

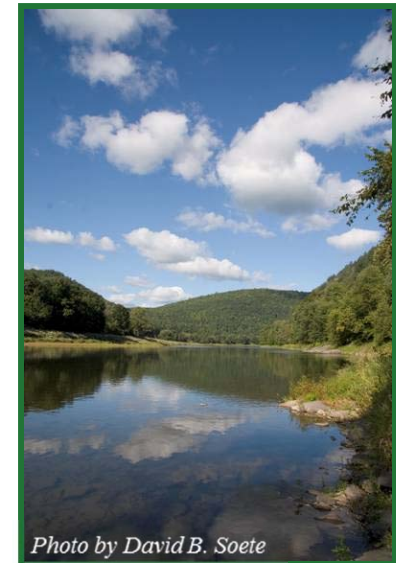
Delaware River Basin Commission

**Association of
Environmental Authorities
of New Jersey**

Fall Conference

**Steve Tambini
Executive Director, DRBC**

November 19, 2014



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

Let's Talk

- About:
 - Who we are
 - What we do
 - Why it matters

Listening and Learning

EVERYTHING

In the News 11/05/2104: California Water Bond

Politics

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

Molly Peterson

November 05 2014



<http://www.scpr.org/news/2014/11/05/47846/californians-pass-7-5-billion-water-bond-now-what/>

In the News 10/14/2014

US Supreme Court

E&E Publishing, LLC

SUPREME COURT:

Justices vexed by Kan.-Neb. water dispute case

Jeremy P. Jacobs, E&E reporter

Greenwire: Tuesday, October 14, 2014

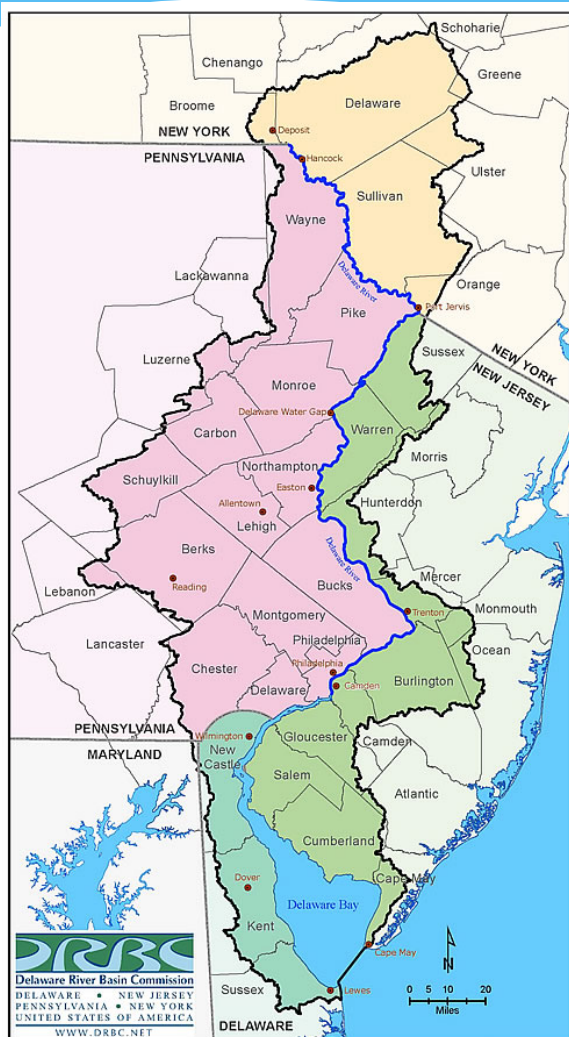
<http://www.eenews.net/stories/1060007317>

On the **Kansas - Nebraska dispute** over allocations in the Republican River:

- * Justice Breyer acknowledged that the US Supreme Court includes nine people “who couldn’t know less about” water accounting and stated “**is there a chance you guys can work it out?**”

“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.

1. 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

1. Why was the DRBC created?

d) All of the above



Philadelphia Record, 1937, editorial page cartoon

1954 US Supreme Court Decree

- Allocated out of basin diversion to **New York City of up to 800 MGD** from the city's three Delaware Basin reservoirs, effective when all three of those reservoirs were fully constructed, which occurred in 1964;
- Required compensating releases to **maintain a flow of 1,750 cubic feet per second in the Delaware River at Montague, N.J.;**
- Established an excess quantity to be released from the reservoirs each year (the “Excess Release Quantity” or “ERQ”); and
- Granted out of basin diversion rights to **New Jersey of up to 100 MGD.**

2. True or False?



**1954 Supreme Court
Decree Parties
(FFMP Parties)**

2. True or False?



**1954 Supreme Court
Decree Parties
(FFMP Parties)**

FALSE

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.**

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”.

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.

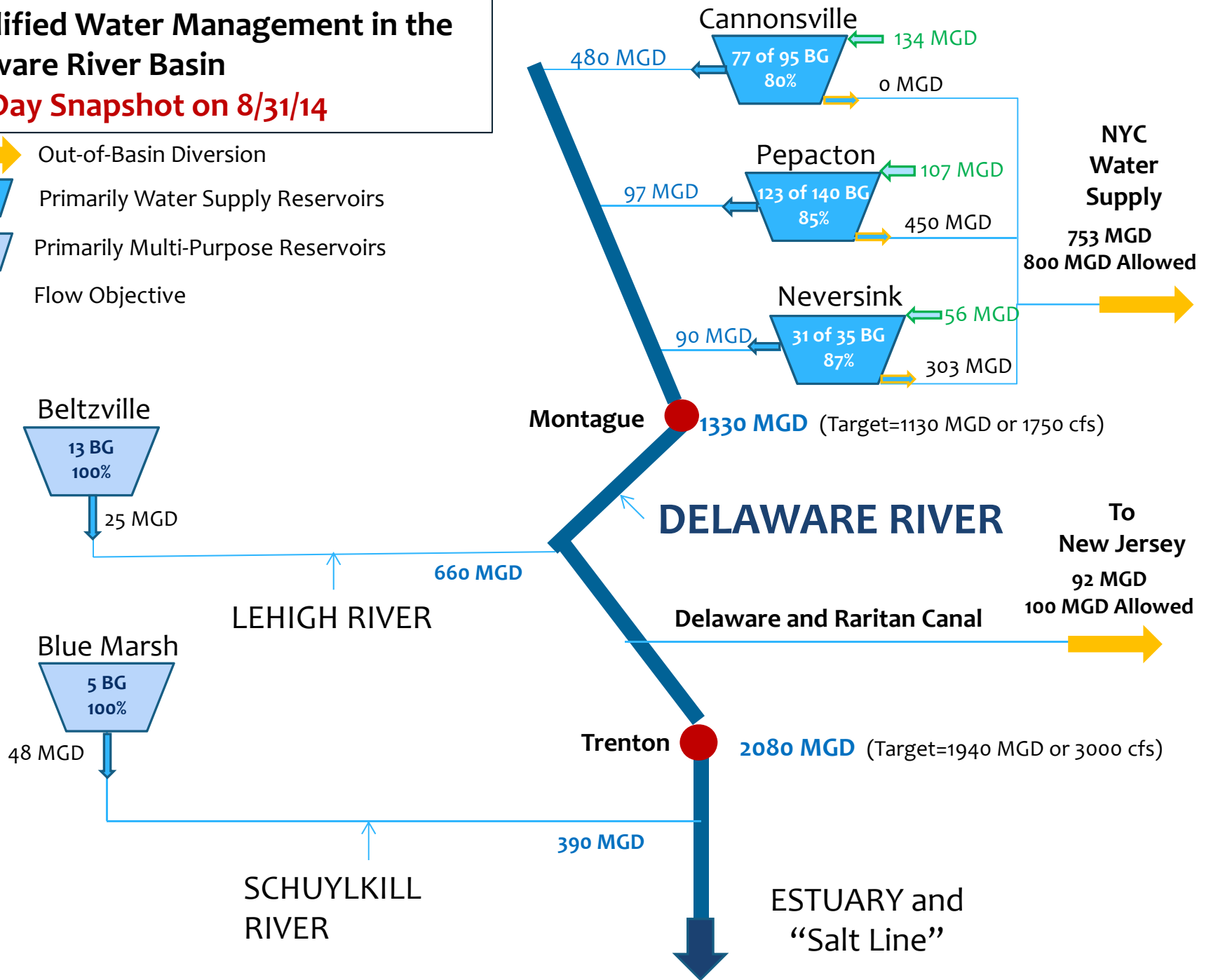
DRBC Functional Responsibilities

- 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



3. When was the last DRBC declared Drought?

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When was the last DRBC declared drought? **2010**

- **2010** - “Lower Basin Drought Warning” (Two Months)
- **2001** through **2002** – Basin Wide “Drought Emergency”
- **1981/1982** and **1985** – “Basin Wide Droughts”
- Several other years with drought warnings.
- **1961 - 1967** Drought of Record for Delaware River Basin

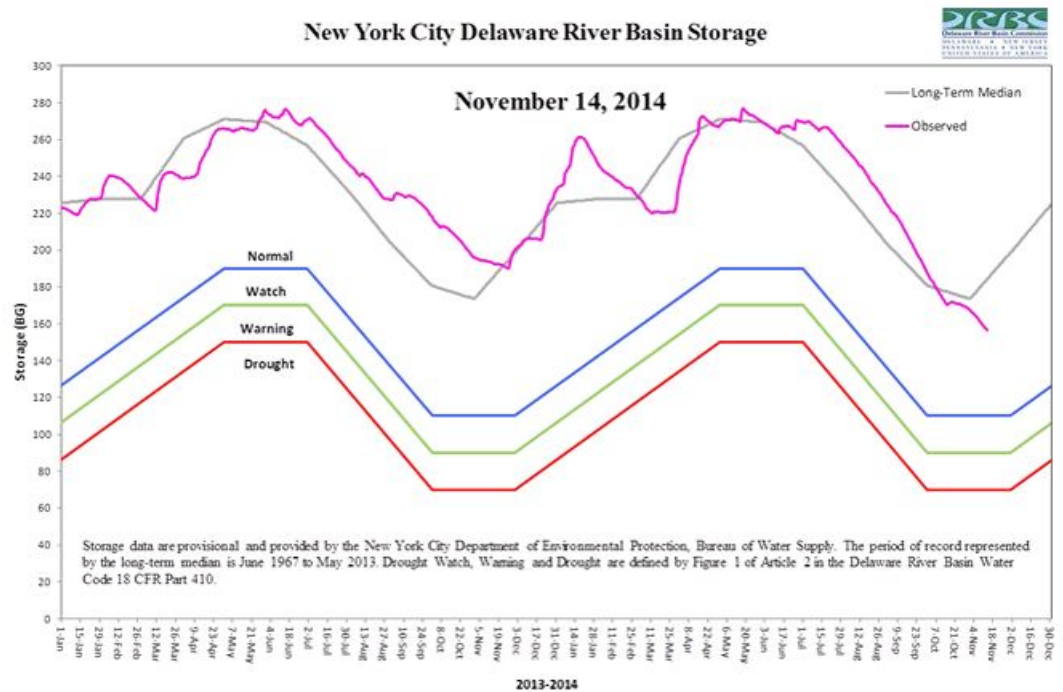


Photo by NYCDEP

*NYC Cannonsville Reservoir
December 20, 2001 at 6.5% of capacity*

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.



4. When was the last significant Delaware River Flood?

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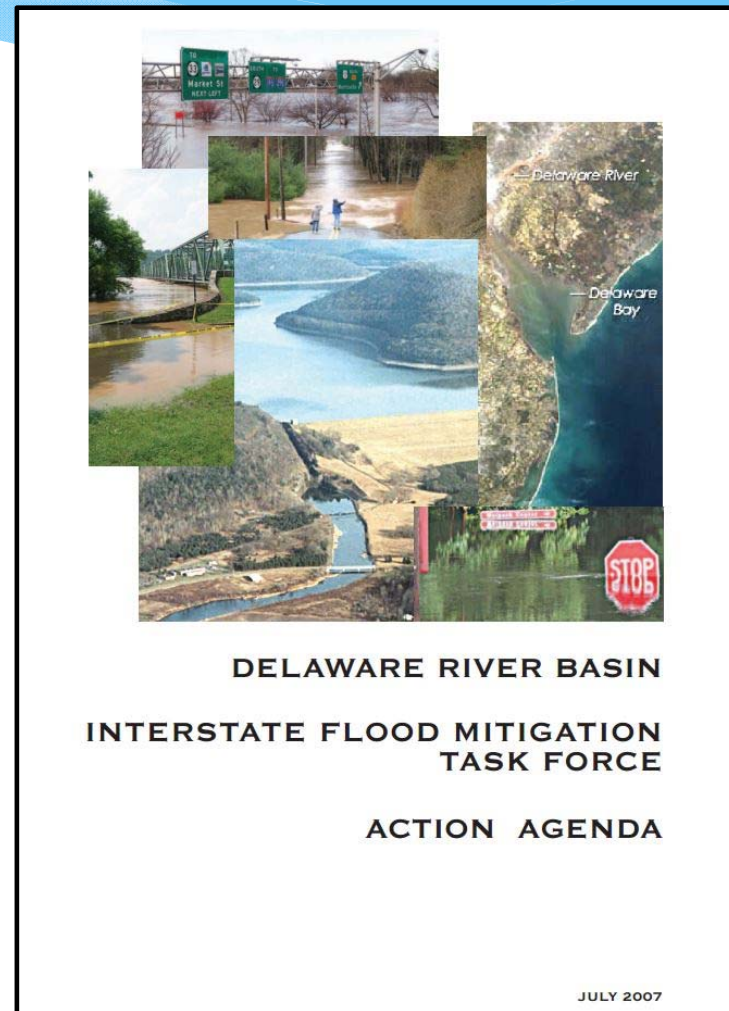
Year	Event	Stage @ Trenton Flood =20'
2011	Hurricane Irene and TS Lee	23.11
2006	June 24 to 26 Heavy Rains	25.09
2005	March April Heavy Rains and Snow Melt	25.33
2004	September TS Ivan	23.41
Record (1904)	Ice Jam	30.60



Yardley, PA June 29, 2006

Interstate Flood Mitigation Task Force

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



5. True or False?

**DRBC manages
the flow
releases in the
NYC reservoir
systems**



5. True or False?

**DRBC manages
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NYC reservoir
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FALSE



USGS operates the Office of the Delaware River Master

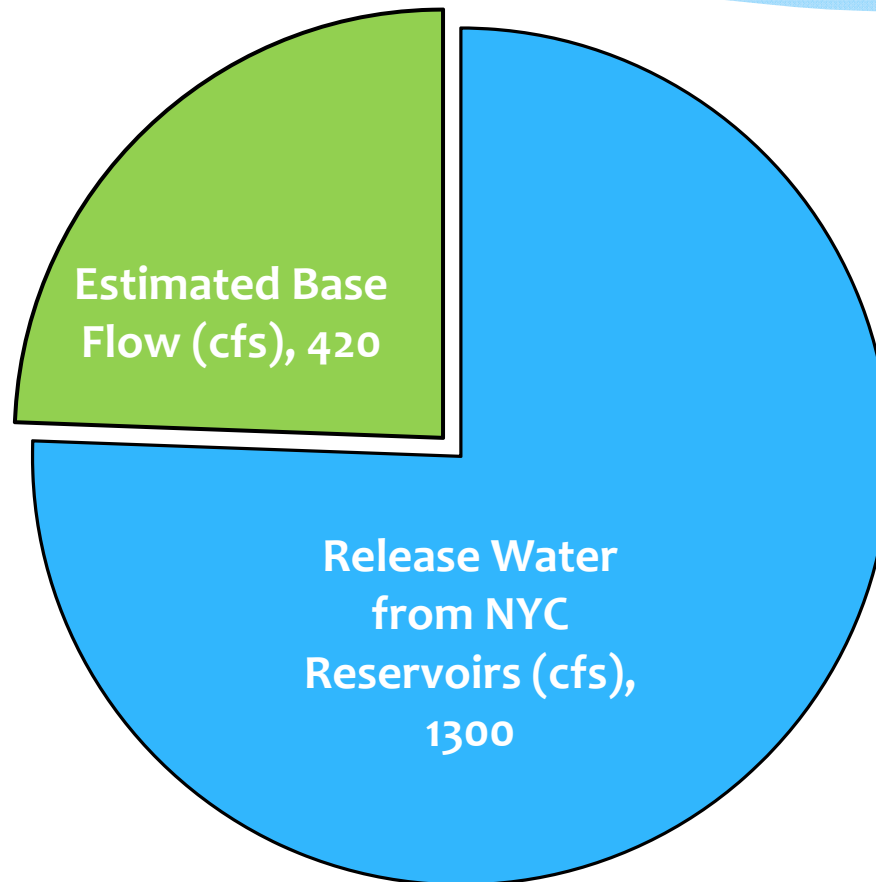
Flow at Montague, NJ October 15, 2014

Montague Gage:

Flow Target =

1,750 cfs

Estimated average
base flow (9/8 to
10/15, 2104) = 641 cfs
(36% of target).



6. True or False?

DRBC manages the flow releases in the Blue Marsh and Beltzville reservoir systems to control the “salt line” in the Estuary.



6. True or False?

DRBC manages the flow releases in the Blue Marsh and Beltzville reservoir systems to control the “salt line” in the Estuary.

TRUE



Note: US Army Corps of Engineers owns and operates the reservoirs. DRBC pays over \$1.3M annually to support their construction, operations and maintenance

7. The quality of Basin waters shall be maintained for:

- a) Public drinking water (after reasonable treatment)
- b) Recreation
- c) Navigation
- d) Wildlife, fish and other aquatic life
- e) Regulated waste assimilation
- f) All of the above



7. The quality of Basin waters shall be maintained for:

- a) Public drinking water (after reasonable treatment)
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- c) Navigation
- d) Wildlife, fish and other aquatic life
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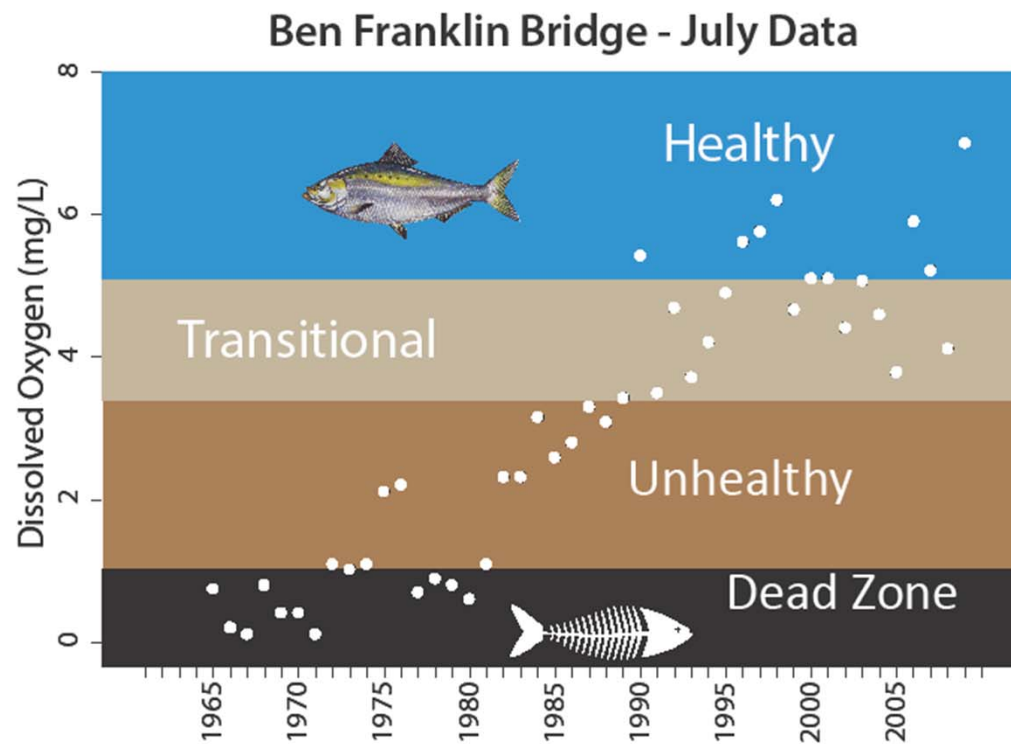


Special Protection Waters Program “Keeping Clean Water Clean”

- 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:

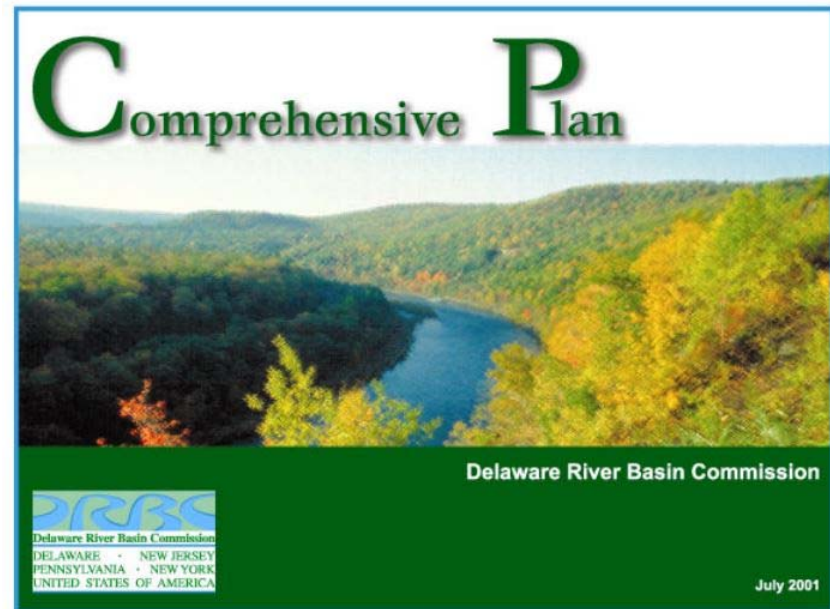
- PCBs
- Nutrients
- Pharmaceuticals and PCPs

8. The DRBC Comprehensive Plan is required to be updated every:

- a) 20 years
- b) 10 years
- c) 5 years
- d) None of the above

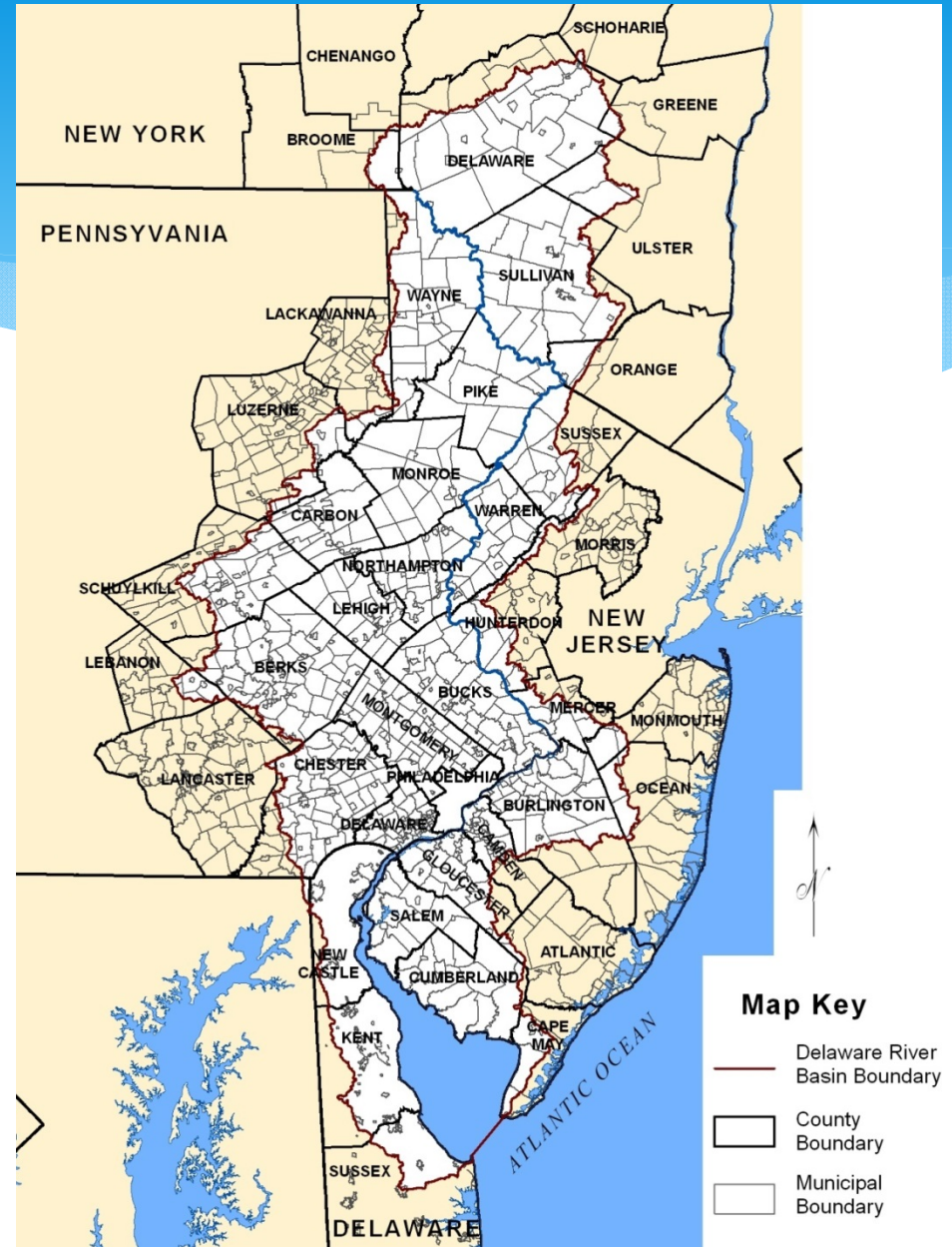
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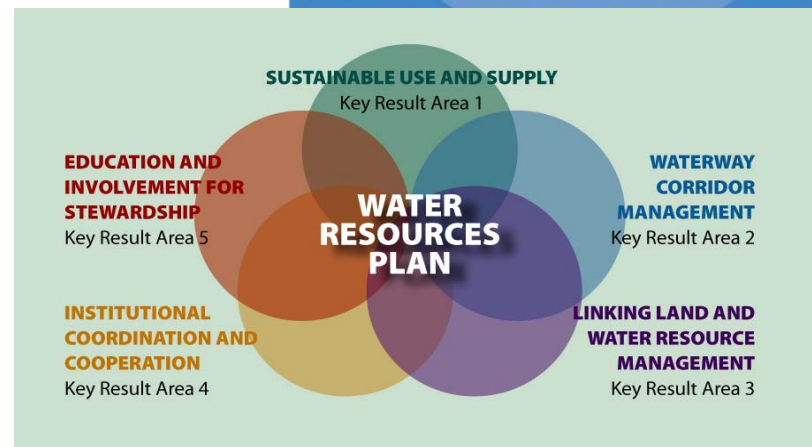
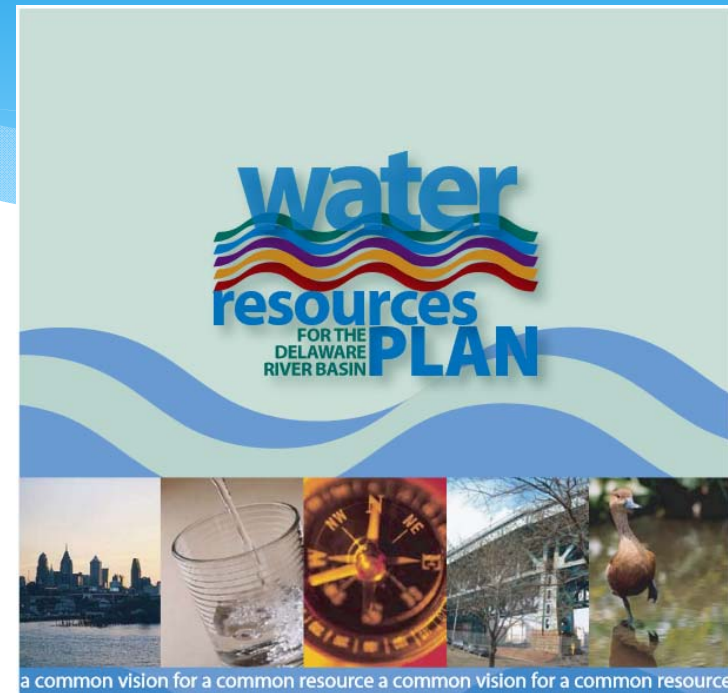
The Need for Basin-Scale Planning and Management

- 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



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**

9. True or False?

DRBC Regulations and Standards are more “strict” than state Regulations and Standards?

9. True or False?

DRBC Regulations and Standards are more “strict” than state Regulations and Standards?

FALSE (in general terms).
TRUE (in some cases).

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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- Water withdrawals
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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

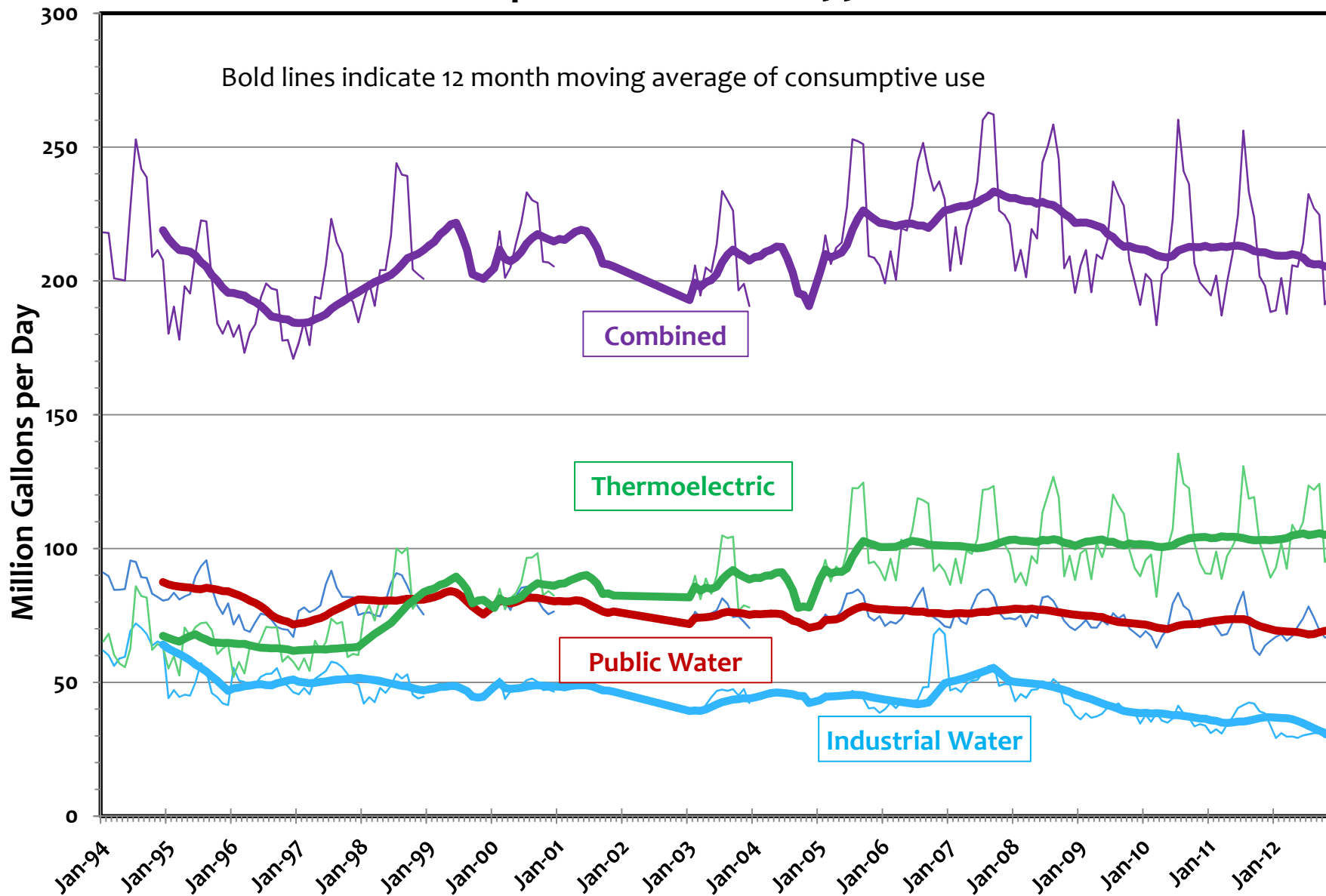
10. Consumptive water use in the past 20 years in the Delaware Basin is:



- a) Increasing
- b) Decreasing
- c) About the same

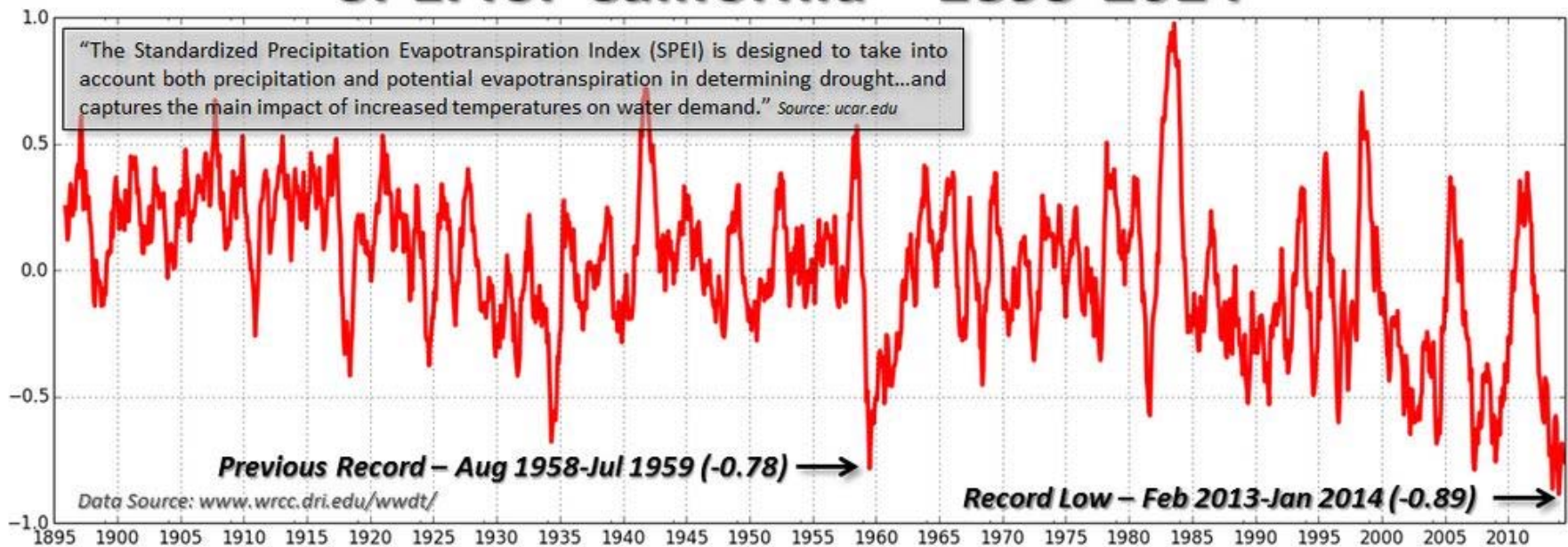
c) About the Same

Consumptive Use Trends 1994 - 2012



Remember the CA headlines?

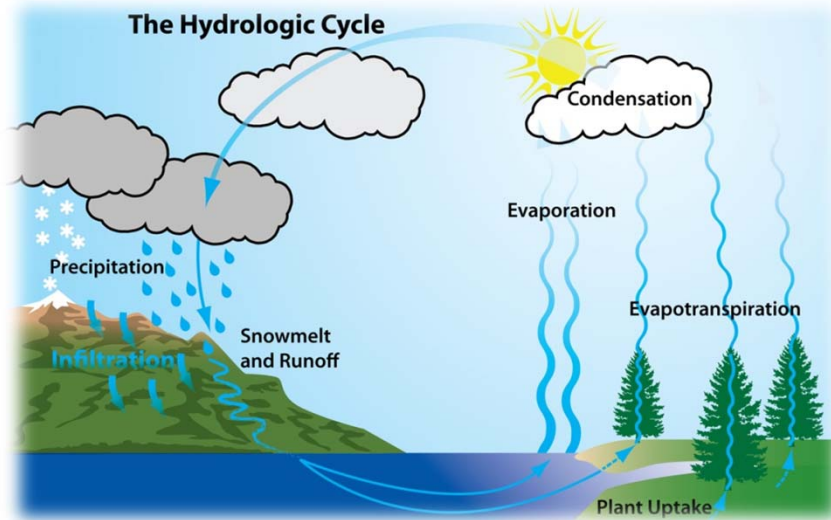
SPEI for California – 1895-2014



So... how did you do?

- **Who we are:**
 - Watershed based interstate agency
 - Engineers, Scientists, Planners
- **What we do:**
 - Plan: Watershed based, Comprehensive water resource, Topic Driven, WQ Assessments
 - Policies: Regulations, Standards, Rules of Practice
 - Projects: Supported by DRBC (e.g., Blue Marsh and Beltzville) and supported by others to meet Basin needs.

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



One more headline 10/23/2014:

<http://www.njspotlight.com/stories/14/10/23/feds-states-continue-to-shortchange-delaware-river-basin-commission/>

NJ SPOTLIGHT
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BUDGET EDUCATION ENERGY & ENVIRONMENT HEALTHCARE
MAPS PODCASTS VIDEOS WEBINARS ROUNDTABLES SANDY ELECTIONS 2014

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FEDS, STATES CONTINUE TO SHORTCHANGE DELAWARE RIVER BASIN COMMISSION

JON HURDLE | OCTOBER 23, 2014

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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
- Effective and efficient regulation
- Committed to Public Service

Steve Tambini, Executive Director

Steve.Tambini@drbc.state.nj.us

www.drbc.net

Thank you!



Delaware River Basin Commission

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