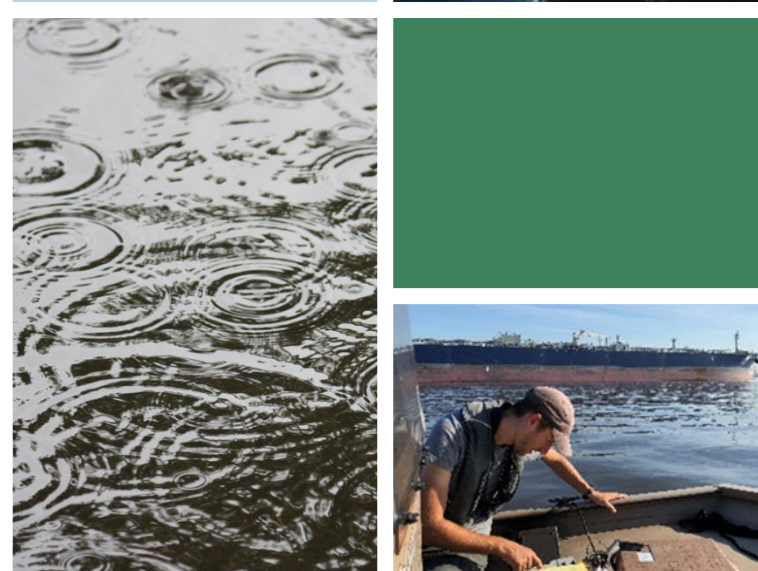
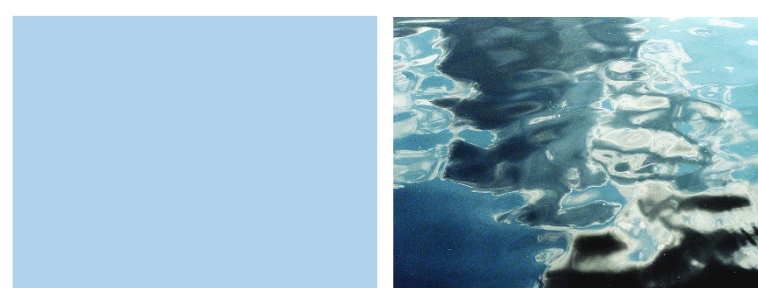


Data Centers *and the* Delaware River Basin

Chad Pindar, P.E.
Manager of Water Resource Planning

Data Center Informational Meeting,
Hunterdon County Complex -
September 29, 2026



What is the Delaware River Basin Commission?

DRBC's website



Established by interstate compact in 1961, a regional body with the force of law to oversee a unified approach to managing a river system without regard to political boundaries.



Delaware



New Jersey



New York



Pennsylvania



Federal Gov't (USACE)

“ provide trusted, effective and coordinated management of our Basin's shared water resources. ”



①

Why is DRBC thinking about data centers?

②

Water use and power in the Delaware River Basin

③

Data centers and the DRB

Section 1

Why is DRBC thinking about data centers?



N.J. General Assembly large data centers to p upgrades

The bill aims to shield households and small b large data centers.

By [Sophia Schmidt](#) · Updated Mar. 25, 2026 3:02 pm

DATA

N.J. families just go biggest energy bill spike numbers.

Updated: Mar. 23, 2026, 6:46 p.m. | Published: Mar. 23, 2026, 10:01



State of New Jersey
Governor Mikie Sherrill

Home About Action News Contact

Home / News / Press Releases / Promise Kept: Governor Sherrill T

Promise Kept: Governor Sherrill Takes Bold Action with Executive Orders Declaring State of Emergency on Utility Costs

Posted on 01/20/2026

Pennsylvania governor's legal action against PJM prevents cross 13 states

PENNSYLVANIA CAPITAL-STAR

GOVERNMENT & POLITICS

EDUCATION

ENERGY & ENVIRONMENT

CRIMINAL JUSTICE

LABOR

HEALTH CARE

Among governors whose states rely on want data centers to guarantee their er

governors are exploring fast track approval for data centers that agree to deliver le power to the grid as part of the connection process.

ONG, INSIDE CLIMATE NEWS - NOVEMBER 3, 2025 12:07 PM

NJ Spotlight News

Powered by NJ PBS

WATCH

HEALTH CARE

EDUCATION

BUDGET

POLITICS

UNDER THE DOME

NJ drops radioactive waste rule to drive nuclear plant construction

Sherrill signs bill to allow spent fuel storage, and now a 14-member panel can review financing, regulations to prepare for potential sites

ELISE YOUNG | APRIL 9, 2026 | [UNDER THE DOME](#), [ENERGY & ENVIRONMENT](#)

MAXIMUM GENERATION ALERT

No customer actions required. Demand Response may be implemented.



PJM Service Territory

Sept. 17, 2026

PJM Footprint





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Power Plants

Featu

NEWS

New Jersey governor looks to build ‘thousands of megawatts’ of renewables, attacks PJM ‘mismanagement’

By [Will Norman](#)
January 26, 2026

Why is everyone interested?

Proposals near your community

- municipalities are dealing with proposals
- DCs are a “new” type of industry - landuse / zoning
- quality of life concerns
 - traffic, noise, back-up generators, screening, etc.
 - utility connections – power, internet, water

PA Environment Digest Blog

An Update On Environmental Issues In Pennsylvania
Edited By: David E. Hess
Former Secretary, PA Department of Environmental Protection

TUESDAY, APRIL 14, 2026

- ➔ **PA House Passes Bills To Develop Model Zoning Ordinance To Help Local Governments Regulate, Mitigate The Impacts Of A.I. Data Center Developments; Report Water, Energy Use**



Penn State Extension – A Guide to Common Questions – designed to help communities engage in dialogue with DC proposals.

<https://extension.psu.edu/data-centers-a-guide-to-common-questions>

Regional electricity bills

- Residential customer bills (e.g. PSE&G, PECO, JCP&L, PPL, ACE, MetED, DPLC)
- PJM costs increases

It's all over local and national news

Elected officials & governance/policy



Authorization – Water Resources Program

Section 1.5 Emergent Issues

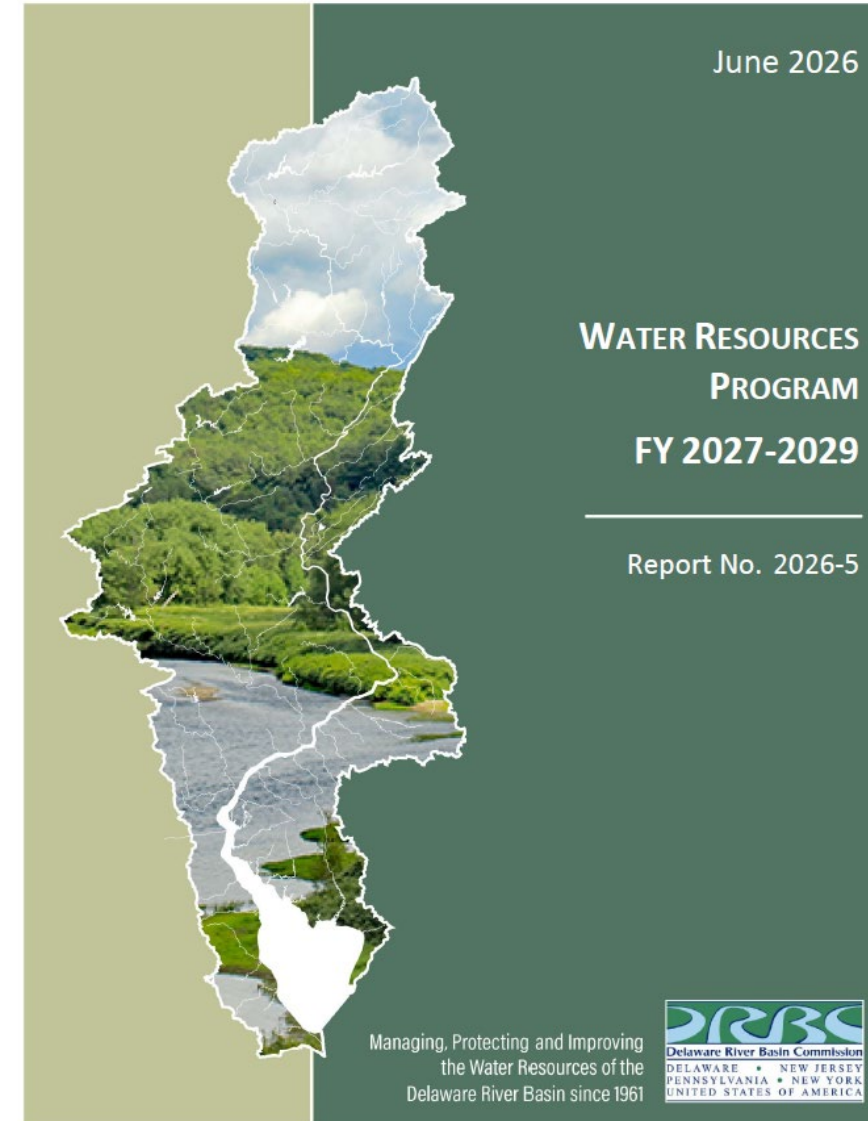
- 1.5.7 Data Centers

The growing importance of data centers and their potential impacts on water resources within the Basin are important to understand. Data centers have the potential to consume large volumes of potable water for various purposes, primarily for cooling systems and humidity control.

Section 2.2 Work Program

- 2.2.1.1.1 Water Supply Planning for a Sustainable Water Future 2060

DRBC will continue to track proposed data center projects in the Basin and brief the Commissioners and advisory committees on the potential impacts that data centers may have on water resources in the Basin.



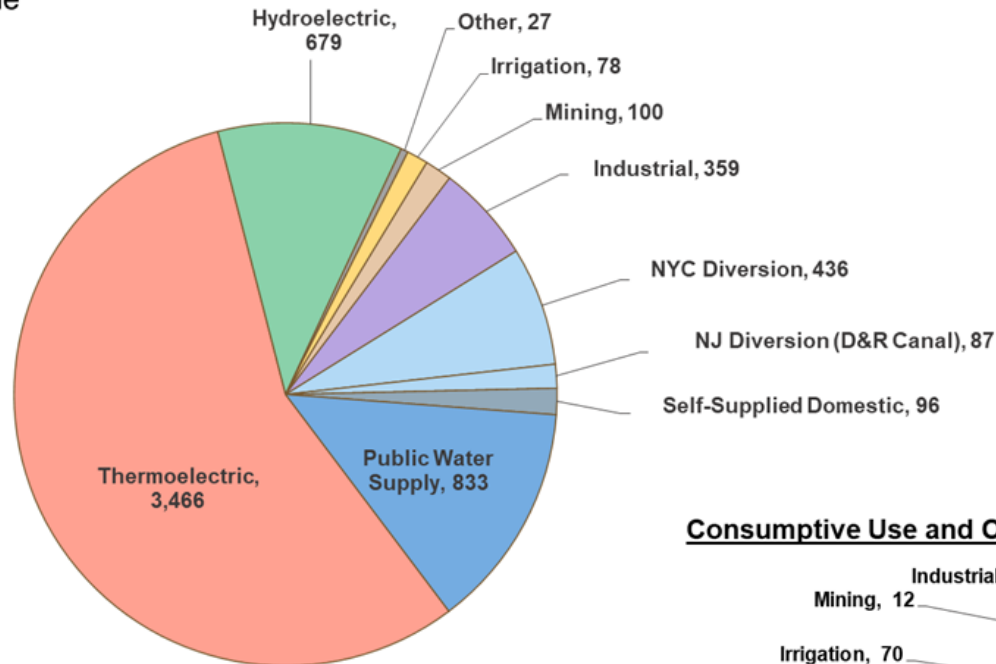
Section 2

Water use and power in the
Delaware River Basin



2024 DRB Water Withdrawals

Total Water Withdrawals
(ground and surface) from the
Delaware River Basin, **2024:**
6,160 MGD

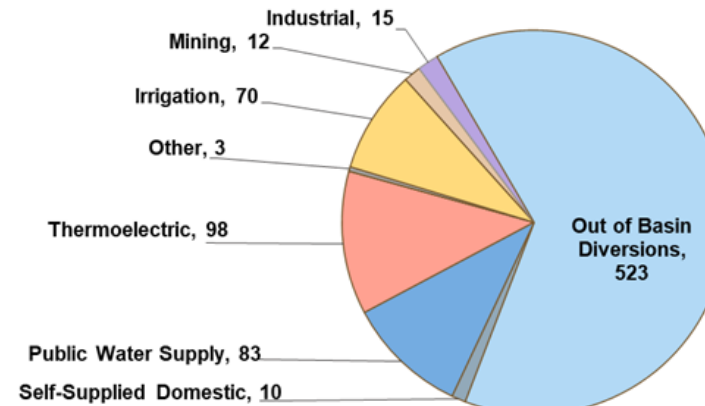


- Thermoelectric
- Hydroelectric
- Other
- Irrigation
- Mining
- Industrial
- NYC Diversion
- NJ Diversion (D&R Canal)
- Self-Supplied Domestic
- Public Water Supply

~ 6.1 BGD in 2024

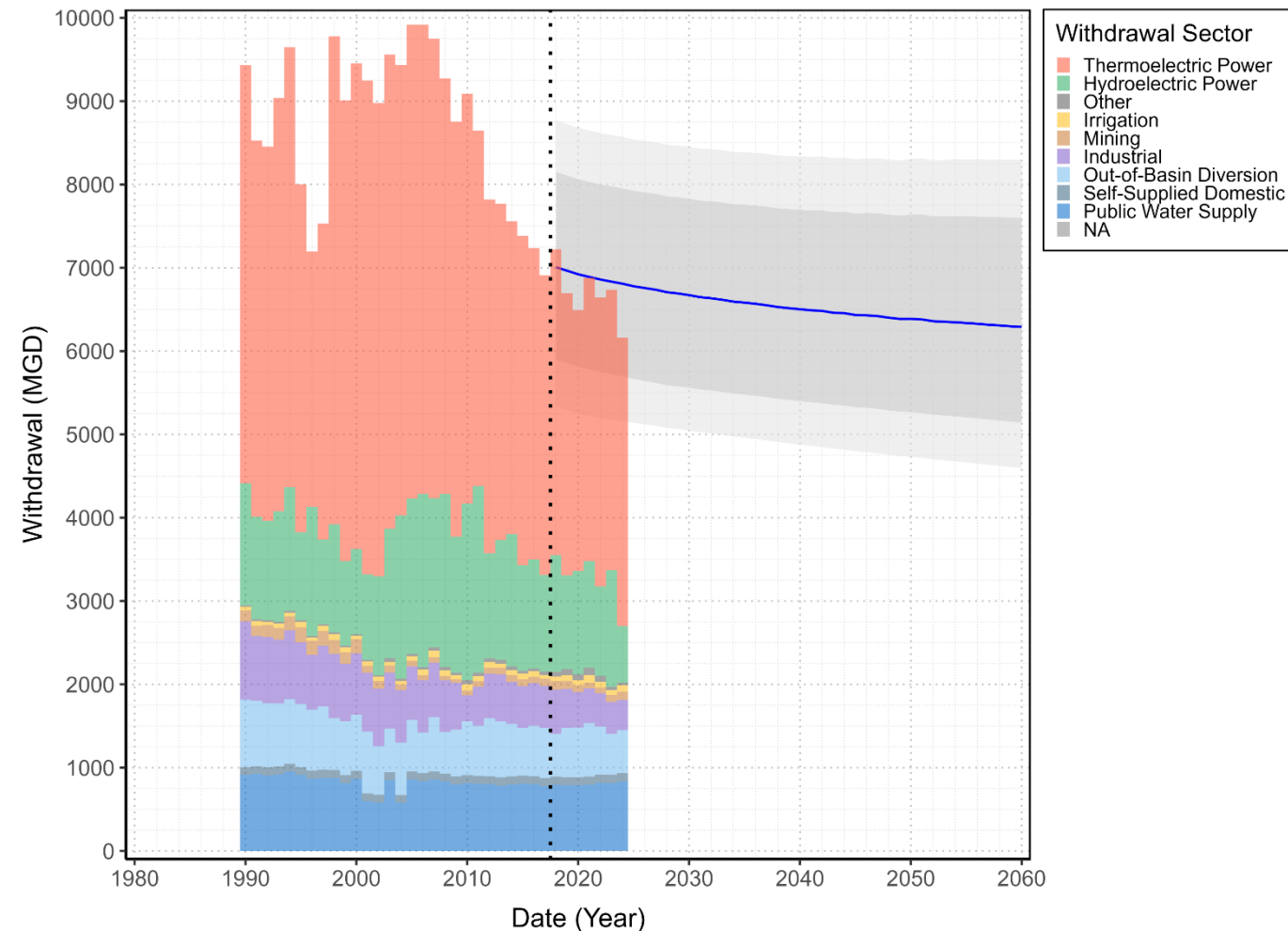
- ~3.5 BGD is thermoelectric
- 0.8 BGD is PWS

Consumptive Use and Out-of-Basin Diversions: 814 MGD



1990 – 2024 DRB Water Withdrawals

Historical and projected water withdrawals from the Delaware River Basin



Water Withdrawals 1990 - 2024

~ 10,000 MGD in 2005 (10 BGD)

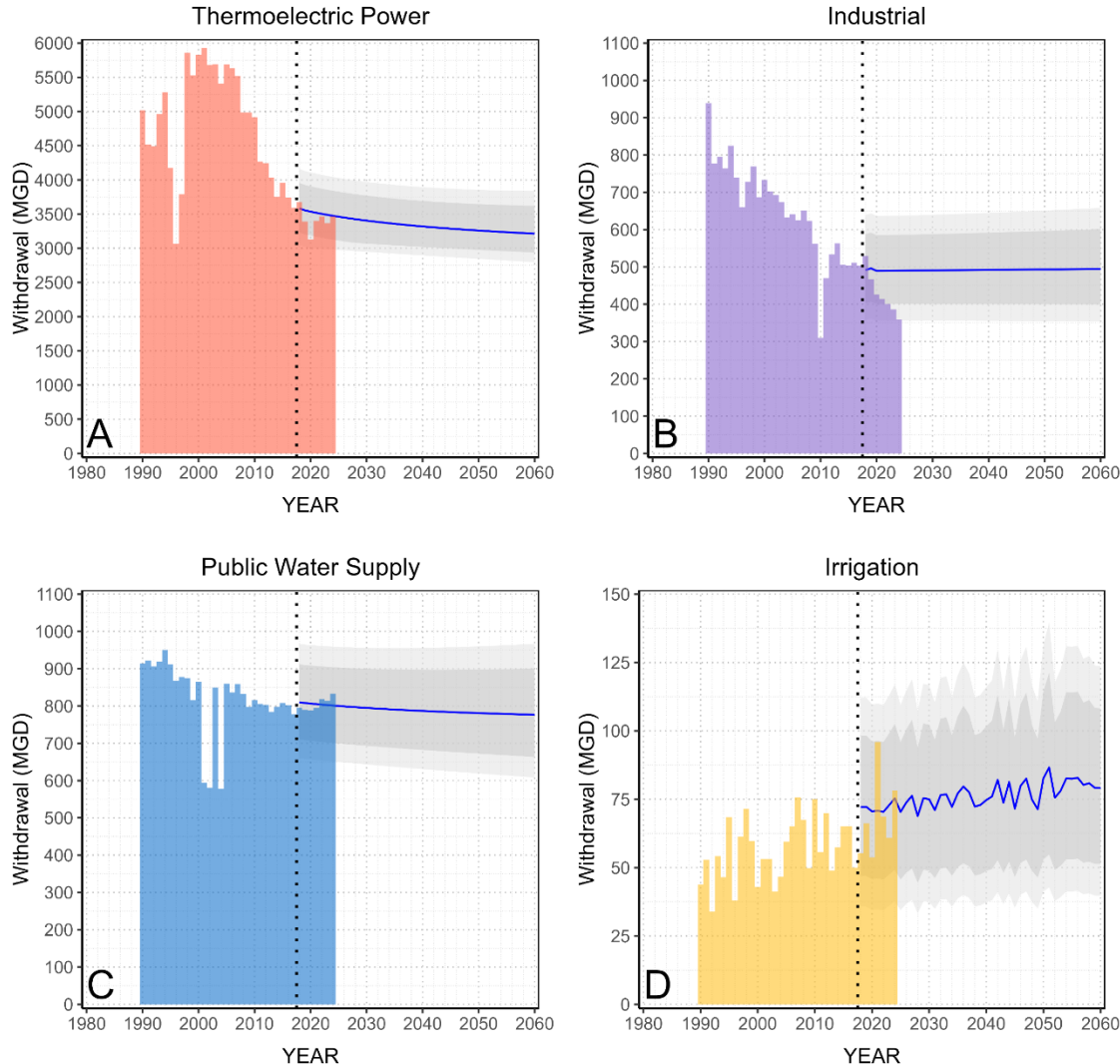
~ 6,000 MGD in 2024 (6 BGD)

~ 4,000 MGD *decrease* (4 BGD)

Decrease Projected to 2060

Key Sectors

Withdrawals in the Delaware River Basin



Notes

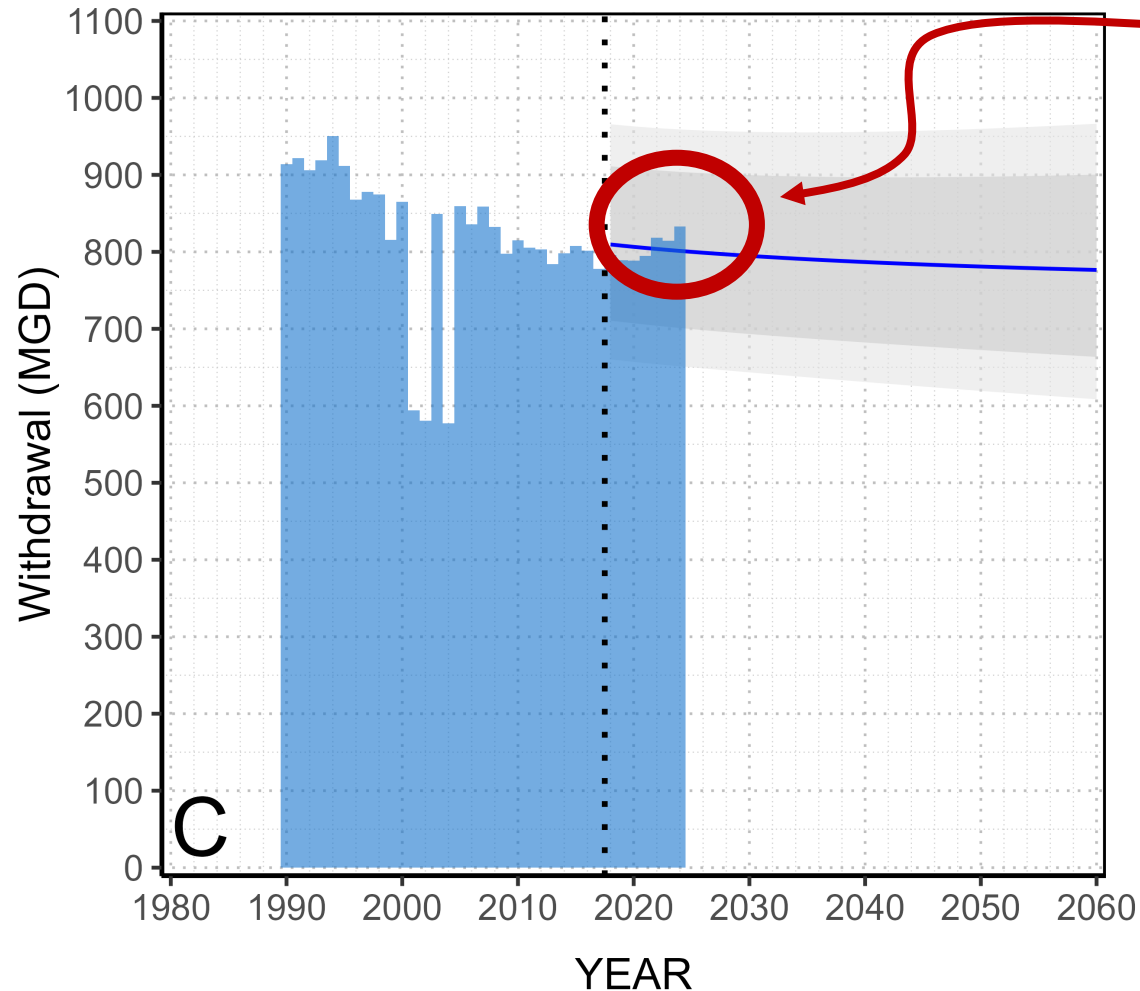
- A. Thermoelectric - 2.5 BGD decrease since 2000, reverse?
- B. Industrial – continued decreases **below** projection
- C. PWS shows **increase** – but near projection
- D. Irrigation shows **increase**

Data Centers could impact three of these sectors.

- Power demands for PJM grid
- Industrial if they self-supply
- Customers of PWS

1990 - 2024– PWS Water Use

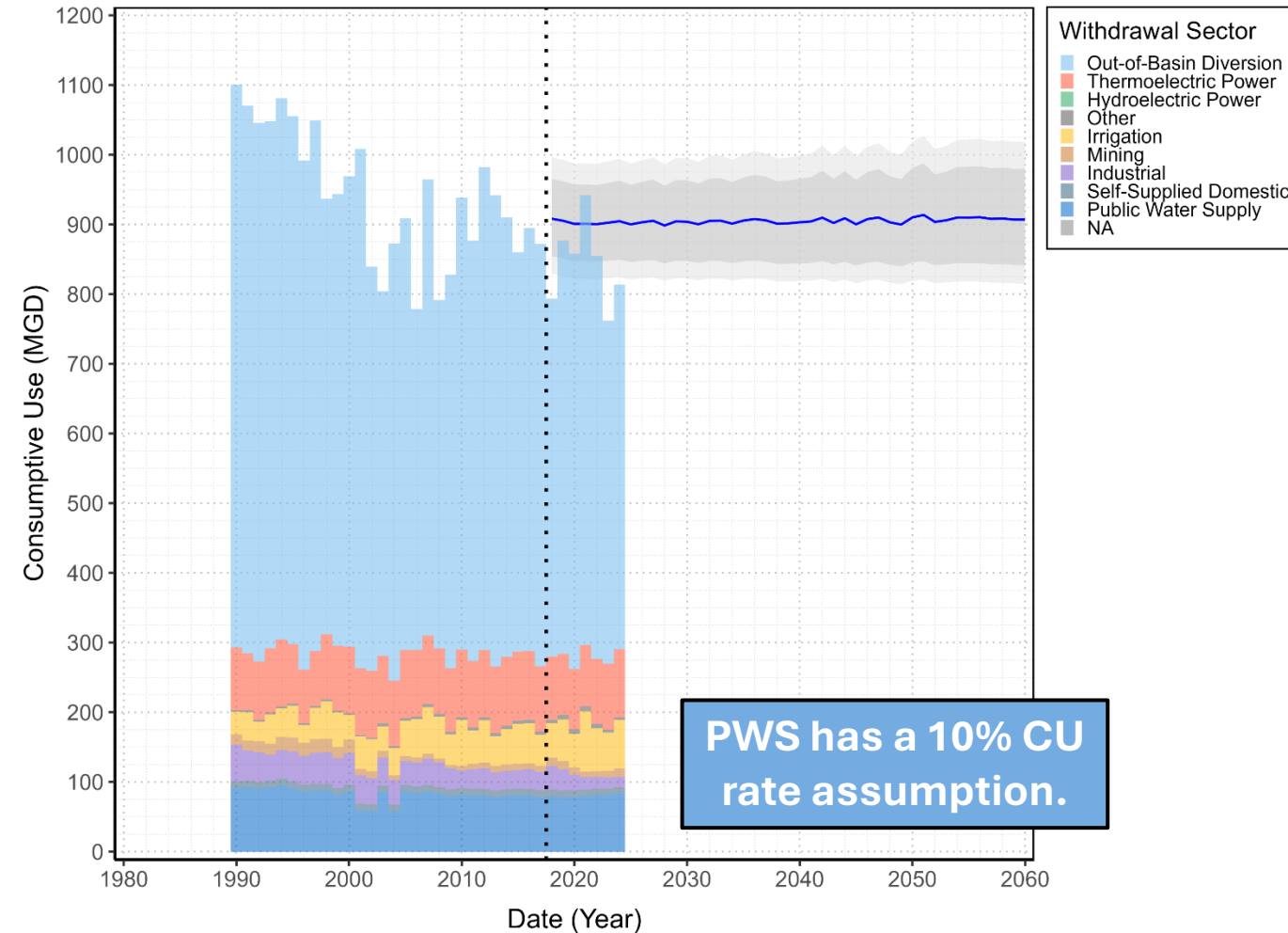
Public Water Supply



Notable observation: First time in decades that the PWS sector has seen a multi-year increase in withdrawals

1990 – 2024 DRB Consumptive Water Use

Historical and projected consumptive water use in the Delaware River Basin



Consumptive Water Use

~ 1,100 MGD in 1990 (1 BGD)

~ 825 MGD in 2024 (0.825 BGD)

~ 300 MGD decrease (0.3 BGD)

Projected to remain constant

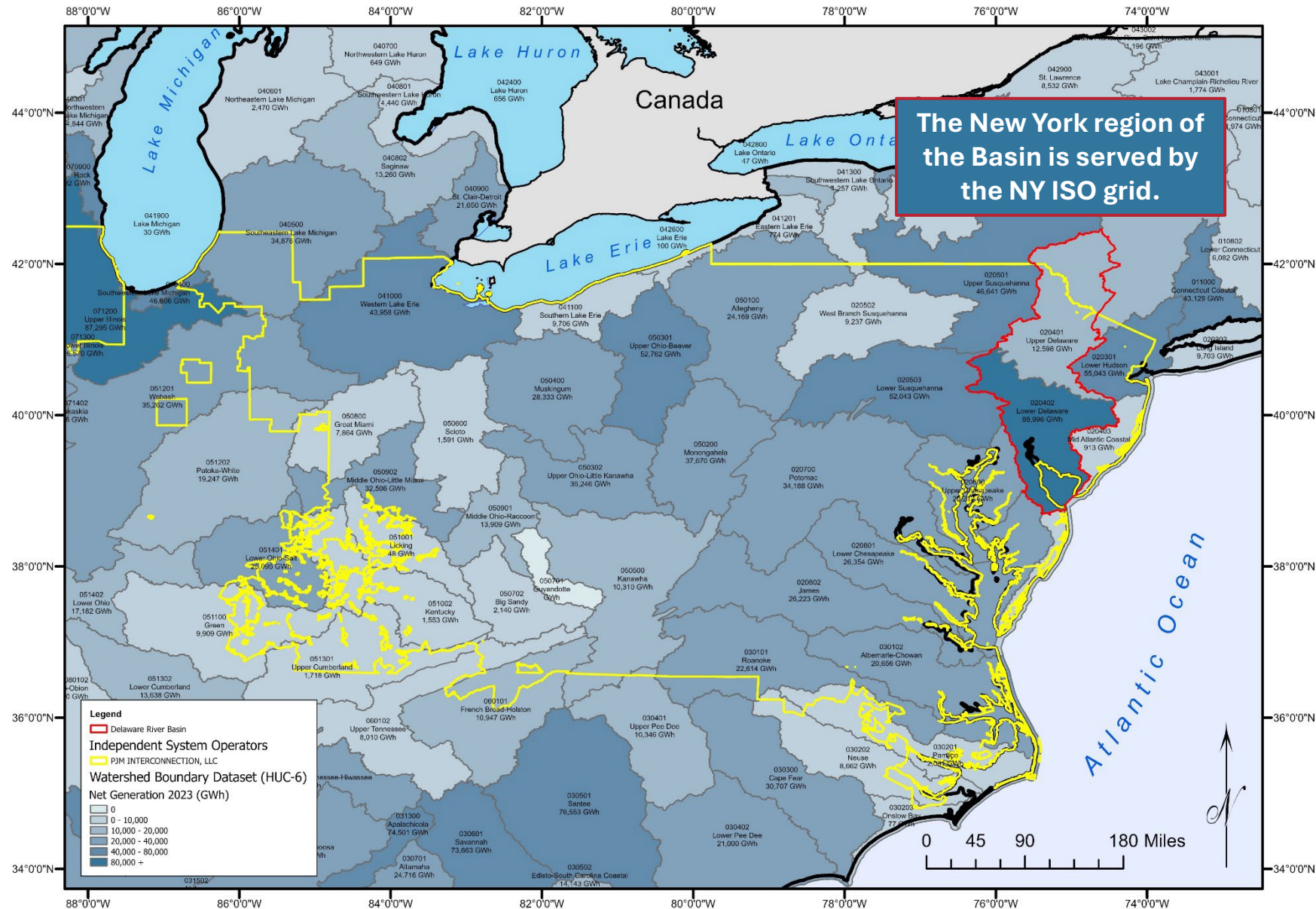
PJM Grid

- Regional Transmission Organization (RTO)
- Largest grid in U.S.
- ~65 million customers
- 13 states + D.C.
- HQ in Valley Forge, PA
- Regulated by FERC

CY2023 net power generation
Lower Delaware HUC

2nd in the country
1st in the PJM

88,690 GWh in 2023

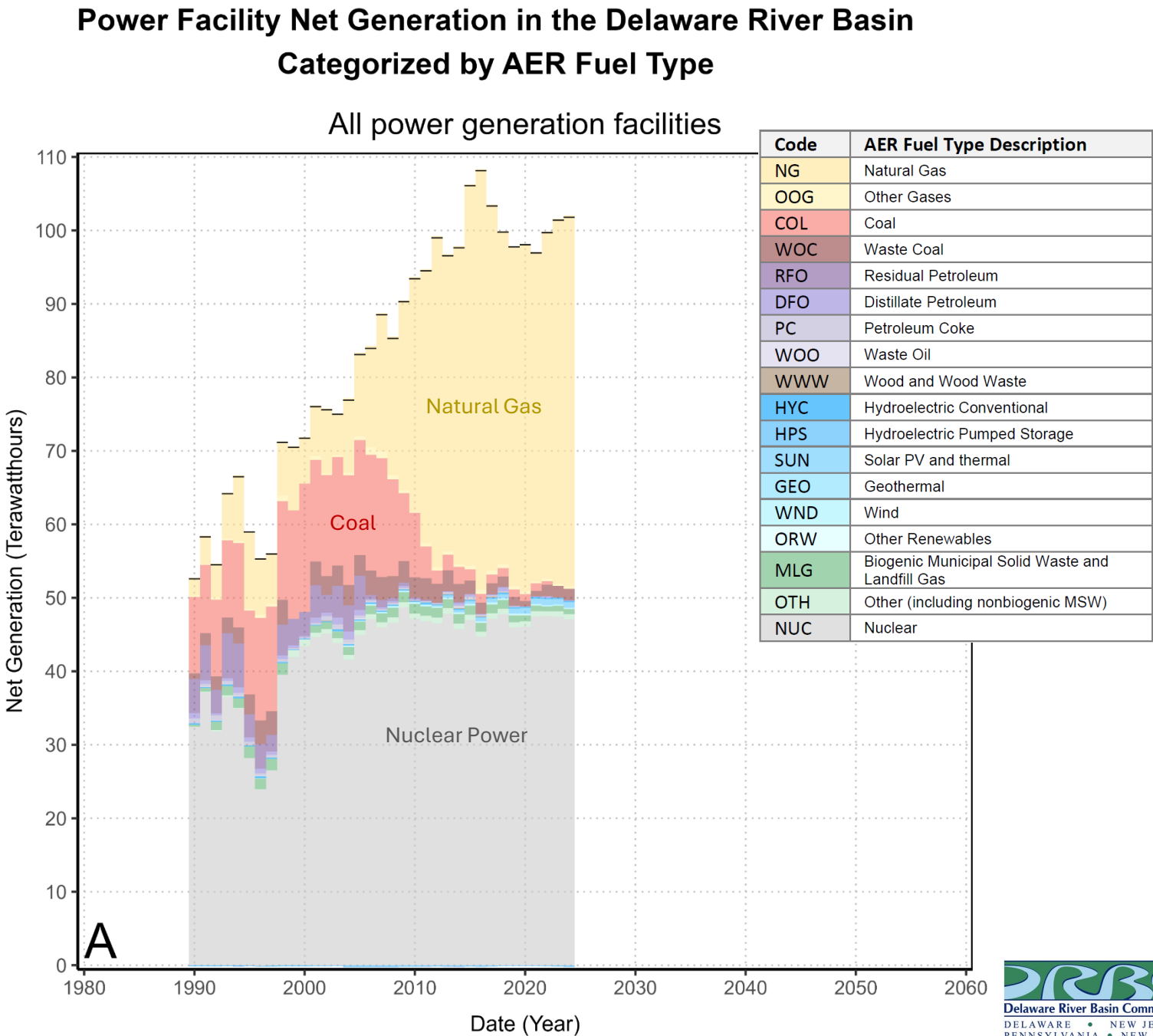


Total net power generation (from all sources) as reported through EIA Form-923 (CY2023), aggregated to a HUC-6 scale for the entire country. Labels within each watershed indicate the watershed name, as well as the net generation in gigawatt-hours (GWh).

Sources:

United States Energy Information Administration (EIA) Form 923, Form 860 and "PowerPlants" shapefile.
USGS Watershed Boundary Dataset (HUC-6 boundaries)

The Delaware River
historical context for
essential power
generation



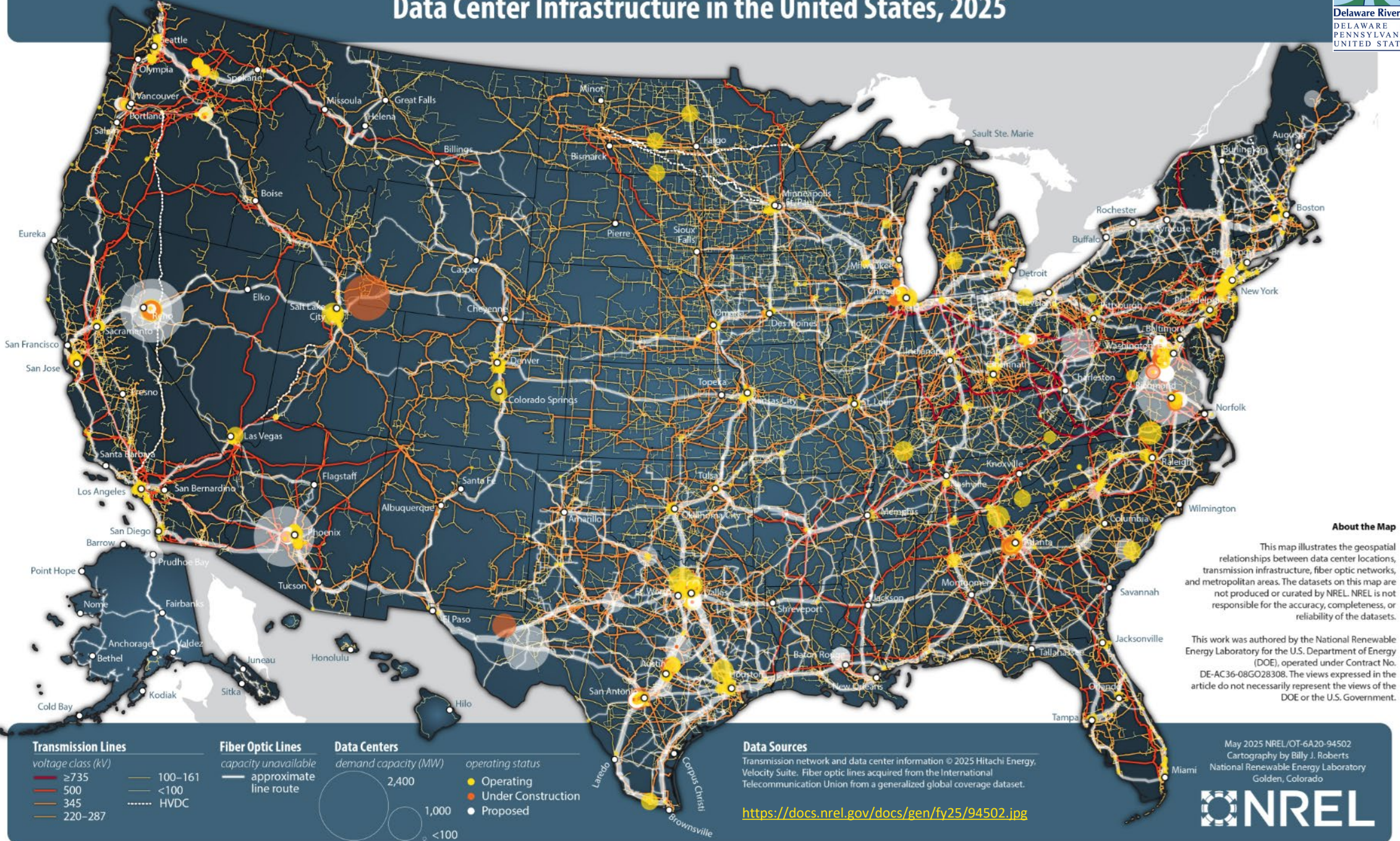
*Total net power generation includes facilities in the Upper Delaware (020401) and the Lower Delaware (020402).

Section 3

Data centers and the DRB



Data Center Infrastructure in the United States, 2025

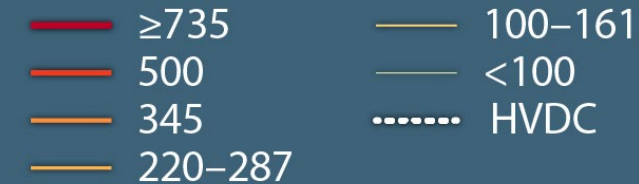


NYC and NOVA hubs surround the DRB



Transmission Lines

voltage class (kV)



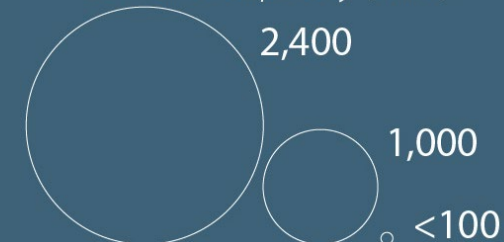
Fiber Optic Lines

capacity unavailable

— approximate line route

Data Centers

demand capacity (MW)



operating status



What is DRBC doing?



Research existing data centers in the DRB

- Establish a list using resources such as data portals, internet searches, and NAICS
- Assess location intersection with public water supply service areas*
- Review industry characteristics (e.g. EIA, other agencies)



Track proposed data centers in the DRB

- No self-supplied applications to date
- Review news releases & stay “in-the-know”
- Several under construction as customers to PWS
- Municipalities likely get first detailed information on projects
- Model ordinances for data centers



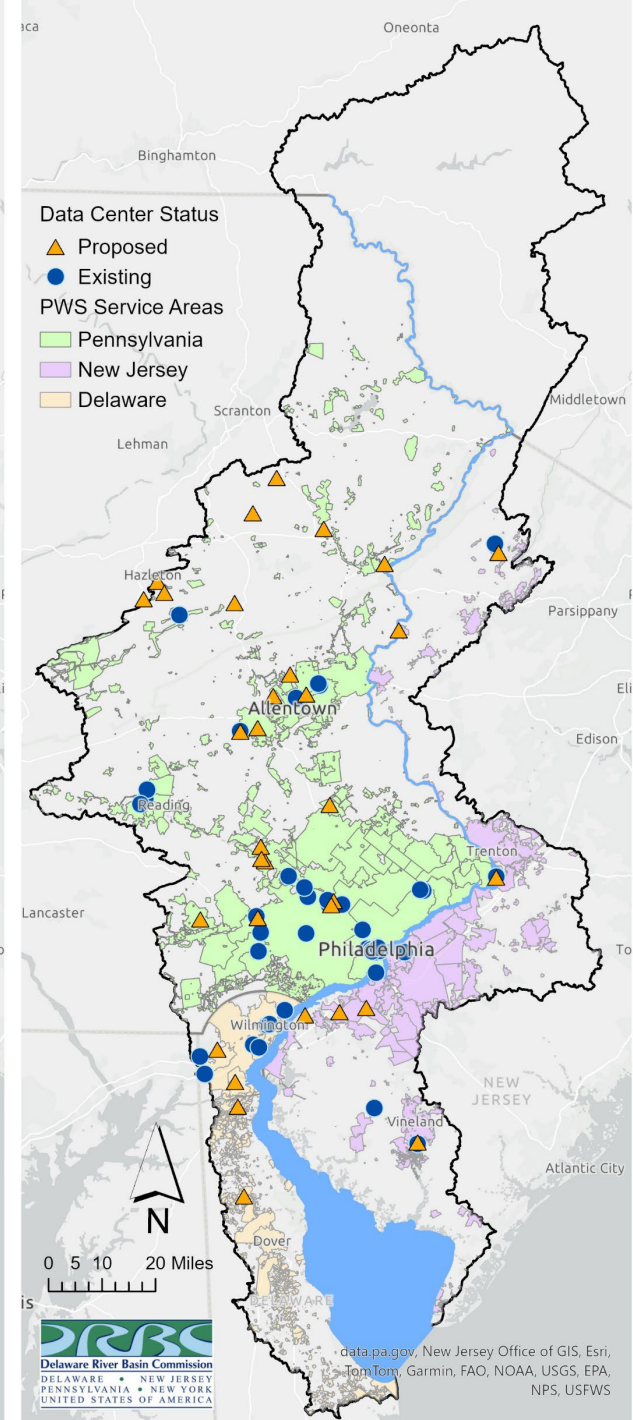
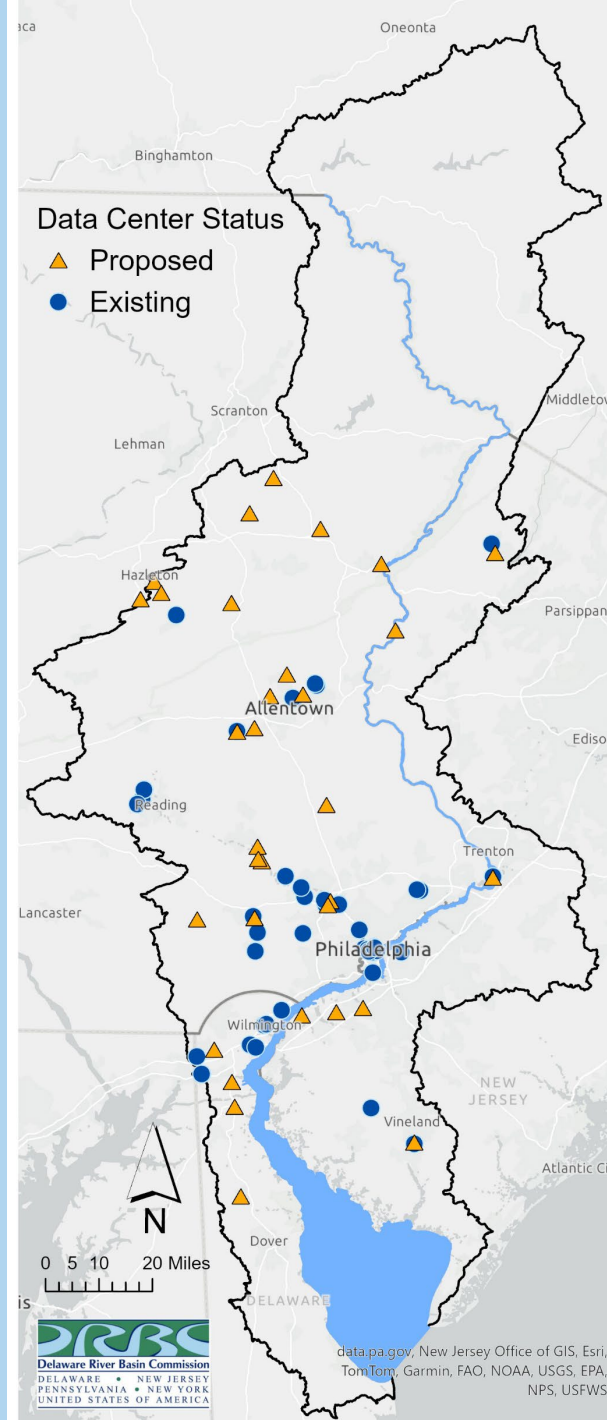
Evaluate ways to reduce impacts

- This means understanding the potential impacts as well!

* DRBC reviews water withdrawals above 100,000 gpd (or 10,000 gpd in the SEPA-GWPA).
There are currently no approvals for self-supplied data centers.

Data centers across the DRB

Basin State	Existing	Proposed
Pennsylvania	51	24
New Jersey	6	5
Delaware	9	4
New York	0	0
	66	33



What has DRBC learned in the last year?



There are about 66 operating in the DRB

- All served by public water supply
- Not hyperscale - yet
- Amazon's Bucks County facility under construction



Public water supply utilities likely have Non-Disclosure Agreements (NDAs) with hyperscale data center developers



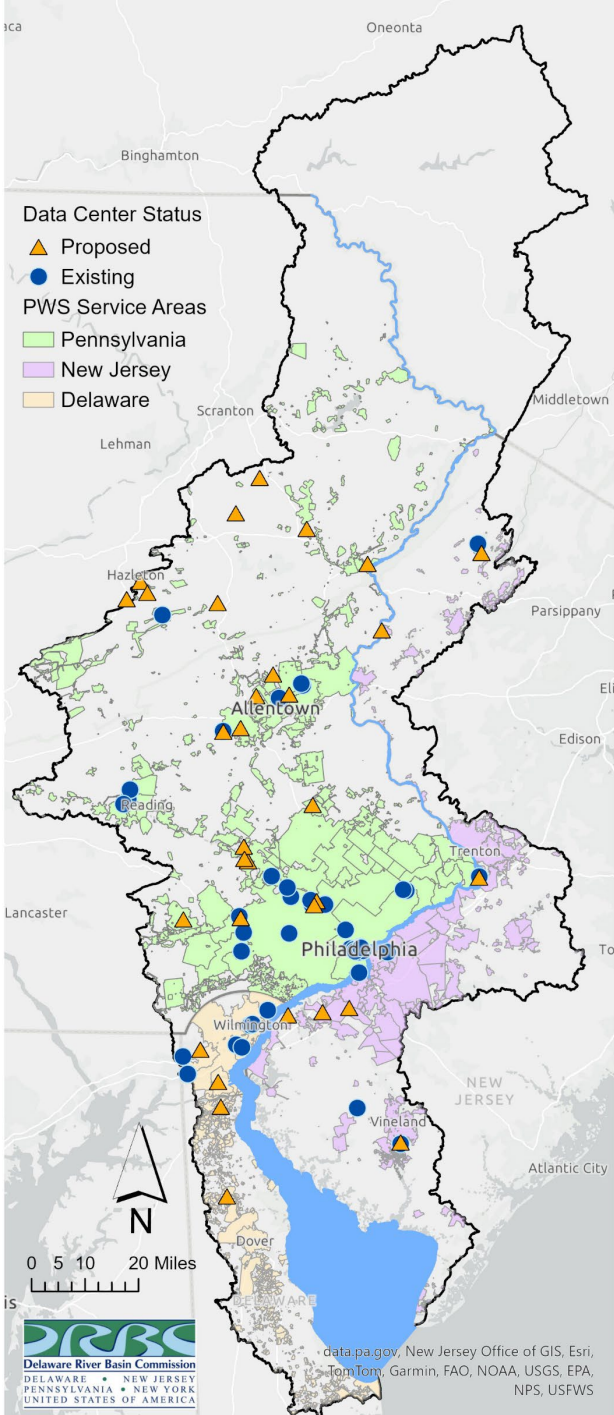
Facility level water use data is almost non-existent & difficult to obtain



- Quarterly meetings with ICPRB, SRBC, Aqua, American Water, Veolia are helpful
- Extensive outreach with elected officials (state & municipal); webinars
- Numerous inquiries from citizens, etc.



<https://www.nj.gov/drbc/programs/supply/datacenters.html>



Water Resource Considerations

Water Source

- Large customer of PWS system?
- Develop their own water source? (DRBC permit?)

Cooling Technology

- Evaporative cooling = larger water demand, lower power demand
- Closed loop cooling = less water
- Air cooling = higher power demand, less water

Consumptive Use

- Depends on cooling technology
- Does DC consumptive use change PWS 10% CU assumption?

Power

- Increase power generation = consumptive use?

Emergency Response Planning

- How do Regulatory Agencies / Public Water Supply Systems factor in DCs in emergencies and drought?

Thank you!



DRBC website

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