the source regulatory and legislative updates | best practices | new technologies



Submitted by Jesse Goldberg, Miller Environmental, Inc.

As part of its Source Water Protection Program, the Reading Area Water Authority ("RAWA") helped to sponsor field work performed by the National Chapter of Trout Unlimited ("TU") in the Maiden Creek watershed, the source of drinking water for the City of Reading. The effort was undertaken with the purpose of reclassifying stream reaches within the watershed that contain wild trout populations for more stringent environmental protection under several chapters of the Pennsylvania Department of Environmental Protection regulations. All of Pennsylvania's waters have a designated use, which determines the protection standards that DEP uses to permit development activities within watersheds. Wild trout streams are protected by the water quality criteria associated with Cold Water Fishes designation and depending upon the waterway's chemistry, biology, and/or social characteristics, streams may qualify for additional protection under the High Quality or Exceptional Value designations.

The stream assessments were conducted according to the protocols of the Pennsylvania Fish and Boat Commission, who administers the Unassessed Waters Initiative. The National Chapter of Trout Unlimited partnered on the project with RAWA, and also the local Tulpehocken Chapter of Trout Unlimited. As a result of the surveys conducted this past summer, five stream reaches in the upper portions of the Maiden Creek watershed will be proposed for reclassification based upon the existence of wild trout.



SSM SSM

TU's stream survey crew was led by Field Technician Kathleen Lavelle, who has completed multiple Unassessed Waters surveys throughout Pennsylvania. According to Lavelle, "sampling for the Pennsylvania Fish and Boat Commission's Unassessed Waters Initiative in the Maiden Creek watershed was a successful endeavor in the 2015 field season. As the sampling in the southeast region of Pennsylvania for this initiative is in its inaugural stages, the potential for finding further native brook and wild trout populations is promising. TU looks forward to pursuing more surveys in this area and hopes to see the streams where trout were found listed on the wild trout list in the future". She also mentioned that "although much of the watershed is agricultural, native brook trout were found in 5 of the 29 streams that were assessed and wild brown trout were also found in a stream accompanying brook trout. In most cases, if the water was cold enough, trout were present. Finding predominantly native brook trout was exciting and a good indicator of the potential populations throughout the watershed".





WHAT'S INSIDE

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Safe Drinking Water Begins at the Source

Source Water Protection has been a growing concern for many municipalities and community water systems. To help protect Pennsylvania's drinking water, the Department of Environmental Protection created the **Source Water Protection Technical Assistance Program** (SWPTAP).

What is SWPTAP? This program provides funding and expertise to develop a Source Water Protection Plan. Community water systems that participate receive free assistance in delineating protection zones, developing strategies for managing the protection areas, and planning for the future.

Contact your Regional DEP office to find out more about SWPTAP, or visit the DEP website.

http://www.dep.state.pa.us/dep/deputa te/watermgt/wc/Subjects/SrceProt/Sour ceAssessment/default.htm

Quick Reference Guide

Questions? Contact your regional DEP office for guidance:

Northcentral Region Office

Mark Stephens 570.327.3422 mstephens@pa.gov

Northeast Region Office Andrew Augustine 570.830.3101 aaugustine@pa.gov

Northwest Region Office Christopher Berkey 814.332.6410 chberkey@pa.gov

Southcentral Region Office Craig Ebersole 717.705.4962 craebersol@pa.gov

Southeast Region Office Kevin Smith 484.250.5131 kevins@pa.gov

Southwest Region Office Tom McCaffrey 412.442.4212 tmccaffrey@pa.gov



2015 PA-AWRA Annual Conference

Keys to Successful Implementation Strategy

by Ashton Hogarth, SSM Group

The Annual Conference of the Pennsylvania Section American Water Resources Association (PA-AWRA) was held October 9th in State College. Students and professionals in water resources gathered to discuss water quality issues and improvement strategies being implemented in PA's three major river basins.

The "Innovative Strategies for Achieving Stormwater Management Goals" session covered management strategies and implementation projects being used to improve water quality in the Chesapeake Bay Watershed. Though the strategies discussed by each speaker were different, some more technical than others, the message was all the same. The key to successful strategy implementation is getting everyone involved on the same track, and headed towards a common goal. This is often the most important and most difficult part of implementing a project or protection plan. In many cases, implementation requires the cooperation of different groups of people, be it those with environmental organizations,

regulators, municipal officials, residents, farmers, or business owners. These individuals often have different perspectives on protection of a natural resource, so how can everyone agree on shared goals?

1: Feed them.

What better way to bring a community together and work towards a common goal, than to feed them? The speakers joked about holding very important strategy meetings after a pancake breakfast or lunch at a buffet restaurant. But as simple and silly as this sounds, this was key to breaking the ice before discussing the important (and sometimes heated) topics. Advertise a free meal, and people will show up, whether they think the issues matter to them or not.

2: Make it matter to the locals.

It's no secret that Pennsylvania has been struggling to keep up with the goals set to clean up the Chesapeake Bay. We're physically removed from the actual Bay, but the reality is, the majority of our state contributes to its watershed. However, many people simply do not have the resources or motivation to make the changes required to do our part in Bay restoration. Because large-scale watershed restoration seems overwhelming, we have to make it local. Instead of focusing on the Bay, emphasize what it will do for the local community. Make people realize that healthy local streams, mean a healthy, beautiful community.

3: Find a benefit for every stakeholder.

It can be difficult to get everyone in a community on common ground when it comes to protecting or improving a natural resource. A business owner and an environmental group in a watershed probably aren't motivated by the same things. By thinking creatively, though, best management strategies in a watershed can be beneficial for everyone. Organize waste exchanges for local businesses and industries. Allow residential developments to design community beautification projects that involve tree plantings and rain gardens. If your community participates in, or is thinking about charging stormwater fees, provide credits to residents and businesses that implement storm water controls on their property. No matter what your end goal, find a way to work together to benefit the community.

For more information on PA-AWRA, visit www.state.awra.org/pennsylvania.

SPOTLIGHT ON SWP

"Consider the Source" Campaign

submitted by Tanya Dieroff and Andrew Bliss, Capital Region Water

Capital Region Water is the municipal authority that owns and manages the greater Harrisburg community's water systems and associated infrastructure - from raindrop to river. Although the City of Harrisburg is located on the banks of the Susquehanna River, the City's primary source of drinking water is not the River. Instead it is the DeHart Reservoir, made possible due to an impoundment of Clark Creek, located 20 miles northeast of the City. Collaboration is critical to the success of this project as there is significant geographic separation between the source of Harrisburg's drinking water and residents. Upstream stakeholders are critical to the protection of this water. Members of the Collaborative include the following supporting partners: Clarks Creek Watershed Preservation Association, Doc Fritchey Chapter of Trout Unlimited, Dauphin County Conservation District, and Penn State Extension - Dauphin County.

Thanks in part to the League of Women Voters of Pennsylvania Citizen Education Fund and a grant from the Pennsylvania Department of Environmental Protection for Drinking Water Source Water Protection, Capital Region Water launched a source water education program to inform the public about where their drinking water comes from and what they can do to help protect it at the source. Additional assistance was also provided by the Appalachian Brewing Company in Harrisburg.



Consider the Source: From Raindrop to Tap includes a video and brochure that can be found online at

<u>capitalregionwater.com/considerthesource</u> and provides four ways for the public to help protect their drinking water:

- 1. **Don't litter.** Anything that falls in the watershed could end up in your drinking water.
- Pick up trash. If you see litter, pick it up. If you see trash near DeHart Reservoir and can't pick it up, report it by calling 888-510-0606.
- 3. Maintain your septic system if you live in a rural area.
- 4. Report vehicle spills near DeHart Reservoir by calling 911.

About The Source:

Capital Region Water's award winning drinking water is sourced from the DeHart Reservoir located in Clarks Valley, 25 miles northeast of Harrisburg. This 5 mile long reservoir holds nearly 6 billion gallons of water and is surrounded by over 7,000 acres of forestland owned by Capital Region Water. Capital Region Water also has the ability to draw water from the Susquehanna River as a backup supply. In 2015, Capital Region Water's Water Services Center was one of seven utilities in the country to receive the President's Award from the Partnership for Safe Drinking Water for exceeding state and federal drinking water standards. In 2014, Capital Region Water's drinking water placed in the Top 5 in a nationwide taste test contest.

New Faces in Source Water Protection





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SSM welcomes Aaron Pysher, GIT as Graduate

Geologist. Aaron is a Geologist-In-Training (GIT) responsible for field and technical support of various water resources projects including public water supply development, infiltration testing, sinkhole investigations, and groundwater modeling and analysis. He received his BS in Professional Geology from Bloomsburg University of Pennsylvania

PA DEP welcomes Craig Ebersole to Southcentral Region Office. Craig is the new

Source Water Protection contact at PADEP's Southcentral Regional Office. Craig is assuming the responsibilities previously held by Cathy Port. He has over six years of experience characterizing impacts to soil and groundwater as an environmental consultant and is eager to draw from that experience to serve the Southcentral Region.

Good Water = Good Life

Submitted by Heather Almer, Columbia-Montour Coalition for Source Water Protection

On September 16, Columbia County held its first Water Education Day for over 500 8th grade students. The theme for the event was "Good Water = Good Life"—to emphasize that where water is good, life can be good, and when water is bad (dirty, impaired or contaminated), life struggles. Students rotated through six stations on groundwater, stream studies, conservation art, general water quality, fish ecology, and an original musical and theatrical performance by area high school students on water quality and conservation. Throughout the day, students learned about the sources of our drinking water, how it gets polluted, and the connection between land and water. The event was sponsored by a grant from Pennsylvania American Water.

The water education day was a project of the Columbia-Montour Coalition for Source Water Protection—a group formed in 2012 whose basic mission is to protect and conserve local drinking water sources. Approximately 50 volunteers from many agencies and environmental groups were involved in the station instruction and logistics. All volunteers wore bright aqua blue "Good Water = Good Life" t-shirts that were designed by a local high school student, and sponsored by United Water, depicting a kayaker drinking a cup of water, demonstrating the concept of how water is both a necessity and a privilege.

Presenters and volunteers were asked to model sustainable habits by bringing their own reusable water bottles, and recycling bins were placed around the park. Students made natural mandalas at the art station, working in small groups using locally found natural materials to make beautiful layered pieces that were photographed and then disassembled for the next group to re-use. At the end of the day all the materials were placed in a brush pile to blow away or decompose into the local ecosystem.





Good Water = Good Life

