

State of New Jersey
Department of Environmental Protection

2024 NEW JERSEY STATEWIDE WATER SUPPLY PLAN

APPENDIX B

SURFACE WATER SYSTEMS OF NEW JERSEY



Appendix B:

Surface Water Systems of New Jersey

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The following section describes the major surface water reservoir systems in New Jersey by drought region.

NORTHEAST DROUGHT REGION

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION

North Jersey District Water Supply Commission (NJDWSC) operates the Wanaque Reservoir, Ramapo pumping station, and Monksville/Wanaque South – Two Bridges Pump Station as one system. The Wanaque Reservoir, completed in 1929, is located in northeastern New Jersey, directly above the town of Pompton Lakes on the Wanaque River. In 1987, construction was completed on the Monksville Reservoir, also located on the Wanaque River, and just upstream of the Wanaque Reservoir, which culminated in total reservoir storage of 36.6 bg.

The NJDWSC reservoirs, Wanaque (29.6 bg) and Monksville (7.0 bg), are filled from three sources. The first source is the Wanaque River. Both Wanaque and Monksville are “on-stream” reservoirs on the Wanaque River. The Wanaque Reservoir, with a 94.4 square mile drainage area and a storage capacity of 29.6 bg, has a 10 mgd passing flow requirement downstream on the Wanaque River. The second source is the Ramapo River. The NJDWSC operates a pump station on the Ramapo River that can pump approximately 150 mgd of water into the Wanaque Reservoir, provided a 40 mgd passing flow requirement is maintained downstream of the pump station. The third source available is the Wanaque South -Two Bridges Pump Station, which consists of a single intake located on the Pompton River, upstream of the confluence of the Pompton and Passaic Rivers. From this pump station, six pumps can divert up to 250 mgd of water into the Wanaque Reservoir or into the Oradell Aqueduct, provided a minimum passing flow of 92.6 mgd is maintained in the Passaic River and required temperature and dissolved oxygen levels are met.

The NJDWSC consists of 13 member municipalities and water systems. The current approved safe yield of 190 mgd is distributed as follows:

Municipality	Daily Allocation of Currently Approved Safe Yield (mgd)
Bayonne	10.5
Bloomfield	7.51
Cedar Grove	1.2
Clifton (PVWC)	6.345
Glen Ridge	0.705
Kearny	13
Montclair	5.7
Patterson (PVWC)	18.8
Passaic (PVWC)	10.34
Newark	49.4
Nutley	3
Wayne	9.5
Veolia- Hackensack municipalities	48

Table B.1 North Jersey District Water Supply Commission Allocations

VEOLIA WATER NEW JERSEY

Veolia New Jersey serves water to Alpine, Bergenfield, Bogota, Carlstadt, Cliffside Park, Closter, Cresskill, Demarest, Dumont, East Rutherford, Edgewater, Emerson, Englewood, Englewood Cliffs, Fair Lawn, Fairview, Fort Lee, Franklin Lakes, Hackensack, Hasbrouck Heights, Haworth, Hillsdale, Leonia, Little Ferry, Lodi, Maywood, Montvale, Moonachie, New Milford, Northvale, Norwood, Old Tappan, Oradell, Palisades Park, Paramus, Ridgefield, Ridgefield Park, River Edge, River Vale, Rochelle Park, Rockleigh, Rutherford, Saddle Brook, South Hackensack, Teaneck, Tenaflly, Teterboro, Upper Saddle River, Wallington, Washington Township, Westwood, Woodcliff Lake, Wood-Ridge, Guttenberg, Hoboken, North Bergen, Secaucus, Union City, Weehawken, West New York and other towns through wholesale contracts. In addition to water received through its coownership of the Wanaque South project with NJDWSC, Veolia Water New Jersey (previously United Water New Jersey-UWNJ) system consists of four reservoirs in the Hackensack River Basin, four surface water diversions (the Wanaque-South project and intakes on the Saddle River, Hirschfeld Brook and Sparkill Creek), and a series of groundwater wells. The combined storage of the four reservoirs is approximately 13.9 billion gallons (bg). The total safe yield of Veolia Water New Jersey system is 126.5 mgd.

The four Hackensack River Basin reservoirs are as follows:

- Lake Deforest Reservoir is located 0.8 miles north of West Nyack, Rockland County, New York. The reservoir has a drainage area of 27.5 square miles and storage capacity of 5.67 bg. The importance of interstate agreements and cooperation is clear considering that Veolia Water New Jersey is reliant upon this source, which is located in New York State.
- Lake Tappan, downstream of Lake Deforest, is located 0.5 miles north of Old Tappan in Bergen County. The reservoir has a drainage area of 49 square miles and a storage capacity of 3.853 bg.
- Woodcliff Lake is a dammed impoundment along Pascack Brook, a tributary to the Hackensack River. The Lake is located 0.7 miles north of Hillsdale in Bergen County. The reservoir has a drainage area of 19.4 square miles and storage capacity of 0.871 bg.
- The Oradell Reservoir is the terminal impoundment of the Veolia Water New Jersey system and is located on the Hackensack River at Oradell in Bergen County. The reservoir has a drainage area of 113 square miles and a storage capacity of 3.507 bg.

As an equal partner in the Wanaque-South Project with the NJDWSC, Veolia Water New Jersey currently receives up to 48.0 mgd of water via the Oradell Aqueduct, a 17-mile pipeline that connects NJDWSC's Wanaque system and Veolia's Oradell Reservoir. Intakes and pump stations on the Saddle River, Hirshfeld Brook and Sparkill Creek can also be used to provide additional storage in the Oradell Reservoir.

PASSAIC VALLEY WATER COMMISSION

The Passaic Valley Water Commission (PVWC) treats and supplies water to the towns of Passaic, Paterson, Clifton, Lodi, Elmwood Park, Prospect Park, Little Falls, West Paterson, and other communities through wholesale contracts. The PVWC operates three intakes on the Pompton and Passaic Rivers (Jackson Avenue, Two Bridges, and Little Falls), and an off-stream reservoir, known as Point View. The Jackson Avenue Pump Station on the Pompton River houses five pumps with a capacity of 10 mgd each. PVWC is permitted to divert 1,550 mgm from this intake to fill the Point View Reservoir, but must maintain a 136.2 cubic feet per second (cfs) passing flow at the United States Geological Survey (USGS) gaging station, located downstream of the Jackson Avenue diversion. The Point View Reservoir has a maximum storage capacity of 2.9 bg.

During times of low flow, releases are made from the reservoir to the Pompton River to ensure 75 mgd is available for diversion by PVWC at the Little Falls Pump Station and treatment plant. In addition, PVWC must maintain a minimum passing flow of 0.62 cfs for the Haycock Brook, immediately below the reservoir. The PVWC also operates intakes at the Two Bridges and Little Falls locations. They have two 50 mgd pumps in the Two Bridges Pump Station that divert water from the Pompton and Passaic Rivers. Water is transferred from Two Bridges to the Little Falls Treatment Plant via a 60-inch main. The Little Falls diversion is PVWC's farthest downstream diversion point, where three-60 mgd pumps divert water, via a canal off the Passaic River, to the treatment plant. The PVWC is permitted to divert up to 2,325 mgm from Two Bridges and/or Little Falls. PVWC is also a member of the NJDWSC and receives 34.485 mgd from that source.

CITY OF NEWARK

The City of Newark Water Department serves the City of Newark, Pequannock Township, the City of East Orange, Wayne Township, the Town of Bellville, the City of Elizabeth, and Bloomfield Township. The City of Newark's water sources lie within the Pequannock Watershed, in the Townships of Kinnelon, West Milford, Jefferson, Hardyston, and Vernon. The City of Newark also owns approximately 80% of the property surrounding its reservoirs. The five main reservoirs of the Newark system – Echo Lake, Canistear, Oak Ridge, Clinton, and Charlottesburg Reservoirs – are all located on the Pequannock River or its tributaries, and are all wholly reliant on gravity flow for storage. The combined storage of the five reservoirs is 14.80 bg, while the safe yield of the entire system is 49.1 mgd. Newark also receives 49.4 mgd from the NJDWSC system.

Newark's Pequannock System Reservoirs:

- Echo Lake Reservoir is located in Passaic County, 1.6 miles north of Charlottesburg and 1.9 miles upstream from the mouth of the Macopin River. The reservoir has a drainage area of 4.35 square miles including the Matthews Brook diversion and a storage capacity of 2.004 bg at spillway elevation.
- Canistear Reservoir is located in Sussex County, 1.8 miles northeast of Stockholm. It has a drainage area of 6.08 square miles and a storage capacity of 2.407 bg at spillway elevation.
- Oak Ridge Reservoir is located in Passaic County, at the dam of the Pequannock River, 0.9 miles southwest of Oak Ridge. The reservoir has a drainage area of 27.3 square miles and a storage capacity of 3.909 bg at spillway elevation.
- Clinton Reservoir is located in Passaic County, at the dam on Clinton Brook, 2.0 miles north of Newfoundland, New Jersey. It has a drainage area of 10.5 square miles and a storage capacity of 3.518 bg at spillway elevation.
- Charlottesburg Reservoir is located in Passaic County, 1.1 miles upstream from the Macopin River, and 1.5 miles southeast of Newfoundland, New Jersey. It has a drainage area of 56.2 square miles and has a storage capacity of 2.964 bg at spillway elevation with its bascule gate closed. This reservoir is where the Newark diversion is taken, consequently being the most downstream of the five reservoirs.

CITY OF JERSEY CITY

The Jersey City system is comprised of the Boonton Reservoir system and is owned by the City of Jersey City. Currently, operations of the Jersey City system have been granted to Veolia under contract. The system supplies water to Jersey City, Caldwell, and Lyndhurst. The Boonton Reservoir System consists of two reservoirs located in the Rockaway River Watershed: Boonton Reservoir and Splitrock Reservoir. The system has a combined storage of 11.3 bg. The Boonton Reservoir is the southernmost of the two and is the point of diversion for the water system treatment plant. A 7.9 mgd minimum passing flow requirement must be satisfied in the Rockaway River, downstream of the reservoir diversion. The safe yield of the system is 56.8 mgd and consists of only natural water flow into the reservoirs.

NEW JERSEY AMERICAN WATER COMPANY – PASSAIC SYSTEM

New Jersey American Water Company's Passaic system serves the following: Bedminster, Berkeley Heights, Bernard, Bernardsville, Chatham, Chester, Far Hills, Livingston, Long Hill, Maplewood, Millburn, New Providence, Short Hills, Springfield, Summit, West Orange and portions of City of Orange, Florham Park, Harding, Hillside, Livingston, Mendham, South Orange, Union, Warren, and Watchung. The Passaic System consists of several groundwater wells, three surface water intakes and three off-stream reservoirs located in the upper Passaic River Basin. These reservoirs are called Canoe Brook 1, 2 and 3. The combined storage of the three is 2.84 bg. The safe yield of the entire system is 10.8 mgd, which is fed mainly by water pumped from two surface water sources – Canoe Brook and Passaic River.

TAYLORTOWN RESERVOIR SYSTEM – TOWN OF BOONTON

The Town of Boonton and surrounding Boonton Township receive water from four groundwater wells and one surface water source, Taylortown Reservoir, sometimes referred to as Taylorsville Reservoir. The system serves Boonton Town, Boonton Township, Montville Township and Mountain Lakes Borough where it serves an approximate population of 9,000 people.

The reservoir is approximately 82 acres in area and had an approximate capacity of 125 million gallons when constructed in 1895 but subsequently been reduced to 75 million gallons. The Taylortown reservoir intake has a rated pump capacity of less than or equal to 1,400 gallons per minute or 2.016 mgd. Water from Taylortown Reservoir is pumped via two 20 HP centrifugal pumps, each 700 gallons per minute (gpm), into the treatment plant where it goes to the distribution system. The estimate safe yield of the reservoir itself as being 0.70 mgd was identified by work done in 1995 as part of the 1996 New Jersey Statewide Water Supply Plan. The applicable water allocation permit (WAP) limits for all diversion sources are 61.7 mgm and 575 mgy, while the monthly allocation limit for Taylortown Reservoir is 21.7 mgm and 250 mgy.

CLYDE POTTS RESERVOIR – SOUTHEAST MORRIS COUNTY MUA (SMCMUA)

Clyde Potts Reservoir is 15.6 mg and was created by an earth and concrete dam constructed in 1932 on Harmony Brook and has a passing flow requirement of 0.13 cfs. The reservoir is located entirely within the Mendham Township boundaries, while about a third of the watershed supplying the reservoir surface waters is in the neighboring town of Randolph. The SMCMUA diverts surface water directly to the treatment plant by a series of pumps totalizing 2,778 gpm. The reservoir has an allocation of 124 mgm and 795 mgy and serves an estimated population of approximately 63,000 people.

The SMCMUA system has interconnections with Morris County MUA, Parsippany-Troy Hills, New Jersey Psychiatric Institute, Randolph Township, East Hanover Township, Madison Borough, and the Borough of Florham Park and serves Hanover Township, Borough of Morris Plains, Morris Township, Morristown Township and portions of the Borough of Florham Park, Chatham Township, Harding Township, Randolph Township and Parsippany-Troy Hills.

KAKEOUT RESERVOIR – BOROUGH OF BUTLER RESERVOIR SYSTEM

Kakeout Reservoir (formerly Kikeout Reservoir) has a drainage basin of 5.61 square miles at the point of diversion and serves as a surface water supply reservoir system for Butler Borough, Passaic Valley Water Commission, Kinnelon Borough of Bloomingdale and the Borough of Riverdale, serving an approximately 9,650 people. The Reservoir consists of Kakeout Dam which is a diaphragm earthen fill embankment dam approximately 30 feet high and 410 feet long with a concrete core wall with a minimum 2-foot thickness extending into the underlying rock and glacial till foundation having a base width of 4 feet. This structure is owned, maintained, and operated by the Butler Water Company. The downstream passing flow below dam is 0.261 cfs. Water is diverted by gravity flow from the reservoir to the treatment plant with a permitted water allocation of 124 mgm and 1488 mgy at a maximum diversion rate of 2800 gpm.

NORTHWEST DROUGHT REGION

MORRIS LAKE (NEWTON RESERVOIR) – NEWTON TOWN WATER UTILITY

Morris Lake, also known as Newton Reservoir, is in Sparta Township in the Sparta Mountains in Sussex County, New Jersey. It has been the source of drinking water for the Town of Newton since the early 1900's. Originally Morris Lake was a deep, natural lake that covered 130 acres and was fed mainly by natural springs with a drainage area of about 1.25 square miles. In the mid-1800s, another dam was built approximately 0.25 mile below the lake, which formed a pond between the lake and Pine Swamp Brook. Eventually the pond and the lake were united when the pond was raised to the level of the first dam located at the original outlet of Morris Lake. Through damming a portion of Pine Swamp Brook, an artificial channel and smaller artificial lake were created below Morris Lake, which is now known as Glen Lake. The drainage area of these two lakes combined was increased to about 3.80mi². Recent studies and surveys of the lake show a maximum depth of 119 feet and an average depth of 42 feet. The capacity of the reservoir as full spillway elevation is 1.98bg with a corresponding surface area of 145 acres. The water system has a storage capacity of 2.0 mg and allocation amounts of 38.75 mgm and 393 mgy which serves a population of approximately 8,300 people.

CENTRAL DROUGHT REGION

NEW JERSEY WATER SUPPLY AUTHORITY

The New Jersey Water Supply Authority (NJWSA) owns and operates a surface water supply complex that indirectly supplies a large quantity of water to customers in Middlesex, Hunterdon, Mercer, Somerset, and Union. This complex is composed of three facilities: Spruce Run Reservoir, Round Valley Reservoir, and the Delaware & Raritan (D&R) Canal.

SPRUCE RUN AND ROUND VALLEY RESERVOIRS

Spruce Run Reservoir is located on the Spruce Run just north of Clinton, New Jersey. It has a drainage area of 41 square miles and a storage capacity of 11 bg. It is filled through natural flow from its two largest tributaries – Spruce Run and Mulhockaway Creek – and discharges into the South Branch of the Raritan River near Clinton. Statutory passing flows of 40 mgd at the USGS gaging station at Stanton and 70 mgd at the USGS stream gage at Manville are required.

Round Valley Reservoir is located just east of Spruce Run Reservoir. It has a storage capacity of 55 bg and is almost entirely reliant on water pumped from the South Branch of the Raritan River at the Hamden Pumping Station since its drainage area is a mere 5.7 square miles. Water can be released as needed to either the Hamden Pumping Station or the South Branch of Rockaway Creek (a tributary of the Lamington River) by gravity lines.

Water released from either reservoir travels downstream to maintain flow at the intake of New Jersey American Water/Elizabethtown Water Company and at the intakes of other users. There is also a required statutory passing flow of 90 mgd at the USGS stream gage at Bound Brook.

The Spruce Run and Round Valley systems have a safe yield of 176 mgd at Bound Brook. This, in combination with the D&R Canal safe yield of 65 mgd provides the NJWSA with a total yield of 241 mgd.



Spruce Run

DELAWARE AND RARITAN CANAL

Originally constructed in 1834 as a barge canal, the Delaware & Raritan Canal (D&R Canal) underwent extensive rehabilitation by the New Jersey Water Supply Authority in the 1980's. The D&R Canal is now operated to transfer water from the Delaware River into the Raritan River Basin for consumption. The feeder canal extends 22 miles along the Delaware River from Bull's Island, near Frenchtown, south to Trenton. The main canal runs 36 miles from Trenton to New Brunswick with a break at the Route 1 crossing.

The NJWSA is allocated up to 100 mgd of Delaware River water via the D&R Canal, although under the "1983 Good Faith Agreement" of the Delaware River Basin Commissioners, only 65 million gallons per day may be diverted during a Drought Warning or Emergency designated by the Delaware River Basin Commission. This potential reduction in allocation is currently reflected in the safe yield of the NJWSA System. Under the Flexible Flow Management Plan (FFMP), the Parties to the 1954 Supreme Court decree agreed to temporarily re-establish a portion of the allotment to 85 mgd under drought conditions.

Water in the D&R Canal is transported by gravity flow through Hunterdon, Mercer, and Somerset Counties along the path of the Millstone River to the Raritan River. Most of the safe yield of the system is diverted by purveyors at Bound Brook. At Bound Brook, the Raritan River, containing water released upstream from the Spruce Run and Round Valley Reservoirs, is directly adjacent to the D&R Canal, containing the Delaware River water. A pump station located at this point is able to transfer water between the Raritan River and D&R Canal.

COASTAL NORTH DROUGHT REGION

NEW JERSEY WATER SUPPLY AUTHORITY – MANASQUAN RESERVOIR

The New Jersey Water Supply Authority’s Manasquan Reservoir supplies water directly or indirectly to the following: Avon-by-the-Sea, Belmar, Brielle, Keyport, Lake Como, Matawan, Red Bank, Sea Girt, Spring Lake, Spring Lake Heights, Wall Township and New Jersey American Water. The Manasquan Reservoir is located entirely within the Manasquan River drainage basin in southeastern Monmouth County and northeastern Ocean County. It is located on Timber Swamp Brook, which is a tributary of the Manasquan River. The reservoir has a usable capacity of 4.67 bg and a 740-acre surface water body area, while having a safe yield of 30 mgd. The drainage area above the reservoir on Timber Swamp Brook is approximately 3.3 square miles, while the drainage area above the reservoir intake on the Manasquan River is approximately 65 square miles. The intake for the reservoir is located on the Manasquan River at Hospital Road, less than a half-mile west of the Garden State Parkway in Wall Township. The intake utilizes five intake pumps of which four can divert 40 mgd and one capable of diverting 20 mgd. The minimum passing flow on Timber Swamp Brook is 0.969 mgd, while the minimum passing flow below the intake on the Manasquan River is 8 mgd or 12 cfs.

Surface water is diverted from the Manasquan River or Manasquan Reservoir. The raw water can be diverted either to the NJAWC – Glendola Reservoir (described below), Oak Glenn Treatment Plant, or to the NJWSA Manasquan Treatment Plant for treatment and distribution, with excess returning to the Manasquan River aiding the 8 mgd or 12 cfs passing flow below the intake.

The Manasquan Water Treatment Plant is located on Hospital Road in the Allenwood section of Wall Township and is owned by the Monmouth County Improvement Authority but is operated by the NJWSA. This plant provides water used by residents in Brielle, Sea Girt, Spring Lake, Spring Lake Heights, and Wall Township.

NEW JERSEY AMERICAN WATER COMPANY – COASTAL NORTH SYSTEM – SWIMMING RIVER AND GLENDOLA RESERVOIRS

New Jersey American Water Company’s (NJAWC) Coastal North System serves over 350,000 people within Monmouth and Ocean Counties. In addition to many groundwater wells, they divert water from intakes on the Jumping Brook and the Shark River and operate the Swimming River and Glendola reservoirs. The Swimming River Reservoir has a storage capacity of 2.3 bg, but only a usable capacity of 1.82 bg. Its drainage area is 48.5 square miles. The Swimming River Reservoir is fed by the Ramanessin Brook, Fourth Creek, Bordens Brook, Willow Brook, Hopp Brook, Big Brook, Fulling Mill Brook, Barren Neck Brook, Trout Brook, Yellow Brook, Miry Bog Brook, Mine Brook, Slope Brook, Hockhockson Brook, and Pine Brook. These tributaries allow the Swimming River to meet its passing flow of 9.4 cfs (or 6 mgd) below the reservoir.

The Glendola Reservoir is operated as an “off-river” storage facility to provide storage for flows pumped from the Shark River and Jumping Brook. The property is located in the Glendola section of Wall Township. The reservoir has a drainage area of 16.0 square miles and a storage capacity of 1 billion gallons. It maintains passing flows of 1.25 mgd in the Shark River and 0.75 mgd in the Jumping Brook. The reservoir has a safe yield of 11.1 mgd, inclusive of the 5.4 mgd purchased from the New Jersey Water Supply Authority Manasquan System and pumped to the Glendola Reservoir.

NEW JERSEY AMERICAN WATER – COASTAL NORTH SYSTEM – OAK GLENN TREATMENT PLANT

Originally constructed in 2003, New Jersey American’s Oak Glenn Treatment Plant is a critical water supply asset to the region. Due to rapid population growth throughout the mid 2000’s, NJAWC sought to enhance and upgrade the plant to meet increasing normal and peak demands for potable water. An expansion project at the treatment plant began in early 2016 and finished in 2019 which expanded treatment capacity from the originally designed 10 mgd to 17.5 mgd.

BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY

The Brick Township Municipal Utilities Authority (BTMUA) serves Brick, portions of Howell, and provides bulk sales to Point Pleasant Beach, Point Pleasant Borough, and Lakewood Township. The BTMUA has a number of groundwater wells (including those formerly owned by Parkway Water Company (PWC) due to BTMUA’s acquisition of PWC), two surface water intakes on the Metedeconk River, and a reservoir. The reservoir is located on a 120-acre tract that borders Brick and Wall Townships, has a water surface area of approximately 90 acres, and holds approximately one billion gallons of water. The reservoir is operated as

a pump/storage facility which is fed by a 42" ductile iron pipe which pumps water from the Metedeconk River to the reservoir and releases through the same pipe via gravity. The Metedeconk River is fed by a 70-square mile watershed that traverses seven municipalities in northern Ocean and southern Monmouth counties. The BTMUA draws water predominantly from surface water via the river and its pumped storage reservoir, which supply 74 percent of the water. The remaining withdrawals are comprised of groundwater withdrawn from BTMUA's 2,000-foot-deep wells in the Raritan Magothy Aquifer and other wells located in the Kirkwood-Cohansey Aquifer. The existing allocation of the surface water system is 650 mgm and 3.7 bgy.

The safe yield of the surface water system is calculated to be 17 mgd, based on the 1981 and 2002 droughts. In addition, the creation of the BTMUA reservoir (860 million gallons) increased the storage of the Coastal North Drought Region from 7.9 bg to 8.8 bg (an 11.39% increase). This system must maintain a passing flow at the North Branch of the Metedeconk River of 14 cfs.

COASTAL SOUTH DROUGHT REGION

ATLANTIC CITY MUNICIPAL UTILITIES AUTHORITY

The Atlantic City Municipal Utility Authority (ACMUA) was established on September 14, 1978 by action of the Board of Commissioners of the City of Atlantic City, who created it under the provisions of the New Jersey Municipal and County Utilities Law. On Jan 22, 1980, the ACMUA acquired the Atlantic City Water Utility and assumed operation and maintenance of the system. ACMUA now serves approximately 150,000 people in Atlantic County. The Authority's main facilities include two surface water reservoirs, Kuehnle and Doughty Ponds with a combined capacity of approximately 500 million gallons. The ACMUA also possesses twelve wells and three water towers with a combined capacity of more than 9 million gallons.

SOUTHWEST DROUGHT REGION

The Southwest Drought Region runs along the western side of the state along the Delaware River from Trenton to south of Camden. The region includes two major regional surface water suppliers: the City of Trenton and the New Jersey American Water Company - Western Division. Both systems have intakes on the mainstem of the Delaware River.

NEW JERSEY AMERICAN WATER COMPANY DELTRAN WATER TREATMENT PLANT – DELAWARE RIVER INTAKE

The NJAWC Delran Water Treatment Plant treats water drawn from the Delaware and delivers as much as 40 mgd of water to its customers. Built in 1996, the plant was created to address the regional critical water supply needs the region's groundwater supplies could not as part of the Critical Area 2 declaration. This on river diversion is used for Public Community Supply and serves approximately 260,000 people in the following communities:

Beverly City, Burlington Township, Cinnaminson Township, Delanco Township, Delran Township, Edgewater Park Township, Maple Shade Township, Moorestown Township, Mount Laurel Township, Palmyra Borough, Riverside Township, and Riverton Borough in Burlington County; Audubon Borough, Audubon Park Borough, Barrington Borough, Bellmawr Borough, Camden City, Cherry Hill Township, Clementon Borough, Gibbsboro Borough, Gloucester Township, Haddon Heights Borough, Haddon Township, Haddonfield Borough, Hi-Nella Borough, Laurel Springs Borough, Lawnside Borough, Lindenwold Borough, Magnolia Borough, Mount Ephraim Borough, Oaklyn Borough, Pennsauken Township, Runnemede Borough, Somerdale Borough, Stratford Borough, and Voorhees Township in Camden County; and Elk Township in Gloucester County.



Bulls Island

TRENTON WATER WORKS – THE CITY OF TRENTON – DELAWARE RIVER INTAKE

Trenton Water Works, owned and operated by the City of Trenton, maintains the Trenton Water Filtration Plant which has the capacity to treat and distribute 65 mgd of water from the mainstem of the Delaware River to an approximate population of 200,000. The water is diverted into two 8' x 5' tunnels open to the river 200' from the bank. The diverted water flows by gravity to three pumps where it is combined, metered, and treated. The systems diversion serves the communities of Trenton, Ewing, and portions of Lawrence, Hamilton, and Hopewell Townships. Trenton distribution system is currently interconnected with Aqua New Jersey, New Jersey American Water – Elizabethtown and Lawrence Township.