contamination event entails a strong response and recovery operation. An effective response **also** requires coordinated communications among water utilities and local governments, and most importantly the public. Recent media regarding pharmaceuticals, hexavalent chromium, among other topics, further reminds us of the need to develop strong regional messages about water quality.

This EPA Stag grant project will focus on preparing drinking water utilities and local governments, in addition to primacy agencies, for not only a confirmed contamination event; but also during the period prior to confirmation or in the event of a false positive.

#### **Utility Contributions**

- ☐ Attend the Workshop
- ☐ Complete the Gap Analysis survey
- Provide contacts and materials
- ☐ Give perspectives and opinions
- ☐ Consult with the project team
- ☐ Participate in the exercise \_\_\_\_\_
- ☐ Apply the protocol

#### **Updates**

We will send periodic updates to make sure utilities know what to expect and how the project is progressing.

#### **About Aqua Vitae**

Aqua Vitae is a consulting firm that specializes in policy and risk communication. They recently completed the Drinking Water Advisory Communication Toolbox for AWWA and CDC.

#### Gap Analysis May 2011 - June 2012

# Why a gap analysis?

Before a communication protocol and messages can be developed, we need to understand what regional utilities have experienced and how they prepare.

#### How will it be conducted?

The survey is on-line. You will be able to complete it over time, to stop and come back. Designed for the right person to fill out sections
Information is confidential. None of the results will be linked to a specific utility or individual.

#### Areas

Operations

Management

Customer Service

Communication

**Emergency Response** 

# Topics Experiences Primacy Agency

Planning
Collaborations
Preparedness

#### Outcome

Regional snapshot of public notification Protocol platform

#### Contacts

Many agencies at the local, state and regional levels may be involved with public notification. The project needs them to provide information and insight for the gap analysis. Most importantly, they will be invited to the exercise planned for the final portion of the project.

These are examples of the type of staff we would like to include:

Public Health Emergency Response

Public Officials Primacy Agencies

# GROWING COMMUNITIES ON KARST 2011

and

GREAT VALLEY WATER
RESOURCES SCIENCE FORUM

# MAPPING, PROTECTION, AND REMEDIATION OF ENVIRONMENTALLY SENSITIVE LANDSCAPES

September 12 - 14, 2011 NATIONAL CONSERVATION TRAINING CENTER SHEPHERDSTOWN, WEST VIRGINIA Sponsored by:

POTOMAC HEADWATERS RC&D

WV DEPT OF ENVIRONMENTAL PROTECTION

US GEOLOGICAL SURVEY

WV DEPT OF HEALTH AND HUMAN RESOURCES



#### Growing Communities on Karst is for:

- Planning staff
- Watershed Representatives
- Storm water facility Managers
- Public Works staff
- Transportation officials
- Engineers
- Concerned citizens
- Developers
- Landscapers
- Geologists
- Urban Foresters
- Soil Scientists
- Consultants

100	MONDAY – SEPTEMBER 12, 2011
1:00 to 4:00	Field Trip to Capitol Cement Quarry
	TUESDAY - SEPTEMBER 13, 2011
8:00	Conference Registration & Exhibits
	Hydrogeology and Groundwater Availability in the Fractured-Rock Aquifer Systems of Clarke and Warren Counties, Virginia
8:30 to	South Fork Shenandoah River Instream Flow Modeling to Determine Fish Habitat Availability During Low-Flow Periods
6:00	Transient Groundwater-Flow Modeling in the Opequon Creek Watershed, Virginia & West Virginia
	Landscape Analysis for determining endocrine disrupters from land- use activities in the Potomac and Shenandoah watersheds
	An Overview and Preliminary Results of a USGS LiDAR Acquisition
	Program for the Shenandoah River and Opequon Creek
	Watersheds in Virginia and West Virginia WEDNESDAY – SEPTEMBER 14, 2011
8:00	Registration & Exhibits
	Welcome and Recap of Past Karst Conferences
	WVDEP Public Access to Maps & Information
8:30	Risk Assessment in Karst
to	A Minimally Invasive method for Characterizing Contaminated Karst
12:00	Karst Case Studies with Down Hole Video
	Environmental Impacts of Ethanol & Bio-Base Fuels

Fees	Amount
Registration – field trip	\$15
Pay at the door – two days with one lunch	\$40
Registration – conference attendance	\$35
Includes 1 lunch and 3 breaks	
Display Booth – Includes one registration	\$300

Please e-mail or	. call and	l leave a	a messa	ge.
Let us know the foll	owing: 1	NAME, I	E-MAIL,	PHONE

and Method of Payment:

September 12,	Field Trip 📙	Check
September 13		Credit card – We will invoice.
September 14	Please make ch	necks payable to: PHR(&D

Or, select invoice by credit card. We use PayPal.

Register today by phone or e-mail:

Phone: 304.267.8953 ext. 113

Olga Adams, Potomac Headwaters RC&D

E-mail: phrcd.6003@frontier.com

Days attending:

# West Virginia CR+6 permits in the Potomac River Basin (2011)

PERMIT NO#	PERMIT NAME	FAC LAT	FAC LON		SIC CODE DESCRIPTION	RECEIVING WATER	ADDRESS	ADDRESS	СІТУ	STATE	ZIP	PIPE	PIPE DESCRIPTION	PIPE LAT	PIPE LON PRAM	PRAM DESCRIPTION CHROMIUM,	MLOC SEAN	MODN LQAV LQMX UNIT	ICMN	LCAV	ICMX	TINO
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DEFINITIONS

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# Maryland CR+6 permits in the Potomac River Basin (2011)

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