

# Population Served by the Delaware River Basin

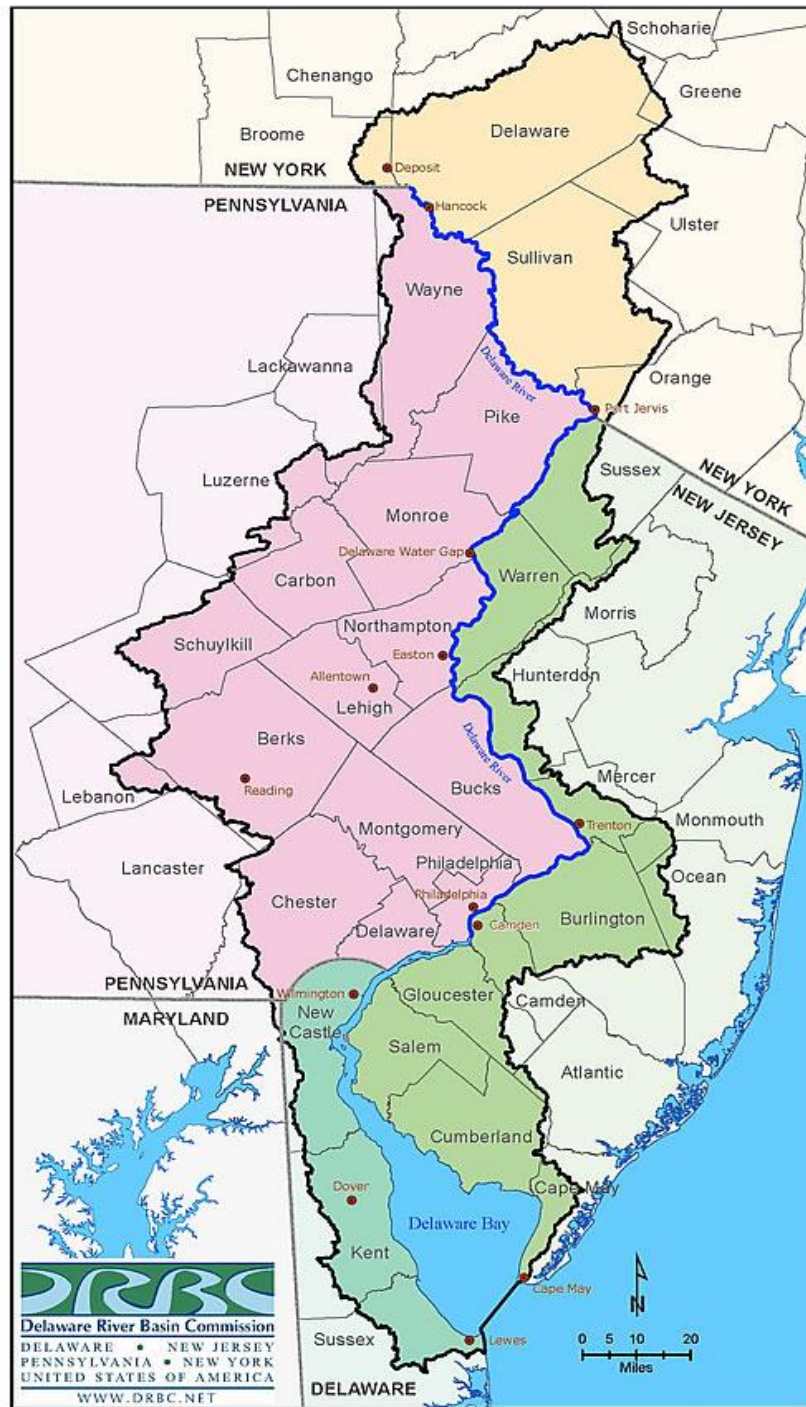
**Coalition for the Delaware  
River Watershed (CDRW)**

*Sara Sayed*

June 14, 2023

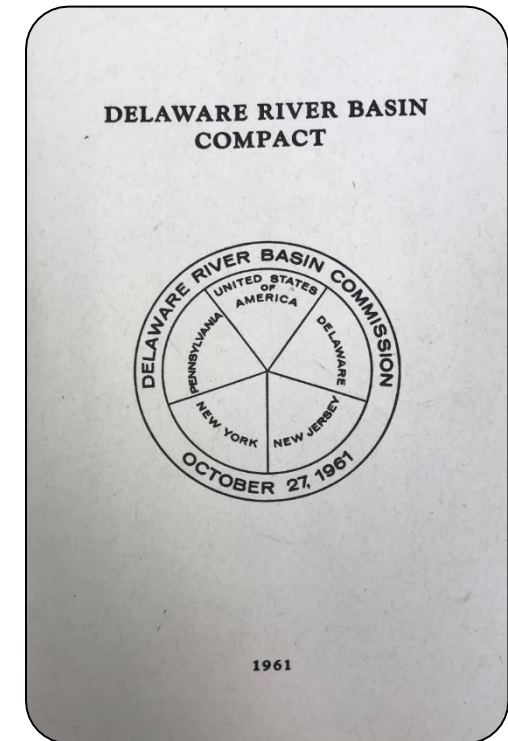
# The Delaware River Basin (DRB)

- Main stem river is **330 miles long**
- Forms an interstate boundary over its entire length
- Longest, **un-dammed** U.S. river east of the Mississippi
- **Drains 13,539 square miles** in 4 states  
(0.4% USA land area)
- **13+ million people** (about 4% of the 2020 U.S. population) rely on the waters of the Delaware River Basin
- Water **withdrawal** in the Basin = **6.4 billion gallons/day**
- **0.45 billion gallons/day** of water comes from groundwater  
(1/2 of that used for public water supply)
- **Contributes over \$21B** in economic value to the region



# What is the Delaware River Basin Commission?

- Created by an Interstate Compact in **1961** due to
  - Water supply shortages and disputes
  - Flooding
  - Pollution in the Delaware and its tributaries
- Has **5** voting members: Delaware, Pennsylvania, New Jersey, New York and Federal Government [ACOE]
- Delaware River Basin Compact directs **regulatory, monitoring & assessment** and **planning** duties



# Population Served by the Delaware River Basin

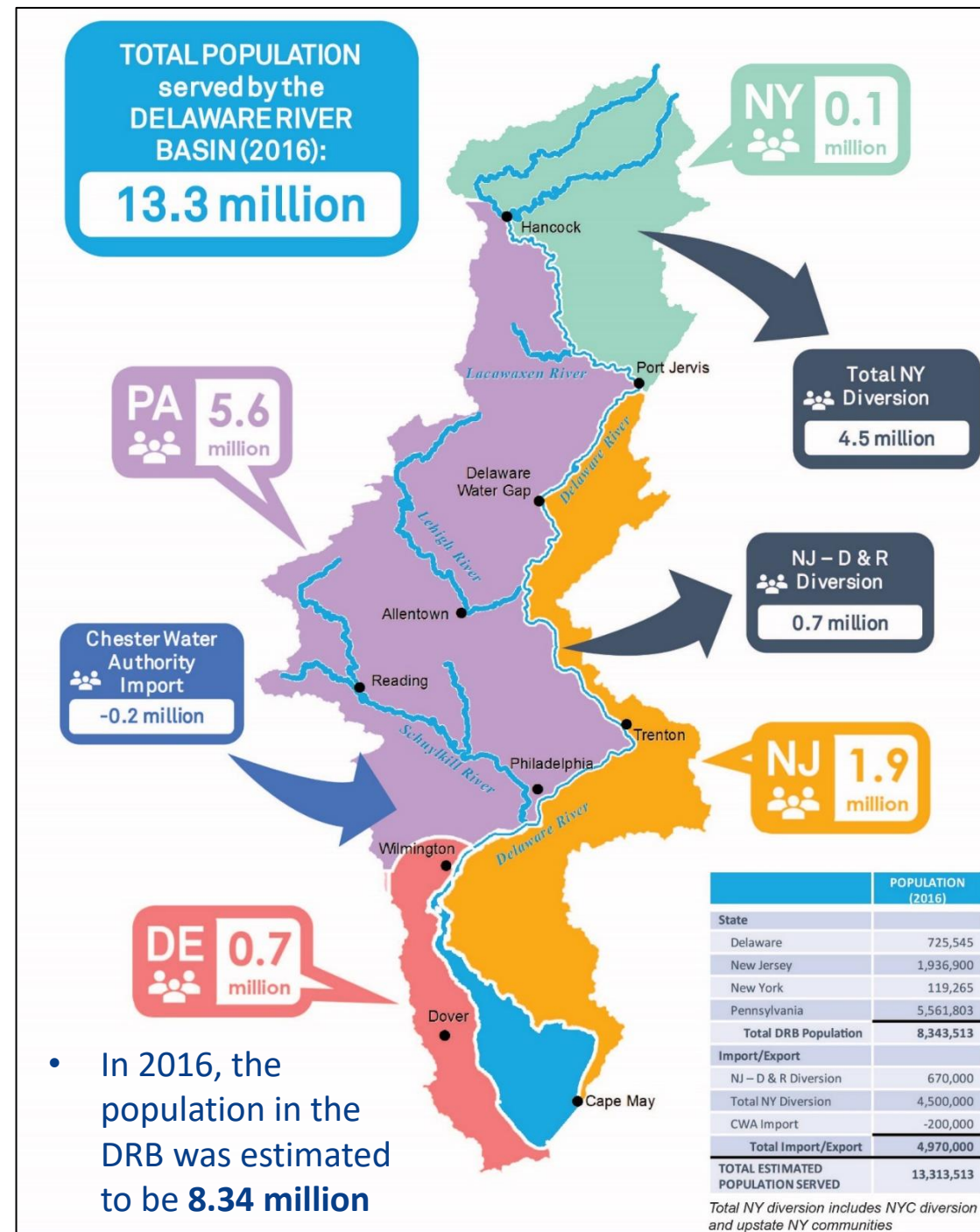
- FY2023-2025 Water Resources Program included a task to update the Population Served estimate for the DRB
- DRBC most recently provided a Population Served estimate in July 2018 based on CY2016 information
- 2016 total population served by DRB water was estimated at **13.3 million**
- Methodology presented to the Commission's Water Management Advisory Committee in October 2018

# 2016 DRB Population Served

## 13.3 million

### Estimation of Population Served by DRB Water - 2016 Data

1. Basin Population:			
a.	2010 population	8.25 MM	
b.	Change in population 2010-16	0.09 MM	
c.	Estimated DRB 2016 population		8.34 MM
2. NJ Served from Diversion			
a.	Average NJ diversion	84 MGD	
b.	2016 per capita use	125 gpcd	
c.	Equivalent NJ population served		0.67 MM
3. NYC Population			
a.	Estimated 2016 population	8.54 MM	
b.	DRB fraction of 2016 supply	47%	
c.	Equivalent NYC population served		4.01 MM
4. Outside NYC Served			0.50 MM
5. Chester County Import – 2016			
a.	PADEP reporting	-0.14 MM	
b.	Chester Water Authority bulk sales	-0.06 MM	
c.	Total population served by Chester import		-0.20 MM
<b>Grand Total Estimated Population Served</b>			<b>13.3 MM</b>



# 2020 DRB Population Served

## 14.2 million

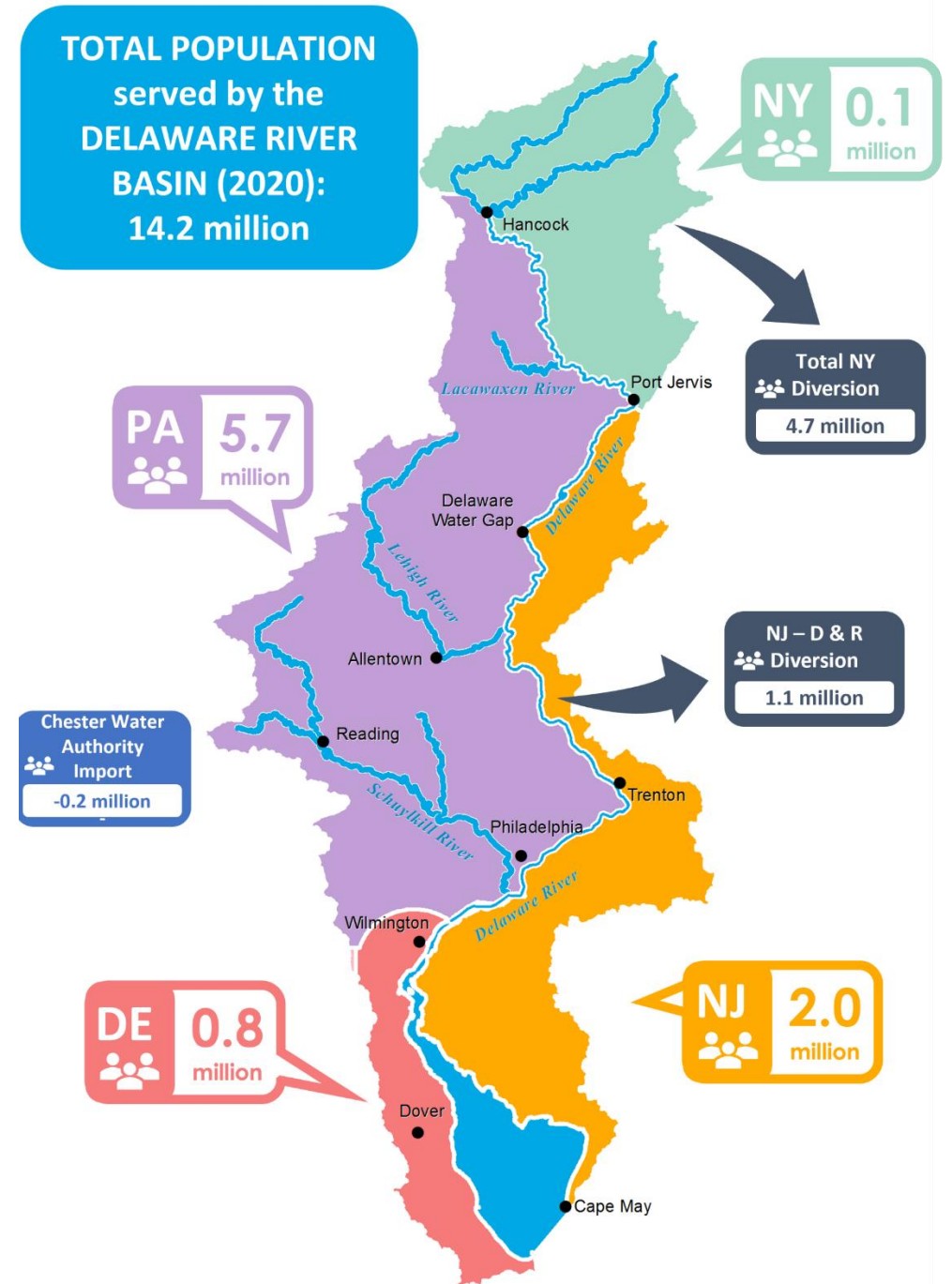
**Table 1: Estimation of Population Served by Delaware River Basin Water (2020 Data)**

<b>1. Basin Population<sup>1</sup></b>			
a. Population residing within the DRB boundary ..	8.629 MM	←	Updated with 2020 Census Data
<b>2. NYC Population<sup>2</sup></b>			
a. Estimated 2020 NYC population .....	8.804 MM	}	←
b. DRB fraction of NYC supply .....	48%		
c. Equivalent NYC population served .....	4.226 MM		
<b>3. Outside NYC Served</b>			
a. Communities along aqueduct .....	0.438 MM	←	Updated with data from NYCDEP
<b>4. NJ Served from Diversion<sup>3</sup></b>			
a. Equivalent NJ population served .....	1.087 MM	←	Updated with CY2020 estimate from NJDEP
<b>5. Chester Water Authority Import<sup>4</sup></b>			
a. CWA's Delaware County service area (PA) .....	0.112 MM	}	←
b. CWA's Chester County service area (PA) .....	0.034 MM		
c. CWA bulk sales			
i. Veolia (DE) .....	0.001 MM		
ii. Suez (DE) .....	0.009 MM		
iii. Artesian (DE) .....	0.031 MM		
d. Total DRB population served by CWA .....	-0.187 MM		Updated with CY2020 data from Chester Water Authority
<b>Grand Total Estimated Population Served .....</b>	<b>14.193 MM</b>		

# 2020 Population Served Update

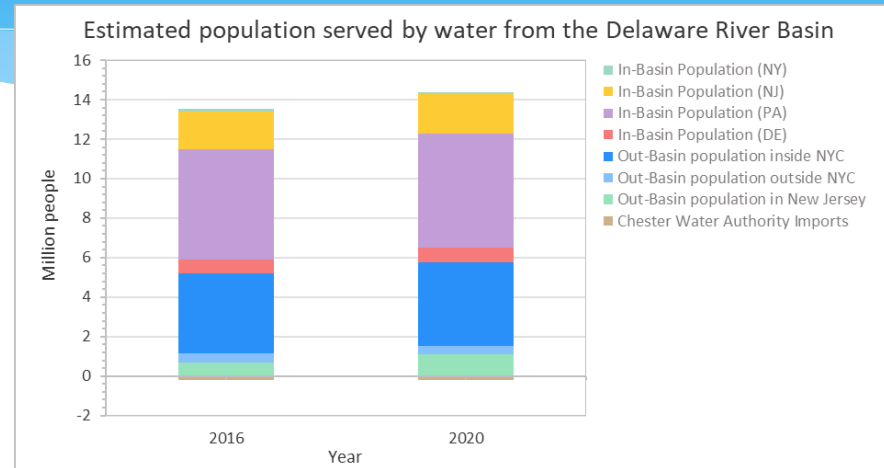
2020 Census data indicates that the estimated population in the Basin has increased to **8.63 million (+.29 million)**

	POPULATION (2020)
State	
Delaware	0.774
New Jersey	1.989
New York	0.117
Pennsylvania	5.749
<b>Total DRB Population</b>	<b>8.629</b>
Import/Export	
NJ – D & R Diversion	1.087
Total NY Diversion	4.664
CWA Import	-0.187
<b>Total Import/Export</b>	<b>5.564</b>
<b>TOTAL ESTIMATED POPULATION SERVED</b>	<b>14.193</b>



# 2020 Population Served Update

- Biggest increases in population seen in PA (+0.187 MM) & NJ (+.052 MM)
- Small decline in NY (in basin) population
- Large increase in NJ (out of basin) population due to change in calculation methods
- Future population served updates will occur on a **5-year** interval
- This work is published in **the recently approved FY2024-2026 WRP**



*Summary of estimates for the population served by water from the Delaware River Basin.*

Reference:	(DRBC, 2018)	(DRBC, 2018)	(DRBC, 2023)
Data Year:	2010	2016	2020
In-Basin Population (NY)	0.122	0.119	0.117
In-Basin Population (NJ)	1.940	1.937	1.989
In-Basin Population (PA)	5.488	5.562	5.749
In-Basin Population (DE)	0.700	0.726	0.774
Out-Basin population inside NYC		4.010	4.226
Out-Basin population outside NYC		0.500	0.438
Out-Basin population in New Jersey		0.670	1.087
Chester Water Authority Imports		-0.200	-0.187
<b>TOTAL</b>		<b>13.324</b>	<b>14.193</b>



# Questions?



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<https://www.state.nj.us/drbc/>