

# State Water Planning 1965-83

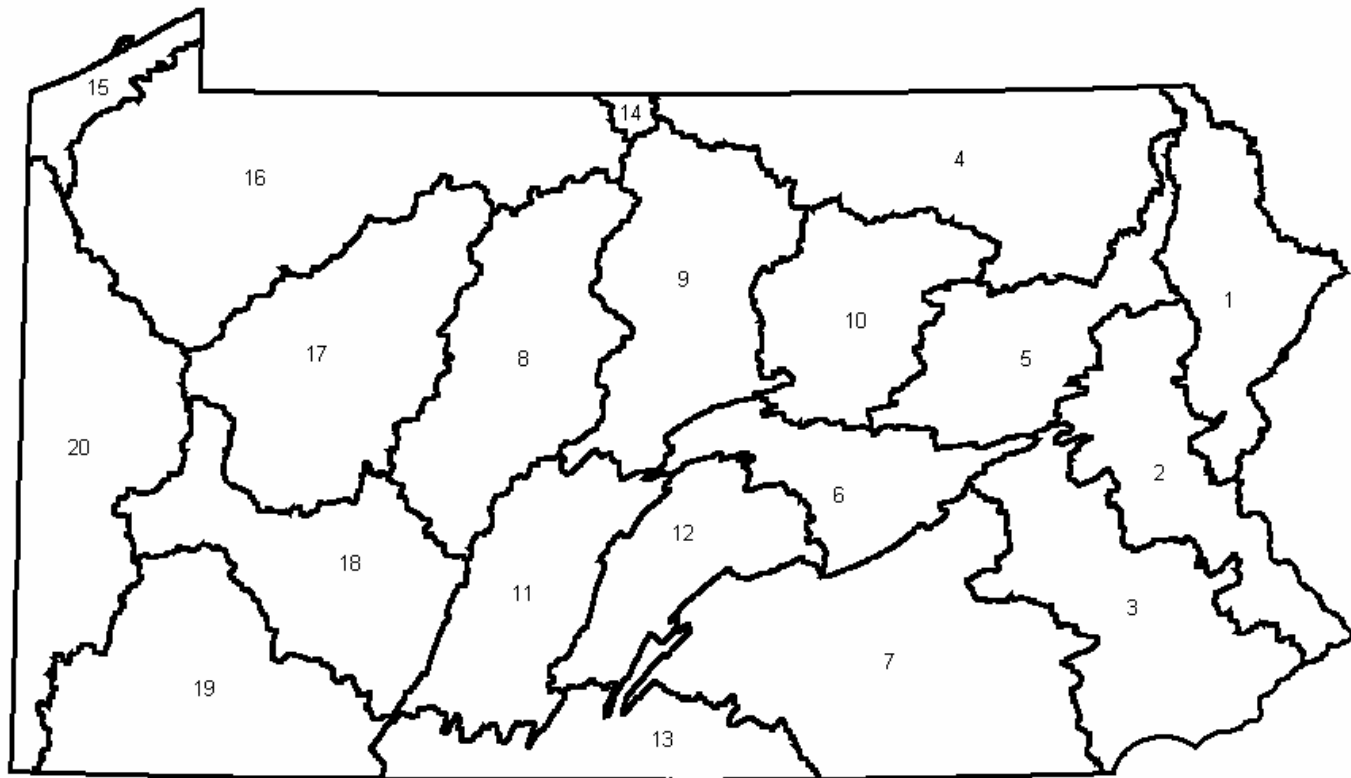
**Presented to**  
State Water Plan Regional Advisory Committees  
December 8-19, 2003

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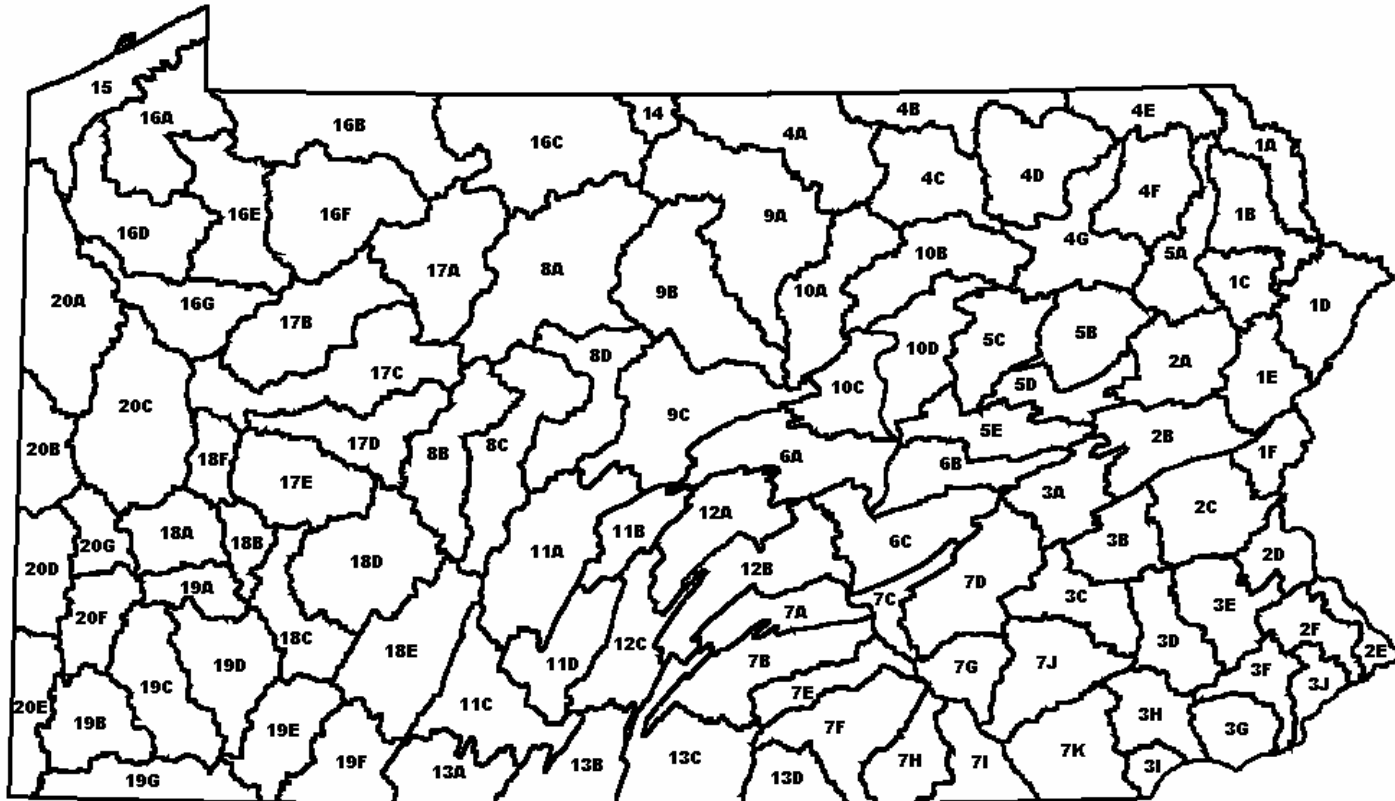
# 1965 Federal Water Resources Planning Act (P.L 89-80, Title III)

- Matching funding to states for state water planning nationwide
- Forerunner of Division of Water Use Planning formed, to qualify for federal funds
- Interagency Water Resources Coordinating Committee (WRCC) formed

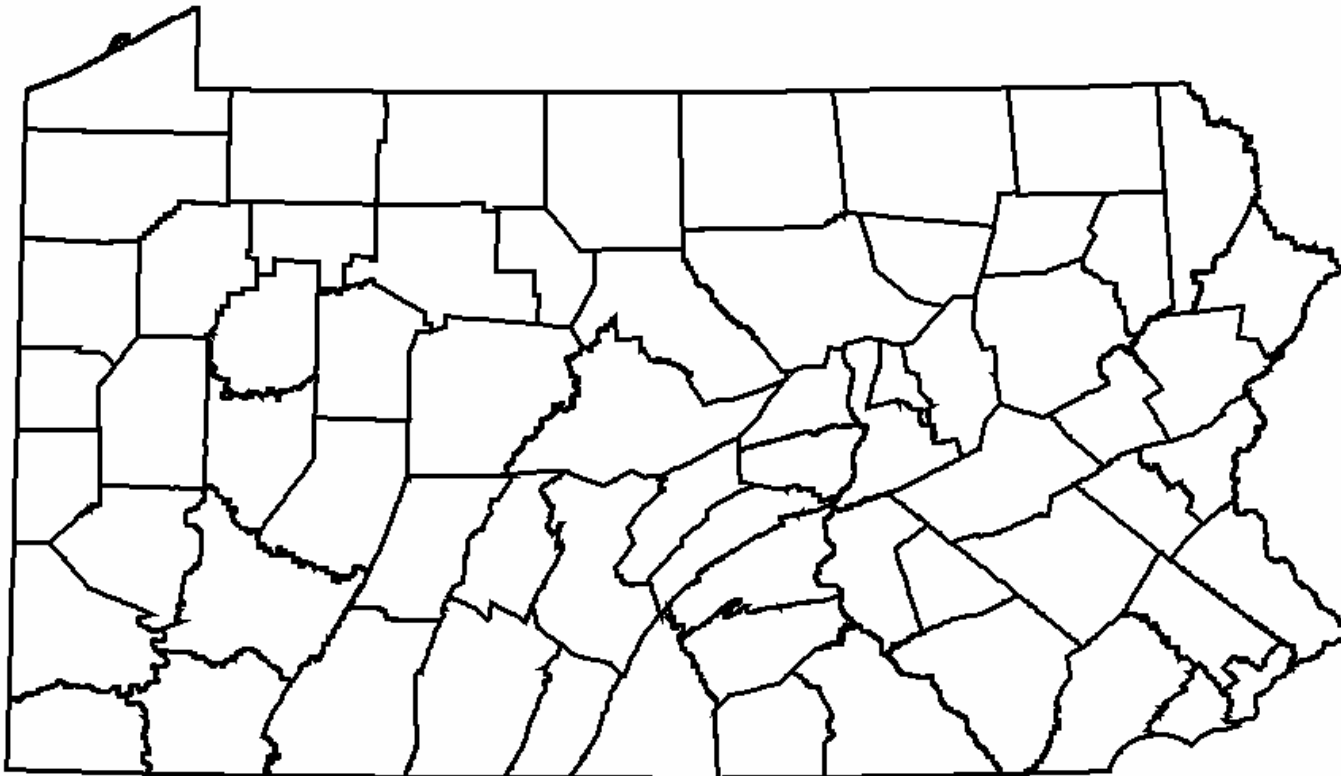
# 20 Subbasins



# 104 Watersheds



# 67 Counties



# Advisory Committees

- Interagency -- Water Resources Coordinating Committee (WRCC)
- Subbasin -- Water Resources Advisory Committees
- Citizens Advisory Council
- Statewide -- Water Resources Policy Advisory Committee (WRPAC)

# In-House Effort

- Division of Comprehensive Resources Programming
  - 18 full-time staff
  - Up to 6 interns
  - Some consultant assistance, primarily with data collection

# Data Collection

- 1969 - 1978
- Interagency
- Largely voluntary
- Water Use
  - Public Water Supply
  - Industrial
  - Agricultural
  - Fishing & Boating
- Populations



# *Planning Principles*

- Purpose
- Goals
- Objectives
- Standards and Criteria
- Work Program
- Methodology

# *Planning Principles - Purpose*

- Purpose

“The purpose of this planning effort is to develop a *flexible* State Water Plan for the *wise* management of the Commonwealth’s water and related land resources to meet the present and future needs of the people of Pennsylvania, and to improve the *quality of life*. Accordingly, the Plan provides guidelines designed to:

# *Planning Principles -- Purpose*

1. “Regulate the quantity and quality of available water to assure adequate supplies of good water to meet present and future needs, in consonance with protection of the environment, as well as the public health, safety, and welfare.”

# *Planning Principles -- Purpose*

2. “Develop and conserve water and related land resources to meet residential, municipal, industrial, agricultural, electric power, navigation, and recreational requirements, and to provide flood damage reduction and water necessary to meet water quality management requirements.”

## *Planning Principles -- Purpose*

3. “Preserve the natural and scenic beauty of areas adjacent to certain wild and scenic water areas and streams for the use and enjoyment of present and future generations.”

# *Planning Principles -- Purpose*

4. “Control and reduce the amount of (acid) mine drainage entering the streams of the Commonwealth from abandoned surface and subsurface mines.”

# *Planning Principles -- Purpose*

5. “Establish priorities which permit needs to be met in order of urgency.”

# *Planning Principles -- Purpose*

6. “Utilize the water and related land resources of the Commonwealth toward achievement of the State’s social, economic, and environmental goals.”



# *Planning Principles -- Goals*

- Goals:
  1. Water Supply – “Water supplies of adequate quantity and quality to meet short-range and long-range needs.”
  2. Flood Damage Reduction – “Mitigation of existing flood damage problems, and minimization of future flood damages.”

# *Planning Principles -- Goals*

3. Outdoor Recreation – “Adequate water and related land resources to meet present and future water-oriented and water-enhanced recreational needs
4. Water Quality Management – “Prevent pollution of the waters of the Commonwealth, and reclaim and restore to a clean, unpolluted condition all presently polluted waters, so that probable and planned water uses will be protected at all times.”

## *Planning Principles -- Goals*

5. Environmental Management – “...in the process of attempting to identify and meet the Commonwealth’s water resources needs and problems, efforts are also directed toward carrying out this task in a manner designed to improve and protect the State’s natural environment...”

# *Planning Principles – Standards and Criteria*

## A. Water Supply

1. Public Water Supply – filtration; drinking water standards; source adequacy; permits for surface sources and interbasin transfers
2. Industrial Water Supply – quantity and quality depend upon individual requirements

## *Planning Principles – Standards and Criteria*

3. Agricultural Water Supply – livestock water requirements; 1 inch/week irrigation
4. Interstate Interbasin Transfers – settled through RBCs
5. Intrastate Interbasin Transfers – develop in-basin resources first; protect future needs of exporting basin; provide compensation to exporting basin

# *Planning Principles – Standards and Criteria*

## B. Flood Damage Reduction

1. Urban drainage a local responsibility
2. Projects designed for flood of record or 100-year event
3. Benefits should exceed costs of structural measures
4. “Dams and Encroachments” publication criteria must be met

# *Planning Principles – Standards and Criteria*

## C. Outdoor Recreation

1. Include fishing; boating; swimming; picnicking and camping
2. Participation rates derived from SCORP
3. State Park lakes should be 100+ acres in 15+ square mile d.a.
4. Criteria for Wild and Scenic rivers

# *Planning Principles – Standards and Criteria*

## D. Water Quality Management

1. Chapter 93 criteria for streams
2. Waste treatment provided to meet water quality criteria
3. Minimum secondary treatment for domestic sewage
4. Interstate water quality managed through RBCs



# *Planning Principles – Work Program*

- Scope of Work
  - Breadth and Depth – program-oriented; statewide; multi-objective; comprehensive
  - Horizons – 1990 & 2020
  - Planning Areas
  - Staff Requirements
  - Planning Procedures
  - Reports

# *Planning Principles – Work Program*

- Coordination
  - Federal and Interstate Agencies
  - State Agencies
  - Local Agencies

# *Planning Principles – Methodology*

- Inventory
- Population
- Analysis
  - Water Supply
  - Flood Damage
  - Outdoor Recreation
  - Water Quality Management

# *Planning Principles – Methodology*

- Investigation of Potential Resources
- Alternative Solutions

# Subbasin Reports

- I. Summary and Recommendations
- II. Subbasin Goals and Objectives

# Subbasin Reports

- III. Physical Features and Resources
  - Basin Orientation
  - Climate
  - Hydrology
  - Topography
  - Geology
  - Mineral Resources
  - Soil Resources
  - Forest Resources
  - Fish, Waterfowl and Furbearer Resources

# Subbasin Reports

- IV. Socio-Economic Features
  - Historical Setting
  - Economy and Employment
  - Population
  - Transportation
  - Land Use

# Subbasin Reports

- V. Water Resources Problems and Solution Alternatives
  - Water Use
    - Watershed Water Use and Reuse
    - Public Water Supply
    - Consumptive Water Use
  - Flood Damage Reduction
  - Water-Related Outdoor Recreation
  - Wild and Scenic Rivers
  - Water Quality
  - Erosion and Sedimentation



# Subbasin Reports

- VI. Principal Physical Characteristics and Environmental and Social Impacts of Structural Alternatives
  - Potential Multi-Purpose COE Projects
  - Potential Consumptive Use Makeup Projects
  - Water Supply and Flood Control Projects