

## Defining the Regulatory System for Water Management

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- Context: Many Challenges Emerging in Water Management & Protection
- Presentation's Goals
  - Review Major Water Policies & Who Makes/Enforces Them
  - Recent Policy Developments Related to Surface Water Protection in PA
  - Provide Educational Resources

# Challenges

**Major Water Policies &** Who Makes/Enforces Them Federal Government (EPA) Clean Water Act Safe Drinking Water Act The major surface watersheds of Pennsylvania. > Multi-state Lake Erie Lake Ontario LAKE ERIE FRIE **GENESEE RIVER** WATERSHED Collaborations WATERSHED BRADFORD River Basin and SCRANTON WILLIAMSPORT **Other Water** SHARON SUSQUEHANNA OHIO RIVER ELAWARE RUM RIVER WATERSHED WATERSHE ATERSHED Management STATE COLLEGE ALLENTOWN PITTSBURGH Commissions ALTOONA READING HARRISBURG PHILADELPHIA

LANCASTER •

POTOMAC RIVER

WATERSHED

Chesapeake Bay

Chesapeake Bay

Atlantic Ocean Multi-state Collaborations: River Basin & Other Water Management Commissions

- Those Commissions
  with Regulatory
  Powers over Water
  Allocation & Access
  - Susquehanna River
  - Delaware River

- > Other Commissions
  - Ohio River Valley
    Water Sanitation
  - Potomac River
  - Chesapeake Bay
  - Great Lakes & St. Lawrence River Basin

## Policies Governing Water Access and Allocation in PA

In addition to the Interstate River Basin Commissions (~2/3 of PA)

- Susquehanna River Basin Commission
- Delaware River Basin Commission
- > PA DEP: Water Resources Planning Act
  - Must register use of > 10,000 gallons per day
- Clean Streams Law
  - Limits stream dewatering

# For More Information on Water Supply Issues & Policies

#### MARCELLUS EDUCATION FACT SHEET



#### Water Withdrawals for Development of Marcellus Shale Gas in Pennsylvania

Introduction to Pennsylvania's Water Resources

Pennsylvania has considerable water resources both above and below ground. The state's surface water resources include more than 83,000 miles of streams and rivers, more than 4,000 lakes and reservoirs, hundreds of thousands of private ponds, and 120 miles of coastal waters, overall totaling nearly 2.5 trillion gallons of water (Figure 1). Below the surface, about thirty times more water (80 trillion gallons) is stored in groundwater aquifers after it percolates through

than those of some southwestern and mountain states where other shale fields are already in fullfledged gas production. The abundance of water in Pennsylvania is a double-edged sword for drilling. Water is needed for drilling, but drillers need to avoid affecting the numerous water wells, streams, lakes, and other water bodies throughout the state with their operations.

Although water is plentiful in Pennsylvania, a variety of user groups place significant demands

Authors Charles Abdalla & Joy Drohan http://paturalgas.exter

#### Selected topics

- PA's Water Resources
- Marcellus Shale Gas Development
- Institutions Governing Interstate Waters
- PA DEP's Role in Water Management
- Sale of Water
- Water Quality Issues

http://naturalgas.extension.psu.edu/Publications.htm

# Major Water Policies & Who Makes/Enforces Them

### Federal

- Clean Water Act
- Safe Drinking Water Act (includes Underground Injection)
- Enabling River Basin and other Water Management Commissions

### Pennsylvania

- Implements most federal laws regarding water quality
- Oil & Gas Drilling
- Surface & Ground
  Water Protection
- Allocation/Access
- Others
  - Dam Safety & Encroachment
  - Solid Waste Mgmt.

# Recent Policy Developments Related to Surface Water Protection in PA

### Treatment and Disposal of Wastewaters from Marcellus Shale Gas Drilling



**Recent Policy Developments Related** to Surface Water Protection in PA > PA is changing its Industrial Wastewater Treatment & Discharge Rules (April 2009) PA DEP's Interim Strategy (until 1/1/2011) rules for industrial wastewater treatment Permitting treatment plants where assimilative capacity exists PA DEP's Final Proposed Rules. Amending

rules to establish new water quality standards

- Wastewater treatment (public comment period is open now)
- Water quality standards (to be proposed)

# For More Information on PA's <u>Wastewater</u> Issues & Policies

#### Shaping Proposed Changes to Pennsylvania's TOTAL DISSOLVED SOLIDS STANDARD

We all have a stake in sound public policies for water management.

A Guide to the Proposal and the Commenting Process

Changes are being proposed to the total dissolved solids (TDS) treatment standards to protect Pennsylvania's streams, rivers, lakes, and public drinking water. This publication provides a basic description of TDS, the history of the current standards, and the reasons for the proposed changes. It also indicates how the public can have a voice in shaping the proposed changes.



#### Should I Comment on the Proposed Regulations?

- Are you concerned about highquality and affordable water supplies for your home or business?
- Do you fish, boat, or camp on or near Pennsylvania's streams, rivers, and lakes?
- Are you concerned about the economic viability of industries

Authors Charles Abdalla & Joy Drohan

### Selected topics

- What is TDS? Why Does it Matter?
- DEP proposes a Two-Tiered Approach
- Why is the TDS Standard Changing?
- Proposed Changes to PA's Water Quality Standards
- Tips and Advice for Commenting on the Proposed Regulations

#### http://www.nutrientwaterpolicy.aers.psu.edu

On-line Sources of Information Available from Penn State University Cooperative Extension

"Nutrient and Water Policy Update" website: <u>http://www.nutrientwaterpolicy.aers.psu.edu</u>

College of Ag. Sciences "Water Resources" website:

http://water.cas.psu.edu/

