

# *Potomac Drinking Water Source Protection Partnership (DWSPP)*



## Water Utility Perspective

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# Objectives



- Review the importance of Source Water Protection
- Discuss the benefits of the Potomac DWSPP
- Highlight some of the Potomac DWSPP Initiatives and Accomplishments

# Why the Need for Source Water Protection?



- Part of the Multiple Barrier approach to preventing contamination of a water supply
- Source Water Assessments (SDWA, 1996)
- Statistical Analysis of Drinking Water Treatment Plant Costs, Source Water Quality, and Land Cover Characteristics (Freeman, et al., 2008).
  - Found significant relationships among source water quality, percent forested cover, and drinking water treatment cost

# Why the Need for Source Water Protection?



Some of the treatment challenges faced by water suppliers include:

1

The emergence of new contaminants that suppliers may not be prepared to test or treat

2

Spikes in contaminant loads due to storms and flooding that make treatment more challenging

3

Constantly changing standards and regulations regarding new contaminants which are present in the water long before they are identified as threats to public health

4

Increased treatment and capital costs due to higher pollutant loads and changing water quality standards

# Source Water Cost-Benefit Tool

## Water RF Project #4143

J. Oxenford and J. Henderson, Journal AWWA (September 2010)

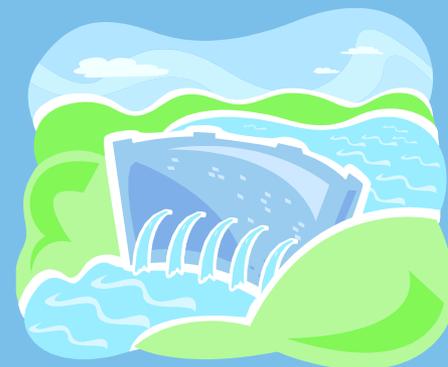


### Cost & Benefits of Source Water Protection need to consider:

- Water Reliability and Quality
- Avoided Costs
- Public Health and Safety
- Environmental and Recreational Benefits
- Economic Social and Equity Impacts

# A Pilot Survey of Drinking Water Utility Practices and Perspectives

AWWA Source Water Protection Committee (2010)



## Among the Conclusions:

- Collaboration and engagement appear to improve the completion of source water protection elements.
- Written vision and goals are essential for success in source water protection programs.

# Partnership's Role with Other Programs



1

Give the drinking water utilities and their governmental counterparts a stronger voice and more effective position in the numerous watershed protection efforts already in place.

2

Provide a complementary voice advocating watershed protection efforts to ensure that drinking water issues are adequately addressed.

3

The Partnership works with existing programs where possible, but may also create new programs that are needed for source protection.

# Benefits of Being Part of the Potomac DWSP Partnership



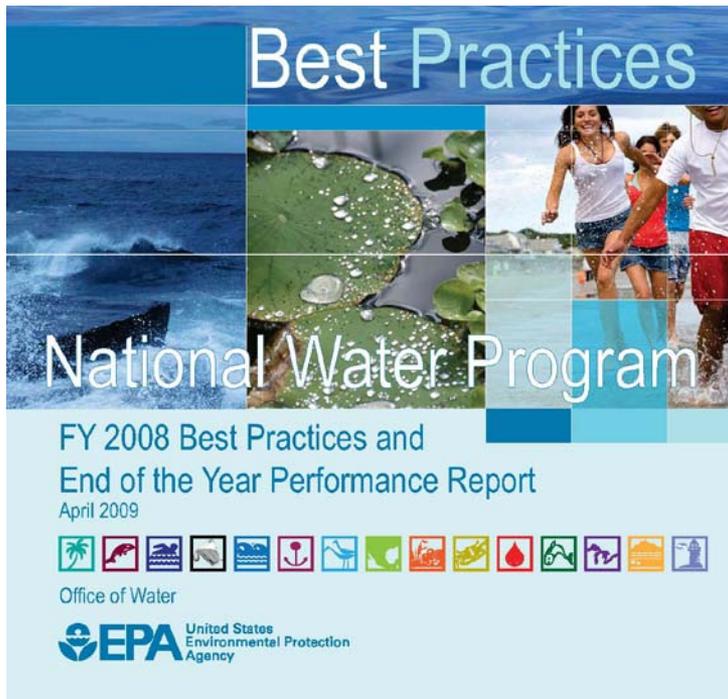
1. Ability to provide a unified voice on source water protection issues that affect the Potomac basin
2. Workshops and information sessions on relevant topics, including timely and emerging water quality issues
3. Ability to organize and execute exercises with federal, state and local cooperation
4. A forum for water quality information and exchange
5. Technical workgroups allow for the “leveraging” of resources.

# Initiatives and Accomplishments (with “lead” utility identified)



- Cryptosporidium Source Tracking Project (2006) - WSSC
- Pipeline Spill Tabletop Exercise (2008) – Fairfax Water
- WaterRF Emerging Contaminants Projects (2006+) - WSSC, WAD and FW
- Workshops and Information Sessions
  - Pathogens Workshop (2005) – WAD
  - Road De-icing (2006) – Fairfax Water
  - Urban Stormwater (2006, 2008) – Fairfax Water
  - Emerging Contaminant Workshops (2005, 2007, 2008) – WSSC
  - Agriculture Issues Workshop & Webinars (2008-2011) – WSSC & WAD
  - Water Quality Standards and TMDLs (2010) – Fairfax Water

# DWSPP Listed among EPA Best Practices



## Outcomes of the partnership as listed by EPA

”Partnership activities help to ensure that people’s most basic need for clean, safe and abundant water is reliably met. Collaborative monitoring programs have explored the occurrence of several unregulated contaminants, providing the region with reliable information about contaminant occurrence and persistence as well as increased understanding of the water quality of a major source of drinking water. Additionally, training and tabletop exercises have helped enhance the region’s ability to protect public health by providing clean and safe drinking water during emergency situations. Partnership exercises have improved emergency response coordination and communication between Potomac River water utilities, local responders, Federal and State agencies, and private industry.”

Questions?

For more information on the partnership  
please visit

<http://www.potomacdwspp.org/>



**Thank You!**