

Delaware River Basin Commission

Water Resource Management in the Delaware River Basin

Steve Tambini, P.E.
Executive Director

March 17, 2016
AWWA NJ Annual Conference

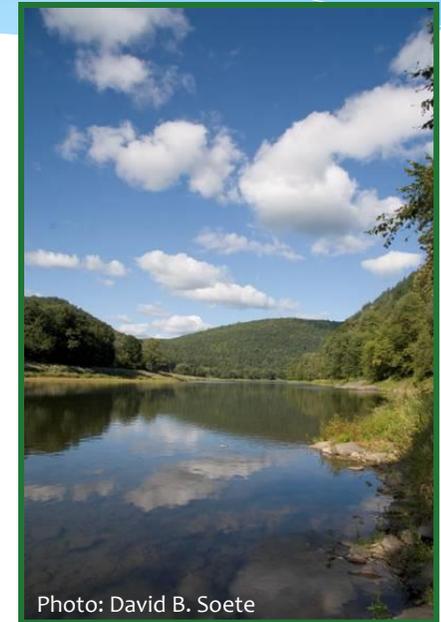


Photo: David B. Soete





Photo: Nicholas A. Tonelli

Delaware River @Trenton

October 2014

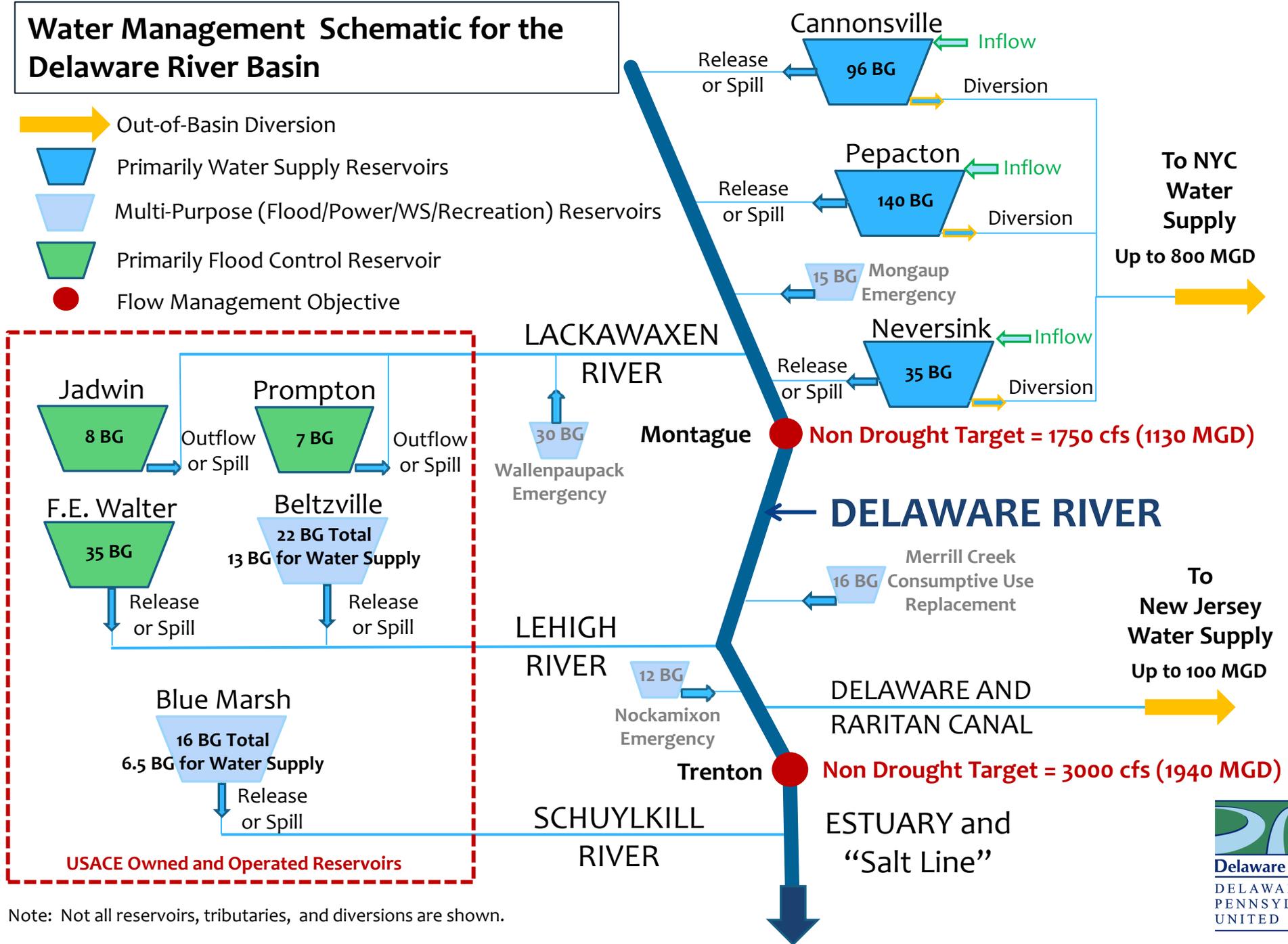




http://www.rentphilly.com/wp-content/uploads/2014/11/pennslanding_waterfront.jpg

Water Management Schematic for the Delaware River Basin

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



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



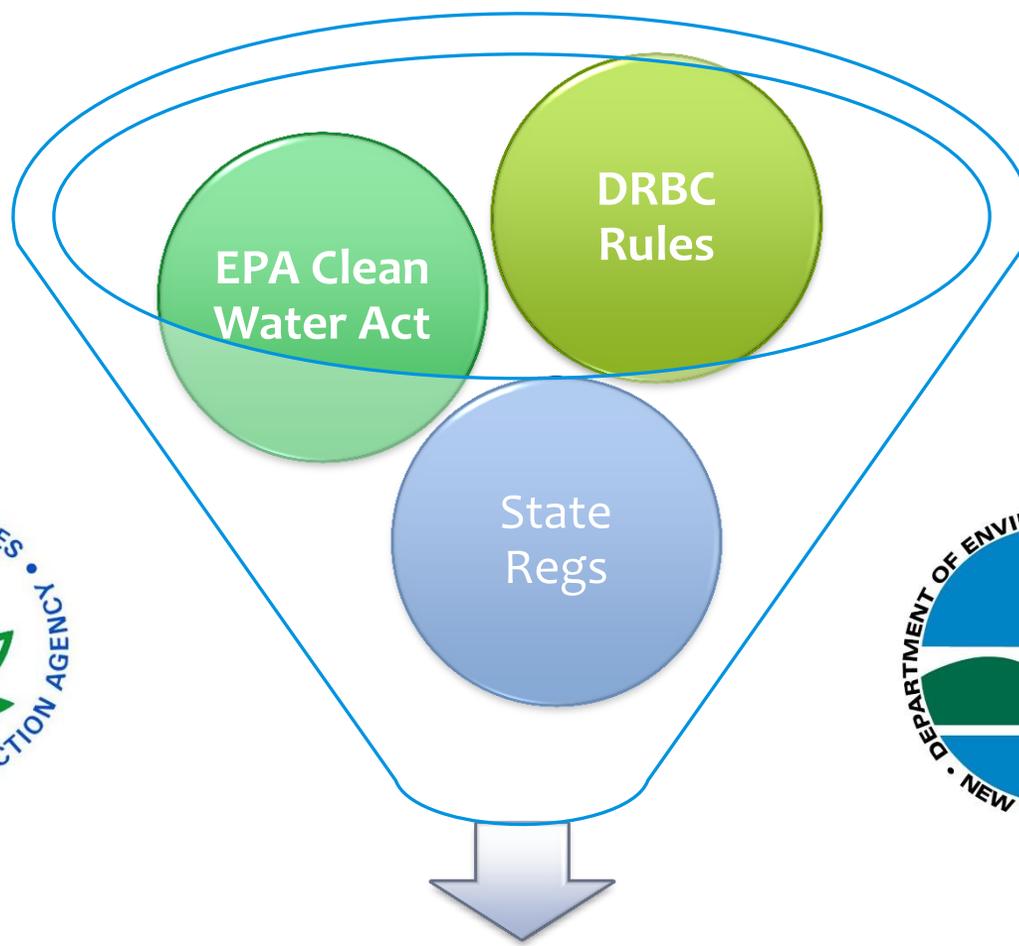


Photo: Nicholas A. Tonelli

Objectives

- Who we are
- What we do
- Why it matters
- Questions



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Presenters

Overview

Steve Tambini, P.E.

- History / Background
- Organization

Water Supply

Amy Shallcross, P.E.

- Supreme Court Decree
- Flow Management

Water Quality

John Yagecic, P.E.

- WQ Assessments
- Emerging Issues

Water Use

J. Kent Barr

- Water Usage
- Water Audits



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In the News 11/05/2014: California Water Bond

Politics

Californians pass \$7.5 billion water bond:
Now what?

Molly Peterson

November 05 2014



<https://talgroupinc.files.wordpress.com/2014/10/lakes-thumb.jpg>



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In the News 9/28/2015: Climate Issues

NorthJersey.com
NO. 1 IN BREAKING LOCAL NEWS

Local | News | Sports | Obituaries | Photos | Opinion | Columnists | Blogs | Real Estate

Bergen | Passaic | Morris | Essex | Hudson | Sussex | Towns | Community | The

NORTHJERSEY.COM : NEWS

Study: Sea level rise increasing major storms off New Jersey

SEPTEMBER 28, 2015, 4:07 PM LAST UPDATED: MONDAY, SEPTEMBER 28, 2015, 4:24 PM

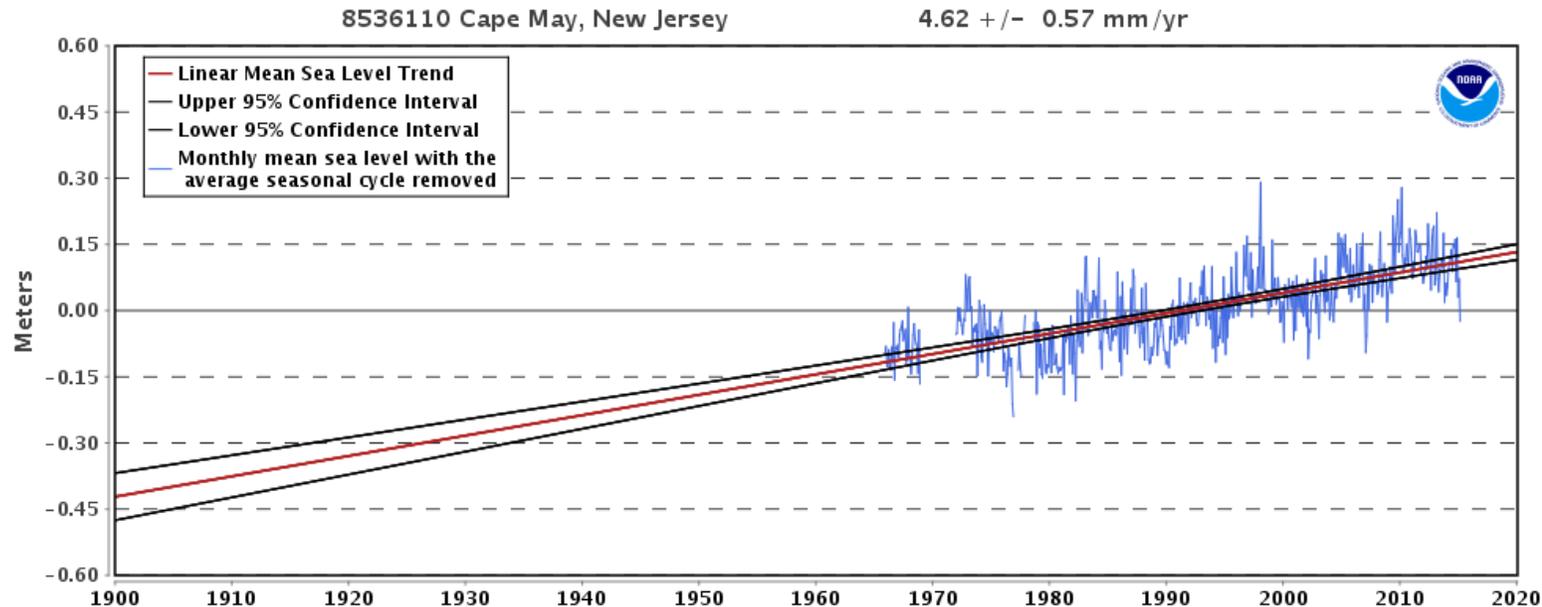
BY WAYNE PARRY

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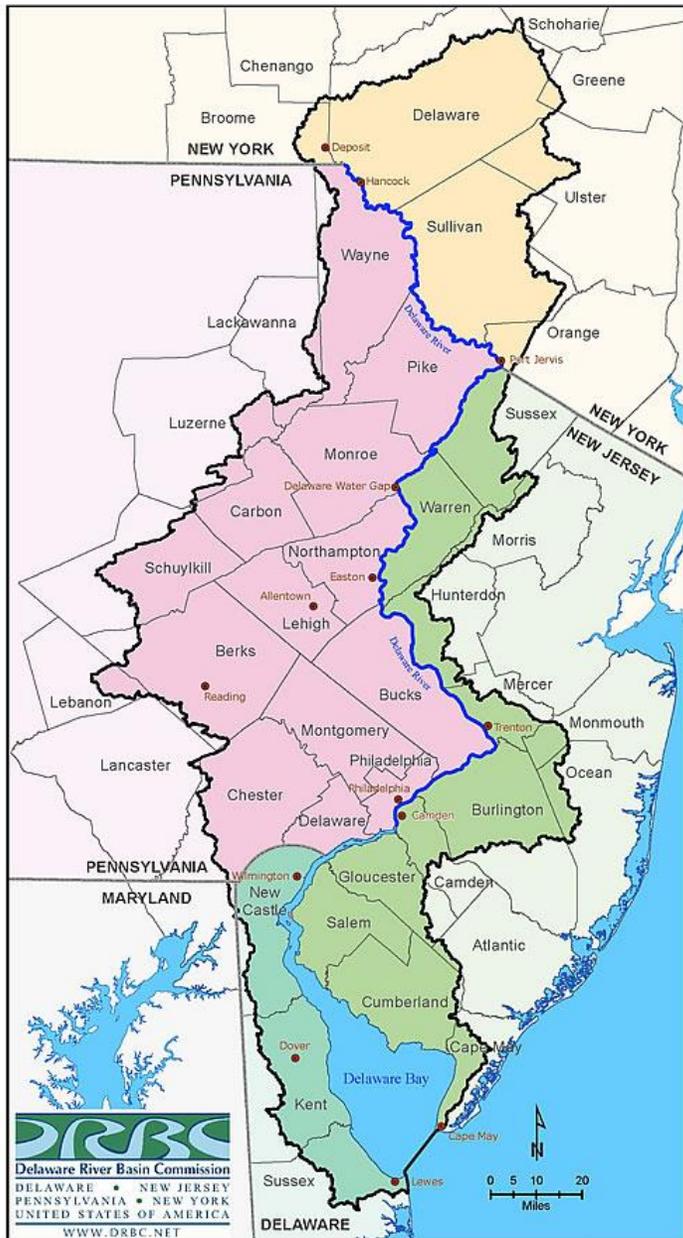


“A river is more than an amenity, it is a treasure”

-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** of watershed in 4 states.
- ❑ Water **withdrawal** in the Basin = **8.7 billion gallons a 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.



Why was the DRBC created?

- a) **Water supply** shortages and disputes over the apportionment of the basin's waters;
- b) Serious flooding;
- c) Severe pollution in the Delaware River and its major tributaries;
- d) All of the above



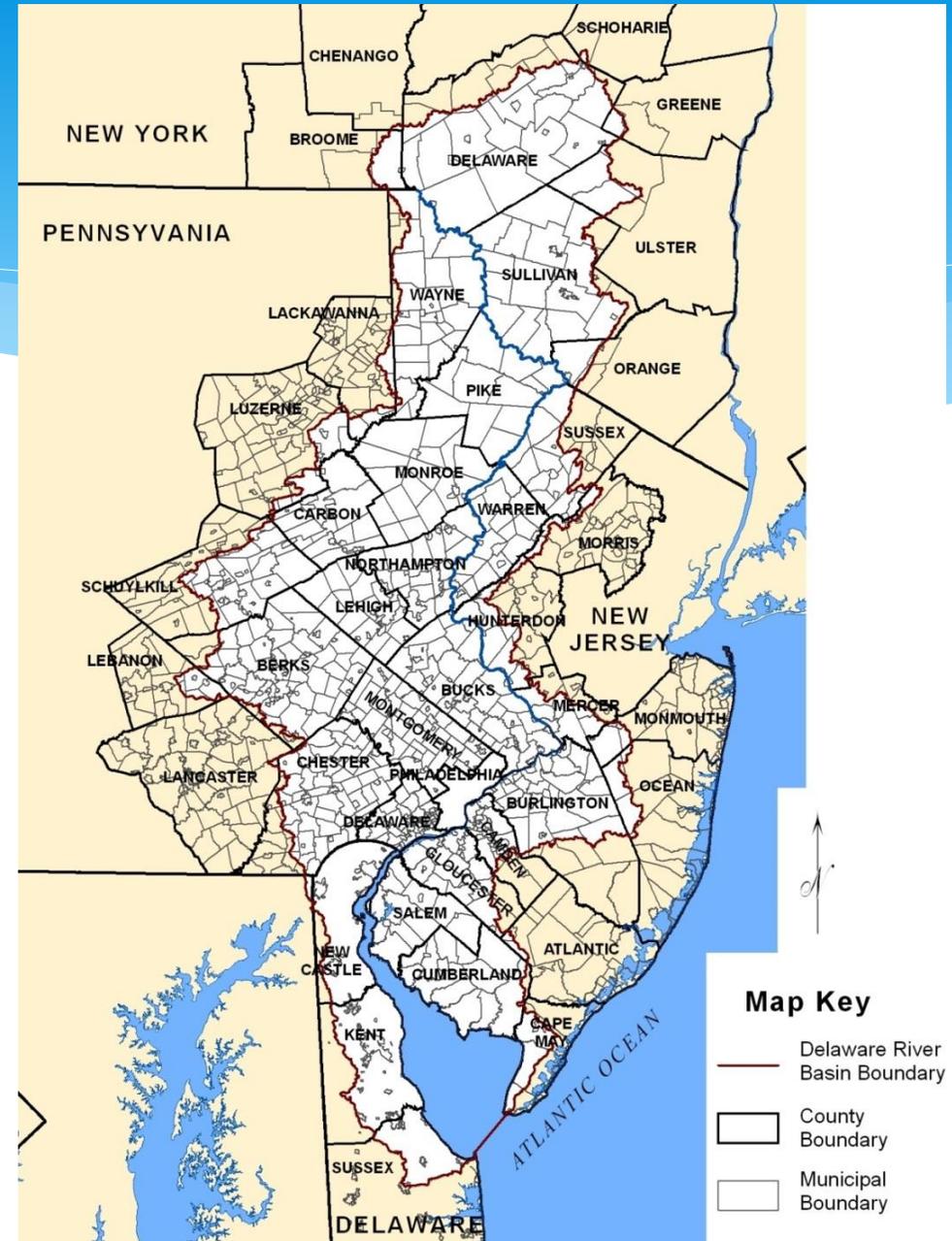
Why was the DRBC created?



d) All of the above

The Need for Basin-Scale Planning and Management

- 4 States
- 42 Counties
- 838 Municipalities
- NY City



Interstate Water Conflicts

- **1952** – NYC seeks to modify Decree to increase its diversion to 800 mgd (with construction of Cannonsville Reservoir)
- **1954** - Based on Special Master's report and with agreement of Parties, Supreme Court modifies Decree and retains jurisdiction
- **1954 US Supreme Court Decree:**
 - 800 mgd diversion to NYC.
 - 100 mgd diversion to New Jersey
 - Formula for compensating downstream releases.
 - River master appointed (USGS).



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Delaware River Basin Commission Founded by Compact in 1961

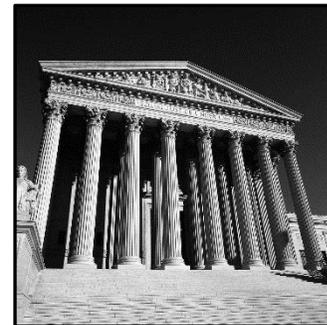
Five Equal Members:

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



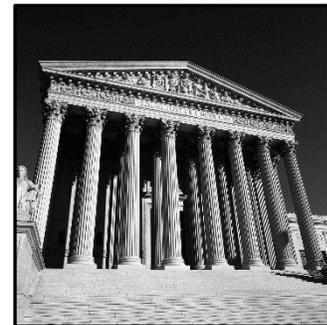
Note: New York City and Philadelphia are “advisors” and not members

True or False?



**1954 Supreme Court
Decree Parties**

True or False?



**1954 Supreme Court
Decree Parties**

FALSE

DRBC and the Parties to the 1954 Supreme Court Decree

DRBC:

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



Parties to the 1954 Supreme Court Decree:

New York City



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What is an interstate compact?

- An arrangement between two or more states that is designed to solve their common problems and that becomes part of the laws of each state.
- Under Article 1, Section 10, Clause 3 of the US Constitution states: “No state shall, **without the Consent of Congress...** enter into any Agreement of Compact with any other State”.



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1961 Delaware River Basin Compact

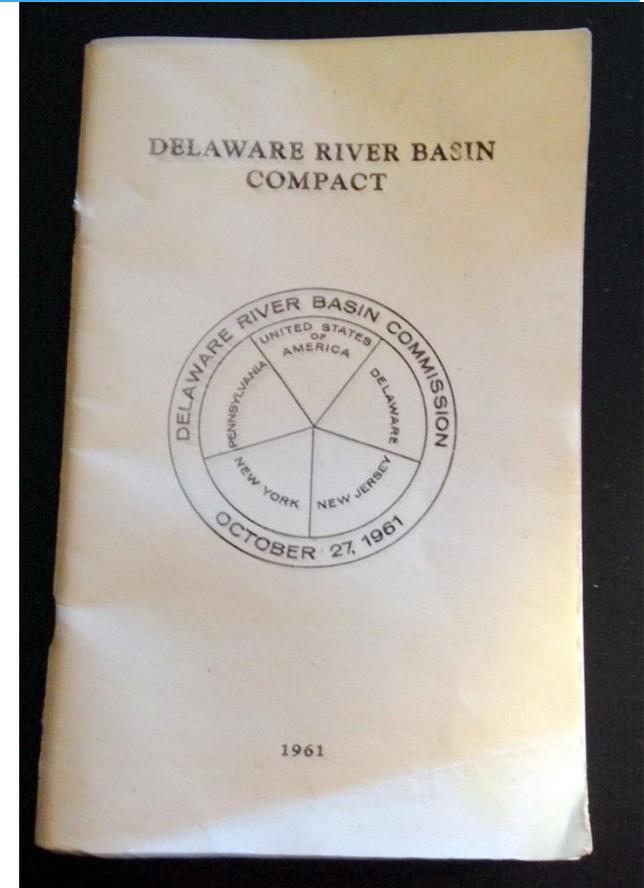
- Recognizes DRB as a regional asset with local State and National interests
- Management and control of water resources under a **Comprehensive Plan** will bring benefits and is in the public welfare.
- The Commission shall develop and effectuate **plans, policies and projects** relating to the water resources of the Basin
- **The Commission** (without unanimous consent of the 1954 Decree parties) **cannot change or impact the Supreme Court Decree.**



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DRB Compact Basic “Charges”

- **From the Compact Preamble:**
- a **Comprehensive Plan** administered by a **basin wide agency** will provide
 - ✓ flood damage reduction;
 - ✓ conservation and **development of ground and surface water supply...**;
 - ✓ development of **recreational facilities**;
 - ✓ **propagation of fish and game**;
 - ✓ promotion of related... **watershed projects**;
 - ✓ **protection to fisheries...**;
 - ✓ development of **hydroelectric power**;
 - ✓ **control of movement salt water**;
 - ✓ **abatement and control of stream pollution**;
 - ✓ **and regulation** towards the attainment of these goals.



Water Resource Objectives

- An adequate and sustainable supply of water for the basin.
- Clean and healthy water resources throughout the Basin.
- Reduction of losses and impacts in areas prone to flooding within the Basin.



Photo: David B. Soete