



ORPC Oxford Region Planning Committee

Chair: Al Jezyk Jr. Vice-Chair: Charles Fleischmann Treasurer: Robert Ketcham

Special Meeting Report

Connecting the Water Dots: An Exploration of the Oxford Region's Water Quality Initiatives

Reported To: CCPC Staff and ORPC Representatives

Reported By: David Ross and Mark Gallant

Date/Time: February 27, 2019 - 7:00 pm

Place: East Nottingham Township Building

Persons Present:

Elected Officials: Robert Ketcham, Peggy Ann Russell – Oxford; John Wallace – East Nottingham; Al Jezyk, Jr. – Elk; Joel Brown – Lower Oxford; Charles Fleischmann, Scott Rugen – Upper Oxford; Tiffany Bell – West Nottingham;

PC Members: Elizabeth Randolph – Upper Oxford; Joe Bauer – East Nottingham; David Ross – West Nottingham;

Other Guests: Anders Alfelt, Peg O'Grady, Patty Blakeder – OWA; Todd Pride OWA and Mid-Atlantic Youth Anglers and Outdoors Partners; Paul Andriole – CWA; Chris Strohmaier – CCCD;

Residents: Randy Teel – Oxford; Denise Rugen – Upper Oxford.

Speakers: See below.

Introduction & Countywide Initiatives

Jan Bowers – Chester County Water Resources Authority



While barely 25% of rainfall in a watershed is absorbed as ground water, our aquifers play a crucial role in our survival as a community. Virtually all drinking water in the Oxford Region is obtained through Oxford's 5 public wells and thousands of private wells; and ground water accounts for the sunny day flows in our surface waters, which supply the drinking water for tens of thousands of customers outside our region.

Past and present choices ...

- to pave over groundwater recharge areas (74% of impervious surfaces are for vehicles)

- to allow contaminants from fields, roads, and septic systems to enter streams and aquifers

...have resulted in PaDEP listing 90% of our local streams as impaired.

We all have a role in reversing these trends because our survival depends on it, it is the right thing to do and regulatory requirements will only tighten in the years ahead:

- County “Watersheds” protection plan
- Act 1678 Stormwater Management Ordinance
- MS4 requirements
- Chesapeake Bay TMDL

Water Quality Initiative Overview in the Oxford Region

Rachel Roberts - American Mushroom Institute and Elk Creek Watershed Association

Eager to partner on outreach/education efforts, leveraging newly protected lands in the Elk Township

Oxford Borough Source Water Protection Plan

Lyn O'Hare - Spotts, Steven, and McCoy & Brian Hoover, Oxford Borough

Borough Council approved in January 2018, with funding from PaDEP’s Source Water Protection Technical Assistance Program (SWPTAP) a voluntary plan to protect its 5 public wells (and a 6th well that is being prepared to return to service). The plan is awaiting approval from DEP.

The plan identifies overlapping protection zones (100-400’) around each well, a wider capture zone and the immediate watershed, the last zone including parts of surrounding municipalities. The goal is to develop strategies for addressing ranked potential sources of contamination using

- Watershed forums and partnerships
- Public education and outreach
- MS4 BMP’s
- Agricultural conservation and manure management plans
- Emergency management planning

Chester Water Authority Source Water Protection Plan

Anita Martin - Chester Water Authority

In July 2015, PaDEP approved the SWPP for the Octoraro Reservoir, which (in combination with flows from the Susquehanna River) is the source for CWA’s system. The primary challenge remains nitrates (primarily from agricultural runoff), but the plan also addresses:

- Phosphates
- Sedimentation
- Herbicides
- Total organic carbon (leaves/branches)
- Taste and odors
- Algae growth
- Transportation accident risks (Rt. 472)

Based on estimates of transport times from potential surface and groundwater contamination sites to the reservoir.

Recommended strategies include implementing

- Ag conservation and manure management plans
- BMP's
- Riparian Buffers

Octoraro Source Water Collaborative

Leslie Weller - Alliance for the Chesapeake Bay

Three Alliance initiatives are especially relevant to the Region:

- Restoring the Reservoir -- Funding for agricultural conservation planning and BMP implementation; stream monitoring with OWA and CWA.
- Turkey Hill Clean Water Partnership -- 75% cost-share funding with the goal of making Turkey Hill's contributing dairies 100% conservation plan implementation compliant
- Riparian Buffers -- Using a combination of DCNR and DEP grants, provides farmers, municipalities, schools and committed homeowner with supplies for extending riparian buffers on Bay tributaries.

Octoraro Source Water Collaborative

Rupert Rossetti - Octoraro Watershed Association (OWA)

Major OWA initiatives for protecting the watershed:

- Amish outreach
- Buffer cleanups -- April 13th will be the 4th annual clean up at the reservoir
- Monitoring -- monthly for chemicals; 1-2 a year for macroinvertebrates; looking for sites in the Oxford Region
 - Buffer planting -- with Alliance for Chesapeake Bay
 - Outreach & Education -- have display tent, will travel; annual picnic at reservoir, March 28 annual dinner

Oxford Region Stormwater Initiative

Overview of the Oxford Region's possible stormwater collaboration and new NFWF grant
Stephanie Armpriester - Brandywine Conservancy & Ellen Kohler - University of Maryland Environmental Finance Center

Using NFWF grants to facilitate collaboration among the 6 Oxford Region municipalities to meet MS4 responsibilities and maximize restoration of water quality in a cost effective manner.

2016-2017: Funded mapping and coordination among engineers and officials

- Elk and West Nottingham received MS4 waivers
- East Nottingham received a first round of PaDEP comments
- The Borough, Lower and Upper Oxford awaiting comments

2019: Develop a regional stormwater management strategy that incorporates both regulated and unregulated land uses; leveraging MCM's 1 and 2.

Penn State Extension's Master Watershed Steward Program

Meagan Hopkins-Doerr - Penn State Extension

Meagan coordinates the program for Chester and Delaware Counties. Trains and certifies volunteers to be master water shed stewards. Training location returns to Chester County in 2020. If numbers justify, would be happy to locate a training in the Region. Volunteers are positioned to support the following services:

- Public education
- Invasives removal
- Stream monitoring
- Rain gardens
- Stream clean-ups
- Municipal Support

Oxford Region Agricultural Water Quality Improvement Initiatives

RCPP Program & Current Oxford Projects

Paige LaDuca, Chester County Conservation District)

Goal is to encourage voluntary compliance with soil conservation and water quality initiatives, with referrals to enforcement agencies as necessary. Programs of particular relevance to the Region:

- Chesapeake Bay Inspections -- have covered 200 of 600 farms to date, finding that roughly 60% have conservation or manure management plans.
- Chesapeake Bay Program Special Projects -- funding for implementing Ag BMP's
- Conservation Reserve Enhancement Program -- incentives for creating and maintaining riparian buffers

- Dirt & Gravel Low Volume Roads Program -- funding for BMP's as well as road maintenance available to municipalities
- Environmental Quality Incentives Program -- funding for implementing Ag BMP's
- Grow Greener Grants -- currently funding the CCCD mushroom farms conservationist and the Leech Run restoration project in Lower Oxford.
- Regional Conservation Partnership Program grant -- funding for implementing Ag BMP's
- Rattlesnake Creek initiative -- focused effort to get this Upper Oxford stream off PaDEP impairment list

Stroud Water Research Center

Dave Wise - Stroud Water Research Center

Stroud, carrying out its mission to study aquatic eco-systems, has concluded that establishing and maintaining fully forested riparian buffers is the most effective measure for restoring water quality.

- Linking landowners with the right mix of partners and advisors is often an effective way to achieve that goal.
- Farm Stewardship Program: For every acre of forested buffer (minimum 35') installed, landowners can receive \$4,000 to help pay for other conservation practices.
- Soil Health Assistance: Free workshops and one-one consulting on implementing no-till and cover crop solutions to reduce runoff.

Whole Farm BMP implementation on Preserved Farms

Stephanie Armpriester - Brandywine Conservancy

[Ran out of time at the event]

Discussion

Two points emerged in the limited time for discussion:

- While in eastern portions of the County urban centers and suburban developments pre-dating effective stormwater controls are the major contributors to stream impairments, here agriculture remains a major contributor.
- A key component of any water quality restoration program will need to be helping the agricultural community address their water conservation needs in an economically feasible way.



Next Steps -- Leveraging our Partnerships [to be discussed at the March ORPC meeting]

Secretary Follow-up Necessary: I will forward the link shared by Stephanie Armpriester that contains materials from this meeting and a meeting report provided by David Ross

ORPC Homework: Please review the meeting reports and linked meeting materials and be prepared to discuss the next steps in the ongoing regional stormwater program.

Website Updates: See for yourself: www.chesco.org/planning/oxfordregion

CCPC Staff in Attendance: Mark Gallant, Kevin Myers, and Wes Bruckno.

Next Meeting: March 27, 2019. Check the ORPC website for an agenda.

Thank you:

Thank you Stephanie Armpriester and Ellen Kohler for your continued dedication to the Oxford Region and Stephanie's hard work pulling together everything, including the snacks, for this special meeting.

Thank you to David Ross for recording the finer points of this special meeting.

Thank you to Jan Bowers for your guidance and expertise.