The Delaware River Basin

- 13,539 square mile drainage area serves 17 million water users
- Drinking water supply for NY, Philadelphia, & Wilmington
- One-half the drinking water supply for New York City (800 mgd)
- Port complex, including Philadelphia, Camden and Wilmington, is the largest freshwater port in the world
- Three reaches included in National Wild and Scenic River System
- World class trout fishery in the tailwaters of the NYC reservoirs
- Tremendous economic significance for the region.
View of the Delaware River and Delaware Water Gap
The Delaware River and Water Gap from Kittatinny Point NJ
(NPS Photo)
Scenic NY Route 97 through Hawks Nest welcomes most visitors to the Upper Delaware River.

Photo © David Soete
The Litigation

- Initial litigation among the states in the 1930’s over equitable share of the River’s flow led to Supreme Court Decree

- Second round of litigation in 1950’s due to New York City’s plans to build reservoirs in the East and West Branches led to the Amended Decree

- Amended Decree sets limits on New York City withdrawals and also establishes minimum flow targets at specified locations in the River
1954 Decree

- NYC could divert 800 mgd upon completion of Cannonsville Reservoir on the West Branch.
- NJ could divert 100 mgd via Delaware and Raritan Canal; to be increased if and when NJ constructed a reservoir to store waters of the Delaware River for purposes of diversion to another watershed.

NYC must maintain flow at Montague of 1,750 cfs after construction of Cannonsville.
As a result of the 1954 Decree, New York City gets roughly half its water from three reservoirs located on tributaries to the Delaware -- Cannonsville, Pepacton, and Neversink.

Map: NYC DEP Web Site
Cannonsville Reservoir holds about 96 bg when full. In late-November 2001, storage dropped to just over 3 bg, a record low.

*December 20, 2001 at 6.5% of capacity*  
*photo by NYCDEP*
Attempts to create a Compact Agency failed in 1925, 1927 and 1953.

Factors contributing to new impetus for Compact after 1954 included:

- **Post-war growth** resulted in interest by PA and NJ in building a dam on the main stem to augment water supplies.

- **Major flooding** in 1955 attracted the attention of the public, the federal government and political leaders to the need for flood control.

- **Senate Committee** on Public Works commissioned a ACOE study on feasibility of a major reservoir on the main stem.

- Mayor Clark of Philadelphia created a **Delaware River Basin Advisory Committee**, which obtained a large grant from the Ford Foundation to study potential administrative organizations for river basins. Study contract was awarded to a team at Syracuse University. Its recommendations, issued in 1959, included creation of a compact with federal government as an equal member.
The Delaware River Basin Compact

- Enacted in 1961
- Signatories: New York, New Jersey, Pennsylvania, Delaware, United States
- Purpose: “encourage and provide for planning, conservation, utilization, development, management and control of the water resources of the basin”
- Principles: “promote interstate comity”; “apply principle of equal and uniform treatment of all water users similarly situated . . . without regard for political boundaries.”
The Compact Addressed
Several Problems

- Adversarial posturing and proceedings to modify Supreme Court Decree inefficient and results uncertain
- Need for mechanism to adjust River flows due to drought or changing demographic or economic factors
- Water resource planning often requires many years for development and construction of projects
The Compact Addressed

Several Problems – cont.

- Basin subject to uncoordinated administration of 43 State agencies, 14 Interstate agencies, 19 Federal agencies

- Regional development of a common resource requires a regional agency
Allocation by Judicial Decree v. Compact

**Judicial Approach:**
- Pressures to simplify the facts and
- Reduce the number of alternatives
- Pressure for certainty and stability
- Firm and enforceable legal right can engender complacency

**Multi-Party Collaboration through DRBC:**
- Operates to generate multiple alternative solutions
- Dynamic instability
- Pressures toward innovation, novelty and experimentation

Delaware River Basin Compact

Roles:

- **Planning**: actions must be consistent with a basin-wide comprehensive water resources plan adopted by the commission.

- **Coordination**: coordinates activities among 43 state agencies, 14 interstate agencies and 19 federal agencies, in part through the use of advisory committees, currently, including Flood, Flow Management, Information Management, Monitoring, Water Quality, Toxics, TMDL Implementation, Water Management.

- **Regulation**: Projects having a substantial effect on the water resources of the basin require review under Section 3.8 of the Compact. Projects must not substantially impair or conflict with the comprehensive plan.
General Areas of Commission Authority

- Water Supply (Flow Management)
- Pollution Control
- Flood Protection
- Watershed Management (soil conservation, fish and wildlife habitats)
- Recreation
- Hydroelectric Power
- Withdrawals and Diversions
Water Flows

- Supreme Court Decree flow targets provide the foundation – monitored by River Master
- Compact allows changes in flow regimes established by Supreme Court by unanimous consent of Decree parties
- Compact allows changes to flow regimes by unanimous consent of signatories to Compact in drought emergency
Water Flows – cont.

- “Good Faith Agreement” embodied in Commission’s regulations specify reduced minimum flow targets during drought

- No litigation since Compact became effective

- How will ecological demands be addressed?
  - Fisheries habitat banks?
## Basin-Wide Drought Operations

<table>
<thead>
<tr>
<th></th>
<th>NYC Diver.</th>
<th>NJ Diver.</th>
<th>Montague Target</th>
<th>Trenton Target</th>
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<tbody>
<tr>
<td>Normal</td>
<td>800 mgd</td>
<td>100 mgd</td>
<td>1,750 cfs</td>
<td>3,000 cfs</td>
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<td>Watch</td>
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<td>Warning</td>
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<td>2,700</td>
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<tr>
<td>Emerg.</td>
<td>520</td>
<td>65</td>
<td>1,100-1,650</td>
<td>2,500 – 2,900</td>
</tr>
</tbody>
</table>
Cooperative Federalism

- Federal government is full voting member (one of five)
- Federal government will not take any action in conflict with the Commission’s comprehensive plan if federal Commissioner votes in favor of plan
- President can suspend the comprehensive plan if national interest so requires
- Federal government may withdraw from Compact
Reasons To Include The Federal Government

- Federal agencies do not always speak with a single voice – the Compact places onus on federal representative to coordinate within federal government

- Need to coordinate all government agencies with regulatory or project authority

- Strong federal interest in proper management of navigable River and intelligent development of the Basin

- Funding?
Comprehensive Planning

- Commission’s Comprehensive Plan
- Basin-wide plan with allocated responsibilities
- Integration of water quality and water quantity
- View of surface water and groundwater as integrated system
  - SE Pennsylvania groundwater protected area
Regulation of Water Quality

- Regulation of dissolved oxygen levels – 1960s program similar to present day TMDLs that allowed return of shad to the River
- Commission regulation allows for consistent standards and complementary actions in all states bordering the River
- Commission is utilizing a technical advisory committee for PCB TMDL to take stakeholder concerns into account at an early stage
- Commission is establishing an implementation advisory committee
Strength of Federal-Interstate Compact

- Regional problems managed regionally
- Opportunity to coordinate state agencies
- Opportunity to coordinate federal government agencies
- Forum and mechanism for resolving water allocation and related disputes
- Ability to develop and enforce a comprehensive regional plan
Strength of Federal-Interstate Compact – cont.

- Ability to consider all facets of water management in an integrated manner
  - Surface and groundwater
  - Water quantity and quality
  - Land-water and air-water relationships

- Utilize physical boundaries such as watersheds rather than political boundaries

- Ability to examine cumulative impacts within a watershed
Challenges

- Nonpoint source pollution
- Reluctance of states and federal government to yield authority
- Relationship of Commission’s programs with federal programs
- Land management as local prerogative