



# 2024 New Jersey Statewide Water Supply Plan

## Public Meeting Plan Overview

March 15, 2024

April 9, 2024





# Presentation Outline



- Water Supply Planning in NJ
- Overview of the 2024 Plan
- Highlights
- Action Areas
- Next Steps







## Planning

- 1981 Water Supply Management Act
  - Develop and periodically update a WSP
  - Historically focused on quantity
- 1982, 1996 and 2017 Plans
  - Numerous regional and statewide plans prior to 1982
- Fundamental Questions:
  - How much do we currently have and use?
  - How much will we need in the future?
  - What are the critical issues impacting supply?
  - What do we need to do to ensure adequate supply w/o unacceptable impacts?

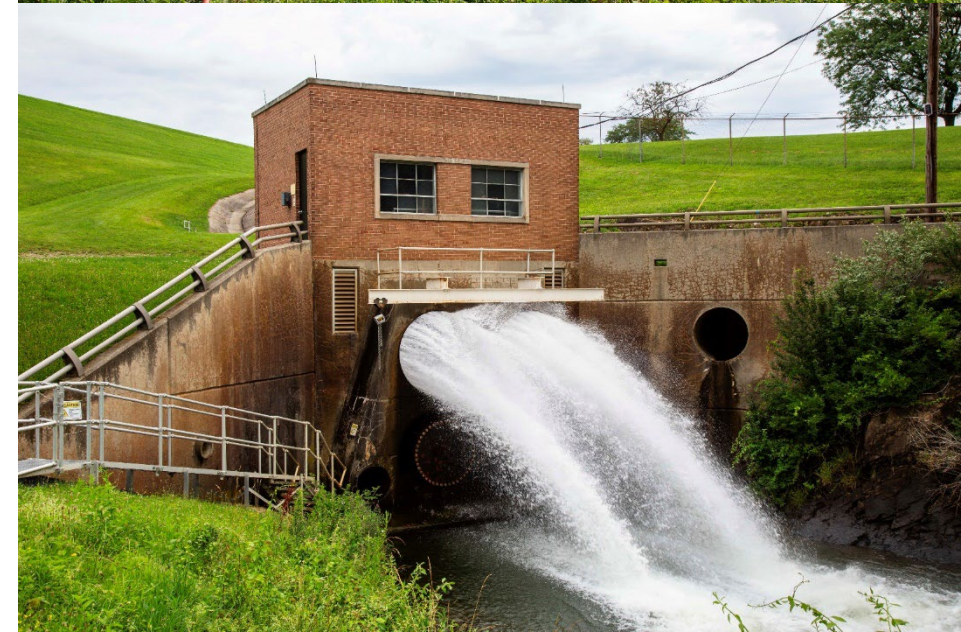




# 2024 NJ Statewide Water Supply Plan



- 5-Year plan with 2050 planning horizon
- Addresses major comments on 2017 WSP
  - Lack of climate change evaluations
  - Limited public engagement and policy recommendations
- Major additions:
  - 5 more years of data
  - Climate change impacts to water availability
  - Statewide safe drinking water assessment
  - Environmental Justice/Overburdened Community water supply impacts
  - Detailed policy recommendations







# Chapters



## **Executive Summary**

### **Chapter 1: Introduction**

### **Chapter 2: Statewide Water Availability**

### **Chapter 3: Climate Change and Water Availability**

### **Chapter 4: Statewide Water Demands and Balances**

### **Chapter 5: Water Resource Protection and Planning Efforts**

### **Chapter 6: Regional Planning for Deficit Mitigation and Avoidance**

### **Chapter 7: Planning for an Uncertain Future**

### **Chapter 8: Water Supply Action Plan**

### **Appendices (12)**





# Public Engagement To Date



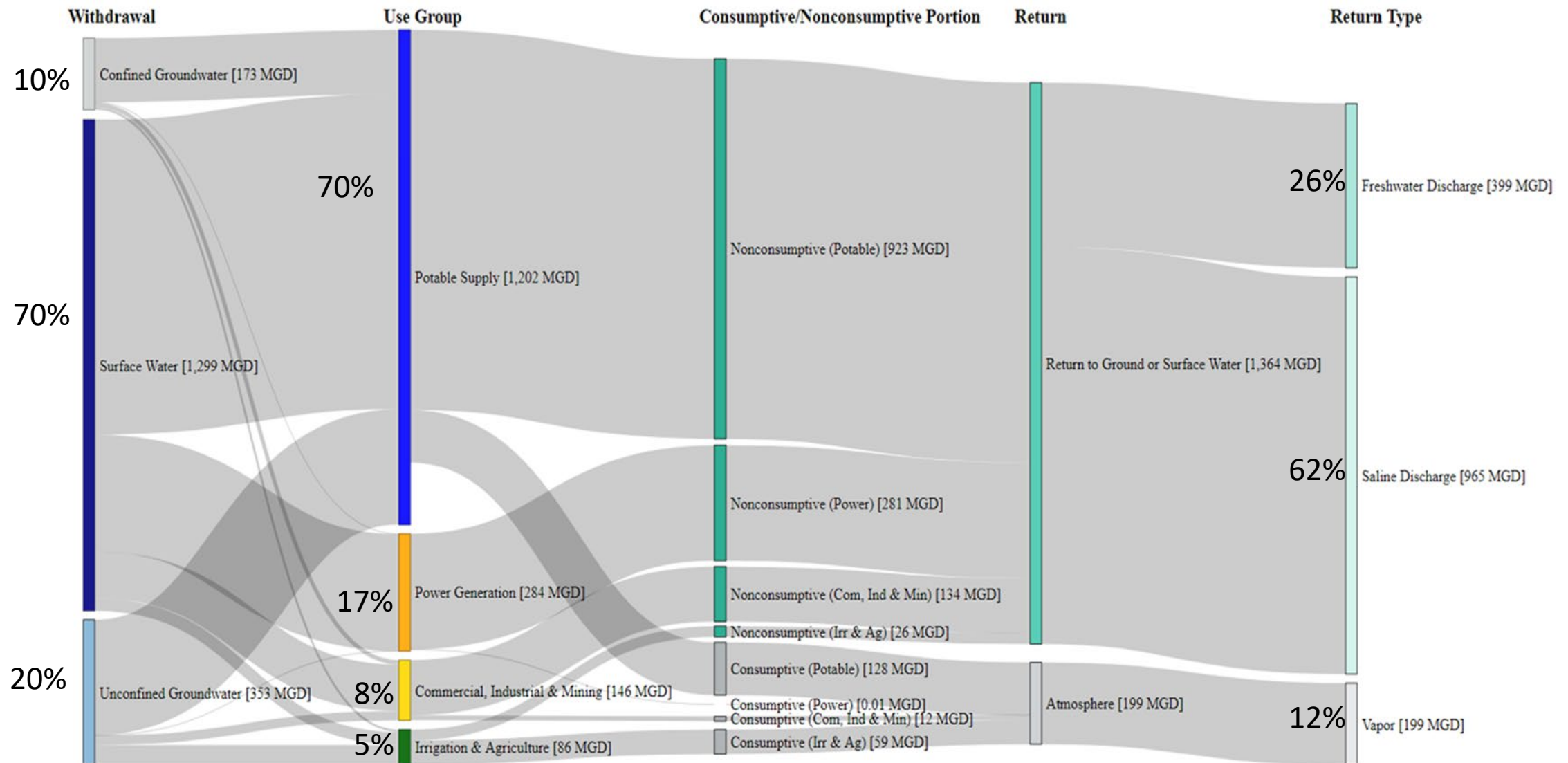
- Water Supply Advisory Council
  - 10 public meetings since 2022
- Invited Stakeholders
  - 5 meetings with ~130 participants
- Website and email (live 9/2022)
  - <https://dep.nj.gov/water-supply-plan/>
  - watersupplyplan@dep.nj.gov
- Draft Plan released 2/26/2024







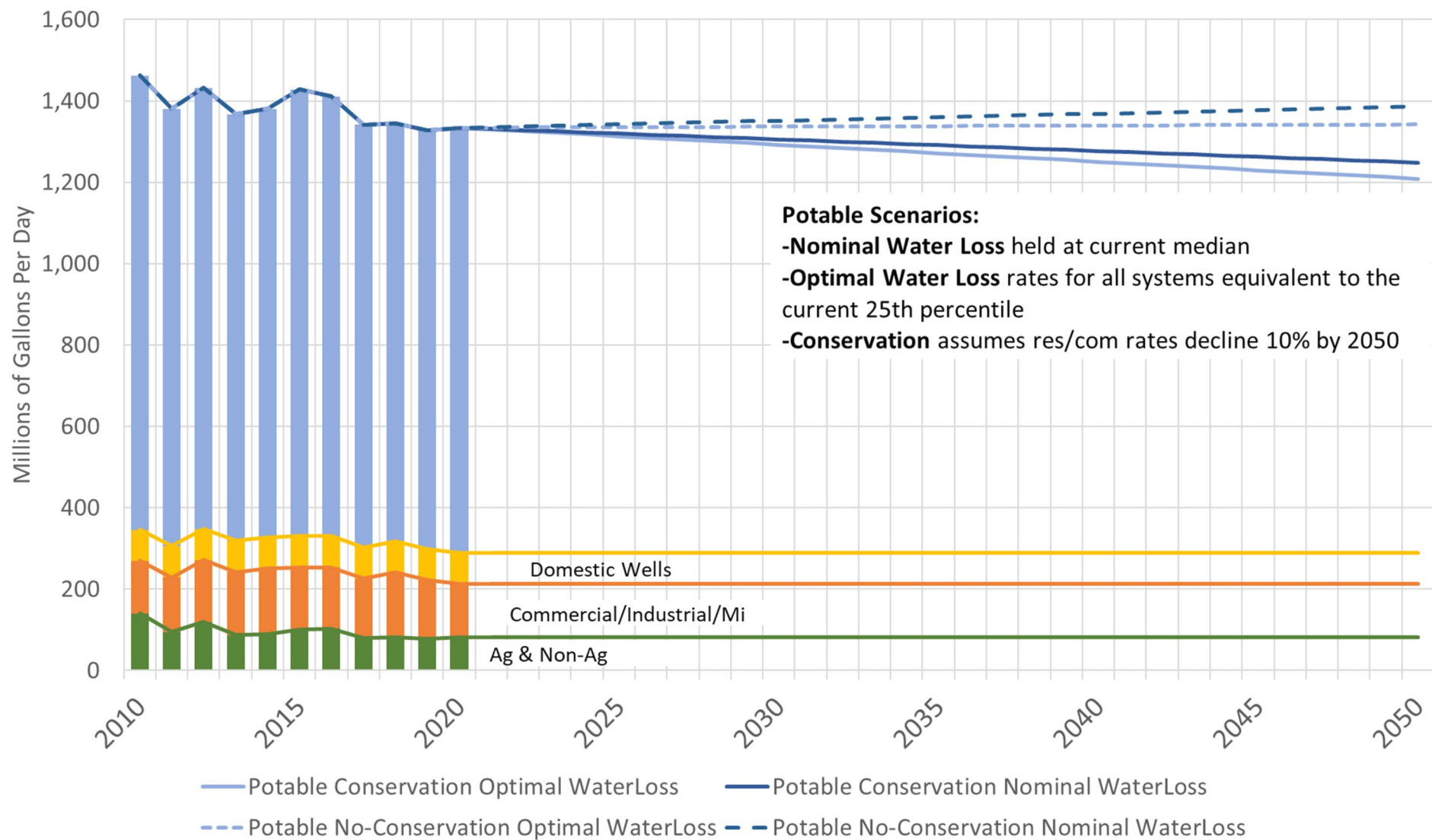
# Current Water Use: Statewide Transfers







# 2050 Forecasted Demands

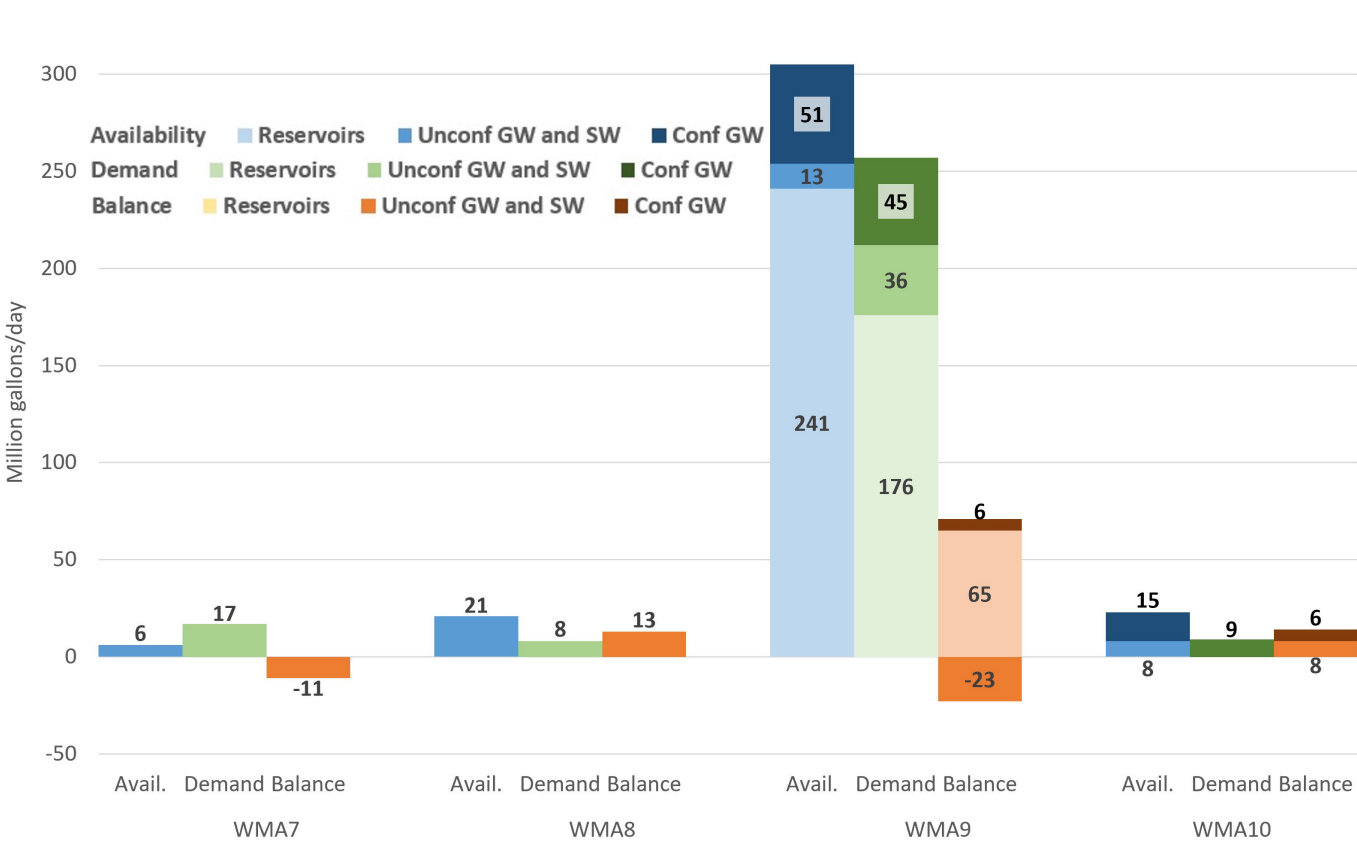






# Remaining Availability: Current

## Water Availability Summary: Raritan Water Region

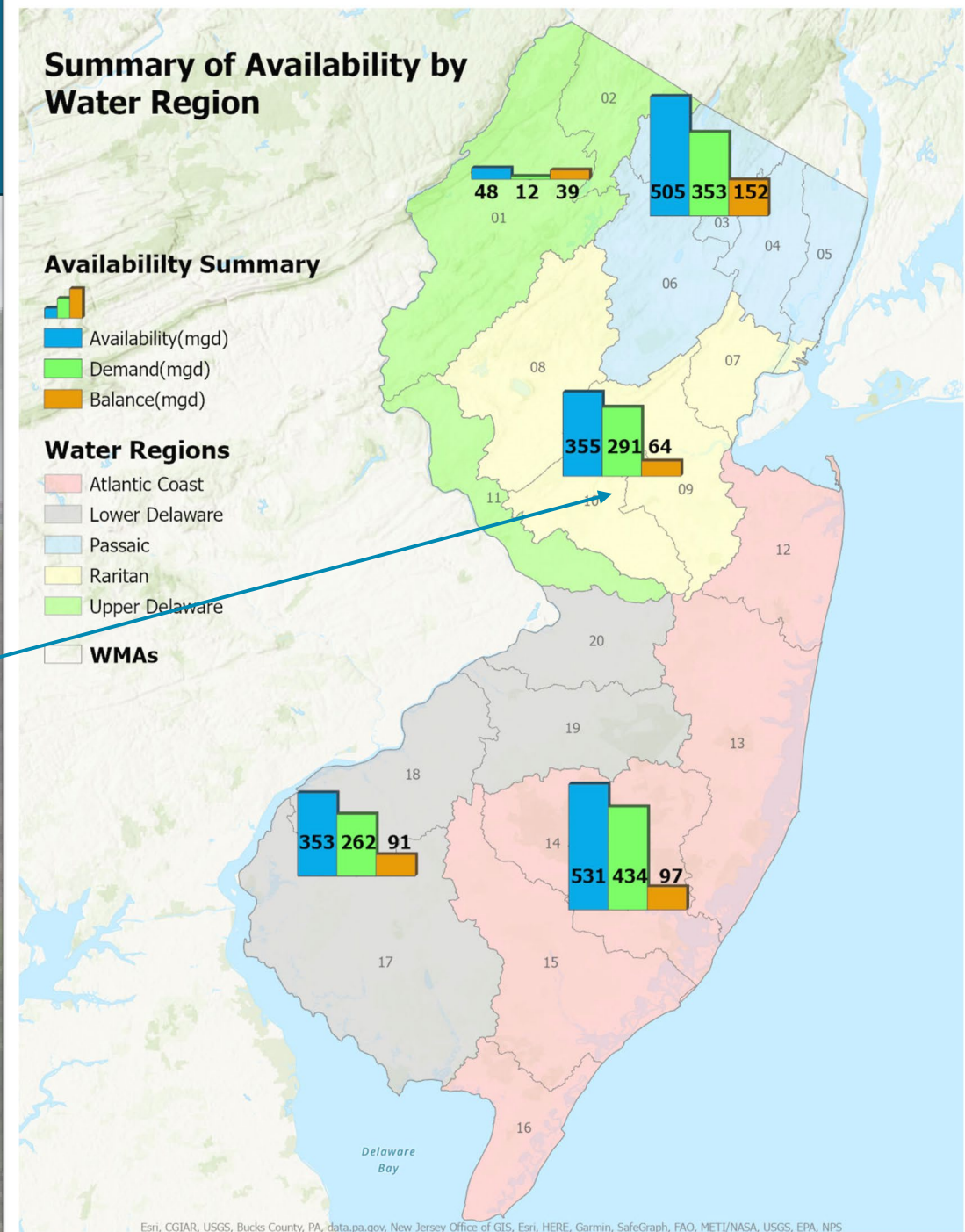
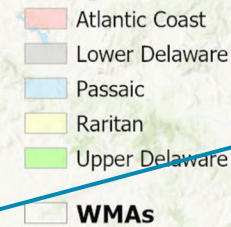


## Summary of Availability by Water Region

### Availability Summary

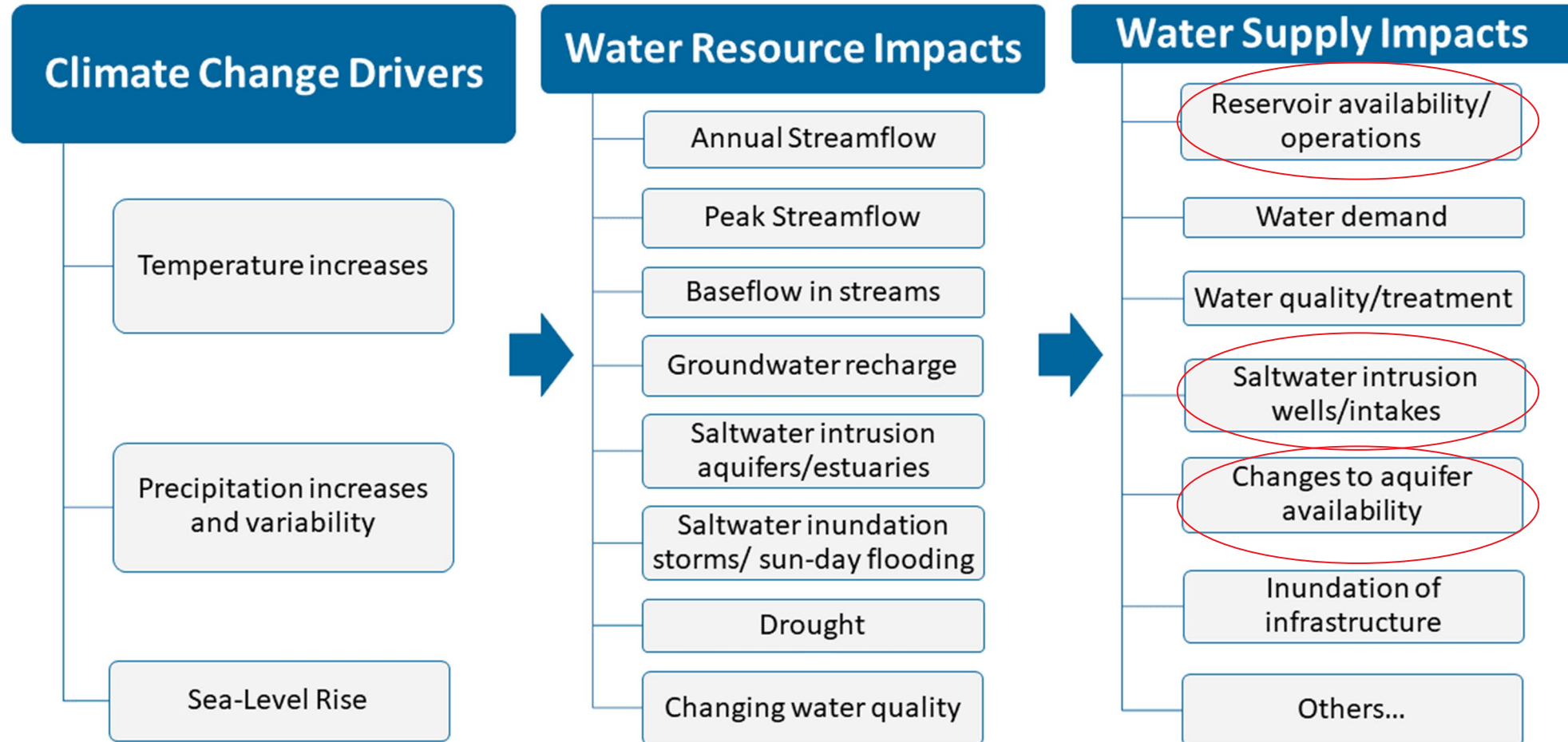


### Water Regions





# Climate Change and Water Supply







# Climate Change Findings

Statewide **water supply risks** from climate change **are manageable but only if** the state continues to take **actions to mitigate threats**.

The greatest concerns are associated with **saltwater intrusion** in near ocean-bay unconfined aquifers and estuaries.

**Local problems** do/will occur, and **resilient infrastructure** will be critical to withstand extreme events.

Assessments include:

- Sea level rise and saltwater intrusion/inundation
  - 2 ft ~2050 and 5 ft ~2100
- Groundwater recharge
- Streamflow trends and reservoir safe yields

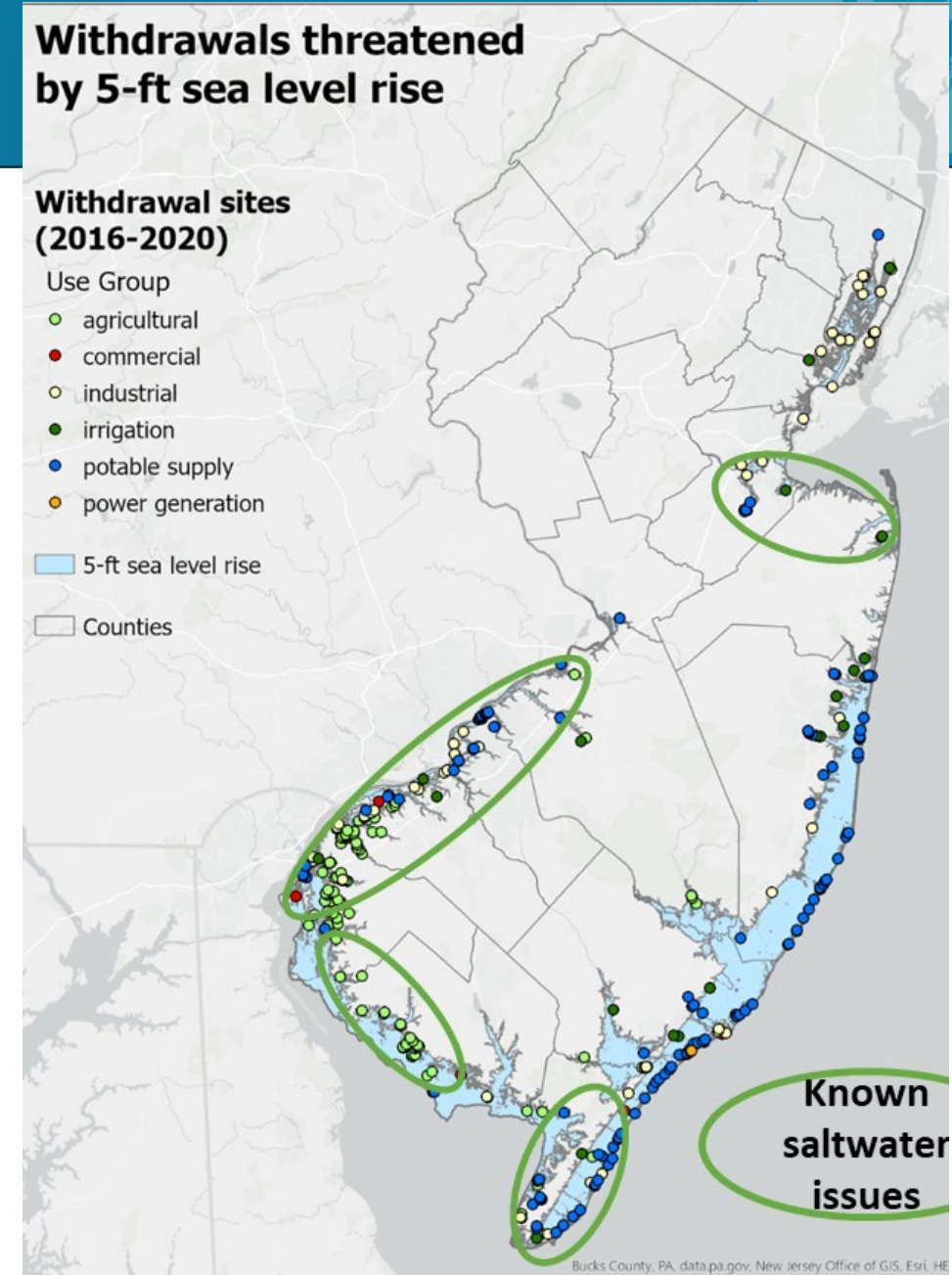
## Withdrawals threatened by 5-ft sea level rise

### Withdrawal sites (2016-2020)

- Use Group
- agricultural
  - commercial
  - industrial
  - irrigation
  - potable supply
  - power generation

5-ft sea level rise

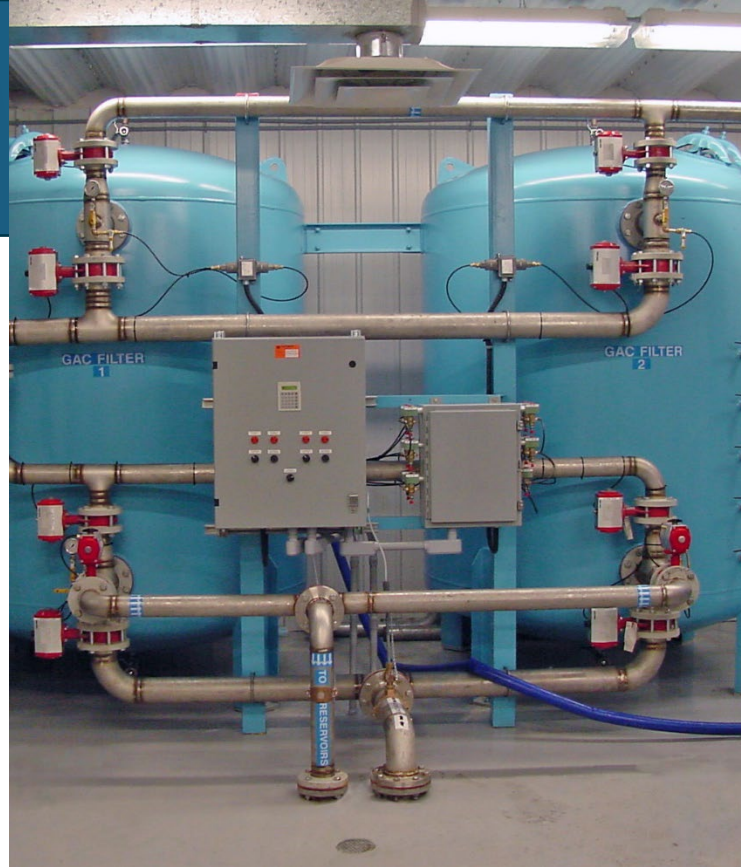
Counties





# Impacts of New and Emerging Contamination

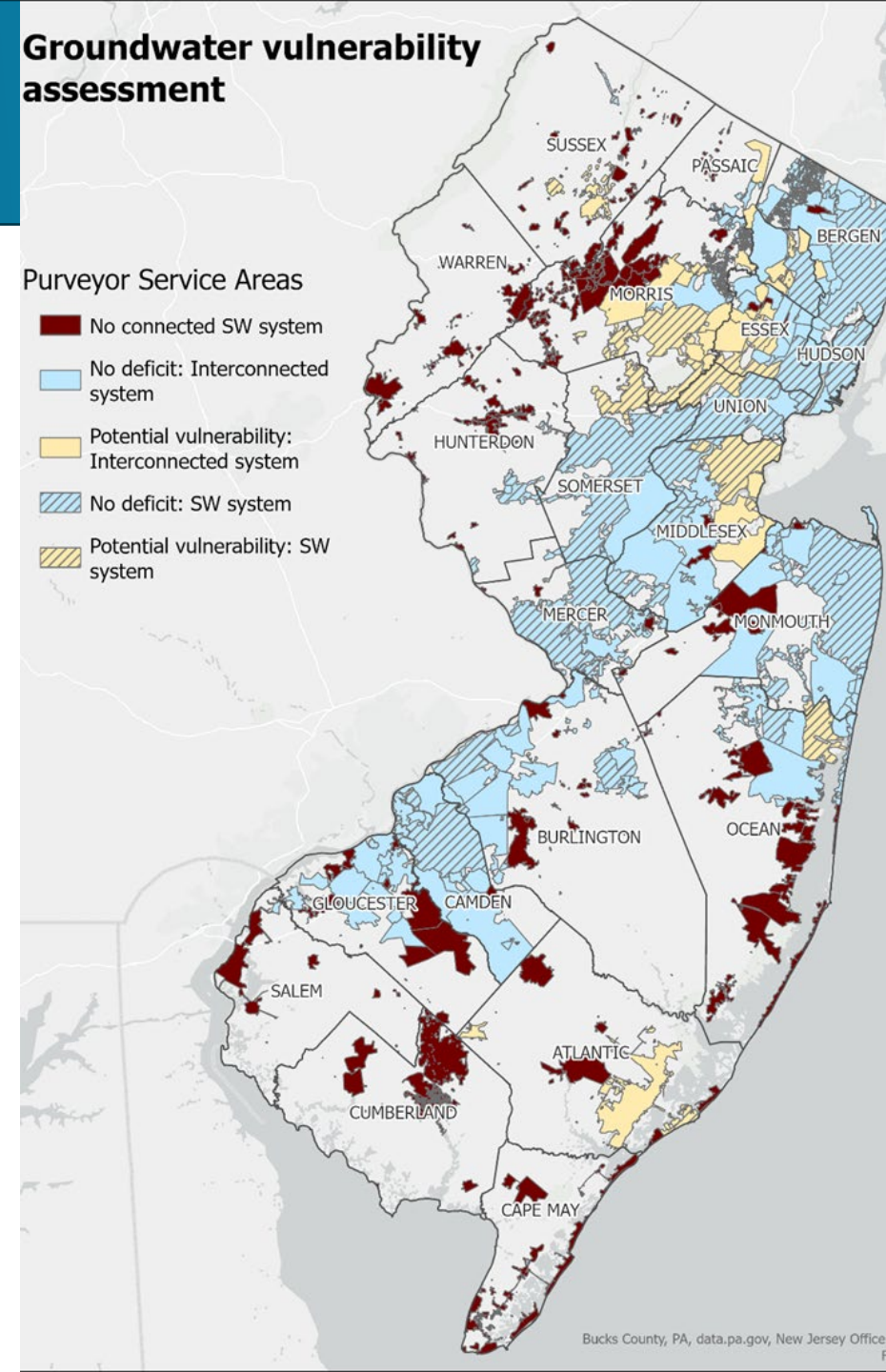
- Long-term treatment costs
- Water source changes
- Unintended consequences



## Groundwater vulnerability assessment

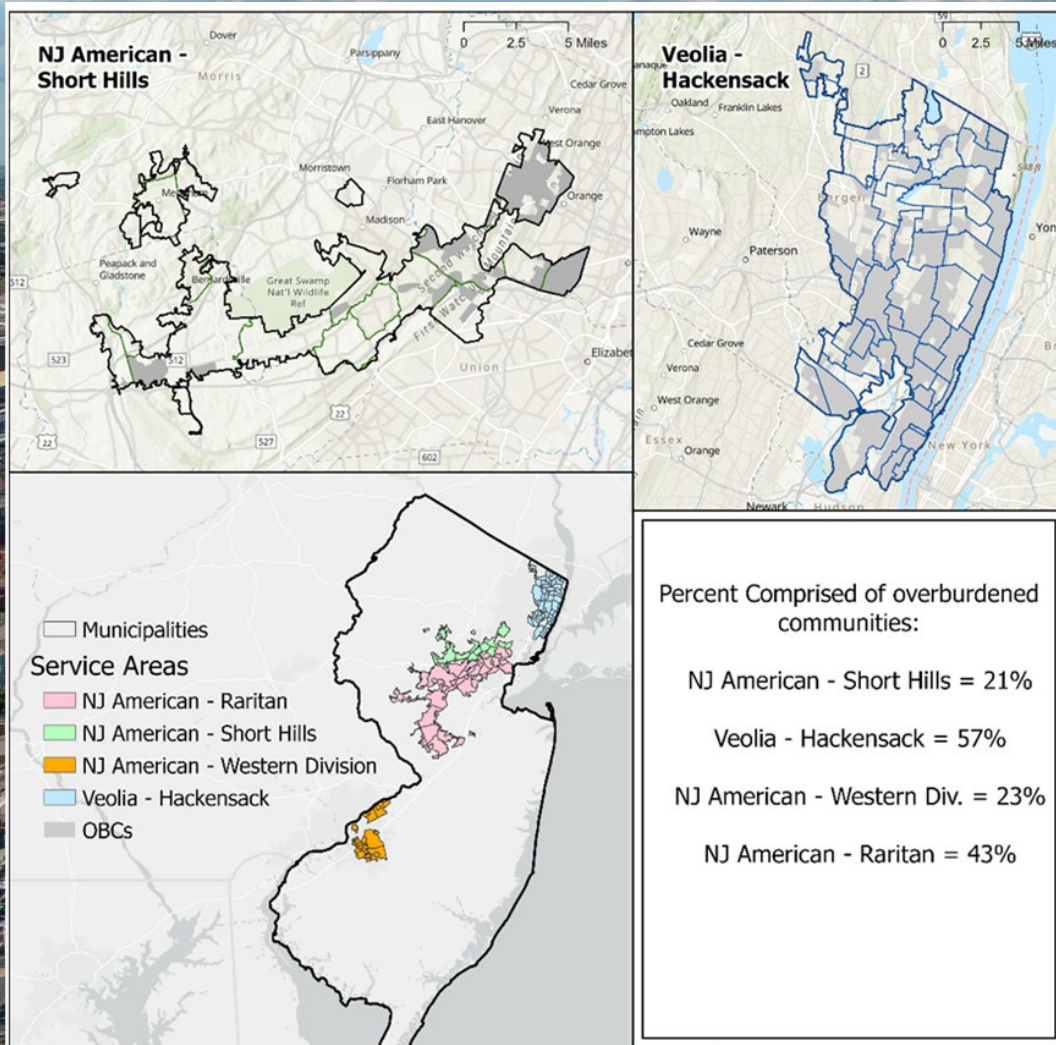
### Purveyor Service Areas

- No connected SW system
- No deficit: Interconnected system
- Potential vulnerability: Interconnected system
- No deficit: SW system
- Potential vulnerability: SW system

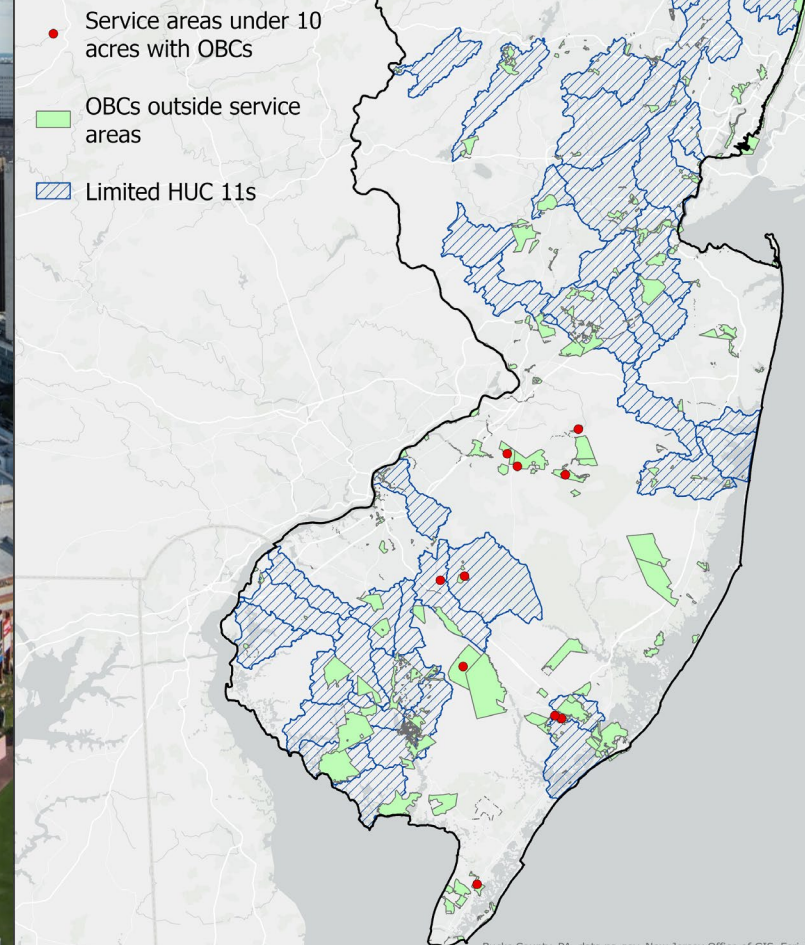




## Within Service Areas



## Outside Service Areas







# Overall Plan Findings



The draft plan concludes that, under normal conditions and in most regions, New Jersey has **adequate volumes of source water supply** and is **well-positioned** to address water supply **challenges** *as long as* the state **continues to take actions** to mitigate the **threats of climate change, aging infrastructure** and **emerging contaminants**.

The **availability** of surface water, unconfined groundwater, and confined aquifers, the use of which **varies geographically**, was modeled to investigate potential shortages. Although not evenly distributed throughout the state, total **natural water resource availability** (including reservoirs) remains about the same as the 2017 New Jersey Statewide Water Supply Plan determined. However, **current and forecasted use** did change, and a few regions showed **potential shortages**.





# Action Areas



**To meet the draft plan requirements and ensure that New Jerseyans continue to have ample, reliable, and safe supplies of water now and in the future, the following action areas are covered in the draft plan:**

- **Hydrologic Data, Monitoring, Models, and Assessments**
- **Regional and Statewide Water Supply Planning and Protection**
- **Climate Change - Water Availability Research and Modeling**
- **Climate Change - Infrastructure Resilience Recommendations**
- **Water Policy Modernization**
- **Asset Management and Resilience**
- **Policies and Priorities for Efficient Water Use**
- **Public Outreach**

Details can be found in Chapter 8





# Next Steps



- Completing legislatively required briefings, plus others
- Public meetings during 60-day comment period (per law)
  - In-person meeting
    - DEP Public Hearing Room
    - 401 East State Street, Trenton
    - March 15, 2024 10AM
  - Virtual meeting
    - Microsoft Teams
    - April 9, 2024 7PM
- 60-day public comment period ends April 26, 2024
- Release final Plan with comment-response document ~Sept 2024
- Plan implementation
  - Expanded/interactive webpage planned

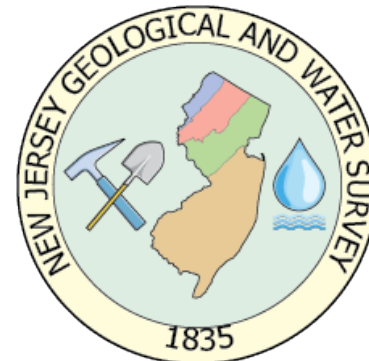
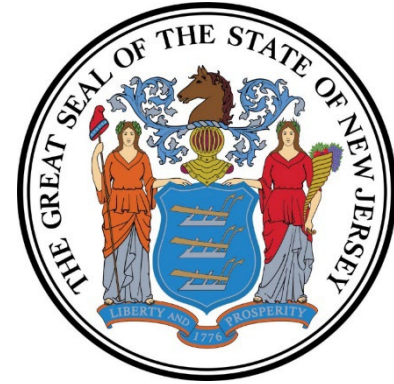




# Thanks



- Water Supply Plan Team
  - Department Leads:
    - NJGWS Water Supply Modeling and Planning
    - Division of Water Supply and Geoscience
    - Water Resource Management
  - Water Supply Advisory Council
  - Rutgers, The State University
- More info
  - email: [watersupplyplan@dep.nj.gov](mailto:watersupplyplan@dep.nj.gov)
  - website: <https://dep.nj.gov/water-supply-plan/>
  - New Jersey Water Withdrawal Data Summary Viewer  
<https://experience.arcgis.com/experience/9da78182503e467989c280bfdf741d3a>





# WSAC Member Comments

followed by  
Public Comment Session  
(3 minutes per person)

