

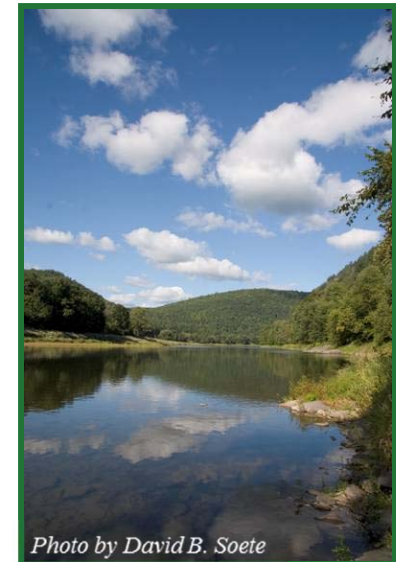
Delaware River Basin Commission

2014 AWRA Annual Water Resources Conference

**Fifty years and counting:
Unified Water Management
in the Delaware River Basin**

**Steve Tambini
Executive Director, DRBC**

November 5, 2014



Delaware River Basin Commission
DELAWARE • NEW JERSEY
PENNSYLVANIA • NEW YORK
UNITED STATES OF AMERICA

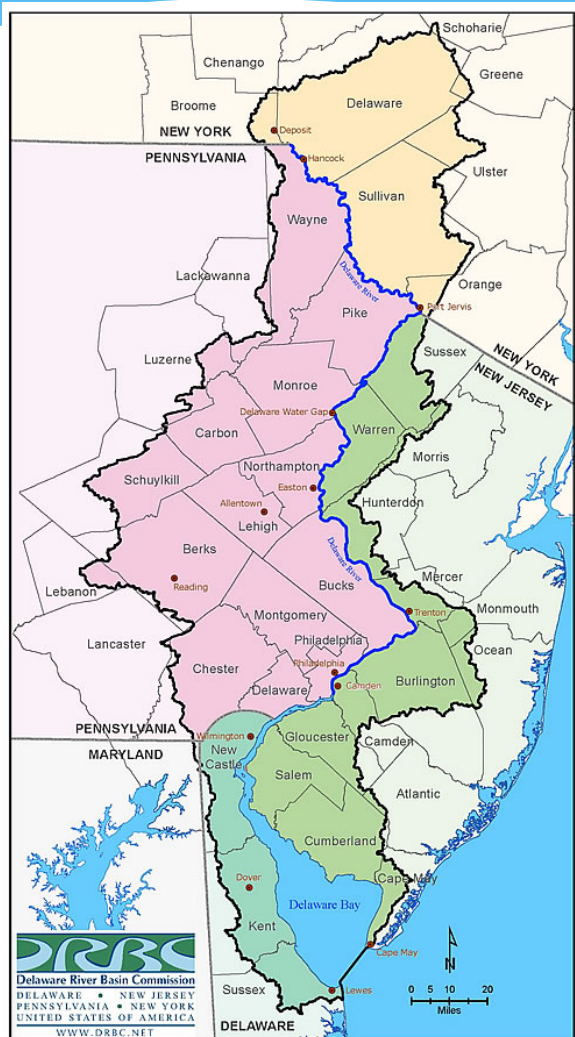
Let's Talk ...

... about:

- Who we are and what we do.
- Why it matters now and in the future.

“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**
- ❑ 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?

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

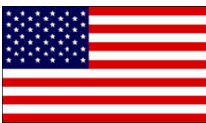


Philadelphia Record, 1937, editorial page cartoon

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

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



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.**

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;**
 - ✓ improved **navigation;**
 - ✓ **control of movement salt water;**
 - ✓ **abatement and control of stream pollution;**
 - ✓ and regulation towards the attainment of these goals.

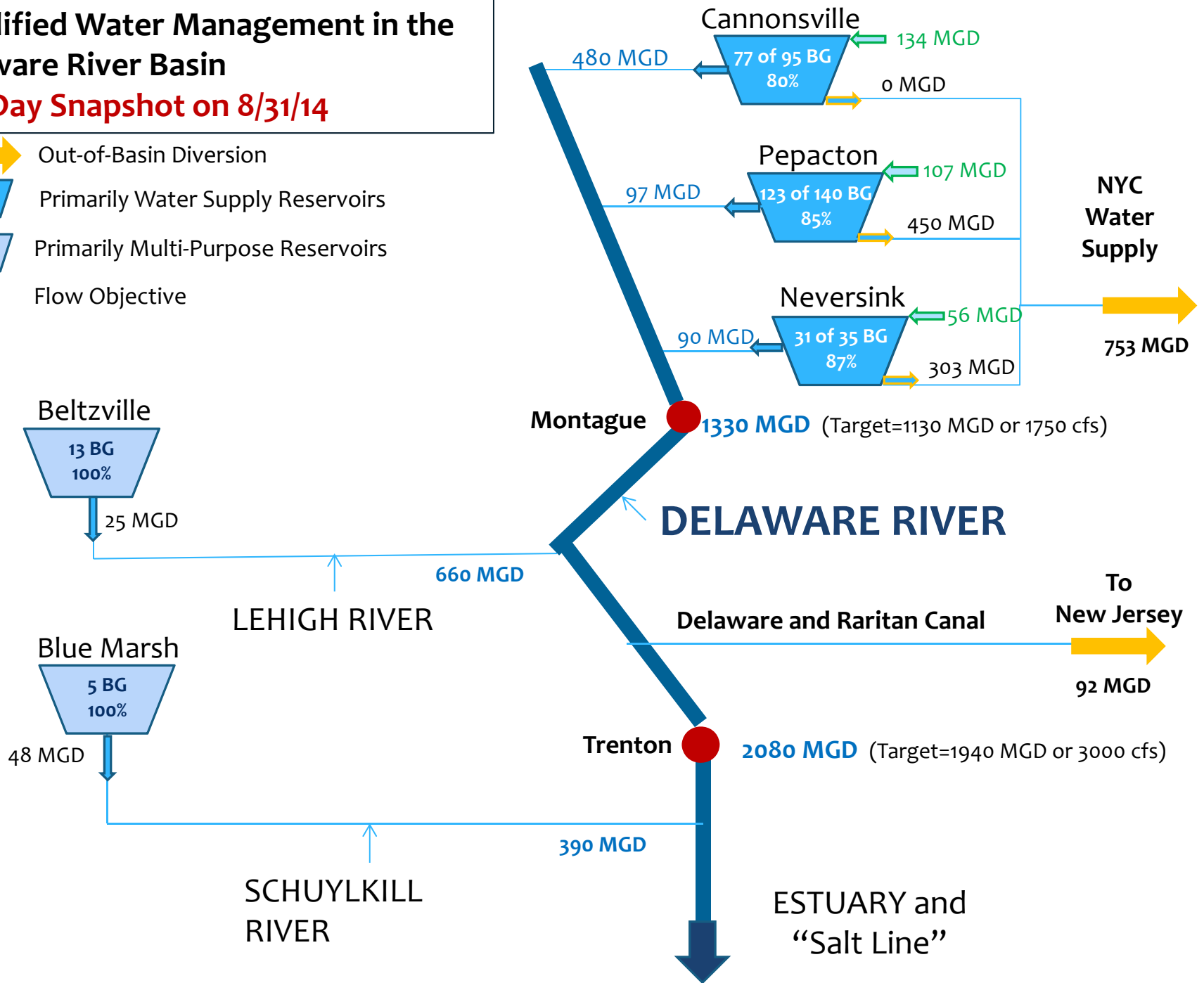
DRBC Primary Functional Responsibilities

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

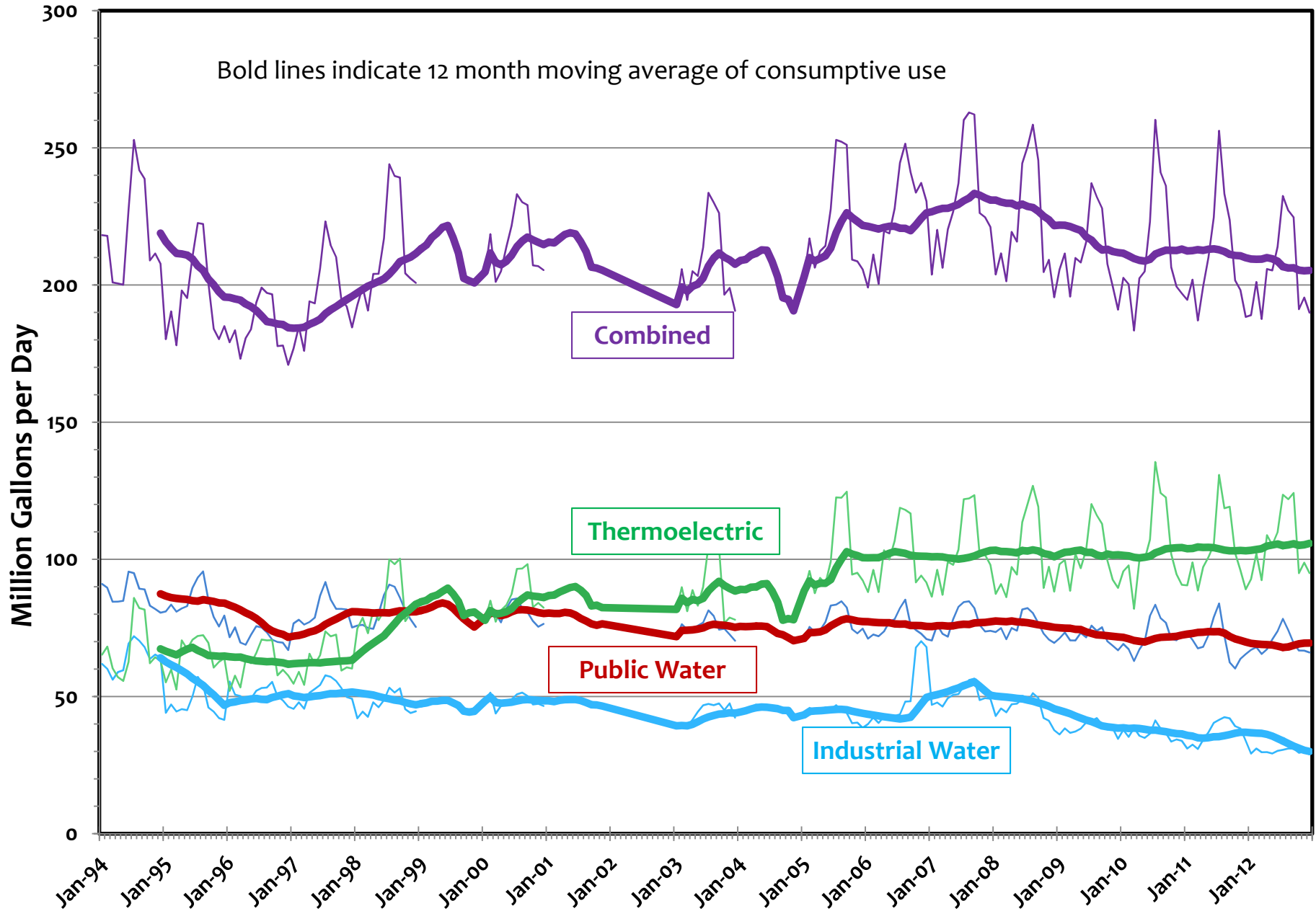
Simplified Water Management in the Delaware River Basin

One Day Snapshot on 8/31/14

-  Out-of-Basin Diversion
-  Primarily Water Supply Reservoirs
-  Primarily Multi-Purpose Reservoirs
-  Flow Objective



Consumptive Use Trends 1994 - 2012

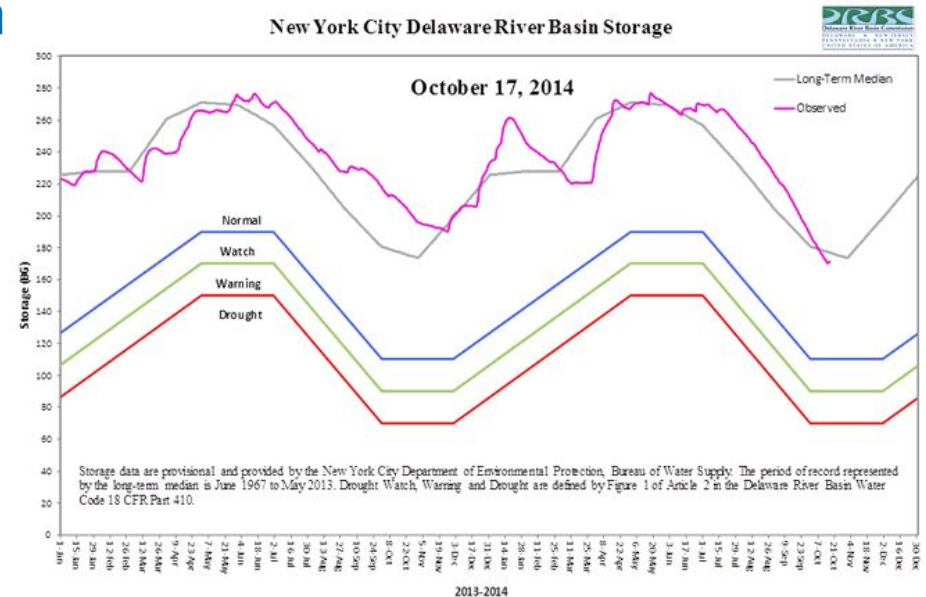


Recent Floods and Droughts

Event	Year	Comment
Flood	2011	September - Hurricane Irene and TS Lee
Drought	2010	Drought Warning - Lower Basin only
Flood	2006	June - Heavy Rains
Flood	2005	March/April - Snow Melt and Heavy Rains
Flood	2004	September - TS Ivan
Flood	2003	October - Heavy Rains
Drought	2001/2002	Drought Emergency
Flood	2001	June - TS Allison
Flood	1999	September - Hurricane Floyd
Drought	1998/1999	Drought Warning
Flood	1996	January – Heavy Rains/Ice

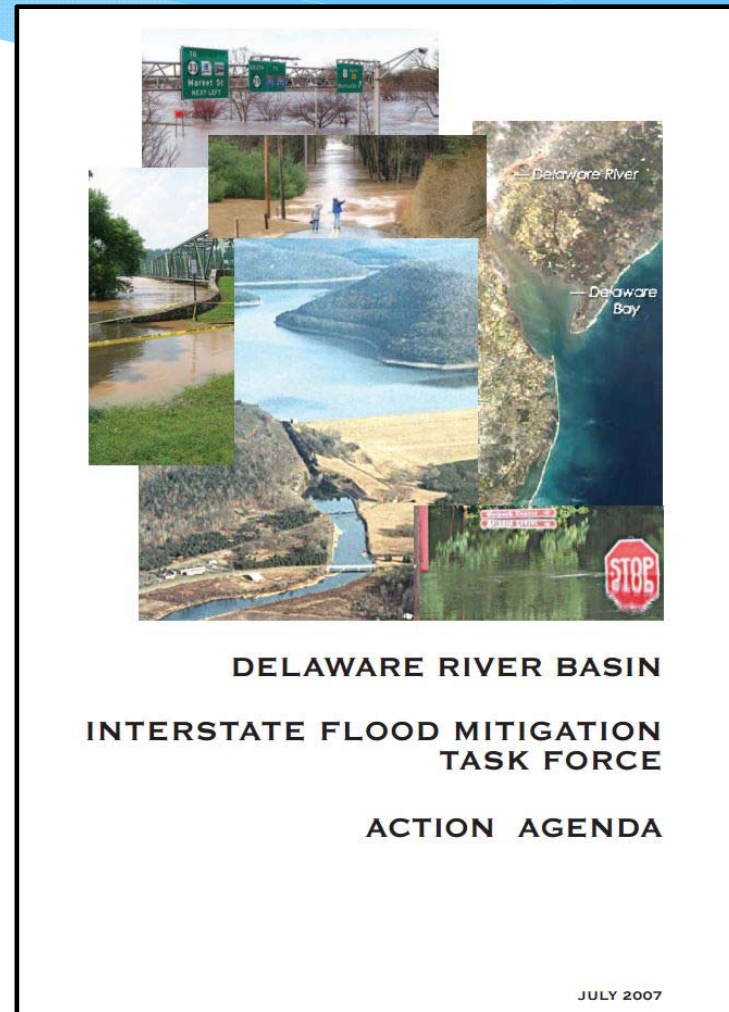
Drought Management

- Drought of record led to the “Good Faith Agreement” in 1983 including:
 - A schedule of phased reductions in out of basin diversions, releases and flow target objectives.
 - Coordination of equitable apportionment of priority water uses.



Interstate Flood Mitigation Task Force

- Reservoir Operations
- Structural and non-structural measures
- Storm water Management
- Floodplain Mapping
- Floodplain regulation
- Flood warning



The quality of Basin waters shall be maintained for:

- Public drinking water (after reasonable treatment)
- Recreation
- Navigation
- Wildlife, fish and other aquatic life
- Regulated waste assimilation

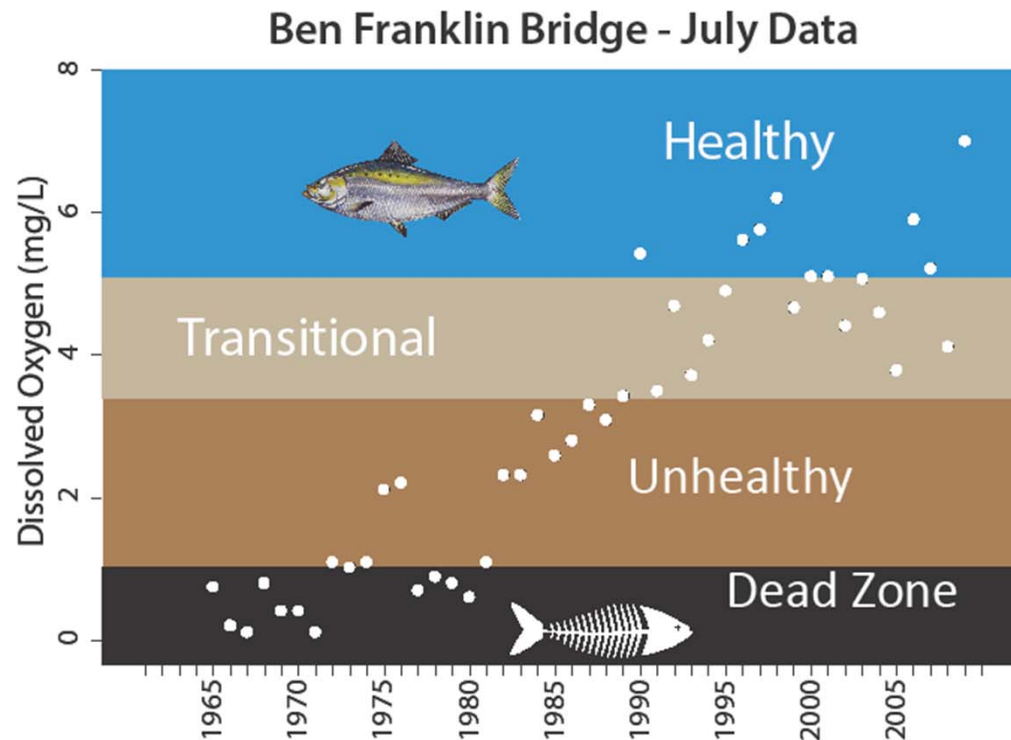


Special Protection Waters Program “Keeping Clean Water Clean”

- Anti-degradation regulatory program for entire 197 miles of non-tidal Delaware River.
- Policy of “no measurable change” in existing water quality except toward natural conditions.
- Three-quarters of the non-tidal Delaware River (about 150 miles) has been included in the National Wild and Scenic Rivers System.



Estuary Water Quality



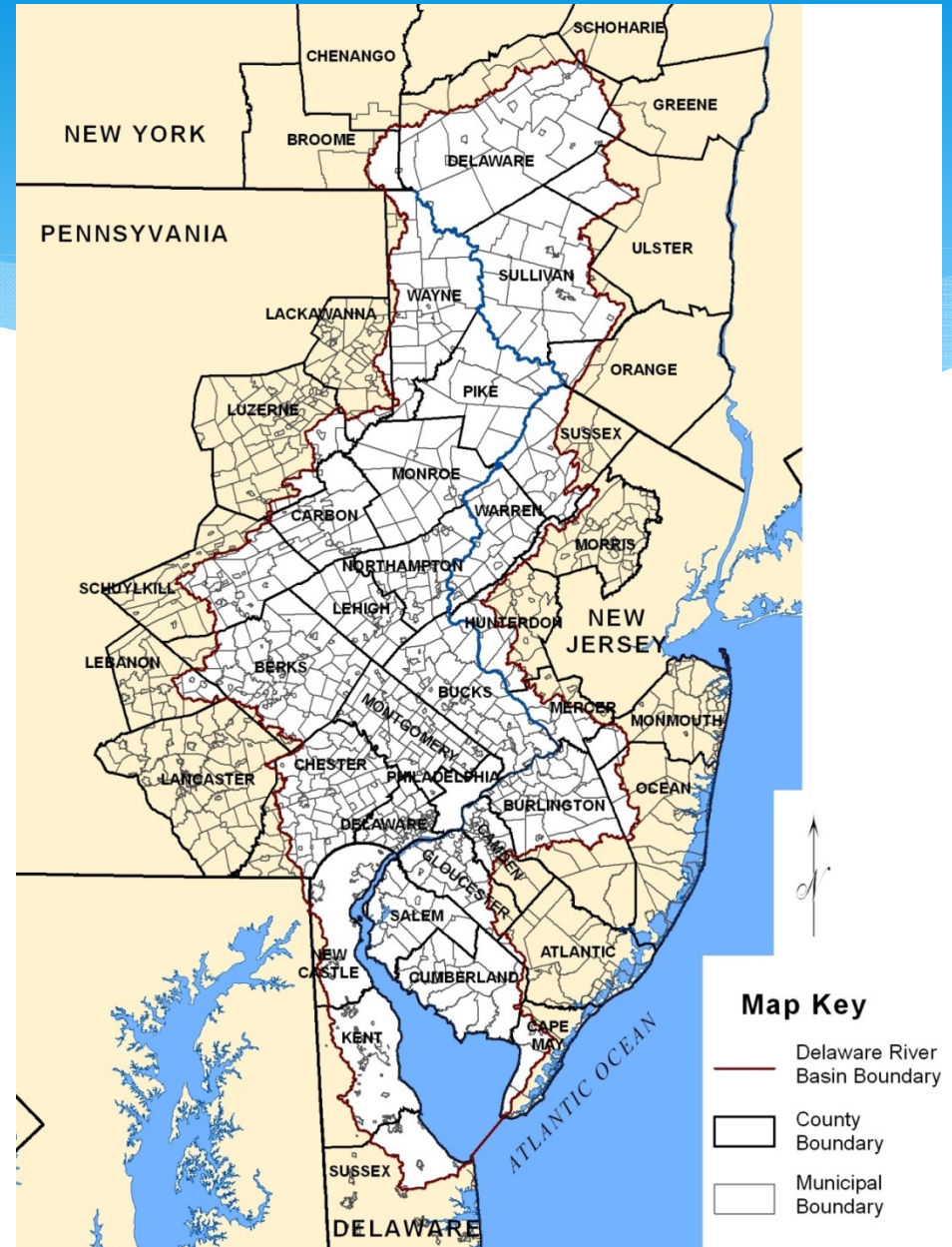
Tremendous progress made towards overall health of the estuary

Continuing Issues of Concern:

- PCBs
- Nutrients
- Pharmaceuticals and PCPs

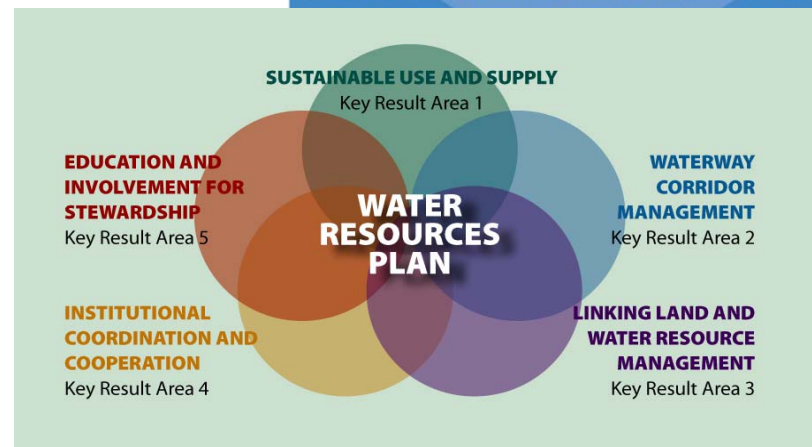
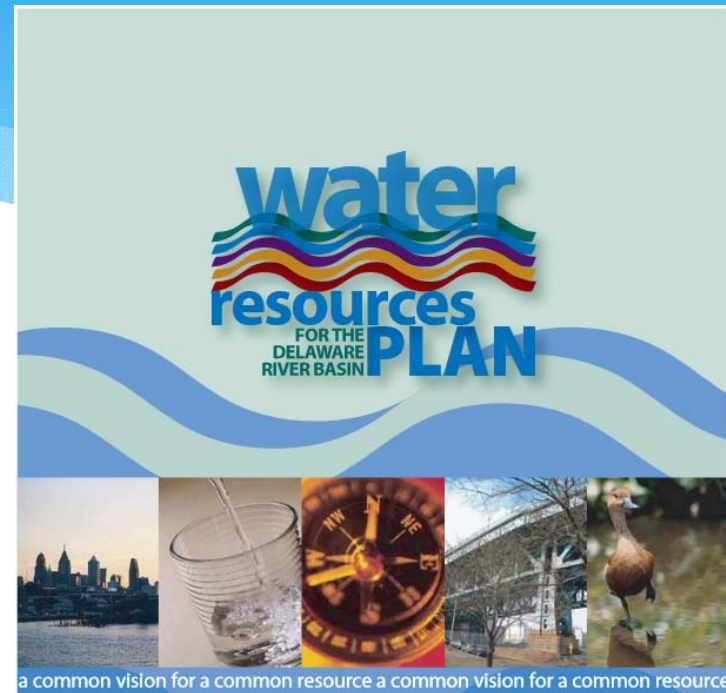
The Need for Basin-Scale Planning and Management

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



Water Resources Basin Plan

- Watershed, Basin-wide, Goal-based Plan
- Consensus-based Plan.
- Integrated, created and implemented by ALL Stakeholders
- 5 Key Result Areas
- 21 Goals
- 102 Objectives



“No [person] ever steps in the same river twice,
for it's not the same river...”

-Heraclitus ~500BC

- **Change... change... change
...and challenge:**
 - Planning for...
 - Regulatory roles and relationships
 - Funding
 - More

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**
- **Energy and Water Efficiency**
- **Possible Shale Gas Development**
- **Ecological Flows**

Significant Regulatory Programs

- Water withdrawals
- Wastewater treatment/discharges
- Flood Plain
- Other projects having a “substantial effect on the water resources of the basin”

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■ Delaware



■ New Jersey



■ Pennsylvania



■ New York State



■ Federal Government



Administrative Agreements with States

- DRBC Compact and Rules allow for and encourage the use of administrative agreements with states and state agencies to:
 - ✓ Promote **inter-agency collaboration** and cooperation on shared mission objectives.
 - ✓ Promote **regulatory program efficiencies**.
 - ✓ **Avoid unnecessary duplication** of effort.
- Recognizes the Authority, standards, rules of each agency

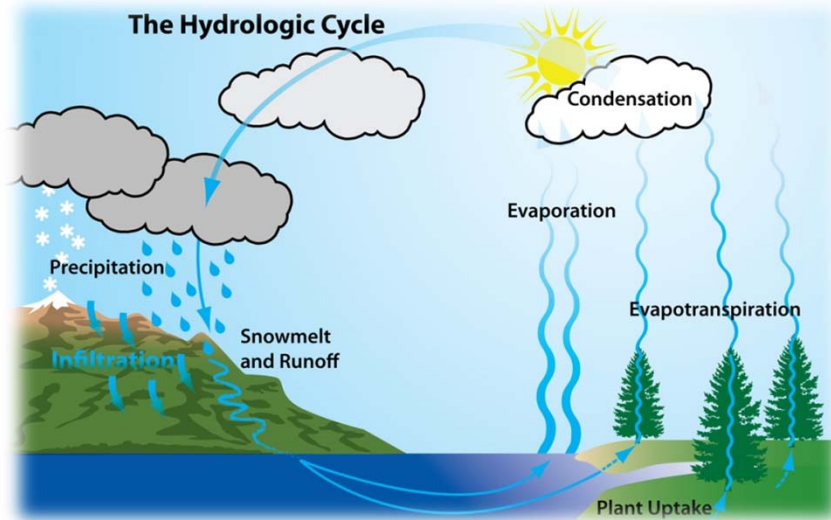
Foundational Funding (Revenue) Sources

- Signatory Members
- Regulatory Program Fees
- Water Charges
- Other (grants, special projects, etc.)



These need to be stable, sustainable, and “right sized”

Why it matters for the next 50+ years...



The Bridge for DRBC...



- Built upon the Compact Foundation
- Adaptive to change
- Well defined and value added mission, scope and focus
- Collaborative with our signatory partners
- Committed to Public Service

Steve Tambini, Executive Director

Steve.Tambini@drbc.state.nj.us

www.drbc.net

Thank you!



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