

Delaware River Basin Commission

Background and Mission of WMAC

WMAC Meeting

June 16, 2015

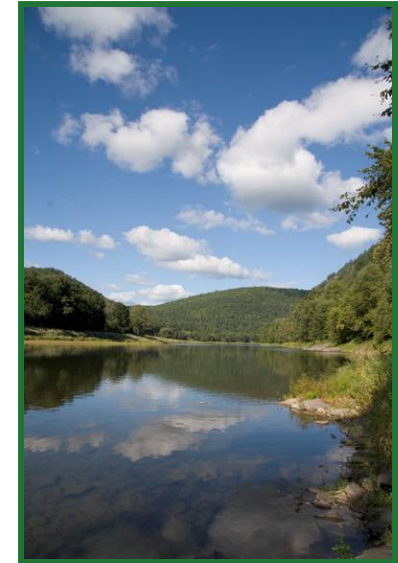
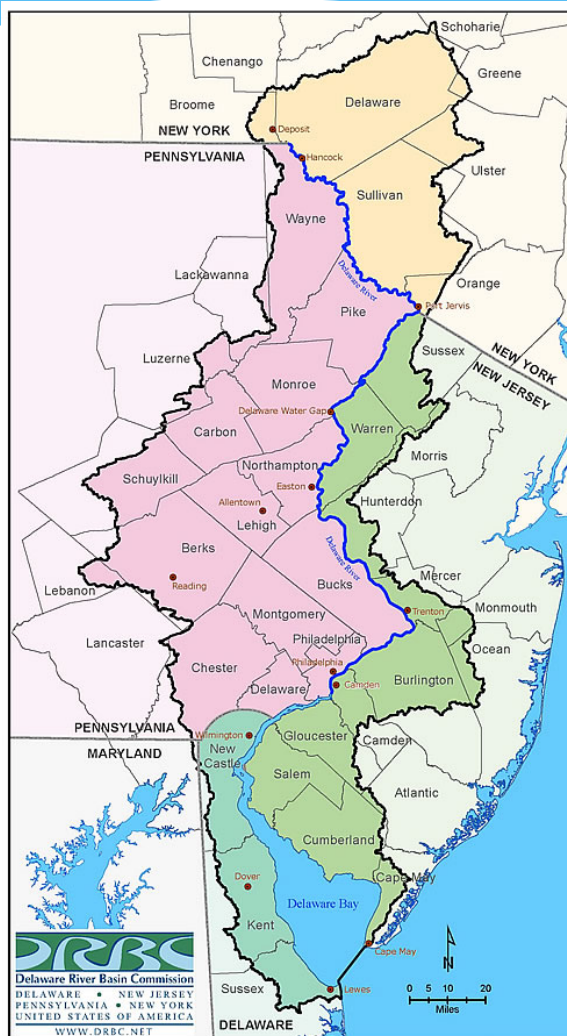


Photo by David B. Soete



“A river is more than an amenity, it is a treasure”

-US Supreme Court Justice
Oliver Wendell Holmes



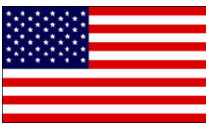
Fast Facts:

- ❑ Delaware River Main stem river is **330 miles long**
- ❑ Delaware River forms an interstate boundary over its entire length
- ❑ **15+ million people** (about 5% of the U.S. population) rely on the waters of the Delaware River Basin
- ❑ **Drains 13,539 square miles** in 4 states.
- ❑ Water **withdrawal** in the Basin = **8.7 billion gallons/day**
- ❑ **Significant Exports: NYC (up to 800 MGD) and NJ (up to 100 MGD)**
- ❑ Longest, un-dammed U.S. river east of the Mississippi (dams are located on tributaries, not the main stem Delaware)
- ❑ **Contributes over \$21B in economic value** to the region.

Delaware River Basin Commission Founded by Compact in 1961

Five Equal Members:

- Delaware
- New Jersey
- Pennsylvania
- New York
- Federal Government



Note: New York City and Philadelphia are “advisors” and not members

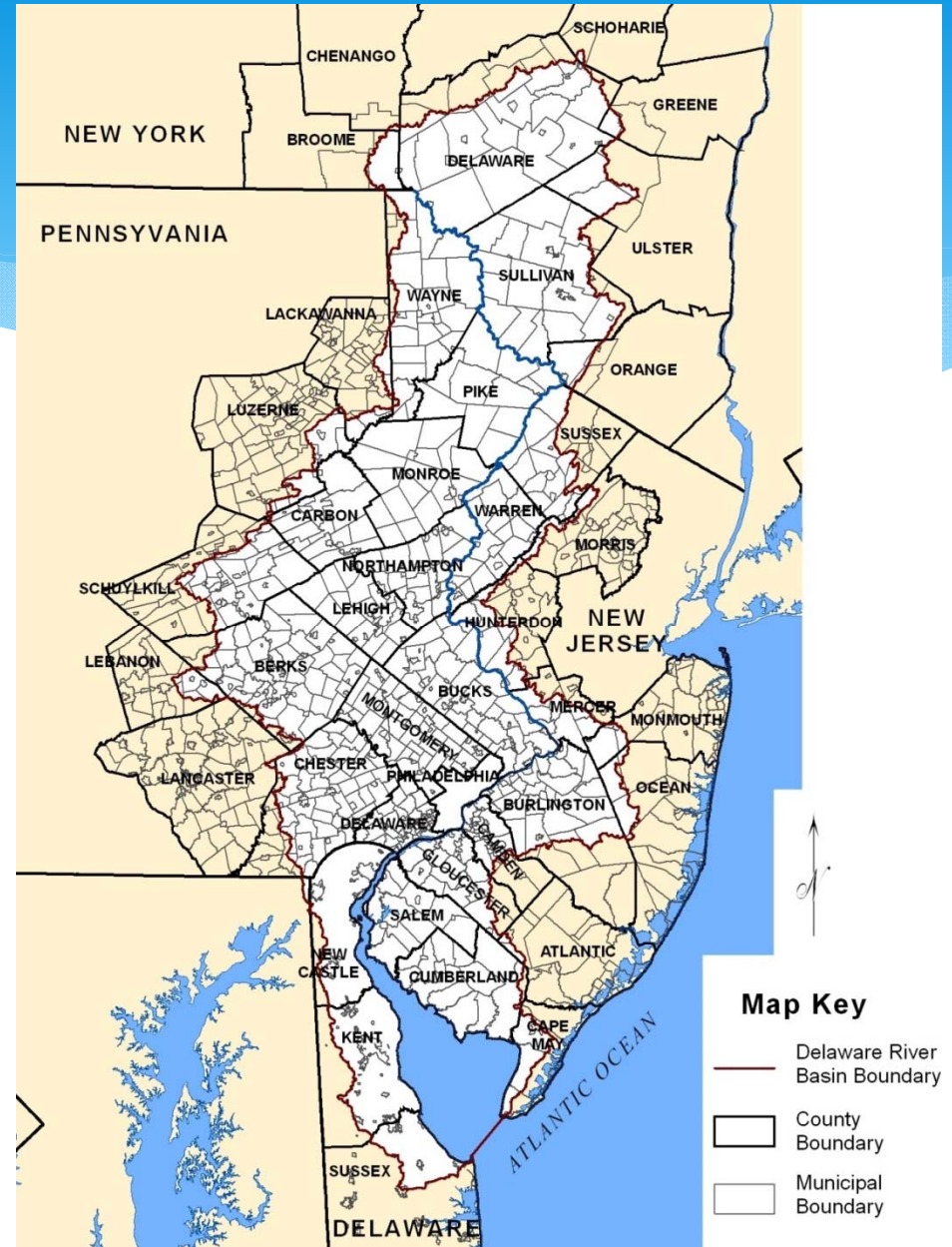
Why was the DRBC created?

- Water supply shortages and disputes over the apportionment of the basin's waters;
- Severe pollution in the Delaware River and its major tributaries;
- Serious flooding



The Need for Basin-Scale Planning and Management

- 4 States
- 42 Counties
- 838 Municipalities
- Exports to NY City & NJ



Delaware River Basin Commission

Managing our shared Basin water resources.

Built on a shared and foundational commitment in the *Delaware River Basin Compact* to:

- **Manage** complex interstate water resource systems and needs.
- **Collaborate** with members on shared waters management issues – from headwaters to the Ocean.
- **Adapt** to achieve mission results.
- **Balance** progress and protection.
- **Partner** to achieve for the Basin, what individual members cannot achieve alone.



DRBC Advisory Committees

- Flood
- Regulated Flow
- **Water Management**
- Toxics
- Water Quality
- Monitoring Advisory & Coordination



DRBC Primary Functional Responsibilities

- **Water Supply**
- **Drought Management**
- **Flood Loss Reduction**
- **Water Quality**
- **Watershed Planning**
- **Regulatory Review (Permitting)**
- **Outreach/Education**
- **Recreation**








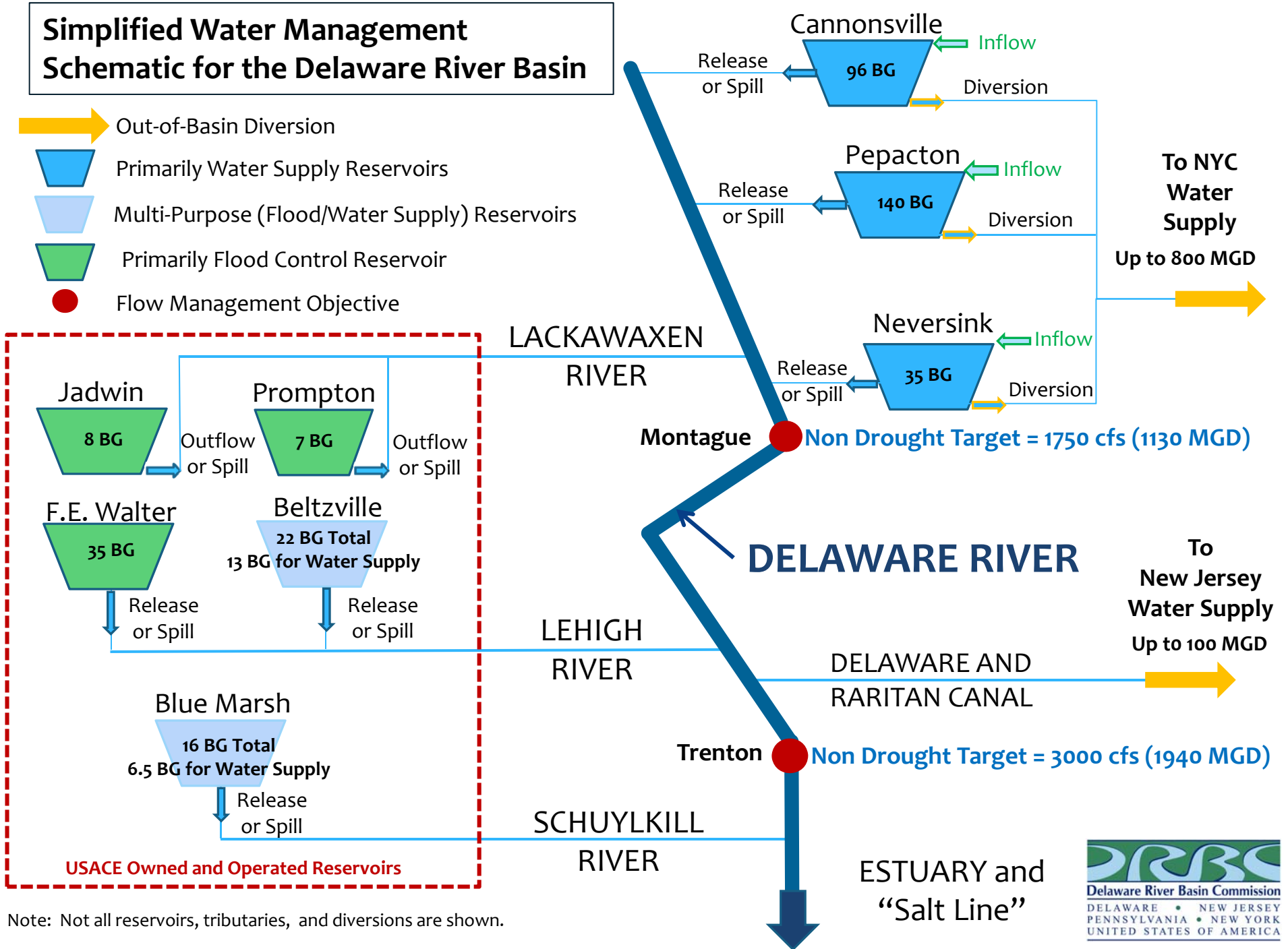
Core Water Supply Planning Question

Can the Delaware River Basin support the following objectives during a repeat of the drought of record (or greater)?:

- Meet flow management targets at Montague NJ and Trenton, NJ
- Keep the salt line at targeted river miles so as to not impact drinking water supplies, aquifers, and industrial uses.
- Support overall basin demands with required levels of drought related demand management.

Simplified Water Management Schematic for the Delaware River Basin

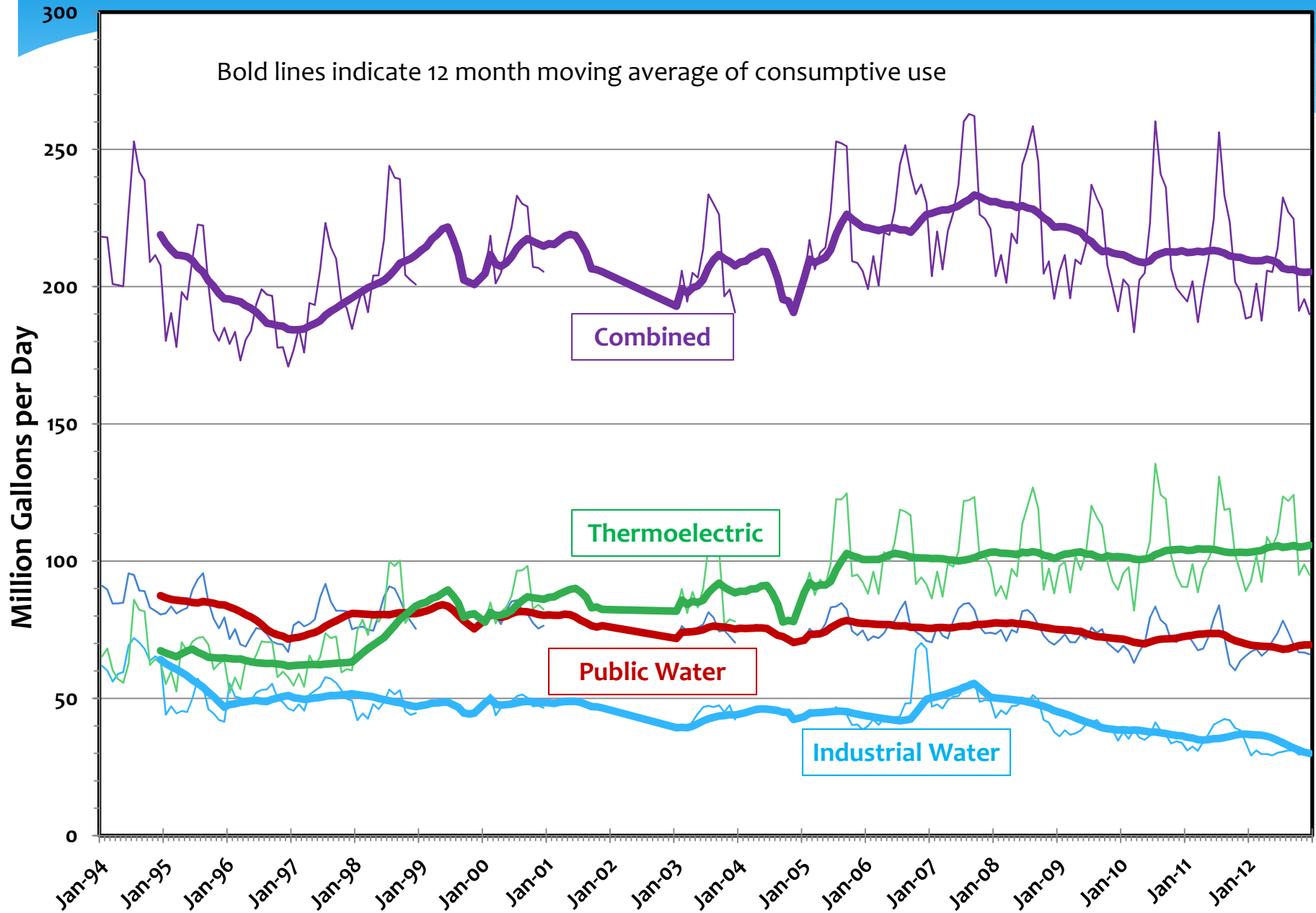
-  Out-of-Basin Diversion
-  Primarily Water Supply Reservoirs
-  Multi-Purpose (Flood/Water Supply) Reservoirs
-  Primarily Flood Control Reservoir
-  Flow Management Objective



Note: Not all reservoirs, tributaries, and diversions are shown.

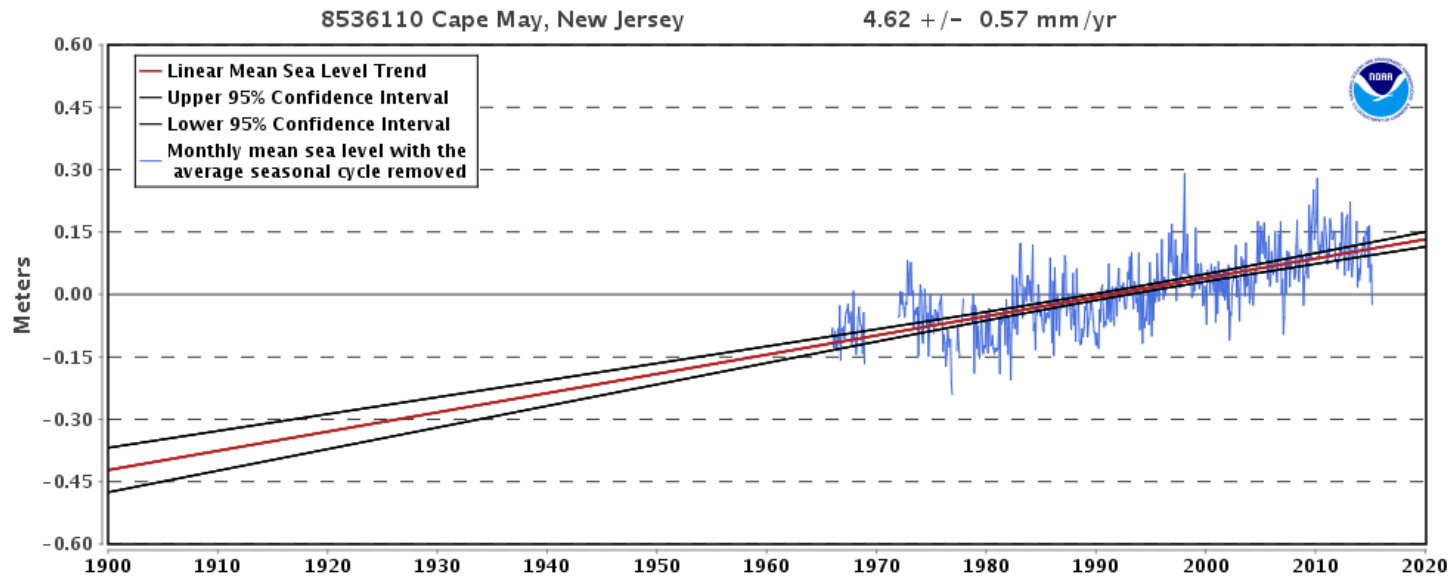


Consumptive Use Trends 1994 - 2012



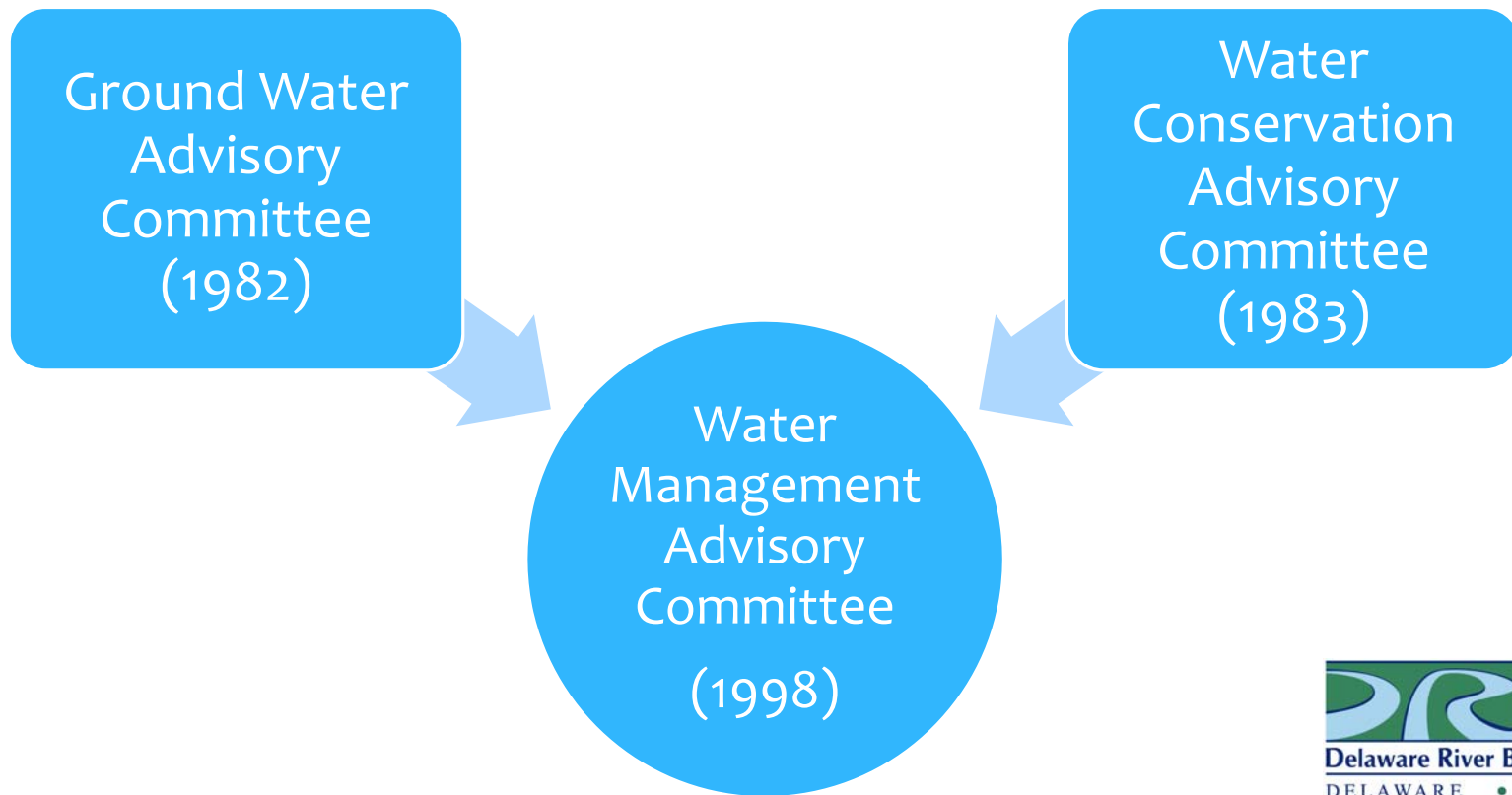
Mega Trends and Other Emerging Planning Issues

- **Demographics:** Changes and Shifts
- **Climate Change:** Sea level rise, frequency and intensity of storms and droughts
- **Energy Water Nexus**
- **Possible Shale Gas Development**
- **Energy and Water Efficiency**



Note:
4.62 mm/yr =
1.5 ft/100 years

WMAC Created: Resolution 98-21



Purpose of WMAC

- Water demand and consumptive use forecasting
- Implementation of water conservation regulations
- Models and methods for characterizing groundwater flow and instream flow needs
- Protocol for review of integrated resource plans
- Recommendations for the conduct of watershed-based plans

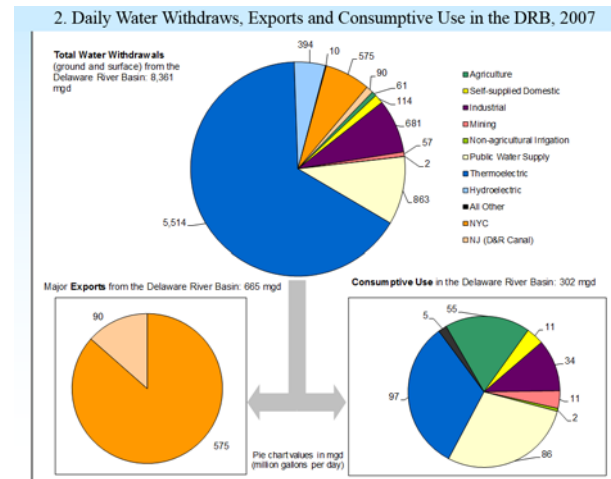
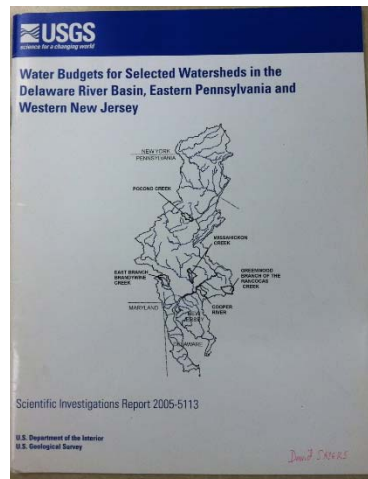
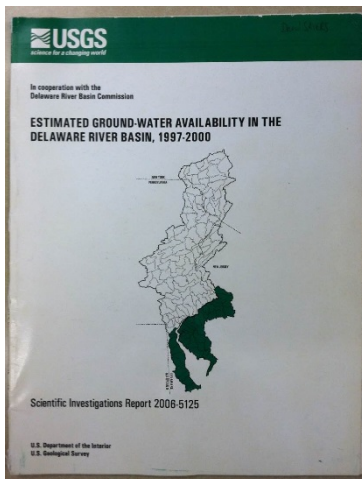
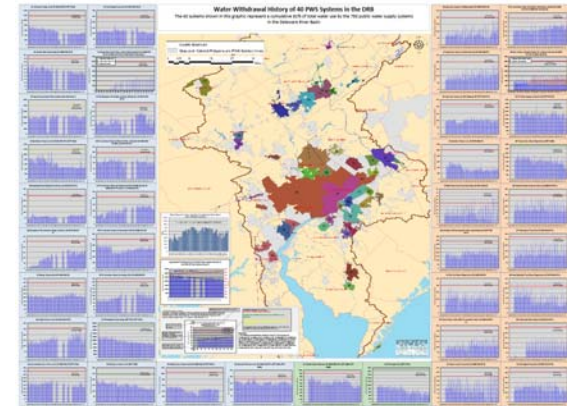
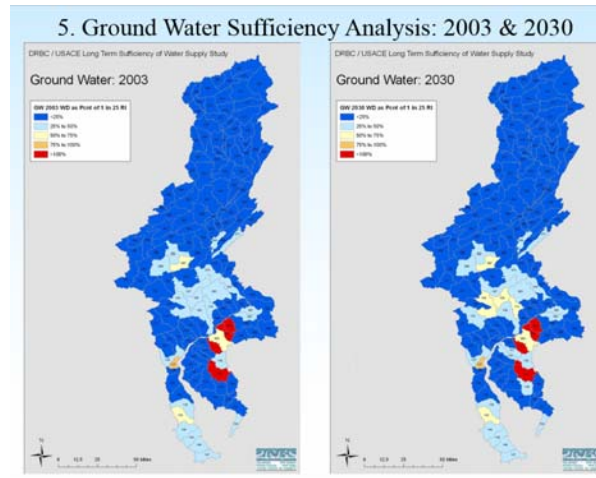
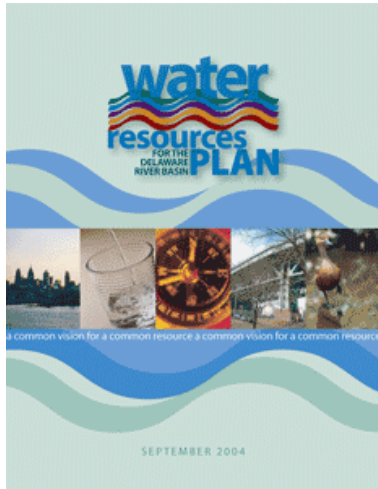
20 WMAC Representatives:

- a) State of Delaware
- b) State of New Jersey
- c) State of New York
- d) Commonwealth of Pennsylvania
- e) U.S. Army Corps of Engineers
- f) U.S. EPA
- g) U.S. Geological Survey
- h) City of New York
- i) City of Philadelphia
- j) County Water Agency
- k) Water Resources Association
- l) Industry
- m) Water Utility
- n) Agriculture
- o) League of Women Voters or other Civic Organization
- p) Environmental Organization
- q) Watershed Organization
- r) Academia
- s) Recreation
- t) Fisheries

WMAC Focal Areas & Accomplishments

- Data Capture / Needs
- GWPA / IRP Guidance
- Basin Plan
- Water Audit / Conservation
- Reclaimed Water Use
- Instream Flows
- Review State AAs
- Inter/Intra basin transfers
- Groundwater availability/
Water Budgets
- Water Use Trends
- Water Demand Forecasting
- Water Supply Planning

Examples



WMAC Future Engagements

- Groundwater Management in the DRB (Oct. mtg)
- Water Efficiency
- Water Supply 2060
- Your suggestions...