

# The State Water Plan

# DRBC Water Management Advisory Committee October 13, 2022

Tom Wolf, Governor

Ramez Ziadeh, Acting Secretary

Presented to an advisory committee of the DRBC on October 13, 2022. Contents should not be published or re-posted in whole or in part without the permission of the presenter or the DRBC.

#### **DEP Team**

Susan K. Weaver, PE Acting Chief, Compacts and Commissions

Support

Mike Hill, PG Licensed Professional Geologist

James Horton, EIT Chief, Water Use and Planning Section



### Agenda

- History of the State Water Plan
- Act 220
- State Water Plan Update 2009
- Current Plan of Action
- Q&A



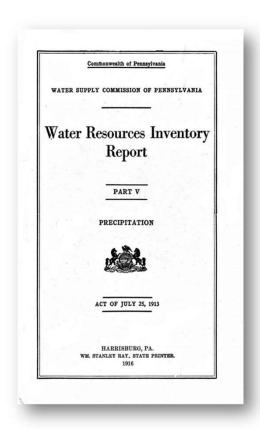
# A Brief History of Water Planning

- Early 20<sup>th</sup> Century
- Passage of Water Laws (1920s & 1930s)
- Northeastern Droughts 1960s
- 1990s and Early 2000s Droughts



# Early 20th Century

- Purity of Waters Act of 1905
- Controlling Water Resources
   Act of 1913





### Water Laws Passed (1920s & 1930s)

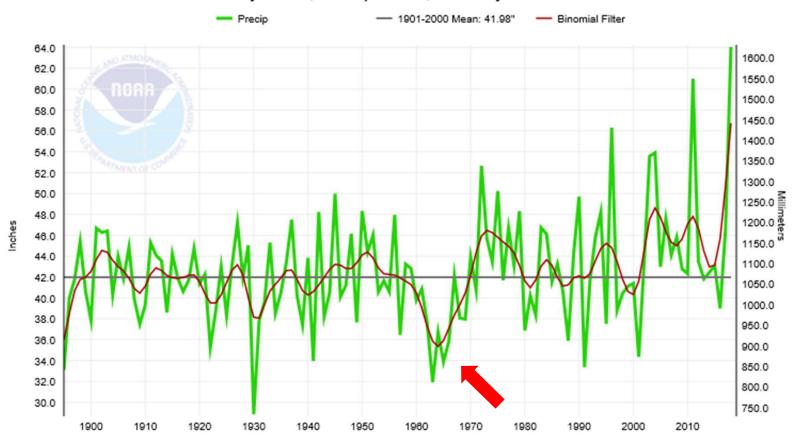
#### Including:

- Limited Permits Act (1923)
- Water Rights Act (1923)
- Water Pollution from Coal Mining Act (1935)
- Flood Control Law (1936)
- Municipal Flood Control Act (1936)
- The Clean Streams Law (1937)



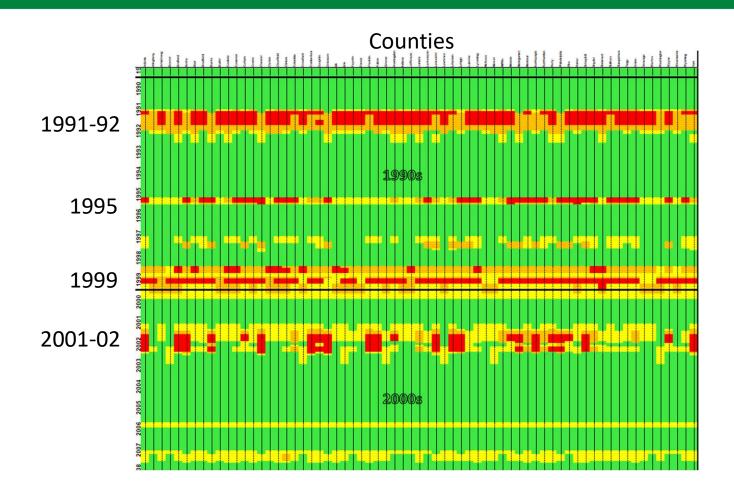
# Northeastern Droughts (1960s)

#### Pennsylvania, Precipitation, January-December





# Droughts 1990s and Early 2000s





#### Act 220 of 2002

Act 220 was passed as PA was exiting a drought in 2002.

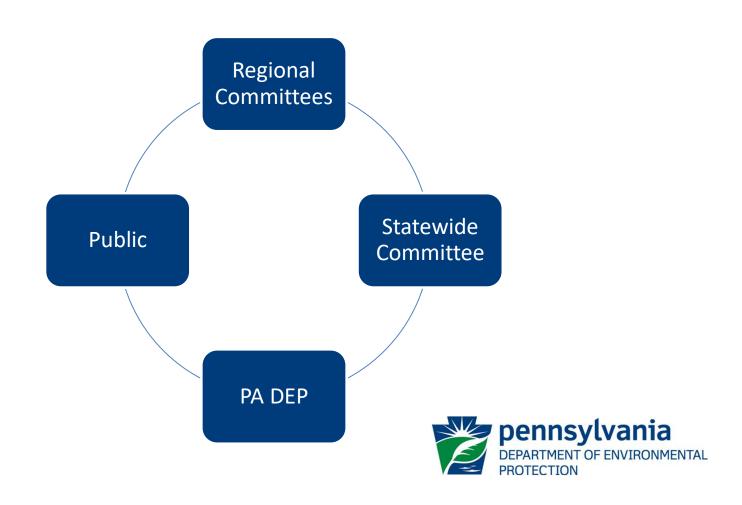
#### Requires:

- Continual Updates
- Water Use Reporting
- Identify Critical Water Planning Areas (CWPAs)
- Voluntary Water Conservation Programming



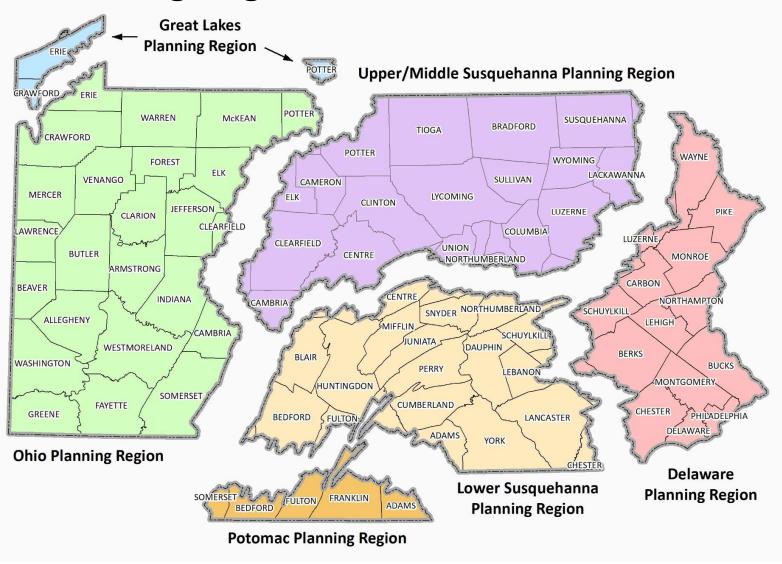
#### 2003-2009 State Water Plan Update

#### Roles and Responsibilities:



# 2003-2009 State Water Plan Update

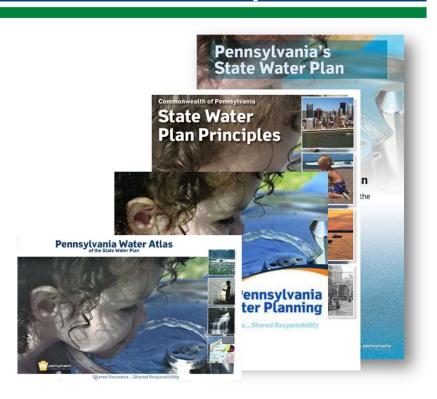
#### Water Planning Regions:



# 2003-2009 State Water Plan Update

#### **Outputs:**

- Principles Document
- Marketing "Touchstone Document"
- Water Atlas
- Web-based water use registration and reporting





#### 2009 to Present Day

#### What DEP Staff have been working on:

- Water Management Plans for Oil and Gas Operations
- Water Use Data System (WUDS) & Greenport
- Water-Use Data and Research (WUDR) Program



#### Water Management Plans





# GreenPort & WUDS

|       | Instructions                             |   | Maria San |  | MAIN MENU           |
|-------|--|---|-----------|--|---------------------|
|       |  | oload a file of your water with Bouse as a template |           | COMMONVEALTH OF PENNSYLVANIA  DEPARTMENT OF ENVIRONMENTAL PROTECTION  DIVISION OF WATER USE PLANNING | [4] WUDS Access DB  |
| Line  | Date                                     | Daily Total Withdrawa                               | al(gal)   | Daily Total Withdrawal Time<br>(hours)   | Instream Flow (Cfs) |
|       |  |   |           |  |                     |
| 1     | 02/01/2017                               |   |           |  |                     |
| 2     | 02/01/2017                               |   |           |  |                     |
|       |  |   |           |  |                     |
| 2     | 02/02/2017                               |   |           |  |                     |
| 2     | 02/02/2017                               |   |           |  |                     |
| 2 3 4 | 02/02/2017<br> 02/03/2017<br> 02/04/2017 |   |           |  |                     |

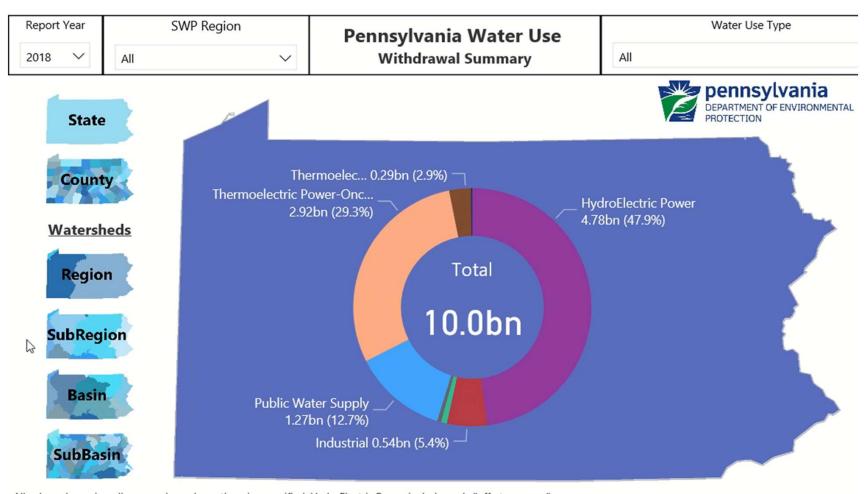


# **WUDR Projects**

| Funding Year | Project  | Amount Awarded |
|--------------|--|----------------|
| 2015         | Developed Work Plan (completed)                        | \$26,000       |
| 2016         | Online water use data sharing website (completed)      | \$52,480       |
| 2017         | QA enhancements to DEPGreenPort (completed)            | \$71,461       |
| 2018         | Conversion of paper registration forms to online forms | \$81,742       |
| 2019         | Data sharing with SRBC, DRBC, and USGS                 | \$52,529       |



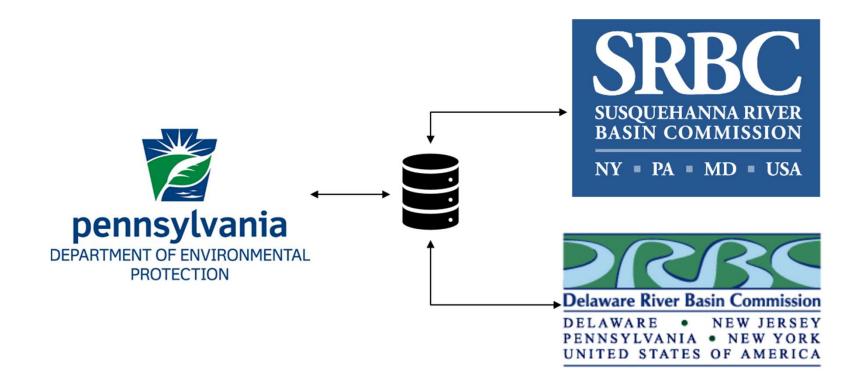
#### Power BI



All values shown in gallons per day unless otherwise specified. HydroElectric Power includes only "off-stream use".



#### Data Sharing with River Basin Commissions



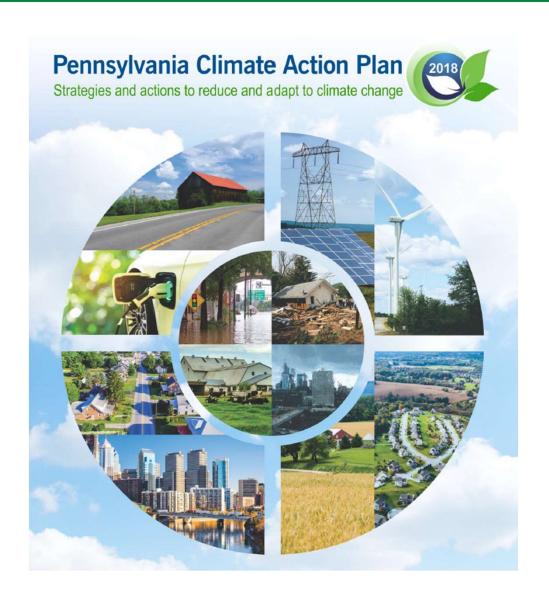


#### Current State Water Plan Update

- Primary Objectives/Deliverables:
  - A reviewed and updated State Water Plan
  - Approved and adopted Critical Area Resource
     Plans (CARPs) in Potomac and Ohio planning areas
  - Enhanced web-based applications and tools
  - Incorporate relevant elements of the 2018 and 2021 Pennsylvania Climate Action Plans



#### Implement Climate Actions



Water resources strategies outlined in the 2018 Governor's Climate Action Plan:

14. Use StormwaterBest ManagementPractices

15. Promote integrated water resources management and water conservation



#### Implement Climate Actions

- Adaptation Opportunities to Impacts of Climate Change
  - Impacts of increasing heat and flooding on
    - Health
    - Overburdened and vulnerable populations
    - Forests, ecosystems, and wildlife
  - Impacts of warmer and wetter climate on agriculture
  - Impacts of flooding on built infrastructure



#### Example Climate Action Plan

- Review of activities at all levels: federal, state, regional, local, private as well as public sector
- Consideration of variations between regional and statewide levels
- Identify strategies/tasks to be explored
- Identify multisector collaboration towards implementation of strategies
- Consider tracking progress through Key Performance Indicators



# SWP Update and Workplan

- Secondary Objectives/Deliverables:
  - A long-term work plan and funding model
  - Legislative, regulatory, policy or programmatic changes



### Three-Year Workplan

Regional and Statewide Meetings; Public Input

• Q1-Q4 2020

Public Meetings; Work Groups Assembled, Regional Components Drafted

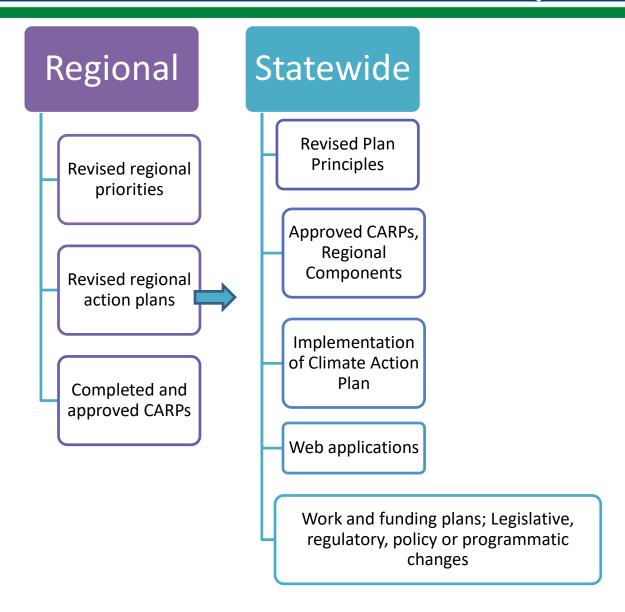
• Q1-Q4 2021

Public Review; Recommendations; Approvals

• Q1-Q4 2022



### Outcome of Review and Update



#### Pennsylvania Clean Water Academy



Want to Learn More?

Visit the Clean Water Academy at:

https://pacleanwateracademy.remote-learner.net/

**FEATURED COURSES AND LINKS** 















Planning and Conservation Division

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