

NEW JERSEY WATER SUPPLY AUTHORITY

A COMPONENT UNIT
OF THE STATE OF NEW JERSEY



2023 ANNUAL REPORT

AND THE

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED

JUNE 30, 2023 AND 2022



Government Finance Officers Association

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New Jersey Water Supply Authority

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO

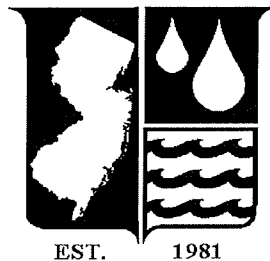
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FOR THE FISCAL YEARS ENDED
JUNE 30, 2023 AND 2022

Prepared by:
Finance and Accounting Staff

Marc Brooks
Executive Director

2023 Annual Report

Governor
Philip D. Murphy



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Chair

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Assistant Secretary
Chair, Capital Projects Committee
Chair, Insurance Committee

Staff

Marc Brooks, P.E.
Executive Director

Kathrine Hunt, Esq.
Deputy Attorney General

2024 Monthly Meetings

The 2024 Monthly Meetings of the New Jersey Water Supply Authority are scheduled to be held beginning at 2:00 p.m. on the following Mondays:

January 8, 2024

February 5, 2024

March 4, 2024

April 1, 2024

May 6, 2024

June 3, 2024

July 1, 2024

August 5, 2024

September 9, 2024

October 7, 2024

November 4, 2024

December 2, 2024

Meetings may be held by teleconference or in person. Dial-in or location information will be provided on the Authority website in advance of the meeting. The period from 12:00 p.m. to 2:00 p.m. on the above dates is set aside, as needed, for separate Committee meetings of the Personnel, Finance, Capital Projects and other Committees of the Authority.

Cover

Photo by Darin Shaffer, Round Valley Reservoir

The New Jersey Water Supply Authority was created on October 7, 1981 (P.L. 1981, c. 293) to operate, on a self-supporting basis, the existing State water supply facilities and to develop future State water supply projects as recommended in the State Water Supply Master Plan. The Authority's Spruce Run/Round Valley Reservoirs System and the Delaware and Raritan Canal Water Transmission Complex (the Raritan Basin System), provides the basic source of water supply to a number of public and private water utilities serving more than 1,500,000 people in central New Jersey. The Manasquan Water Supply System in Monmouth County commenced delivery of this new surface water supply to a number of public and private water utilities, serving more than 250,000 people in the Monmouth County area, on July 1, 1990. Under agreement with the Southeast Monmouth Municipal Utilities Authority, the Authority also operates and maintains a four million gallon per day water treatment plant and distribution system for five municipalities in Monmouth County.

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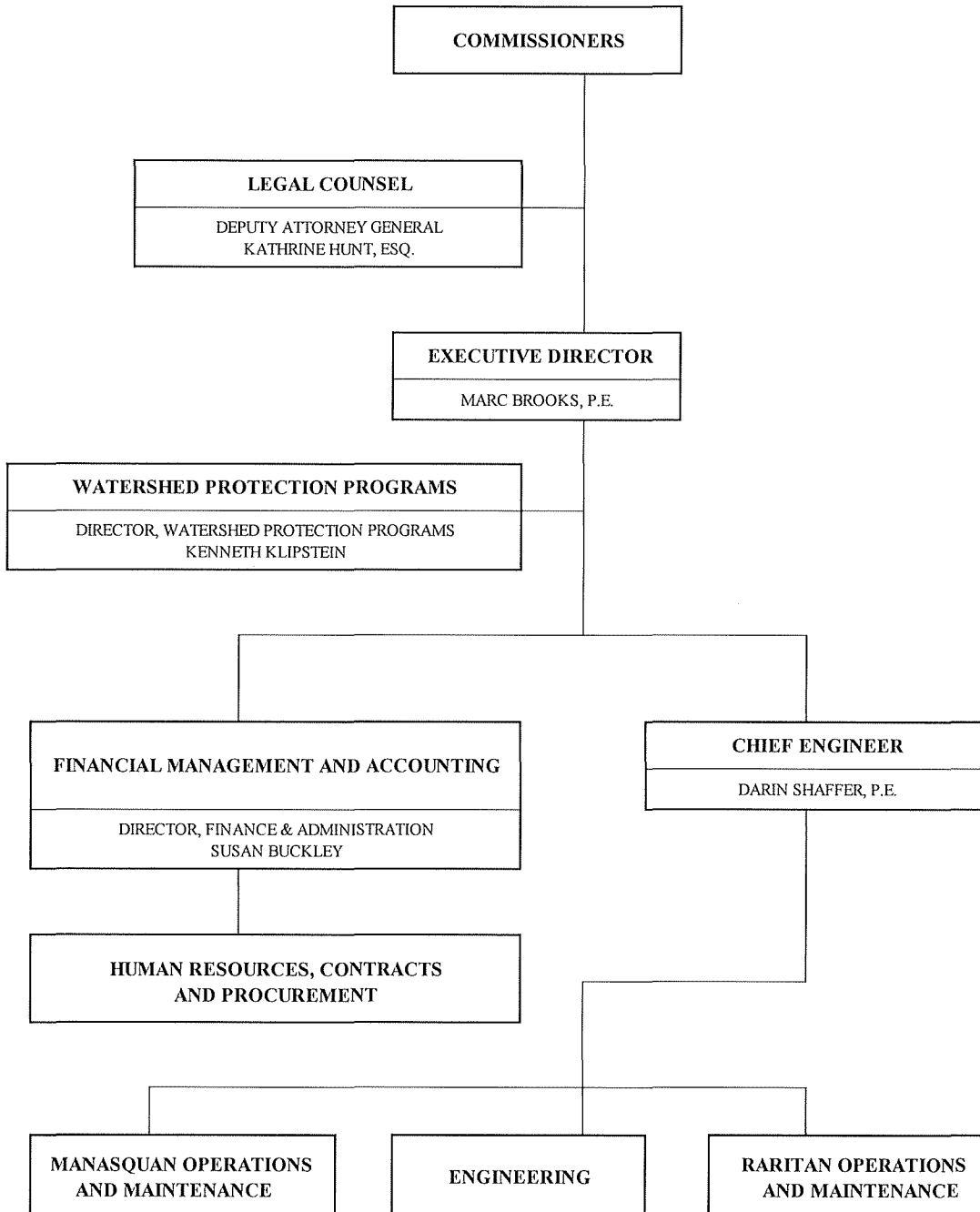
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Letter to Governor and Legislature

NEW JERSEY WATER SUPPLY AUTHORITY



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January 8, 2024

To the Honorable Philip D. Murphy, Governor and Members of the New Jersey Legislature

I am pleased to submit the 42nd Annual Report of the New Jersey Water Supply Authority. The Authority was created on October 7, 1981 (P.L. 1981, c.293) and was established in but not of the Department of Environmental Protection (NJDEP) of the State of New Jersey. The “New Jersey Water Supply Authority Act,” under N.J.S.A. 58:1 B-20, calls for the Authority to publish an Annual Report of its finances on or before the last day of February for the preceding calendar year. This report contains the Authority's Independent Auditors’ Report, and all required reporting to be in compliance with Executive Order No. 37 (2006), for FY2023.

The Authority continues to implement the transformational Round Valley Dam Rehabilitation Project, by far the largest and most significant undertaking by the Authority at this reservoir since its construction in the early 1960s. Staff is currently working on the design of our next major project, the Resource Preservation Foundation Grouting Project at Spruce Run Reservoir.

These projects, along with the Delaware and Raritan Canal Dredging project, which was substantially completed in 2021, position the Authority to continue to perform its primary mission of providing and maintaining a dependable supply of water to the businesses and residents of Central New Jersey, while preserving and enhancing source water quality and quantity through the protection and restoration of critical watershed lands.

The first phase of the Round Valley Dam Rehabilitation Project included grouting of the abutments at the North and South Dams as well as dredging of the Intake Channel at the South Dam. Grouting refers to a process where holes are drilled into the bedrock that underlies the earthen embankment. Anomalies in the bedrock are then filled by pumping cementitious grout through the drilled holes under pressure. The drilling and grouting and intake dredging projects were completed in 2020.

By far the most significant element of the Round Valley Project, however, is the final phase of the project that involves rehabilitation of all three embankments at Round Valley (North Dam, South Dam, Dike). The rehabilitation involves approximately 700,000 cubic yards of excavation to install retrofitted “chimney drains” at each of the three embankments. Chimney drains are constructed layers of sand and gravel placed inside the earthen embankment from bottom to top (resembling a chimney). The chimney drains have become the design standard for all newly constructed earthen dams and are being retrofitted on many dams constructed before chimney drains became the norm.

Construction on the embankments started in early 2020. The major earthwork is now substantially complete at all three embankments (dams). The Authority started a pumping program to refill the Round Valley Reservoir in the fall of 2023. The pumping process is dependent on flows in the river and it may take anywhere from one to three years to completely restore the reservoir pool elevation.

The Authority's Technical Review Board also made recommendations for improvements to the outlet works and the earthen dam foundation at the Spruce Run Reservoir (located approximately one mile north of the Town of Clinton). The "workhorse" of the Raritan System, Spruce Run Reservoir is impounded by the Spruce Run Dam and Dikes A and B and provides stream flow regulation as well as recreation.

An Engineer of Record has been procured to design the foundation improvements (grouting) at Spruce Run Reservoir. Construction is anticipated to begin in early 2024 and will last one to two years.

Other water supply projects are ongoing in the Manasquan System and on the Delaware and Raritan Canal. On the canal, the Landing Lane Spillway Rehabilitation was completed in late summer 2023. Two new projects kicked off in 2023, the rehabilitation of Six Mile Run Culvert in Franklin Township, Somerset County and the rehabilitation of the Western Embankment in Stockton Borough, Hunterdon County.

At the Manasquan Reservoir, replacement of several of the originally installed piezometers (monitoring wells in the embankment) was designed and planned for 2022. The drilling methods required for the safety of the dam resulted in a narrow group of qualified contractors for this work and unfortunately no bids were received in the original procurement. After rebidding, the work was substantially completed in the fall of 2023.

In 2023, cyanobacterial blooms, also called harmful algal blooms (HABs) again impacted the Spruce Run Reservoir. Cyanobacteria are bacteria that occur naturally in water bodies and often result in a population explosion, or bloom, under suitable environmental conditions, such as high-nutrient (nitrogen and phosphorus) availability, low wind, warm water temperatures, and sunlight. Some HABs produce toxins that can be harmful to humans, livestock, and pets. As of this writing in 2023, the Manasquan Reservoir has not experienced a bloom this season, but staff is doing everything possible to prepare for a HAB if it blooms. In most years in the Manasquan Reservoir, a bloom is experienced when the lake "turns over" in late summer/early fall; however, summer blooms also occur. After several years of reservoir characterization efforts, staff has also advanced a more proactive strategy by contracting with a team of highly qualified experts to evaluate options and develop a design for an aeration system to oxygenate bottom waters to both reduce the likelihood of HABs and ensure the reservoir's full safe yield is available year-round.

No blooms have been observed this year to date in the Millstone River. Staff has observed relatively higher natural flows in the Millstone compared to last year. The Authority played a relatively small part in causing the higher flows by implementing a new operational strategy where water is released from the Delaware and Raritan Canal at the Kingston Wastegate, just downstream of Carnegie Lake, instead of the customary location at the confluence of the Millstone and Raritan Rivers. The higher upriver flows keep the water "moving", thus reducing the likelihood of bloom formation. There are too many variables to determine definitively that

the Authority's operational change prevented any bloom formation. Nonetheless, the lack of negative effects suggests that the continuance of the new operational protocol is prudent.

The Authority's watershed and engineering groups have continued coordination with NJDEP and our water purveyor customers, all of whom have a vested interest in the prevention of future blooms. At the request of the Authority, the USGS re-installed continuous water quality sensors at the Millstone River at Blackwells Mills. New continuous but seasonal water quality sensors were also initiated on the Raritan River at Manville and on the Delaware and Raritan Canal near Landing Lane.

The Authority operates three separate systems: the Raritan Basin System, the Manasquan Water Supply System, and the Manasquan Water Treatment Plant and Transmission System. Each system must generate sufficient revenue each year to cover its own operating expenses and debt service. Rates have been generally stable, and the Authority is in good financial health. Total net position was approximately \$151.3 million as of June 30, 2023, and has increased over June 30, 2022 and June 30, 2021. In fiscal year 2023, total assets and deferred outflows were \$381.2 million and total liabilities and deferred inflows were \$230.1 million.

The Authority received its 30th consecutive Certificate of Achievement in Financial Reporting Award for its FY2021 annual report. The FY2022 report is currently being reviewed for this award, and the Authority plans on submitting its FY2023 annual report for consideration for this same award.

Sincerely,



Marc Brooks
Executive Director



Round Valley Reservoir in the fall

Operations - Raritan System

Operations and maintenance activities have been generally normal with a few atypical aspects. After an unusually dry spring season and a normal summer with rainfall occurring at regular intervals, Spruce Run is near full and Round Valley is near its allowable construction pool (as of September 2023). At the start of 2023, the system was stressed due to conditions experienced during the summer of 2022 (extreme lack of rainfall in July and August and the presence of extremely high levels of harmful algal blooms (HABs) in the Millstone River). This resulted in an eight-foot drawdown of Round Valley (in addition to the 25-foot construction drawdown) and a 23-foot drawdown of Spruce Run by mid fall of 2022. Precipitation late in 2022 and the first half of 2023 was sufficient to restore

Spruce Run reservoir to normal pool by May 2023. A pumping program to refill Round Valley reservoir kicked off in late February and achieved the goal of refilling to the construction pool in May 2023. A pumping program to restore Round Valley to its normal pool was initiated in the fall of 2023. Canal operations were modified this year in response to last year's HAB impacts in the Millstone River. The Authority historically releases some excess Canal flow to the Millstone River at the Ten-Mile Wastegate, located near the confluence of the Millstone River and the Raritan River. It is believed that a contributing factor to the Millstone HAB was the low flows and near stagnant conditions, specifically between Carnegie Lake and the confluence with the Raritan River. By moving the release of excess Canal flows to a point further up the Millstone River (at the Kingston Wastegate, just below

Carnegie Lake), we were able to improve the flow conditions in the target stretch of the river to help combat the conditions that favor HAB. This change in the operation was successfully implemented all summer without any adverse impacts to our operations or our customers. The Millstone River did not have any HAB occurrences in 2023.

Round Valley Project and Dam Inspections

In July 2015, the Authority re-convened the Technical Review Board (TRB), previously utilized to study the condition of the Round Valley embankments, to perform a potential failure mode analysis (PFMA) on the three Round Valley Embankments. A PFMA is commonly used in the dam safety community and consists of a robust study of the dam's construction and past performance records, and includes an evaluation of a variety of potential failure triggers.

At the conclusion of its 2015 session, the TRB recommended that *“the Authority begin budgeting, engineering, and planning for the required modifications to the Round Valley Embankments.”*

The Authority procured a consultant to serve as the Engineer of Record to investigate, plan, design, and provide full time construction management services for the efforts recommended by the TRB including:

- Evaluate rehabilitation alternatives and design repair for the existing hydraulic valve on the low-level release at the Round Valley South Dam.
- Remove and replace ten-inch cast iron pipe that connects the Round Valley Force Main to the South Vault.
- Dredge the Round Valley South Tower Intake Channel.
- Repair the sluice gates in both towers.
- Repair the Round Valley building structures (towers and vaults). This work includes repairing or replacing the building roofs and facades as well as ancillary

equipment such as sluice gates and crane hoists.

- Install security improvements at Round Valley Reservoir.
- Install chimney drains and improved drainage features at all three embankments.
- Grout abutments at the Round Valley North and South Dams.

The intake channel dredging was completed in February 2020, the abutment grouting was completed in March 2020, and improved electrical service for each dam was completed in October 2020.

The rehabilitation of the earthen embankments and ancillary structures was initiated in January 2020. Major earthwork was completed at the Dike in 2021 and the North Dam in 2022. Major earthwork was completed at the South Dam in August 2023. Substantial site restoration work is continuing at the North and South Dam, including topsoiling, seeding, paving and reforestation. Work on the towers and vaults is also ongoing. The contractor has forecast final completion in July 2024. Security improvements will be implemented after the rehabilitation project is complete.



Major earthwork was completed at the North Dam in the summer of 2022. Restoration work, including topsoiling, paving, and installing permanent instrumentation is ongoing.

With the major structural components of the earthwork complete, the Authority began refilling the reservoir late in the fall of 2023. Pumping will continue throughout the winter and spring as weather and river flows allow.

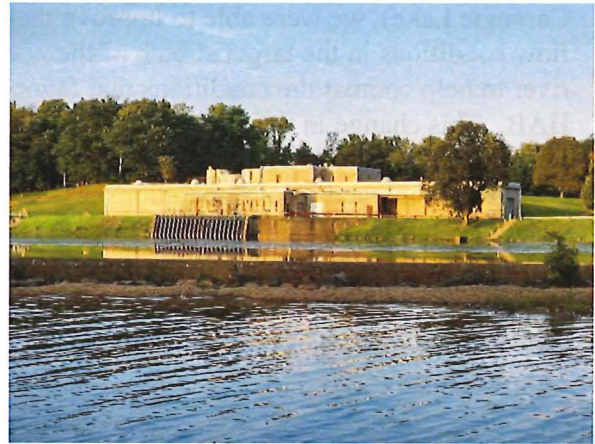


Topsoiling, seeding and erosion control mats being installed at the South Dam. Major earthwork was completed in August 2023.

The Authority's consultant created and maintained a project-specific website to keep the public informed about the status of the project. With the major work winding down, the public information will be transferred to the Authority's website.

South Branch Pumping Station - Rehabilitation of Four Pump Assemblies, Mechanical & Electrical Upgrades

The South Branch Pumping Station was constructed in 1965 as a part of the Spruce Run/Round Valley Reservoirs Complex in the Raritan River Basin. It is located on the South Branch Raritan River, about three and a half miles downstream from the Spruce Run Reservoir. It is used to pump water from the South Branch of the Raritan River to the Round Valley Reservoir. Ten pumps, each operated by a 2,000 HP motor and capable of pumping 40 million gallons per day, transfer water to the reservoir through a 3.2-mile long, 108-inch diameter force main.



South Branch Pump Station

A previous contract in 2015 refurbished two of the ten pumps. This initial contract served as a model to help refine the scope of future projects. In 2021, professional engineering services were procured for the rehabilitation of four additional pumps, as well as for other long-term mechanical, electrical, and control upgrades that are needed for the entire Pumping Station. These upgrades will ensure reliable operation well into the future. This project is being designed and constructed to minimize the impact on pumping operations that refill Round Valley when the current embankment rehabilitation is complete.

Construction is anticipated to occur in multiple phases/contracts from 2023 through the summer of 2025. A contract is underway to refurbish four pumps and motors, including replacement of the baseplates, which anchor the units to the floor and control vibration. The successful low bidder (contractor) began dismantling the pumps, motors and baseplates in the summer of 2023 and the pumps are required to be rehabilitated, re-installed and tested in 2024.

A second phase of the project will implement electric system upgrades and repairs, control and monitoring sensor upgrades, and miscellaneous maintenance items to ensure long term operation of the station. The work for this second phase will be scheduled either to coincide with intervals when pumping is not anticipated, or to maintain one-half of the electrical system

active at a time. The station was originally designed as a duplex station with two independent electrical systems. This means that half the pumps are powered by one side of the station, and half are powered by the other. Preliminary planning has also begun for replacement of the Pump Station's two 7,500 KVa transformers, which have been identified as approaching their life expectancy.

Spruce Run Reservoir Dam Foundation Grouting Program

Construction of the Spruce Run Reservoir embankment dam in the early 1960s faced a major engineering problem: the subsurface rock intended as the foundation was comprised of the Kittatinny limestone formation. As such, the foundation rock includes broken and weathered features, water-bearing cavities and solution channels typical of limestone formations.

To address these challenges, it was decided to construct a grout curtain, up to 100 feet in depth, along the axis of the embankment. In addition, considerable shallow blanket grouting was conducted in the worst cavernous zones to support the overlying earth fill. The intent of the grout curtain was to add strength to the foundation and to minimize seepage through the bedrock. Following the grouting program, embankment construction proceeded, and the dam and dikes were completed by mid-1964.



Spruce Run Reservoir Dam SE View from Sta. 5+50

In the early 1980s, the Authority installed several instrumentation systems for the Spruce Run Dam in accordance with the recommendations of the dam's Phase I report. This included the installation of piezometers that monitor pore water pressure in the embankment's fill and rock foundation. Over the subsequent years, several of the piezometers have demonstrated upward and downward trends.

In 2013, Authority staff considered it necessary to convene a technical review board (TRB) to discuss and study instrumentation trends at the Spruce Run Dam. As a result, TRB meetings were held in 2014 and 2017.

In 2014, the TRB members recommended implementation of interim risk reduction measures for the Spruce Run dam embankment. These measures included compilation of drilling and grouting data, side scan surveys of the upstream slope and reservoir bottom, video inspection of drains, creation of a comprehensive geologic map, compatibility evaluation of adjacent embankment zones, dye testing, thermal infrared photography, seep/springs measurement, and installation of additional piezometers. Authority staff fulfilled all recommendations from the 2014 TRB meeting.

The TRB reconvened in 2017 to discuss the Spruce Run embankments and to perform a Potential Failure Mode Analysis (PFMA). It was determined that trends in the dam's instrumentation provide evidence that the dam foundation's original grout curtain is slowly deteriorating with time. As such, it was the consensus of the TRB that re-grouting of the karst (limestone) foundation would be required, and that Authority staff should begin long-range planning for the work.

Authority staff and members of the TRB continued reviewing the instrumentation readings in subsequent years. In September 2021, the TRB issued a report and recommended that the Authority proceed with the development of a complete set of design documents for the grouting program.

Following the TRB recommendation, the Authority issued a Request for Proposals (RFP) from engineering firms for the Spruce Run Reservoir dam foundation grouting project and retained the professional engineering services of a highly qualified engineering consultant that will be responsible for design, permitting, and managing construction of a project to restore the grout curtain by drilling through the embankment and bedrock, then pumping grout under pressure to fill any fissures or voids in the rock. Bidding for construction is expected in early 2024 and it is anticipated that construction will take two years.

Spruce Run Reservoir Multi-Disciplinary Project

The Spruce Run Reservoir is located approximately one mile north of the Town of Clinton. The reservoir is impounded by the Spruce Run Dam and Dikes A and B, and provides stream flow regulation, recreation, as well as a raw water supply to residents of central New Jersey. Spruce Run Dam is a Class I, high hazard zoned earth embankment constructed at the former confluence of Spruce Run and Mulhockaway Creek. The reservoir is fed by two major and several minor streams, with a total drainage area of 41 square miles. A primary spillway is located at the west abutment of the dam with a crest elevation of 273.0 feet, which is the maximum operating pool level of the Spruce Run Reservoir. Discharge from the reservoir is either from the primary spillway or from the outlet tower through twin 84-inch diameter pipelines which reduce to twin 48-inch diameter pipes at the downstream outlet vault.



Spruce Run Reservoir's Tower and Access Bridge

The Authority's responsibility to ensure raw water delivery and safe operation of the dam requires the structural integrity and full operational capacity of the outlet works at all times. Many components of the outlet works date to the original construction of the dam. With a service life close to 60 years, some of the outlet works equipment and structures have exceeded their anticipated design life and must be rehabilitated.

At the end of 2019, the Authority retained a professional engineering consultant to investigate, design, and provide construction management services for the following tasks:

- Rehabilitate the flow measuring weir.
- Evaluate the existing spillway capacity.
- Improve the spillway discharge channel for conveyance, inspection and seepage monitoring.
- Replace the outlet vault's Howell-Bunger valves and actuators, the outlet tower hoist, and the roofs at both the outlet tower and the outlet vault.
- Install electrical actuators for the outlet tower sluice gates, a manual transfer switch for connection to a generator as necessary for emergency sluice gate and crane operation, equipment for remote reading of outlet releases, a hardened security gate at the vault, and various architectural improvements to the tower and vault buildings.



Spruce Run Vault. Howell Bunger Valves in Operation

In addition to the previous items, at the recommendation of a Technical Review Board (TRB), the consultant will critically review the operation of the outlet works and consider potential improvements to the procedures required to release water for emergency drawdown.

Updated hydrologic and hydraulic modeling studies for Spruce Run Reservoir are included in this contract to aid in optimization of rapid drawdown and to verify the spillway capacity. Preliminary analysis of the spillway capacity suggests that the existing spillway may be undersized for the regulatory design storm. The NJ Dam Safety regulations require large dams to be designed to safely pass the runoff from the Probable Maximum Precipitation (PMP) which is approximately 34 inches of rain in 24 hours. NJDEP is re-evaluating the PMP based on state-specific conditions, and modest changes to the rainfall data are expected. Regardless of potential changes to the PMP, it is likely that some improvements to the spillway capacity will be required, and the Authority has begun planning for that work.

One aspect of this project was completed in 2022 when all trees and herbaceous vegetation was cleared from the 14.2-acre spillway discharge channel. This work facilitated the monitoring of springs as recommended by the TRB and improved the channel's hydraulic capacity.



Tree clearing equipment at the spillway discharge channel

Additionally, the consultant has completed analyses, field investigations, lab testing, and a draft Schematic Design Report for other features that are included in the rehabilitation project. The work is expected to take several years to complete.

D & R Canal - Landing Lane Spillway

The Landing Lane Spillway is located immediately upcanal of the Landing Lane Bridge in New Brunswick. In 1991, the spillway was rehabilitated by constructing a concrete cutoff wall on the Canal-side slope and by placing dry-laid stone across the crest and on the river side slope. Within 25 years, the spillway was again in need of repair due to erosion caused by seepage over the top of the cutoff wall, erosion of the stone infill and displacement of the dry-laid stone. Consequently, a new rehabilitation effort was designed and permitted, and in fall 2022, a contractor began work on this project.

The 2022-2023 rehabilitation consisted of dismantling the existing spillway and installing new concrete slabs on the crest, river side slope, and river side toe. The original stone, supplemented with new stone, was then reinstalled over the concrete with mortar and stainless steel anchors creating a much more robust design while maintaining the historic aesthetic. The Canal multi-use trail was closed to the public for several

months to accommodate this project, but the contractor completed the work and reopened the multi-use trail in August 2023.



Landing Lane Spillway before (top) and after (bottom) the 2022-2023 rehabilitation project.

D & R Canal Rehabilitation of Six Mile Run Culvert

The Six Mile Run Culvert is located in Franklin Township, Somerset County, at Station 2298+17, just south (upcanal) of Blackwells Mills Road and adjacent to the Six Mile Run State Park site at 625 Canal Road. The culvert consists of three stone masonry arch barrels, which carry the Six Mile Run under Canal Road, the Delaware and Raritan Canal, and the multi-use trail.



Six Mile Run Culvert (West Headwall)

The structure presumably dates to the original construction of the Canal (1830s) and was rehabilitated in the 1980s. Additional work was performed on the outlet end in 2009. The culvert structure is maintained by the Authority and the road (Canal Road) is maintained by Franklin Township.

In March 2018, Franklin Township alerted the Authority to a sink hole that had formed in an area of the road that the Township had patched with asphalt on previous occasions. This sinkhole developed following two Nor'easter storms in a period of a few days. The Authority procured a contractor who made an emergency repair to the road surface and subsurface over the culvert.

The culvert interior at the inlet side was found to be missing stones and needed to be repaired. Authority staff contracted with divers to make temporary repairs to the interior of the culvert pending a more substantial rehabilitative effort.

Authority staff solicited the services of an engineering consultant to evaluate the entirety of the three-barrel structure and to prepare a design for a complete rehabilitation. A cultural resources consultant has also been procured to work on the same project.

An additional sinkhole formed in the same area of the road above the culvert in the summer of 2021. This sinkhole was repaired under an amended contract with the engineering consultant, who also offers construction services.

The rehabilitation project was intended to be split into two phases. Phase I was to

include cleaning, dewatering, and inspection of the culvert; however, the bids for Phase I work were cost prohibitive, so alternative investigations and inspections were completed by the engineering consultant in 2020. Phase II consists of the full engineered design rehabilitation. Construction started in August 2023 and will last up to six months.



Cofferdam installed at Six Mile Run Culvert.

D & R Canal - Rehabilitation of the Western Embankment downstream of the Prallsville Lock

South of Prallsville Lock, a very steep and narrow embankment separates the Canal from the Delaware River. This section of embankment makes up the western bank of the Canal and extends one mile south of the lock to an abandoned railroad crossing where the multi-use trail crosses the Canal. Over the past twenty years, numerous flood events have caused various slope failures and two full breaches of the embankment. Each of these incidents were repaired on an emergency basis to restore flow in the Canal; however, a more stable and permanent solution to restore the embankment was needed, and the Authority retained both engineering and cultural resource consultants to develop a long-term solution to stabilize the embankment.

Considerable design work has been completed in recent years, and in that time, engineering recommendations for the

embankment's long-term stabilization have evolved. Originally, compaction grouting was identified as the preferred method, but there was concern over how this method would affect the very steep and narrow embankment. Consequently, the focus has shifted to an investigation of less disruptive structural measures. It is noted that many traditional engineering methods to improve stability are not suitable due to site-specific constraints which include historic concerns, limited access, narrow crest width, and the presence of watercourses on each side of the embankment.

Due to uncertainty in the structural components of the stabilization, Authority staff decided to approach the project in two phases. Phase I will restore the geometry and aesthetics of the embankment. This includes removal of tarps, clearing of some trees, leveling the crest to eliminate low areas which concentrate flows and increase erosion, restoring damaged historic stone armoring, and restoring the previous slope repairs with topsoil and native vegetation.

Phase II of the project will consist of designing and implementing structural improvements to increase the stability of the embankment and reduce seepage and potential breaches during storm events in the Delaware River watershed.

Construction services for Phase I was publicly bid in spring 2023. The contractor began work in August 2023 and it is estimated that this construction phase will be completed by the end of 2023. A construction schedule for Phase II will be determined after a suitable engineering solution, if possible, has been designed.



Restoration of the Canal embankment in Stockton

D & R Canal - Rehabilitation of the Upper Canal Embankment

The right bank of the Canal from Raven Rock Lock to Prallsville Lock is a narrow embankment that separates the Canal from the Delaware River. Both sides of the trapezoidal embankment core wall are armored with dry-laid stone. In this section, the width of the embankment varies from 20 feet to 100 feet. The narrow nature of the embankment precludes access for vehicles and/or heavy machinery, providing significant maintenance challenges for the Authority. This section of the embankment overtops routinely, which causes erosion and could potentially lead to failure of the embankment. It appears that the embankment was designed with full knowledge of these high flows, keeping in mind that at the time, Canal operators had the “luxury” of being able to drain the Canal for maintenance each year.

High flows during rain events, specifically Tropical Storms Irene and Lee (2011), caused significant erosion at various locations on the embankment. After these storms, Authority staff made temporary emergency repairs to stabilize the affected areas and prevent a complete breach. In most cases, the size and shape of the original embankment was not maintained. It was the Authority’s intent to make final repairs in accordance with approved plans as soon as practicable.

The Authority contracted with both engineering and cultural resources consultants

to investigate and provide a design for rehabilitation of the embankment. In 2022, the engineering consultant amended the original schematic design report to include removal of most of the trees from the embankment. This revision was reviewed and approved by the D&R Canal Commission and State Historic Preservation Office. The consultant is progressing final design and permitting. Construction is anticipated to begin in 2024.

D & R Canal - Rehabilitation of the Prallsville Culvert Pit and Miscellaneous Components

The Prallsville Lock is located on the Delaware and Raritan Canal at Station 155+00. Upstream of the lock, situated at the confluence of the Canal and Wickecheoke Creek, there is a 196-foot-long concrete spillway known as the Prallsville Spillway. Between the spillway and lock, there is a stone masonry culvert that passes under the Canal to the Delaware River. The culvert’s inlet is located in a rectangular pit adjacent to the Canal that is about 65 feet long, 20 feet wide, and 18 feet deep. The pit has dry-laid stone masonry retaining walls and also contains the outlet of another culvert, which passes under the Canal multi-use trail. Flow is conveyed from one culvert to the other along the pit bottom via open channel flow.

In September 2021, flooding associated with remnants of Hurricane Ida caused a partial collapse of the retaining wall at the southwest side of the pit, which is parallel to the Canal and located only 25 feet from its edge. Four non-operational sluice gates located at the Prallsville Spillway’s downstream abutment were also damaged during the flooding.

The repair of this damage is expected to consist of connecting the two culverts within the pit and filling the pit to grade, which will prevent future failures of the retaining wall, and more importantly, the canal embankment it supports. It is also expected that the damaged sluice gates at the Prallsville

Spillway's abutment will be decommissioned as part of this project, as they are no longer needed. The project will also incorporate repairs to some minor erosion damage at the spillway's abutment.



Existing condition of the Prallsville Culvert Pit.

In January 2023, the Authority awarded a contract for the required engineering services. The engineering consultant has completed the schematic design report and is working on final design and permitting.

D&R Canal – Replacement of Eleven Sluice Gates

The Delaware and Raritan Canal has eight lock locations that were repurposed as flow control structures in the 1950s. At that time, the mitered gates that formerly provided operation as a lock to raise and lower boats were replaced with water control devices. At each lock, three sluice gates (left, center, and right) allow Authority Water Supply Operators to maintain appropriate flow levels in the Canal.

As a result of field functionality tests performed by the Authority and underwater inspections performed by a diving company, the Authority determined that the existing gates at four locks are severely corroded and have exceeded their service life. One sluice gate at South Bound Brook Lock was replaced on an emergency basis to ensure operational continuity and redundancy. Authority staff developed plans and

specifications to replace the remaining eleven sluice gates at Five Mile Lock, Ten Mile Lock, Griggstown Lock, and South Bound Brook Lock.

A contract has been awarded to furnish and install the new gates. The gates were ordered in 2023 but have a long lead time. It is expected that the gates will be installed in the first half of 2024.



Emergency sluice gate replacement at South Bound Brook Lock

D&R Canal – Repair of Sinkhole at the Ukrainian Church Culvert

On July 11, 2023, Authority staff observed a sinkhole in the Canal embankment above a historic stone masonry culvert in Franklin Township. Immediate investigation with the assistance of a consulting engineer revealed a unique chimney-like component of the culvert that had a defect which allowed the soil above to be washed into the culvert. While the embankment and the culvert were determined to be stable, the location and elevation of the defect were such that further deterioration due to high water events could allow the Canal to connect to the defect, allowing the Canal to drain to the culvert. At this location, close to the end of the Canal, the Authority has limited options to provide redundancy in the event of a breach. As a result, Authority staff requested and received Board approval to procure engineering and construction services on an emergency basis. A repair design was developed, permitted and bid within approximately two months. Construction was completed in November of 2023.

Operations - Manasquan System

Raw water contracts were maintained at a total of 19.443 million gallons per day (MGD) in 2023. As of the end of September, an additional 65 million gallons of water was purchased in excess of contract volume for the year due to low rainfall during June. Normal weather in July and August resulted in normal reservoir volumes throughout the summer and well into the fall. Reservoir water quality was better than normal during the first nine months of the year. Treatment of the reservoir with algacide was not needed in 2023 as the algae counts and clarity were better than normal. The Authority followed its Harmful Algae Bloom (HAB) mitigation plan throughout the year with good results and no measurable toxins were detected.

Professional engineering services for the design of an aeration system to improve water quality at the Manasquan Reservoir were procured in 2023 and staff has been meeting monthly with the design team to develop alternatives based on the specific oxygen demand that occurs at the reservoir in the summer. The intent of the aeration system is to prevent anoxic nutrient loading leading to the development of HABs. Staff anticipates a design will be completed by the middle of 2024 with construction in 2025.

Formal Dam Inspection

In accordance with New Jersey Dam Safety regulations, an annual inspection of the Manasquan Dam will be conducted in the fall of 2023 and staff continue to conduct quarterly maintenance inspections. Staff continued implementing the consultant's recommendations from the previous formal dam inspections. This includes the ongoing repair and replacement of embankment instrumentation. Design and permitting has been completed to drill eight new piezometer wells in the dam embankment using a specialized well drilling technique. A drilling contractor has been procured and the work

was completed in the fall of 2023. Each well houses a new vibrating wire piezometer. These instruments monitor water levels in the embankment and will replace existing piezometers that have failed and can no longer be accessed. The new piezometers will be integrated into the existing automated data acquisition system in 2024.

Traveling Water Screen Repairs

Replacement of chains, sprockets, shafts, and bearings was performed for two of the eight traveling water screens located at the river intake building. This repair corrected misalignment from worn parts and prevented further damage. This was completed in January 2023.



Traveling water screen repair work



Traveling water screen repair work

Operations - Manasquan Water Treatment Plant (“MWTP”)

The treatment plant provided water that met all NJDEP standards throughout 2023. No major improvements or upgrades to the MWTP were made in 2023. A design project to replace one of the static mixers with a mechanical mixer was completed; however the chemical savings from implementing the project was evaluated to be much less than the consultant’s estimated cost of construction and installation. Therefore, this project will not be constructed due to the unfavorable benefit-to-cost ratio.

Based on the Asset Management Plan guidance, improvements and upgrades to the MWTP processes were completed in 2023 including:

- Rehabilitation of the drainage systems of one of the three residuals drying lagoons.
- Rehabilitation of the residuals dewatering piping systems.
- Replacement of the online monitoring instrumentation.

- Refurbishment of the ozone system components.



Improved residuals drying from lagoon drainage and piping repairs

Additional Improvements planned at the MWTP

A filter process resiliency study was completed during 2019. A consultant evaluated several alternatives for cost, regulatory enhancement, ease of constructability, demonstrated success, and operability. The consultant recommended the construction of a flocculation tank and addition of a plate settler pretreatment system process. These improvements will increase plant resiliency and capacity by improving color removal and reducing the time that the existing processes need to be offline during the flushing of accumulated solids. This will also reduce wastewater generation and dependency on the use of reservoir water during storm events, as well as allow for the refilling of the reservoir after storm events, if needed. If implemented, the recommended system would replace the clarifier portion of

the existing treatment units, which were due to be replaced or improved in 2022. Engineering design of the recommended improvements is accounted for in the Authority's budget. Staff continues to work with the Southeast Monmouth Municipal Utilities Authority ("SMMUA") Board on this project and a Request for Proposals from engineering firms has been generated to move the project forward from planning to final design.

Watershed Protection Programs Unit

The New Jersey Water Supply Authority's Watershed Protection Programs Division administers a systematic source water protection program for the watersheds that the Authority and its customers rely upon for their water supply. The Division's primary objectives include the development and implementation of projects that afford protection to the quantity and quality of the source water in the Raritan and Manasquan River Basins, and the Delaware & Raritan Canal and its tributaries for the benefit of the Authority and its customers. In 2023, the Watershed Office partnered with landowners, farmers, government agencies, businesses and not-for-profit organizations to implement a variety of cost-effective strategies, guided by the results of detailed watershed restoration and protection plans for priority sub-watersheds.

Watershed Planning

Since 2019, the Watershed Protection Office partnered with New Jersey American Water Company ("NJAW") to develop a watershed control plan ("WCP") for cryptosporidium, a persistent protozoan parasite. In December 2022, NJDEP conditionally approved the WCP based on NJAW and the Authority's workplan for implementation. Priority projects in the plan include the Authority's agricultural cost-share program and a USGS source trackdown

study. The trackdown study will monitor Cryptosporidium levels during baseflow and stormflow to help target implementation strategies in areas that will provide the most effective Cryptosporidium control.

The Authority, in cooperation with Rutgers Cooperative Extension, continued work on the NJDEP-funded watershed restoration and protection plan ("WRPP") for the Spruce Run and Mulhockaway Creek watersheds and Spruce Run Reservoir. A draft of the WRPP will be presented to stakeholders in early 2024. This year, Watershed staff engaged with staff from the New Jersey Highlands Council and Hunterdon County Planning to establish scenarios where we can collaborate and support each other going forward as part of this plan.

The Highlands Council approved a funding proposal from the Authority, Rutgers Cooperative Extension and Raritan Headwaters Association to prepare WRPPs for several of the Raritan Basin/Highlands sub-watersheds (HUC14s) that are not currently subject to such plans.

Conservation Practice Implementation for Water Quality

The Authority's Agricultural Cost-Share program continued in 2023, utilizing funds from NJDEP and the US Department of Agriculture, Natural Resources Conservation Service ("USDA-NRCS"). Staff assisted agricultural producers enrolled in our first three Regional Conservation Partnership Program ("RCPP") projects (Raritan Basin Partners for Source Water Protection, Black River Greenway and Protecting Source Water in the Raritan System) and our original NJDEP-funded project (The Authority received funds for a second NJDEP-funded project that began in 2023). Authority source water protection funds and NJDEP funds match USDA-NRCS financial assistance for staff to work with 22 farmers in the source water area. Staff also continued developing performance metrics for the agricultural cost-share program, including pollutant load

reductions. In 2023, the Authority partnered with the New Jersey Department of Agriculture to submit a new RCPP proposal to support agriculture practice related conservation planning assistance throughout the Authority's Raritan Basin source water area.

Stewarding Watershed Lands for Source Water Protection

The protection of natural lands supports source water protection by maintaining important elements of the water cycle, such as groundwater recharge, and by minimizing the accumulation and runoff of pollutants. In addition, proper stewardship of critical watershed lands can enhance water quality and quantity in perpetuity, preventing conversion to alternative land uses that pose greater threats to our water resources.

To date, the Authority and its partners have participated in the preservation of more than 3,600 acres of critical watershed property, valued at more than \$70,000,000. In addition, the Authority holds conservation easements on 300 acres, valued at nearly \$2,600,000. The Authority has forged successful partnerships with more than 30 different entities, both for cost sharing and management responsibilities on preserved parcels.

In 2023, Authority staff are completing a plan to monitor and/or steward 23 parcels, totaling about 1,700 acres. Stewardship activities on these properties were varied and included:

- Stream visual assessments and macroinvertebrate sampling.
- Surveying and removing potentially hazardous trees within WSA-owned or co-owned properties.
- Collaborating with partnering organizations to produce/update maintenance and monitoring agreements.
- Assisting partner organizations in developing Forest Stewardship Plans on several WSA co-owned properties.

- Improving properties by removing potential hazards identified during routine inspections like broken utility manhole covers, a bridge in need of repair, and a storm cellar door on a historic residence.
- Assisting with inspections and contributing to the final report for the dredging mitigation tree planting at Delaware & Raritan Canal State Park at Blackwells Mills.

Stormwater Management and Monitoring

Visual/vegetation assessments and water quality monitoring continued in 2023 at five Franklin Township, Somerset County stormwater basins that the Authority retrofitted with NJDEP and Delaware and Raritan Canal Commission funding. As part of the final report to NJDEP, staff are utilizing a water quality model to estimate the pollutant load reductions achieved by the projects.

Engineering and Watershed staff worked with a consultant to conduct a feasibility study for modification of the Cedar Grove Brook weir to reduce sediment inputs to the Delaware and Raritan Canal.

In 2023, staff performed field reconnaissance and coordinated with county and municipal representatives to identify new stormwater management projects in the source water area.

Aquatic Plant Management

Aquatic plants, specifically a number of aggressive invasive aquatic plants, are creating operational and water quality challenges Authority-wide. Dense aquatic vegetation can cause a myriad of issues including inhibiting water flow, obstructing intakes, impairing water quality, reducing dissolved oxygen, suppressing the desirable native aquatic plant community, altering sediment chemistry, and reducing water depth. The introduction and spread of aggressive invasive aquatic plants in our

source water supply exacerbates these effects and necessitates thoughtful planning and management.

After the 2016 discovery of hydrilla in the Canal, the Authority engaged a qualified consultant in 2017 to assist the Authority in developing and implementing an Aquatic Plant Management Plan for the Delaware & Raritan Canal. The plan focuses on managing aquatic plants for the purpose of maintaining passing flow while protecting water quality for all water users. As recommended in the plan, after six years of low-dosage continuous herbicide treatments, no herbicide was applied in 2023 as no hydrilla plants nor tubers have been found since 2020. This year, the actions shifted to intensive vegetation monitoring without herbicide application unless hydrilla is found. Intensive monitoring will continue throughout the growing season each year to inform rapid response efforts if hydrilla or other aquatic invasive plant species threaten to impact canal operations.

The presence of multiple invasives, including the priority species hydrilla and fanwort, was confirmed in the Manasquan Reservoir in 2017. In response, the Authority hired a consultant in 2018 to prepare an Aquatic Plant and Cyanobacteria Management Plan for the Manasquan Reservoir. After three years of intensive data collection and analyses, the consultant submitted the final plan for long-term strategies for cyanobacteria and aquatic plant management. Based on the plan recommendations, in 2023, the Authority engaged a qualified engineering firm to evaluate options for aeration and prepare design specifications for Manasquan Reservoir system to prevent internal nutrient release during the summer months that contribute to harmful algal blooms.

To combat the spread of hydrilla and evaluate the effectiveness of the herbicide fluridone, a pilot herbicide application began in 2018 at the Manasquan Reservoir Boat Launch. The pilot herbicide application continued in 2023 and continues to suppress hydrilla growth and tuber production. A five-

acre boat launch area has been treated each year except for 2020, when no treatment was conducted at the reservoir. Additionally, a five-acre area on the northern shore of the reservoir, parallel to the boat launch, was also treated in 2023.



Boat Cleaning at Spruce Run

The Watershed Unit oversees three Aquatic Invasive Species Boat Steward programs, where seasonal boat stewards inspect launching and retrieving vessels on summer weekends and holidays for attached organisms while conducting a public education survey. This program was run for the fifth year at the Manasquan Reservoir in coordination with the Monmouth County Park System, the third year at the Spruce Run Reservoir in partnership with the State Park Service, and for the first year at the Round Valley boat launch in partnership with NJ Fish & Wildlife. A total of 2,910 surveys were completed across the three launches. Highlights of the program include water chestnut being intercepted on a boat about to launch at the Manasquan Reservoir, and the Spruce Run steward finding a dumped aquarium on the shoreline and clearing the debris, which included several florets of the invasive plant water lettuce (*Pistia stratiotes*). Getting boaters familiar with AIS prevention techniques was an important task for 2023. As the reservoir refills over the next one-to-three years post-construction, a new aquatic plant community will emerge and will be especially vulnerable to AIS infestation. Boat steward inspections will likely become more routine

once the launch is back to normal conditions/usage.

Under an awarded Lakes Stormwater Management Grant from NJDEP, two “CD3 Wayside Solar” boat cleaning stations were procured in June and delivered in mid-July, one each for the Manasquan Reservoir and Spruce Run Reservoir boat launches. The stations are designed to be used by boaters both entering and leaving the reservoir to ensure no aquatic invasive species are brought in or out of the reservoir. Each station is waterless, solar powered and equipped with an air gun, wet/dry vacuum, grabber tool, plug wrench, and broom, which are all tethered to the station. NJWSA staff has been working with park employees at each site to determine the best placement for the cleaning stations and to promote and encourage usage. During the first season, the Spruce Run station averaged four-to-five uses per day, with more usage on weekends. The cleaning station is particularly popular with kayakers. It is anticipated that the station will become more popular as more visitors learn about the station and how to use it.



Waterless Boat Cleaning Station

Leveraging the Authority’s extensive and accumulated knowledge and experience with aquatic invasive management, Watershed staff is a lead partner, along with NJDEP Division of Science and Research and Fish and Wildlife, on the development of the New Jersey Aquatic Invasive Species Management Plan. NJDEP was awarded a grant from the

Mid-Atlantic Panel on Aquatic Invasive Species to develop the plan in late 2022. The plan is expected to be complete in early 2024 and will be submitted to the national Aquatic Nuisance Species Task Force for approval.

Watershed staff conducts an annual water chestnut pull at the South Branch Pumping Station to ensure the intakes are clear and that water can pass freely. This year staff collected 675 pounds of water chestnut over one and a half days.



South Branch Intake Pond Water Chestnut Removal

Cyanobacteria Monitoring and Response (Harmful Algal Blooms)

In 2023 Cyanobacterial blooms, also called Harmful Algal Blooms (“HABs”), affected Spruce Run Reservoir and the Round Valley Reservoir’s swimming impoundment as well as several other high profile water bodies in New Jersey. Cyanobacteria are bacteria that occur naturally in water bodies and can experience a population explosion, or bloom, under suitable environmental conditions, such as high nutrient (nitrogen and phosphorus) availability, low wind, warm water temperatures, and sunlight. Some cyanobacteria produce toxins that can be harmful to humans, livestock, and pets.

The Watershed Office has taken an active role in monitoring for potential cyanobacteria blooms in cooperation with partners at the NJDEP, the USGS, New Jersey Water Science Center, and the New Jersey Division

of Parks and Forestry. The Watershed Office utilizes a combination of hand-held, instantaneous, and sensor data as well as NJDEP data collected via fixed-wing aircraft remote sensing as screening tools to identify the potential location and estimated cyanobacteria cell density at Manasquan, Spruce Run, and Round Valley Reservoirs.

NJDEP also collects data at the Spruce Run swim beach and at the Manasquan Reservoir's I/O Tower that provides continuous, real-time water quality data. The Authority, along with partners at USGS, NJDEP, and Montclair State University, were awarded a federally competitive Cooperative Matching Funds Grant to study the downstream fate and transport of cyanobacteria and cyanotoxins in the Raritan Basin from 2020-2021. This project combined continuous, real-time water quality data monitoring at multiple sites in the Raritan Basin, including a monitoring buoy in the middle of Spruce Run Reservoir, discrete sampling for phytoplankton community assemblages, four cyanotoxins (microcystins, cylindrospermopsin, anatoxin-a, and saxitoxin), nutrients, and other water quality data, and time-integrated toxin analysis through the use of an innovative technology called SPATT (Solid Phase Adsorption Toxin Tracking). Data analyses are in process; a scientific journal article is currently in review and a USGS Scientific Investigative Report is expected to be published in 2024.

During low-flow conditions during the summer of 2022, the Millstone River experienced an extensive HAB from Carnegie Lake in Princeton past the confluence with the Raritan River and beyond to New Brunswick (26+ miles). After spending the winter reviewing data, the Authority established a plan to divert excess water from the Delaware and Raritan Canal into the Millstone River at the Kingston Wastegate, instead of the further downstream Ten-Mile Wastegate. This added approximately 23 MGD of water to the Millstone River throughout the summer and fall, helping to disrupt stagnant areas which allow for in-

stream growth of cyanobacteria. The Watershed Unit also established an online dashboard to host all real-time USGS data collected throughout the Basin as well as NJDEP and NJWSA laboratory analysis related to HABs. Watershed staff also organized monthly HAB/Flow Meetings throughout the HAB season, which were well attended by the Basin's water purveyors and NJDEP partners.

While the Manasquan Reservoir has not had a surface water HAB in 2023 (as of September 26), the Watershed Office continually works with the Manasquan Operations team to implement the Manasquan Water Supply System's Cyanotoxin Management Plan. The Watershed Office performs in-house cyanotoxin analysis using an automated enzyme-linked immunoassay analyzer (or "ELISA"). HAB activity was lower in 2023 compared to previous years; it is believed this may partially be due to the reservoir remaining at a higher level of fill in 2023 compared to previous years, annual changes in weather patterns, and the Manasquan Operations team's practice of pumping river water into the reservoir only if the river meets certain nutrient concentration thresholds.

This year, the Watershed Office was awarded a Lakes Management Grant to conduct a thorough characterization of physical, chemical, and biological water quality parameters, from the tributaries and within the reservoir over two years of sample collection and analysis. This reservoir characterization, in conjunction with the Spruce Run and Mulhockaway Watershed Restoration and Protection Plans ("SRMWRPP"), will provide the basis for in-reservoir HAB management efforts and further prioritize watershed-based efforts in the future that will improve the quality of the water supply and restore recreational opportunities. The Reservoir Characterization Plan is anticipated to be completed in 2026.

River-Friendly Programs

The Watershed Office continues to work closely with Raritan Headwaters Association and the Watershed Institute to implement a suite of River-Friendly programs. In 2023, the River-Friendly Technical Advisory Committee certified two schools and recertified the Watershed Institute as a River-Friendly business.

AmeriCorps New Jersey Watershed Ambassador Program

AmeriCorps is a national service initiative with programs across the country. New Jersey's AmeriCorps Program, the NJ Watershed Ambassador Program is in its twenty-third year. The Authority is currently hosting its 21st Watershed Ambassador in 2023-2024. Through this program, Watershed Ambassadors are placed at local host sites in twenty Watershed Management Areas, from Sussex to Cape May counties, to serve their local communities. Three source water ambassadors also serve the north, central and south portions of the state. The program works with all sectors of society to improve the quality of New Jersey's waterways, nurturing community-based environmental activities and empowering residents to make responsible and informed decisions regarding their watershed.

In 2023, the Watershed Area 9 ambassador worked with the Authority, Branchburg Township and Hillsborough Township to install four pet waste stations as part of the Cryptosporidium watershed control plan implementation.



Hillsborough Township Pet Waste Station

Policies and Economic Growth Strategies of the State of New Jersey

The Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq. protects drinking water for over 5.4 million people and helps preserve New Jersey's dwindling open space. Approximately 17 percent of the Raritan Basin is in the Highlands, providing nearly all of the water stored in Round Valley and Spruce Run Reservoirs. The Authority's land acquisition program has been suspended temporarily; however, to date, the Authority has committed over \$15 million since 2003 to purchase and preserve, along with its partners, nearly 4,000 acres within the Raritan and Manasquan Basins. The Authority also continues to contribute soft costs and stewardship expenses in order to assist project partners in closing open space parcels within the basin.

One of the stated goals of the NJDEP is to ensure that adequate, safe and reliable water supplies are provided to the people of the State of New Jersey. Specifically, the state ensures that surface and ground water diversions do not exceed the sustainable yield of available water resources. The Raritan Basin Safe Yield Model was developed based on the results of the Authority's operations model, and the Manasquan Reservoir System Safe Yield Model is used in support of water allocation permit applications and System operations.

During 2023, the Authority's operations

continued to support the sustainability of the state's water resources through its operation of the reservoir systems; managing passing flow requirements at certain stations along the river system; with the implementation of a \$75 million Round Valley Reservoir Rehabilitation Project; and through continuous maintenance and dredging of the Delaware and Raritan Canal to ensure adequate flow and the long-term integrity of that structure.

Annual Review of Authority Operations

Each year during the budget process, senior management of the Authority reviews operations to identify inefficiencies and cost savings which, when implemented, will provide direct benefit to the Authority's customers. During 2023, the Authority undertook several steps to implement cost savings and other measures in several

areas. The Authority continued its close review of staffing levels, resulting in significant labor savings from careful management of staffing efforts for open positions. As normal vacancies occurred in staffing during 2023, the Authority promoted or hired personnel from outside the Authority at salaries which were lower than the departing incumbent. During FY2023, the Authority filled multiple vacancies that were primarily a result of retirements and promotions, and realized approximately \$273,000 in turnover savings through exercising this diligence. Overall, FY2023 expenses were approximately 12 percent under budget due largely to savings in salary and fringe and maintenance expense categories. Rates were further stabilized in FY2023 by the use of unanticipated revenue resulting from prior year surpluses, overdrafts and excess debt service coverage.

Letter of Transmittal

NEW JERSEY WATER SUPPLY AUTHORITY



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January 8, 2023

Formal Transmittal of the ACFR

To the Commissioners of the New Jersey Water Supply Authority

The Annual Comprehensive Financial Report of the New Jersey Water Supply Authority ("Authority") for the year ended June 30, 2023 is submitted herewith. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with the Authority. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and are reported in a manner designed to present fairly the Authority's financial position, results of operations, and cash flows in accordance with generally accepted accounting principles. In accordance with these accounting principles, the Authority is a component unit of the State of New Jersey and, as such, is included in the State of New Jersey's Annual Report.

Profile of the Government

Reporting Entity and its Services

The Authority was created on October 7, 1981 (P.L. 1981, c.293) and was established in but not of the Department of Environmental Protection of the State of New Jersey. This "New Jersey Water Supply Authority Act" established the Authority to acquire, finance, construct, and operate water systems under certain circumstances, and authorizes the issuance of bonds of the Authority.

The Authority operates three separate systems: the Raritan Basin System, the Manasquan Water Supply System, and the Manasquan Water Treatment Plant and Transmission System. The Manasquan Water Treatment Plant and Transmission System is owned by the Southeast Monmouth Municipal Utilities Authority ("SMMUA"), and is operated and maintained by the Authority under the terms of an operating agreement. Each of these systems provides sufficient revenues to cover their own operating expenses, and each System's debt service.

A seven member Board of Commissioners governs the Authority. The Authority's Executive Director heads a full-time staff of professional, technical, and operational personnel totaling approximately 117 employees, consisting of approximately 90 employees of the Raritan Basin System and 27 employees of the Manasquan Reservoir System.

The meetings of the Authority are normally scheduled for the first working Monday of each month. Four members of the Authority constitute a quorum at any meeting. Action may be taken, and motions and resolutions adopted by the Authority at any meeting by the affirmative vote of at least four members of the Authority. All meetings held by the Authority are in accordance with the Open Public Meetings Act, which requires that all meetings of public bodies be open to the public.

Accounting System and Budgetary Control

The Authority's financial statements are prepared in accordance with generally accepted accounting principles. The Authority operates and reports as a single enterprise utilizing the accrual basis of accounting. The enterprise fund concept is similar to how private business enterprises are financed and operated. The intent is that the costs of providing service to water users on a continuing basis be financed primarily through user charges.

In an effort to ensure compliance with the Authority's By-Laws and to safeguard its assets, an internal control structure has been developed and implemented by management. The internal control structure is outlined in Accounting Policies and Procedures Manuals maintained by the Authority and include: description of methods, procedures and accounting principles to be followed with explanations and examples of principal transactions; standards setting out authorization levels for expenditure of Authority funds and very specific procedures to follow when executing purchase orders, receiving goods and payment for services; separation of accounts payable and receivable function; limitations on access to the vendor management system; bank reconciliation review; controls over deposits and generation of automated and manual checks. The internal control structure also includes approved organization structures, and approved budgets for capital and operating expenditures.

The Authority's By-Laws also set out standards for procurement, which have been codified in policies and procedures. The standards include a threshold, after which the Board of Directors must approve all transactions. The Authority is in compliance with Executive Order No. 37 (2006) with respect to procurement, and has amended its procedures to ensure 100 percent compliance.

To the best of our knowledge and belief, the Authority followed all of its standards, procedures and internal control safeguards for the year in question. Because the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements.

The Authority adopts an annual budget for its operations and establishes water rates accordingly.

Information Useful in Assessing the Government's Economic Condition

Financial Position

The total assets of the Authority as of June 30, 2023, were \$364,056,154, an increase of 2.4 percent over the previous year's total of \$355,425,497. Net capital assets increased by \$11,508,639 or 5.1 percent, from \$223,816,244 to \$235,324,883.

The total of cash, cash equivalents and investments for the Authority increased \$6,295,301 or 6.0 percent, from \$104,568,018 to \$110,863,319. The increase in this category of asset is associated with normal fluctuations in cash balances and a decrease to accounts receivable. Current liabilities increased \$1,270,909, or 8.0 percent, from \$15,857,254 to \$17,128,163 due primarily to an increase in unearned revenue. Total non-current liabilities decreased from \$196,177,942 to \$193,429,485 or 1.4 percent. The decrease is primarily due to a decrease in non-current portion of bonds, notes, and loans payable. Total Operating Revenue increased by \$1,676,263 or 5.0 percent, from \$33,355,239 to \$35,031,502. Total Operating Expenses increased \$1,104,610, or 5.2 percent, from \$21,139,334 to \$22,243,944 due to an increase in operations and maintenance and fringe benefits. Non-operating Revenue increased \$1,813,655 or 74.4 percent, from \$2,436,323 to \$4,249,978, reflecting increases in

investment income and grant revenue. Non-operating expenses decreased \$14,072, or 1.1 percent, from \$1,319,913 to \$1,305,841 primarily due to a decrease in SMMUA operations net offset by an increase in the interest component of debt service to the state of New Jersey.

Independent Audit

In accordance with the "New Jersey Water Supply Authority Act" (P.L. 1981, c.293), before the last day of February, an Annual Report of the Authority's activities of the preceding calendar year is due to the Governor and the Legislature. This Annual Report must include an audit of the Authority's books and accounts. Mercadien, P.C. was retained to perform an audit of the 2022 Fiscal Year in accordance with Auditing Standards generally accepted in the United States and *Government Auditing Standards* issued by the Comptroller General of the United States. In June 1999, the GASB adopted their Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*. The Authority adopted GASB Statement No. 34 in Fiscal Year 2001, including the Management's Discussion and Analysis ("MD&A"). The MD&A is considered to be required supplemental data and precedes the financial statements. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The Authority's MD&A can be found immediately following the Report of the Independent Auditors. Mercadien, P.C. reports directly to the Audit Committee of the Board of Commissioners. Mercadien, P.C. also issued, as part of the annual audit, a report on internal control and compliance.

The Authority has previously established rates, and intends to continue establishing rates on the basis of its cash needs in any fiscal year to meet its requirements for Operations and Maintenance Expenses, Debt

Service, Capital Fund and the Source Water Component.

Awards and Acknowledgements

Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada ("GFOA") has awarded a Certificate of Achievement for Excellence in Financial Reporting to the New Jersey Water Supply Authority for its Annual Comprehensive Financial Report for 30 consecutive years through FY2021.

In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Annual Comprehensive Financial Report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The FY2022 report is currently being reviewed for this award, and the Authority plans on submitting its FY2023 annual report for consideration for this same award.

Acknowledgements

The preparation of this report on a timely basis could not be accomplished without the efficient and dedicated services of the Financial and Accounting staff of the New Jersey Water Supply Authority. Any financial report is also only as good as the accounting records that supply its supporting data. The Authority's entire staff deserves recognition for their dedication, perseverance and attention to detail that result in the Authority's records being kept in a manner which reflects credit on the staff as a unit as well as each employee individually.

Economic Outlook

The continuing economic viability of the Authority is ensured by the water contracts the Authority maintains with our water users. The water users have entered into long-term contracts for a supply of water for their respective systems, which they are authorized to continuously withdraw without interruption, for potable or industrial water supply purposes. During Fiscal Year 2023, the Authority supplied water to 30 contractual customers of the Raritan Basin System, which provided water to approximately 1,500,000 people in central New Jersey, and 12 contractual customers of the Manasquan System, which provides water to approximately 250,000 people in the Monmouth County area. Two customers accounted for approximately 86 percent of total Raritan Basin System operating revenues. Two customers accounted for approximately 86 percent of total Manasquan System operating revenues.

The total sales base for the Raritan Basin was 182.339 million gallons per day for fiscal year 2023, and the total sales base for the Manasquan Reservoir System was 19.443 million gallons per day. We are expecting our major water customers in both Systems to continue to maintain their approximate contractual water allocations in

the future. Payments for uninterruptible service are based upon the mgd amount specified in each water user contract, and are payable to the Authority whether or not the water user actually withdraws the full amount of water available as defined in the contract as daily uninterruptible service.



Marc Brooks
Executive Director



Susan Buckley
Director, Finance & Administration



Rita Shaw
Controller

Financial Section

Report of Independent Auditors

Management's Discussion and Analysis

Basic Financial Statements

Statements of Net Position

Statements of Revenues, Expenses and
Changes in Net Position

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Notes to Financial Statements

Combining Statements and Schedule

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

**FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION
JUNE 30, 2023**

INDEPENDENT AUDITORS' REPORT

To the Commissioners of
New Jersey Water Supply Authority

Report on the Financial Statements

Opinion

We have audited the accompanying financial statements of the of the New Jersey Water Supply Authority (a component unit of the State of New Jersey) (the "Authority") as of and for the years ended June 30, 2023 and 2022, and the related notes to the financial statements, which comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2023 and 2022, and the changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("GAAS") and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audits of the Financial Statements section of our report. We are required to be independent of the Authority, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

Auditors' Responsibilities for the Audits of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we

- exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, no such opinion is expressed.
- evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by the management, as well as evaluate the overall presentation of the financial statements.
- conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary schedules, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that comprise the Authority's basic financial statements. The other supplementary information, as listed in table of contents, is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 2, 2023, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Mercadion, P.C.
Certified Public Accountants

November 2, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

This section of the Annual Financial Report of the New Jersey Water Supply Authority (the "Authority"), a Component Unit of the State of New Jersey, presents discussion and analysis of the Authority's financial performance during the fiscal years ended June 30, 2023 and June 30, 2022. Please read it in conjunction with the Authority's basic financial statements and accompanying notes.

FINANCIAL HIGHLIGHTS – FISCAL YEAR 2023

- Operating revenue for fiscal year 2023 was \$35.0 million, a 5.0% increase over fiscal year 2022, which was the result of a 6.3% increase in Raritan sales and a 2.6% increase in Manasquan sales. In the Raritan Basin System, rates remained at \$336.00 per million gallons, and the sales base remained 182.339 million gallons per day ("mgd"). In the Manasquan Reservoir System, rates remained at \$1,010.75 per million gallons. The fiscal year 2023 sales base remained at 19.443 mgd. Income from operations increased 10.3% for the Raritan System and decreased 6.7% for the Manasquan System.
- Total operating expenses for fiscal year 2023 increased to \$22.2 million, which represents a 5.2% increase from fiscal year 2022. The increase was primarily due to an increase in fringe benefits related to GASB 68 Public Employees' Retirement System (PERS).
- Non-operating revenue increased 74.4% from \$2.4 million in fiscal year 2022 to \$4.2 million in 2023, primarily because of an increase in investment income.
- Non-operating expenses for fiscal year 2023 decreased 1.1%, primarily related to a decrease in water treatment plant deferred revenue offset by an increase in interest component of debt service to the State of New Jersey.
- Unrestricted cash and cash equivalents for fiscal year 2023 were \$56.3 million, a decrease of 18.4% compared to fiscal year 2022. Restricted cash and cash equivalents decreased by \$15.8 million from fiscal year 2022 to 2023. These decreases are offset by an increase in Investments of \$34.7 million in fiscal year 2023.
- Total liabilities for fiscal year 2023 decreased by 0.7% from \$212.0 to \$210.6 million due to a decrease in long-term debt offset by an increase in unearned revenue. In fiscal year 2023, net pension liability increased by \$3.9 million and net OPEB liability decreased by \$3.4 million.
- Deferred outflows of resources increased in fiscal year 2023 from \$14.3 million to \$17.1 million (19.4%), mostly due to GASB 62 cost recovery.
- Deferred inflows of resources for fiscal year 2023 was \$19.5 million, a decrease of 12.7% compared to fiscal year 2022 mainly to decreases in the pension deferred inflows of resources offset by an increase in OPEB deferred inflows of resources.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

FINANCIAL HIGHLIGHTS – FISCAL YEAR 2022

- Operating revenue for fiscal year 2022 was \$33.4 million, a 2.0% increase over fiscal year 2021, which was the result of a 3.2% increase in Raritan sales and a 0.7% decrease in Manasquan sales. In the Raritan Basin System, rates remained at \$336.00 per million gallons, and the sales base remained 182.339 million gallons per day ("mgd"). In the Manasquan Reservoir System, rates remained at \$1,010.75 per million gallons. The fiscal year 2022 sales base remained at 19.443 mgd. Income from operations decreased 15.8% for the Raritan System and decreased 1.8% for the Manasquan System.
- Total operating expenses for fiscal year 2022 increased to \$21.1 million, which represents a 13.0% increase from fiscal year 2021. The increase was primarily due to an increase in operating and maintenance expenses related to Hurricane Ida repairs.
- Other changes for fiscal year 2022 include the following: non-operating revenue increased 830.2% to \$2.4 million, primarily because of an increase in recovery of deferred outflows of resources related to cost recovery category.
- Non-operating expenses for fiscal year 2022 increased 8.8% to \$1.3 million, primarily related to an increase in the interest component of debt service to the State of New Jersey.
- Unrestricted cash and cash equivalents for fiscal year 2022 were \$68.9 million, an increase of 4.5% compared to fiscal year 2021.
- Total liabilities for fiscal year 2022 were \$212.0 million. This is a decrease of 3.4% from fiscal year 2021 and reflects a decrease in net pension liability and the continued paydown of long-term debt.
- Deferred outflows of resources increased 8.5% mainly due to an increase in the Cost Recovery category. Deferred inflows of resources decreased 0.5% primarily due to a decrease in OPEB offset by an increase in the pension category.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

OVERVIEW OF THE FINANCIAL STATEMENTS

The annual financial report consists of two parts: Management's Discussion and Analysis (this section) and the financial statements. The Authority is a self-supporting entity and follows enterprise fund accounting. The enterprise fund concept is similar to the manner in which private business enterprises are financed and operated. The Authority presents its financial statements on the accrual basis of accounting. The statements offer short and long-term financial information about the activities and operations of the Authority. The intent is that the costs of providing service to water users on a continuing basis are financed primarily through user charges. The Authority has established certain restricted "funds or accounts," as directed by internal resolution and bond indentures. In an effort to ensure compliance with the Authority's by-laws and to safeguard its assets, internal controls have been developed and implemented by management. These internal controls include policies, procedures, approved organizational structures and approved budgets for capital and operating expenditures.

FINANCIAL ANALYSIS OF THE AUTHORITY

The Authority's total net position was approximately \$151.1 million as of June 30, 2023. In fiscal year 2023, total assets and deferred outflows increased 3.1% to \$381.2 million, primarily due to an increase in investments. Total liabilities decreased 0.7% to \$210.6 million. Total net position as of June 30, 2022 was approximately \$135.3 million. Total assets and deferred outflows at June 30, 2022 increased 1.1% to \$369.1 million, primarily due to investments in capital assets, offset by a decrease in unrestricted current assets. Total liabilities decreased 3.4% to \$212.0 million. Changes in assets, liabilities, and net position at June 30, 2023, 2022 and 2021 are summarized in the following table:



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

FINANCIAL ANALYSIS OF THE AUTHORITY (CONTINUED)

	2023	2022*	2021*	Percentage Change 2023-2022	Percentage Change 2022-2021
Assets and deferred outflows of resources					
Current assets	\$ 93,979,815	\$ 131,609,253	\$ 142,794,658	(28.59) %	(7.83) %
Capital assets, net	235,324,883	223,816,244	207,739,965	5.14	7.74
Other non-current assets	34,751,456	-	247,989	100.00	(100.00)
Total assets	364,056,154	355,425,497	350,782,612	2.43	1.32
Deferred outflows of resources	17,117,065	14,333,722	13,208,303	19.42	8.52
Total assets and deferred outflows of resources	\$ 381,173,219	\$ 369,759,219	\$ 363,990,915	3.09	1.58
Liabilities, deferred inflows of resources, and net position					
Current liabilities	\$ 17,128,163	\$ 15,857,254	\$ 15,808,252	8.01	0.31
Non-current liabilities	43,788,940	43,322,867	47,186,377	1.08	(8.19)
Non-current portion of bonds, notes and loans payable	149,640,545	152,855,075	156,503,688	(2.10)	(2.33)
Total liabilities	210,557,648	212,035,196	219,498,317	(0.70)	(3.40)
Deferred inflows of resources	19,538,214	22,378,361	22,479,251	(12.69)	(0.45)
Net investment in capital assets	107,918,240	93,104,101	73,667,713	15.91	26.38
Restricted for cash, investments and unearned revenue	13,289,738	30,166,251	27,135,716	(55.95)	11.17
Unrestricted	29,869,379	12,075,310	21,209,918	147.36	(43.07)
Total net position	151,077,357	135,345,662	122,013,347	11.62	10.93
Total liabilities, deferred inflows of resources, and net position	\$ 381,173,219	\$ 369,759,219	\$ 363,990,915	3.09	1.58

* Certain account balances have been reclassified or restated to conform with current year presentation.



MANAGEMENT’S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

OPERATING ACTIVITIES

The Authority operates three separate systems: the Raritan Basin System, the Manasquan Water Supply System, and the Manasquan Water Treatment Plant and Transmission System. The Manasquan Water Treatment Plant and Transmission System is owned by the Southeast Monmouth Municipal Utilities Authority, which sets the rates, and is operated and maintained by the Authority under the terms of an operating agreement. Each system must generate sufficient revenue each year to cover its own operating expenses and debt service. The following rates were adopted at the May 2022 and 2021 Authority meetings, respectively, based on anticipated operating expenses:

	<u>Rate Effective</u> <u>7/01/2022</u>	<u>Rate Effective</u> <u>7/01/2021</u>	<u>Percent</u> <u>Change</u>
Raritan Basin System	\$ 336.00/mg	\$ 336.00/mg	-
Manasquan Water Supply System			
Initial users	\$1,010.75/mg	\$1,010.75/mg	-
Delayed water users	\$1,124.67/mg	\$1,124.67/mg	-

The Authority's total operating revenue for fiscal year 2023 was \$35.0 million, an increase of 5.0% from fiscal year 2022, due to a 6.3% increase in Raritan sales and a 2.6% increase in Manasquan water sales. The Authority's total operating expenses for fiscal year 2023 were \$22.2 million, an increase of 5.2% from fiscal year 2022, primarily due to an increase in fringe benefits related to GASB 68 Public Employees' Retirement System (PERS). The Authority's total operating revenue for fiscal year 2022 was \$33.4 million, an increase of 2.0% from fiscal year 2021. The Authority's total operating expenses for fiscal year 2022 were \$21.1 million, an increase of 13.0% from fiscal year 2021. The following table summarizes the changes in revenue, expenses and net position between fiscal years 2023, 2022 and 2021:



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

OPERATING ACTIVITIES (CONTINUED)

	2023	2022*	2021*	Percentage Change 2023-2022	Percentage Change 2022-2021
Operating revenues:					
Water sales	\$ 32,451,502	\$ 30,775,239	\$ 30,100,645	5.45 %	2.24 %
Reimbursement of operating expenses	2,580,000	2,580,000	2,609,112	-	(1.12)
Total operating revenues	<u>35,031,502</u>	<u>33,355,239</u>	<u>32,709,757</u>	5.03	1.97
Non-operating revenues:					
State of New Jersey - Grant Programs	820,500	237,951	218,765	244.82	8.77
Investment and interest income	1,349,747	103,990	169,069	1,197.96	(38.49)
Rental income	60,987	60,419	65,489	0.94	(7.74)
Other income	69,467	52,900	6,948	31.32	661.37
Recovery of deferred outflows of resources	1,949,277	1,981,063	(793,937)	(1.60)	349.52
Total non-operating revenues	<u>4,249,978</u>	<u>2,436,323</u>	<u>(333,666)</u>	74.44	830.17
Total revenues	<u>39,281,480</u>	<u>35,791,562</u>	<u>32,376,091</u>	9.75	10.55
Operating expenses:					
Payroll	8,312,516	8,232,535	7,884,810	0.97	4.41
Operations and maintenance	7,280,361	6,800,089	5,461,461	7.06	24.51
Fringe benefits	1,727,350	1,362,488	647,530	26.78	110.41
Depreciation	4,923,717	4,744,222	4,709,941	3.78	0.73
Total operating expenses	<u>22,243,944</u>	<u>21,139,334</u>	<u>18,703,742</u>	5.23	13.02
Non-operating expenses:					
Interest component of debt service to the State of New Jersey	665,889	604,151	372,069	10.22	62.38
SMMUA operations, net	639,952	715,762	841,399	(10.59)	(14.93)
Total non-operating expenses	<u>1,305,841</u>	<u>1,319,913</u>	<u>1,213,468</u>	(1.07)	8.77
Total Expenses	<u>23,549,785</u>	<u>22,459,247</u>	<u>19,917,210</u>	4.86	12.76
Changes in net position	<u>15,731,695</u>	<u>13,332,315</u>	<u>12,458,881</u>	18.00	7.01
Net position, beginning of year, as restated	135,345,662	122,013,347	-	10.93	100.00
Net position, beginning of year, as previously reported	-	-	109,554,466	-	(100.00)
Net position, end of year, as previously reported	-	-	122,013,313	-	(100.00)
GASB 87 adjustment	-	-	34	-	(100.00)
Net position, end of year, as restated	<u>\$ 151,077,357</u>	<u>\$ 135,345,662</u>	<u>\$ 122,013,347</u>	11.62	10.93

* Certain account balances have been reclassified or restated to conform with current year presentation.

CAPITAL ASSETS AND DEBT ADMINISTRATION

At June 30, 2023, the Authority had a total of \$235,324,883 invested in the Systems that it operates: \$189,746,975 invested in the Raritan Basin System, and \$45,577,908 invested in the Manasquan System. This total amount represents a 5.14% increase from last year. At June 30, 2022, the Authority had a total of \$223,816,244 invested in the Systems that it operates: \$176,725,120 invested in the Raritan Basin System, and \$47,091,124 invested in the Manasquan System. This total amount represents a 7.7% increase from the prior year.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

CAPITAL ASSETS AND DEBT ADMINISTRATION (CONTINUED)

The following table summarizes the changes in capital assets, net of depreciation, between fiscal years 2023, 2022 and 2021:

	2023	2022	2021	Percentage Change 2023-2022	Percentage Change 2022-2021
Land and land rights	\$ 25,648,119	\$ 26,444,952	\$ 26,444,952	(3.01) %	- %
Dams	42,724,719	43,486,485	44,248,251	(1.75)	(1.72)
Building, structures and improvements	43,467,405	46,834,126	45,995,010	(7.19)	1.82
Machinery and equipment	2,509,878	2,006,536	1,503,309	25.09	33.47
Leased equipment	24,212	33,896	7,032	(28.57)	382.03
Construction work in progress	120,950,550	105,010,249	89,541,411	15.18	17.28
Total capital assets	\$ 235,324,883	\$ 223,816,244	\$ 207,739,965	5.14	7.74

More detailed information about the Authority's capital assets is presented in Note C to the basic financial statements.

The following table summarizes the changes in capital debt between fiscal years 2023, 2022 and 2021:

	2023	2022	2021	Percentage Change 2023-2022	Percentage Change 2022-2021
Bonds payable	\$ 5,021,291	\$ 5,488,656	\$ 5,936,022	(8.52) %	(7.54) %
Notes payable	33,566,892	33,566,892	33,566,892	-	-
Loans payable	114,168,508	116,982,962	119,872,023	(2.41)	(2.41)
Total	\$ 152,756,691	\$ 156,038,510	\$ 159,374,937	(2.10)	(2.09)

At year-end, the Authority had \$152,756,691 in bonds, notes and loans principal outstanding, compared to \$156,038,510 at June 30, 2022. This change represents a decrease of 2.1%. The change in bonds, notes and loans principal outstanding at June 30, 2022, compared to the total of \$159,374,937 at June 30, 2021, represents a decrease of 2.1%, as shown in the above table.

More detailed information about the Authority's long-term debt is presented in Note E to the basic financial statements.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2023

CURRENT AND NEW BUSINESS

During fiscal years 2023 and 2022, the Authority supplied water to 30 contractual customers of the Raritan Basin System, who, in turn, supplied water to approximately 1,500,000 people in central New Jersey. Two customers accounted for approximately 86% and 85% in 2023 and 2022, respectively, of total Raritan Basin System operating revenue. There is no expected change in the sales base of the Raritan Basin System of 182.339 mgd in fiscal year 2024. Effective July 1, 2023, Raritan Basin System water rates increased to \$365.00 per million gallons, or 8.6%.

During fiscal years 2023 and 2022, the Authority provided water to 12 contractual customers of the Manasquan Water Supply System, who provided water to approximately 250,000 people in the Monmouth County area. Two customers accounted for approximately 86% and 85% in 2023 and 2022, respectively, of the total Manasquan System operating revenue. There is no expected change in the sales base of the Manasquan Water Supply system of 19.443 mgd in fiscal year 2024. There were no changes to the Manasquan Water Supply System water rates for fiscal year 2024.

CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide the water customers, New Jersey citizens, investors and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability as a self-supporting entity. The Authority's overall financial position has improved; total net position has increased and the Authority continues to receive favorable bond ratings. If you have questions about this report or need additional financial information, you can contact the New Jersey Water Supply Authority at 1851 Highway 31, P.O. Box 5196, Clinton, New Jersey 08809, (908) 638-6121 or visit our website at www.njwsa.org.

BASIC FINANCIAL STATEMENTS

NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)

STATEMENTS OF NET POSITION

	June 30,	
	2023	2022*
Assets		
Current assets:		
Unrestricted assets:		
Cash and cash equivalents	\$ 56,288,289	\$ 68,938,148
Unbilled sales	1,853,997	1,749,325
Accounts receivable, less allowance for doubtful accounts of \$1,000 at June 30, 2023 and 2022	13,967,536	23,904,476
Interest receivable	285,544	-
Prepaid expenses and other current assets	1,760,875	1,387,434
Total unrestricted current assets	<u>74,156,241</u>	<u>95,979,383</u>
Restricted assets:		
Cash equivalents	19,823,574	35,629,870
Total current assets	<u>93,979,815</u>	<u>131,609,253</u>
Non-current assets:		
Investments	34,751,456	-
Capital assets, net	235,324,883	223,816,244
Total non-current assets	<u>270,076,339</u>	<u>223,816,244</u>
Total assets	<u>364,056,154</u>	<u>355,425,497</u>
Deferred outflows of resources:		
Cost recovery	2,672,857	685,718
Pension related	3,016,579	2,085,383
OPEB related	10,685,054	10,820,046
Construction loan DEP fee	742,575	742,575
Total deferred outflows of resources	<u>17,117,065</u>	<u>14,333,722</u>
Total assets and deferred outflows of resources	<u>\$ 381,173,219</u>	<u>\$ 369,759,219</u>
Liabilities		
Current liabilities:		
Current portion of bonds, notes and loans payable	\$ 3,116,146	\$ 3,183,435
Accounts payable	4,550,507	4,356,299
Accrued liabilities	2,927,674	2,853,901
Unearned revenue	6,533,836	5,463,619
Total current liabilities	<u>17,128,163</u>	<u>15,857,254</u>
Non-current liabilities:		
Non-current portion of bonds, notes and loans payable	149,640,545	152,855,075
Lease liability	24,884	34,205
Net pension liability	16,101,898	12,251,099
Net OPEB liability	27,662,158	31,037,563
Total non-current liabilities	<u>193,429,485</u>	<u>196,177,942</u>
Total liabilities	<u>210,557,648</u>	<u>212,035,196</u>
Deferred inflows of resources:		
Pension related	2,796,346	8,086,596
OPEB related	16,528,732	14,054,948
Gain on refunding	213,136	236,817
Total deferred inflows of resources	<u>19,538,214</u>	<u>22,378,361</u>
Total liabilities and deferred inflows of resources	<u>230,095,862</u>	<u>234,413,557</u>
Net Position		
Net investment in capital assets	107,918,240	93,104,101
Restricted for cash, investments, and unearned revenue	13,289,738	30,166,251
Unrestricted	29,869,379	12,075,310
Total net position	<u>151,077,357</u>	<u>135,345,662</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 381,173,219</u>	<u>\$ 369,759,219</u>

*Certain account balances have been reclassified to conform with current year presentation.

NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	Years Ended June 30,	
	2023	2022*
Operating revenues:		
Water sales	\$ 32,451,502	\$ 30,775,239
Reimbursement of operating expenses	2,580,000	2,580,000
Total operating revenues	<u>35,031,502</u>	<u>33,355,239</u>
Operating expenses:		
Payroll	8,312,516	8,232,535
Operations and maintenance	7,280,361	6,800,089
Fringe benefits	1,727,350	1,362,488
Depreciation	4,923,717	4,744,222
Total operating expenses	<u>22,243,944</u>	<u>21,139,334</u>
Income from operations	12,787,558	12,215,905
Non-operating revenues:		
State of New Jersey - Grant Programs	820,500	237,951
Investment and interest income	1,349,747	103,990
Rental income	60,987	60,419
Other income	69,467	52,900
Recovery of deferred outflows of resources	1,949,277	1,981,063
Total non-operating revenues	<u>4,249,978</u>	<u>2,436,323</u>
Non-operating expenses:		
Interest component of debt service to the State of New Jersey	665,889	604,151
SMMUA operations, net	639,952	715,762
Total non-operating expenses	<u>1,305,841</u>	<u>1,319,913</u>
Changes in net position	15,731,695	13,332,315
Net position, beginning of year	135,345,662	122,013,347
Net position, end of year	<u>\$ 151,077,357</u>	<u>\$ 135,345,662</u>

*Certain account balances have been reclassified to conform with current year presentation.

NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)

STATEMENTS OF CASH FLOWS

	Years Ended June 30,	
	2023	2022
Cash flows from operating activities		
Cash received from water sales	\$ 33,312,701	\$ 29,246,329
Cash received from reimbursable expenses	3,244,091	2,643,838
Cash received from rental income	45,946	46,281
Cash paid to or on behalf of employees	(13,342,909)	(12,770,802)
Cash paid to suppliers	(7,805,262)	(6,386,029)
Net cash provided by operating activities	<u>15,454,567</u>	<u>12,779,617</u>
Cash flows from non-capital financing activities		
Cash received for grant programs	85,382	192,324
Net cash provided by non-capital financing activities	<u>85,382</u>	<u>192,324</u>
Cash flows from capital and related financing activities		
Proceeds from borrowing	9,000,866	19,021,110
Principal paid on bonds, notes and loans	(2,875,236)	(3,426,702)
Lease liability	9,321	27,207
Interest paid on bonds, notes and loans	(445,590)	(409,405)
Acquisition and construction of capital assets	(16,042,067)	(21,937,110)
Proceeds from sale of capital assets	62,497	43,805
Net cash used in capital and related financing activities	<u>(10,290,209)</u>	<u>(6,681,095)</u>
Cash flows from investing activities		
Sale of investment securities	-	250,000
Purchase of investment securities	(34,751,456)	(2,011)
Interest received on investments	1,064,203	106,265
Net cash provided/(used) by investing activities	<u>(33,687,253)</u>	<u>354,254</u>
Net increase in cash and cash equivalents	(28,456,155)	6,645,100
Cash and cash equivalents, beginning of year	104,568,018	97,922,918
Cash and cash equivalents, end of year	<u>\$ 76,111,863</u>	<u>\$ 104,568,018</u>
Reconciliation of income from operations to net cash provided by operating activities:		
Income from operations	\$ 12,787,558	\$ 12,215,905
Adjustments to reconcile income from operations to net cash provided by operating activities:		
Cash received for operating activity included in other income	734,234	165,270
Depreciation	4,923,717	4,744,222
Increase (decrease) in cash from:		
Unbilled sales	(104,672)	(168,150)
Accounts receivable	959,789	(1,395,447)
Prepaid expenses and other current assets	(373,441)	374,489
Accounts payable	(150,955)	40,492
Accrued liabilities	(531)	(11,869)
Accrued payroll and taxes	(183,856)	11,833
Net pension liability	(2,370,647)	(2,725,824)
Net OPEB liability	(766,629)	(471,304)
Net cash provided by operating activities	<u>\$ 15,454,567</u>	<u>\$ 12,779,617</u>
Non-cash investing activities		
Increase (decrease) in fair value of investments	<u>\$ (580,521)</u>	<u>\$ 2,011</u>

See notes to financial statements

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

NOTES TO FINANCIAL STATEMENTS

A. ORGANIZATION AND OPERATIONS

The New Jersey Water Supply Authority (the "Authority"), a component unit of the State of New Jersey (the "State"), consisting of the Spruce Run/Round Valley Reservoirs Complex, the Delaware and Raritan Canal Transmission Complex (the "Raritan Basin System") and the Manasquan Reservoir Water Supply System (the "Manasquan System"), is a public body, corporate and politic, constituted as an instrumentality of the State, exercising public and essential governmental functions. The Authority was created by the New Jersey Water Supply Authority Act (the "Act") on October 7, 1981, and in connection with the Act, all water supply facilities owned or operated by the State (*i.e.*, *Raritan Basin System*) were transferred or leased to the Authority. The Act empowers the Authority to acquire, finance, construct and operate water systems and issue bonds. Members of the Authority consist of the Commissioner of the New Jersey Department of Environmental Protection ("NJDEP"), *ex officio* member and six public members appointed by the Governor upon the advice and consent of the New Jersey Senate. The public members represent the agricultural community, industrial water users, residential water users, private watershed associations, public finance and water resource management and distribution. The Authority prepares an annual budget that is used to establish rates and as a management tool, but the budget does not constitute a legal budget or establish spending limitations.

The Authority does not have component units that should be included within its financial statements.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Authority is a component unit of the State of New Jersey and is included in their general purpose financial statements.

The accompanying basic financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board ("GASB").

In its accounting and financial reporting, the Authority follows the pronouncements of the GASB and other entities that promulgate accounting principles. GASB Statement 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, establishes the order of priority of pronouncements and other sources of accounting and financial reporting guidance that a governmental entity should apply. Per the Statement, the sources of authoritative generally accepted accounting principles ("GAAP") are categorized in descending order of authority as follows: GASB Statements and Interpretations, GASB Technical Bulletins, GASB Implementation Guides, and literature of the American Institute of Certified Public Accountants ("AICPA") cleared by the GASB. Authoritative GAAP is incorporated periodically into the Codification of Governmental Accounting and Financial Reporting Standards (Codification), and when presented in the Codification, it retains its authoritative status. If the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP described above, a governmental entity should first consider accounting

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Basis of Accounting (Continued)

principles for similar transactions or other events within a source of authoritative GAAP described above and then may consider nonauthoritative accounting literature from other sources. These include GASB Concepts Statements; pronouncements and other Statements, pronouncements and other literature of the Financial Accounting Standards Board ("FASB"), Federal Accounting Standards Advisory Board, International Public Sector Accounting Standards Board, and International Accounting Standards Board, and AICPA literature not cleared by the GASB; practices that are widely recognized and prevalent in state and local government; literature of other professional associations or regulatory agencies; and accounting textbooks, handbooks and articles.

The Authority derives most of its revenue from water user charges and is considered to be an enterprise fund; accordingly, the Authority presents its financial statements on the accrual basis of accounting. In addition, the Authority has established certain restricted "funds or accounts" as directed by internal resolution and bond indentures.

Revenues

Charges for wholesale water usage are established to provide revenue sufficient for services, essential repairs and improvements to the utility plant, and repayment of debt service on certain long-term obligations used for plant construction. Sales are recognized as revenue when water is made available to customers, and the customers are billed in the following month or quarter.

The Authority distinguishes operating revenue and expenses from non-operating items. Operating revenue and expenses result from the sale of water to customers. Operating expenses include costs of providing water, administrative expenses and depreciation on capital assets. All revenue and expenses not meeting this definition are reported as non-operating revenue and expenses.

Capital Assets

Capital assets are stated at original cost and consist primarily of amounts expended to license, construct, acquire, complete and place into operation the projects of the Authority. Capital assets are defined by the Authority as assets with an initial individual cost of more than \$1,000 and an estimated useful life in excess of three years. Such expenditures include labor, materials, services and indirect costs. Normal maintenance and repair costs are charged to operations and maintenance expense. Improvements and replacements are capitalized. Interest earned on long-term debt proceeds used for capital asset construction and temporarily invested during the construction period is netted against interest cost. The excess, if any, is capitalized to construction work in progress, and the portion related to completed projects is expensed. The cost of capital assets retired, net of any gain or loss on the disposal of such capital assets, is offset to accumulated depreciation. The Authority also holds several restricted easements for utility access, conservation and water rights. These easements are recorded at the lower of cost or fair market value upon acquisition.

NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)
NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Depreciation

Capital assets are depreciated on the straight-line basis over the estimated useful lives of the various classes of plant, as follows:

Dams	100 years
Buildings, structures and improvements	15-40 years
D&R canal dredging	20 years
Machinery and equipment	3-10 years

Cash and Cash Equivalents

For purposes of the statements of cash flows, the Authority considers short-term investments that have original maturities of ninety days or less to be cash equivalents.

Investments

Short-term investments and restricted investments used for construction and payment of interest consist of money market funds and U.S. government-backed securities with various interest rates. Restricted investments are restricted under the terms of the Authority's bond indentures for the payment of debt service. All investments are carried at fair value, in accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools* and GASB Statement No. 72, *Fair Value Measurement and Application*.

Accounts Receivable

The Authority considers most of its accounts receivable to be collectible; accordingly, the change in net position is charged with an allowance for estimated uncollectible accounts based on past experience and an analysis of current accounts receivable collectability. Accounts deemed uncollectible are charged to the allowance in the year they are deemed uncollectible.

Compensated Absences

All full-time employees accumulate vacation benefits in varying annual amounts up to a maximum allowable accumulation of two years' benefit. Unused sick leave benefits are earned by all full-time employees at a rate of 15 days per year and may be accumulated without limit. In the event of termination, an employee is reimbursed for all accumulated vacation days. Unused sick leave benefits do not vest but are payable only upon retirement up to a maximum of \$15,000. A liability is accrued in the financial statements when incurred.

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Income Taxes

The Authority is exempt from federal income taxes under the Internal Revenue Code, Section 115, and from state income taxes under N.J.S.A. 27:25-16, and accordingly, no provision is recorded for federal or state income taxes.

Net Position

Net position represents the difference between assets and liabilities and is classified into three categories:

- *Net Investment in Capital Assets* – This represents capital assets, net of accumulated depreciation, less the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition construction or improvement of those assets.
- *Restricted for cash, investments, and unearned revenue* – This represents the net position that is not accessible for general use because its use is subject to restrictions enforceable by third parties. When both restricted and unrestricted resources are available for use, it is the Authority's policy to use restricted resources first and then unrestricted resources, as they are needed.
- *Unrestricted Net Position* – This represents the net position that is available for general use.

Deferred Inflows and Outflows of Resources

In addition to assets and liabilities, the statements of net position report separate sections of deferred outflows of resources and deferred inflows of resources. Deferred outflows of resources represent a consumption of net position that applies to a future period which will not be recognized as an outflow of resources until that time. Deferred inflows of resources represent an acquisition of net position that applies to a future period which will not be recognized as an inflow of resources until that time.

Deferred Inflows/Outflows of Resources – Cost Recovery

The Authority's cost recovery rate model used to establish rates, fees and charges includes an amount for debt principal repayment (but not for depreciation on the related debt financed assets) and also includes vacation amounts paid. In accordance with GASB No. 62, the Authority has deferred the excess of current depreciation on assets financed with debt proceeds over the costs for debt principal repayment and the excess of vacation expense over vacation paid, and accrued sick pay, which are being classified as deferred outflows of resources. The deferred outflows will be recovered through future revenue in accordance with the rate model. The deferred amounts for the years ended June 30, 2023 and 2022 were determined as follows:

NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Deferred Inflows and Outflows of Resources (Continued)

Raritan Basin System	2023	2022
Cost excluded from rate model:		
Depreciation of debt-financed capital assets recoverable from rate payers	\$ 823,423	\$ 835,209
Excess vacation expense over vacation paid	22,814	(45,359)
Accrued sick pay	22,646	(26,741)
	<u>868,883</u>	<u>763,109</u>
Cost included in rate model:		
Debt principal repayment	-	-
Subtotal Raritan Basin System	<u>868,883</u>	<u>763,109</u>
Manasquan System		
Cost excluded from rate model:		
Depreciation of debt-financed capital assets recoverable from rate payers	1,540,854	1,540,854
Excess vacation expense over vacation paid	(8,206)	(11,903)
Accrued sick pay	608	(844)
	<u>1,533,256</u>	<u>1,528,107</u>
Cost included in rate model:		
Debt principal repayment	(415,000)	(395,000)
Subtotal Manasquan System	<u>1,118,256</u>	<u>1,133,107</u>
Total Raritan Basin and Manasquan	1,987,139	1,896,216
Balance, beginning of year	685,718	(1,210,498)
Balance, end of year	<u>\$ 2,672,857</u>	<u>\$ 685,718</u>

As shown in the statements of revenue, expenses and changes in net position for the year ended June 30, 2023, the deferred outflows of resources debit of \$1,949,277 does not include a debit balance of \$37,862 of accrued vacation and sick pay. The June 30, 2022, deferred outflows of resources debit balance of \$1,981,063 does not include a credit balance of \$84,847 of accrued vacation and sick pay.

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Deferred Inflows and Outflows of Resources (Continued)

Deferred Inflows/Outflows of Resources – Debt Refunding

Deferred charges for debt refunding result from the difference between the net carrying amount of refunded bonds and the amount deposited to escrow to defease the bonds. In accordance with GASB 23, the Authority has deferred the difference between the reacquisition price and the net carrying amount of the Manasquan Reservoir Water Supply System Revenue Bonds, Series 2005. The deferred amount is reported as a deferred inflow of resources and amortized as a component of interest expense over the remaining life of the Manasquan Reservoir Water Supply System Refunding Bonds, Series 2016.

Deferred Inflows/Outflows of Resources – Pensions & Other Post-retirement Benefits (OPEB)

Deferred charges for defined benefit plans result from the difference between expected (actuarial) and actual experience, changes in actuarial assumptions, net difference between projected (actuarial) and actual earnings on plan investments, changes in the State's proportion of expenses and liabilities to the plans as a whole, differences between the Authority's plan contributions and its proportionate share of contributions, and the Authority's pension contributions subsequent to the pension valuation measurement date.

Accounting for Southeast Monmouth Municipal Utilities Authority Agreement

The Authority operates and maintains a Water Treatment Plant/Transmission System for the Southeast Monmouth Municipal Utilities Authority ("SMMUA"). The SMMUA is charged for budgeted operating expenses expected to be incurred by the Authority during the SMMUA's fiscal year (January 1 through December 31).

Because of the difference resulting from billing the SMMUA for budgeted expenses versus actual expenses appearing in the financial statements, the Authority includes unearned costs (actual costs exceeding SMMUA billings) or unearned revenue (SMMUA billings exceeding actual costs) in its statements of net position. These excess costs or billings will be recovered or recognized in future periods. As of June 30, 2023 and 2022, unearned revenue amounting to \$5,282,144 and \$4,642,192, respectively, was determined as follows:

	<u>2023</u>	<u>2022</u>
Reimbursement of operating expenses	\$ 2,633,782	\$ 2,583,507
Operating expenses	1,993,830	1,867,745
SMMUA operations, net	<u>639,952</u>	<u>715,762</u>
Unearned revenue balance, beginning of year	4,642,192	3,926,430
Unearned revenue balance, end of year	<u>\$ 5,282,144</u>	<u>\$ 4,642,192</u>

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Accounting for Southeast Monmouth Municipal Utilities Authority Agreement (Continued)

In previous years, the Authority received additional funds that are restricted for use by the SMMUA for costs associated in operating the Water Treatment Plant. As of June 30, 2023 and 2022, the amount included in unearned revenue was \$345,039 and \$267,942, respectively.

Accounting for Watershed Protection Program

For the fiscal years ended June 30, 2023 and 2022, the Authority received \$79,381 and \$107,250, respectively, from federal and/or state environmental agencies for the costs associated with various watershed protection studies of the Raritan Basin System. These funds are restricted to uses specifically identified in grant agreements between the Authority and these agencies and will be recognized as revenue as the related costs are incurred. Eligible project expenses include, but are not limited to, the cost of mapping out streams and other water sources and studying and implementing best land use practices to improve water quality. As of June 30, 2023, all of the funds received had been recognized as revenue.

Accounting for Mitigation funds

During fiscal years ended June 30, 2023 and 2022, the Authority received \$8,940 and \$86,768, respectively, for the costs associated with implementing water quality improvement projects for the Delaware and Raritan Canal. These funds are restricted to projects specifically identified by the D&R Canal Commission ("DRCC") and administered by the Authority and are recognized as revenue as the related costs are incurred. These funds are maintained in a separate mitigation account. As of June 30, 2023 and 2022, the balance of unearned revenue was \$556,425 and \$553,485, respectively.

Accounting for FEMA reimbursements

The authority received Federal Emergency Management Agency reimbursements for COVID-19 and the remnants of Hurricane Ida flooding in the amounts of \$1,016,506 and \$95,756 for the fiscal years ending June 30, 2023, and 2022, respectively. As of June 30, 2023 and 2022, the balance of unearned revenue was \$350,228 and \$0, respectively.

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

C. CAPITAL ASSETS

Capital assets activity for the years ended June 30, 2023 and 2022 was as follows:

	2023			2023
	Beginning	Additions	Retirements	Ending
	Balance			Balance
Capital assets not being depreciated:				
Land	\$ 26,444,952	\$ -	\$ (796,833)	\$ 25,648,119
Construction work in progress	105,010,249	16,217,601	(277,300)	120,950,550
Total capital assets not being depreciated	131,455,201	16,217,601	(1,074,133)	146,598,669
Capital assets being depreciated:				
Dams	77,369,160	-	-	77,369,160
Building, structures and improvements	149,573,239	277,300	(1,069)	149,849,470
D & R Canal dredging	21,160,274	-	-	21,160,274
Machinery and equipment	7,830,475	1,011,588	(288,155)	8,553,908
Leased equipment	38,738	-	-	38,738
Total capital assets being depreciated	255,971,886	1,288,888	(289,224)	256,971,550
Less accumulated depreciation for:				
Dams	(33,882,675)	(761,766)	-	(34,644,441)
Building, structures and improvements	(102,739,113)	(3,644,021)	1,069	(106,382,065)
D & R Canal dredging	(21,160,274)	-	-	(21,160,274)
Machinery and equipment	(5,823,939)	(508,246)	288,155	(6,044,030)
Leased equipment	(4,842)	(9,684)	-	(14,526)
Total accumulated depreciation	(163,610,843)	(4,923,717)	289,224	(168,245,336)
Total capital assets being depreciated, net	92,361,043	(3,634,829)	-	88,726,214
Total net investment in capital assets	\$ 223,816,244	\$ 12,582,772	\$ (1,074,133)	\$ 235,324,883

	2022			2022
	Beginning	Additions	Retirements	Ending
	Balance			Balance
Capital assets not being depreciated:				
Land	\$ 26,444,952	\$ -	\$ -	\$ 26,444,952
Construction work in progress	89,541,411	19,821,529	(4,352,691)	105,010,249
Total capital assets not being depreciated	115,986,363	19,821,529	(4,352,691)	131,455,201
Capital assets being depreciated:				
Dams	77,369,160	-	-	77,369,160
Building, structures and improvements	145,169,966	4,404,482	(1,209)	149,573,239
D & R Canal dredging	21,160,274	-	-	21,160,274
Machinery and equipment	7,444,203	921,289	(535,017)	7,830,475
Leased equipment	56,520	38,738	(56,520)	38,738
Total capital assets being depreciated	251,200,123	5,364,509	(592,746)	255,971,886
Less accumulated depreciation for:				
Dams	(33,120,909)	(761,766)	-	(33,882,675)
Building, structures and improvements	(99,174,956)	(3,565,366)	1,209	(102,739,113)
D & R Canal dredging	(21,160,274)	-	-	(21,160,274)
Machinery and equipment	(5,940,894)	(405,216)	522,171	(5,823,939)
Leased equipment	(49,488)	(11,874)	56,520	(4,842)
Total accumulated depreciation	(159,446,521)	(4,744,222)	579,900	(163,610,843)
Total capital assets being depreciated, net	91,753,602	620,287	(12,846)	92,361,043
Total net investment in capital assets	\$ 207,739,965	\$ 20,441,816	\$ (4,365,537)	\$ 223,816,244

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

NOTES TO FINANCIAL STATEMENTS

D. CASH, CASH EQUIVALENTS AND INVESTMENTS

New Jersey statutes permit the deposit of public funds in the State of New Jersey Cash Management Fund (“NJCMF”) or in institutions located in New Jersey that are insured by the Federal Deposit Insurance Corporation (the “FDIC”) or by any other agencies of the United States that insure deposits. All funds of the Authority may be invested in, obligations of, or guaranteed by, the U.S. government.

The Authority’s bond resolutions limit the investment of restricted assets to obligations of the U.S. government or its agencies, investments in certain certificates of deposit of commercial banks that are members of the Federal Reserve System, investments in the NJCMF, and direct and general obligations of any state that meets the minimum requirements of the resolution.

1. Cash

As of June 30, 2023 and 2022, the Authority’s bank balances were \$78,083,431 and \$104,682,169, respectively, of which \$250,000 was covered through the FDIC. The remaining balances of \$77,833,431 and \$104,432,169 as of June 30, 2023 and 2022, respectively, were collateralized through an irrevocable stand-by letter of credit issued by the Federal Home Loan Bank of Pittsburgh through TD Bank. The letter of credit covers up to a maximum of \$100,000,000 of Authority deposits and was renewed through March 28, 2024. The cash balance per the statements of net position is shown exclusive of outstanding checks totaling \$1,971,868 and \$114,451, respectively. The statements of net position amount include petty cash totaling \$300 as of June 30, 2023 and 2022, respectively.

2. Custodial Credit Risk – Deposits

Custodial credit risk is the risk that, in the event of a bank failure, the Authority’s deposits may not be returned. The Authority does not have a deposit policy for custodial credit risk. The Authority’s bank balances of \$78,083,431 and \$104,682,169 as of June 30, 2023 and 2022, respectively, were exposed to custodial credit risk as follows:

	<u>2023</u>	<u>2022</u>
Uninsured and uncollateralized	<u>\$ -</u>	<u>\$ -</u>

3. Investments and Cash Equivalents

The Authority does not have a policy to limit interest rate risk; however, its practice is to hold investments to maturity.

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The Authority has no level 1 or level 3 investments.

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NOTES TO FINANCIAL STATEMENTS

D. CASH, CASH EQUIVALENTS AND INVESTMENTS (CONTINUED)

3. Investments and Cash Equivalents (Continued)

As of June 30, 2023, the Authority had the following recurring fair value measurements using current sale prices or sale prices of comparable securities for New Jersey General Obligation Bonds (Level 2 inputs) for investments and cash equivalents, and maturities, inclusive of interest receivable:

Investment and Cash Equivalent Type	Valuation Inputs Level	Fair Value	Investment Maturities (In Years)	
			Less than 1	1-5
NJ G/O Bonds and CDs	Level 2	\$ 35,037,000	\$ 23,302,701	\$ 11,734,299
Total		\$ 35,037,000	\$ 23,302,701	\$ 11,734,299

As of June 30, 2022, the Authority had the following recurring fair value measurements using current sale prices or sale prices of comparable securities for New Jersey General Obligation Bonds (Level 2 inputs) for investments and cash equivalents, and maturities:

Investment and Cash Equivalent Type	Valuation Inputs Level	Fair Value	Investment Maturities (In Years)	
			Less than 1	1-5
NJ G/O Bonds and CDs	Level 2	\$ -	\$ -	\$ -
Total		\$ -	\$ -	\$ -

4. Credit and Custodial Credit Risk

In order to limit exposure to credit risk, the Authority follows the investment policies set forth by the NJCMF. These policies allow investment in securities that achieve a certain rating from the three major ratings organizations as determined annually by the governing board of the NJCMF, as well as limiting investments to certain types of marketable securities.

U.S. Treasury notes are explicitly guaranteed by the U.S. government and are not subject to credit risk or custodial credit risk.

The Authority entered into an agreement with TD Bank to collateralize all deposits held at a market rate equal to 102% of the daily combined total of all deposits. As of June 30, 2023, all deposits were collateralized.

5. Investment Income

The following comprises investment income for the years ended June 30, 2023 and 2022, respectively:

	<u>2023</u>	<u>2022</u>
Interest earned on bank accounts and certificates of deposit	\$ 1,369,523	\$ 101,698
Interest earned on securities	560,745	281
Gain/(loss) on fair value of securities	(580,521)	2,011
	<u>\$ 1,349,747</u>	<u>\$ 103,990</u>

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE

Manasquan System

1. Notes Due to State of New Jersey

The Authority has a contractual obligation to repay the following debt:

The \$63,600,000 of Manasquan Reservoir Water Supply System State Loan Notes (the "State Loan Notes") issued June 3, 1987, pursuant to the terms of the State Loan Agreement between the Authority and the State (the "State Loan Agreement"), from monies authorized by the 1981 bond appropriation of \$72,000,000 for construction of the Manasquan System and the \$7,416,000 of Interim Advance Notes issued September 12, 1988, from monies made available from the General Fund of the State to finance completion costs of the Manasquan System. The State Loan Notes and the Completion Loan Notes bear interest at 5.9% and 6.2%, respectively, and are collateralized by the property and revenues of the Manasquan System.

In accordance with the terms of the State Loan Agreement, the State Loan Notes are classified as either Current Debt Service Portion Notes ("Current Notes") or Deferred Debt Service Portion Notes ("Deferred Notes"). Principal of the Deferred Notes will be discharged solely by exchange for Current Notes or by the expiration of a period of forty years from the date of their issuance, which was June 3, 1987. The Deferred Notes must be exchanged for Current Notes on a pro rata basis to the extent that the Authority enters into additional long-term contracts to sell water from the Manasquan System on an annual basis. Such Current Notes are payable over a thirty-year period commencing from such date as is defined in the State Loan Agreement.

Interest on the Deferred Notes accreted as principal through July 31, 1993 and is not payable until they have been exchanged for Current Notes. The interest that accreted as principal through July 31, 1990, accrued interest; however, the interest that accreted for the period from August 1, 1990 through July 31, 1993, did not accrue interest. The accretion of interest to the principal amount for the Current Notes and the Deferred Notes is \$25,563,184 at June 30, 2023 and 2022.

On May 12, 2016, the Authority repaid the State of New Jersey \$78,651.22 for principal and all accrued interest on outstanding Current State Loan Notes and Completion Notes. At June 30, 2023 and 2022, the State Loan Notes and Completion Loan Notes are summarized as follows:

State Loan Notes	2023	2022
Current Notes	\$ -	\$ -
Deferred Notes	30,365,115	30,365,115
Completion Loan Notes		
Current Notes	-	-
Deferred Notes	3,201,777	3,201,777
	<u>\$ 33,566,892</u>	<u>\$ 33,566,892</u>

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

Manasquan System (Continued)

2. Manasquan Reservoir Water Supply System Revenue Bonds, Series 2005

On August 5, 2005, the Authority issued \$47,535,000 in Manasquan Reservoir Water Supply System Revenue Bonds, Series 2005. The proceeds, together with other monies on deposit, were used to prepay \$49,293,438 in Current Manasquan State Loan Notes and Completion Loan Notes, the proceeds of which were used to construct the Manasquan Water Supply System. The Revenue Bonds, Series 2005, carried a bond yield of 3.95%, and were scheduled to mature in incremental annual principal amounts through 2031.

The property, and 100% of the revenue generated by the Debt Service Component of the Rate for both initial system customers and delayed water purchase customers of the Manasquan System, was pledged as collateral for the 2005 Bonds. The Debt Service Component of the Rate represents 120% of the principal and interest requirements. For the years ended June 30, 2023 and 2022, the Debt Service Component of the Rate generated \$710,513.

The Revenue Bonds, Series 2005, had a principal balance outstanding of \$26,105,000 at June 30, 2015. Those bonds maturing on or after August 1, 2016, were subject to redemption prior to their stated maturity dates at the option of the Authority. The last principal payment of \$2,940,000 was made on August 1, 2015. The remaining 2005 Bonds were redeemed on June 15, 2016, for \$23,596,126 including accrued interest.

3. Manasquan Reservoir Water Supply System Refunding Bonds, Series 2016

On April 26, 2016, the Authority issued \$17,460,000 in Manasquan Reservoir Water Supply System Refunding Bonds, Series 2016. The proceeds, together with other monies on deposit in the amount of \$6,340,964, were used to prepay \$23,242,358 in Manasquan Reservoir Water Supply System Revenue Bonds, Series 2005 and Current Manasquan State Loan Notes and Completion Loan Notes.

The Refunding Bonds, Series 2016, have a principal balance outstanding of \$4,550,000 at June 30, 2023, carry a bond yield of 1.6%, and mature in incremental annual principal amounts through 2031. Principal maturities for the year ending June 30, 2024 are \$435,000.

The property, and 100% of the revenue generated by the Debt Service Component of the Rate for both initial system customers and delayed water purchase customers of the Manasquan System, was pledged as collateral for the 2016 Bonds. The Debt Service Component of the Rate represents 120% of the principal and interest requirements. The pledged revenue will be unavailable for other purposes until August 1, 2031.

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

Manasquan System (Continued)

3. Manasquan Reservoir Water Supply System Refunding Bonds, Series 2016 (Continued)

For the years ended June 30, 2023 and 2022, interest expense on the 2016 Bonds amounted to \$158,422 and \$179,083, respectively, and for each year the related interest income earned on the restricted investments account amounted to \$0.

The current refunding resulted in a difference between the par amount of the refunding bonds and the par amount of the refunded bonds of \$5,782,358. The net premium received on the refunding bonds was \$1,821,414, is reported with bonds payable on the statements of net position and is being charged to operations using a method that approximates the effective interest method over the shorter of the remaining life of the old debt or the life of the new debt. Although the refunding resulted in an accounting gain of \$823,712, it was performed to reduce debt service by approximately \$5,269,268 and resulted in an economic gain (difference between the present values of the old and new debt service payments) of \$2,999,861. The accounting gain, or deferred gain on the refunding, is reported as a deferred inflow of resources in the amount of \$213,136 and \$236,817 as of June 30, 2023, and 2022, respectively.

4. New Jersey Environmental Infrastructure Financing Program ("NJEIFP")

The Authority obtained a loan from the New Jersey Environmental Infrastructure Trust ("the Trust") for the construction of a permanent structure over the Manasquan Intake Pump Station. Under the NJEIFP, the borrowers benefit from a loan formula under which participants borrow a percentage of cost from the State Revolving Fund maintained by the NJDEP at zero interest and the remaining percentage from the Trust at the same interest rate the Trust pays on its bonds. Under the State's Smart Growth Initiative, the interest rate is equivalent to 25 percent of the lowest available rate. Each NJEIFP loan carries a 20-year life. Property and revenue of the Manasquan Reservoir System are pledged as collateral for the loans.

The following table summarizes the NJEIFP loan outstanding for the Manasquan Reservoir System, as of June 30, 2023:

NJEIFP Series	Date of Issuance	State Revolving Fund Original Principal	Percent	Trust Original Principal	Percent	Blended Interest Rate	Outstanding Principal	Maturity
2012B	5/3/2012	\$2,312,250	76%	\$715,000	24%	0.80%	\$1,386,609	8/1/2031

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

Raritan System

5. New Jersey Environmental Infrastructure Financing Program ("NJEIFP")

The Authority obtained loans from the Trust for the acquisition of source water watershed properties critical to the Raritan Basin System. Under the NJEIFP, the borrowers benefit from a loan formula under which participants borrow a percentage of the cost from the State Revolving Fund maintained by the NJDEP at zero interest and the remaining percentage from the Trust at the same interest rate the Trust pays on its bonds. Under the State's Smart Growth Initiative, the interest rate is equivalent to 25 percent of the lowest available rate. Each NJEIFP loan carries a 20-year life, and property and revenue of the Raritan Basin System are pledged as collateral for the loans.

In fiscal year 2018, the Authority borrowed \$49,548,569 from the New Jersey Infrastructure Bank (NJIB - formerly known as the New Jersey Environmental Infrastructure Trust) through an interim note to finance its Raritan Basin System Canal Dredging project. In fiscal year 2021 the interim note was converted to permanent long-term financing with the NJIB and the State for a total amount of \$35,684,438 at a blended interest rate of 0.41%. Actual project costs were lower than expected, causing the final loan amount to be lower than originally anticipated.

In fiscal year 2019, the Authority borrowed \$15,224,595 from the NJIB through an interim note to finance a portion of its Raritan Basin System Round Valley Refurbishment and Resource Preservation project. In fiscal year 2021, an additional \$59,775,405 interim financing was completed for the remainder of the project. Upon substantial completion of the project, it is anticipated that the interim note will convert to permanent long-term financing.

The following table summarizes the NJEIFP/NJIB loans outstanding for the Raritan Basin System, as of June 30, 2023:

NJEIFP Series	Date of Issuance	State Revolving Fund Original Principal	Percent	Trust Original Principal	Percent	Blended Interest Rate	Outstanding Principal	Maturity
2003A	11/6/2003	\$ 627,019	75%	\$ 235,000	25%	1.19%	\$ 55,191	8/1/2023
2004A	11/4/2004	1,030,000	75%	350,000	25%	1.31%	147,632	8/1/2024
2005A	11/10/2005	2,940,974	75%	1,050,000	25%	1.25%	230,000	8/1/2025
2006A	11/9/2006	2,099,363	75%	745,000	25%	1.26%	579,667	8/1/2026
2007A	11/8/2007	1,740,563	75%	620,000	25%	1.06%	650,318	8/1/2027
2008A	11/6/2008	1,152,000	64%	660,000	36%	1.74%	636,987	8/1/2028
2010A	3/10/2010	300,493	51%	290,000	49%	1.69%	218,289	8/1/2029
2010B	12/2/2010	1,064,338	52%	990,000	48%	1.87%	938,954	8/1/2030
2012A	5/3/2012	1,501,455	76%	465,000	24%	0.65%	931,658	8/1/2031
2021A	6/10/2021	27,724,230	77%	8,325,000	23%	0.41%	32,612,122	8/1/2040
CFP-20-1	7/9/2020	34,102,823	45%	40,897,177	55%	tbd	75,000,000	tbd
Total		\$ 74,283,258		\$ 54,627,177			\$ 112,000,818	

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

The following table summarizes the changes in bonds, notes and loans payable between fiscal years 2023, 2022 and 2021:

	Fiscal Year 2022	Less Payments, Net of Amortization	Debt Issued	Fiscal Year 2023	Due Within One Year
Bonds payable	\$ 5,488,656	\$ 467,365	\$ -	\$ 5,021,291	\$ 435,000
Notes payable	33,566,892	-	-	33,566,892	-
Loans payable	116,982,962	2,814,454	-	114,168,508	2,681,146
Total	\$ 156,038,510	\$ 3,281,819	\$ -	\$ 152,756,691	\$ 3,116,146

	Fiscal Year 2021	Less Payments, Net of Amortization	Debt Issued	Fiscal Year 2022	Due Within One Year
Bonds payable	\$ 5,936,022	\$ 447,366	\$ -	\$ 5,488,656	\$ 415,000
Notes payable	33,566,892	-	-	33,566,892	-
Loans payable	119,872,023	2,889,061	-	116,982,962	2,768,435
Total	\$ 159,374,937	\$ 3,336,427	\$ -	\$ 156,038,510	\$ 3,183,435

Principal and interest on aggregate maturities and bonds, notes and loans, net of unamortized bond premium, are as follows:

Years Ending June 30,	Raritan Basin System	Manasquan Reservoir System	Notes Payable Manasquan System	Manasquan System Revenue Bonds Series 2016	Totals
2024	\$ 2,875,206	\$ 175,822	\$ -	\$ 580,712	\$ 3,631,740
2025	2,811,976	173,822	-	578,462	3,564,260
2026	2,754,992	171,822	-	575,213	3,502,027
2027	2,611,355	174,697	-	575,838	3,361,890
2028	2,489,659	172,672	-	578,137	3,240,468
2029-2033	10,805,072	606,949	-	2,279,794	13,691,815
2034-2038	9,846,039	-	-	-	9,846,039
2039-2041	5,443,480	-	-	-	5,443,480
Pending Project Completion Deferred Portion	75,000,000	-	-	-	75,000,000
	-	-	33,566,892	-	33,566,892
Subtotal	114,637,779	1,475,784	33,566,892	5,168,156	154,848,611
Less amounts representing interest	2,636,961	89,175	-	618,156	3,344,292
Plus unamortized bond premium	756,437	24,644	-	471,291	1,252,372
Total	112,757,255	1,411,253	33,566,892	5,021,291	152,756,691
Less:					
Current principal portion	2,523,574	157,572	-	435,000	3,116,146
Non-current principal portion	\$ 110,233,681	\$ 1,253,681	\$ 33,566,892	\$ 4,586,291	\$ 149,640,545

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS

Pension and Retirement Plans

Full-time employees of the Authority are covered by the Public Employees' Retirement System of the State of New Jersey ("PERS"). PERS is administered by the State of New Jersey, Division of Pensions and Benefits ("Division"). The Authority has adopted GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* and Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date*. Statements No. 68 and 71 require the Authority to report its share of the defined benefit pension liability and expense, as well as the related deferred outflows of resources and deferred inflows of resources, allocated to it by the PERS. For additional information about PERS, please refer to the Division's Annual Comprehensive Financial Report (ACFR) which can be found at <https://www.nj.gov/treasury/omb/publications/22fr/NJFRFY2022Complete.pdf>.

Following is the total of the local portion of the System's pension liabilities, pension assets, deferred outflows of resources and deferred inflows of resources related to pensions, and the pension expense and expenditures for the fiscal year ended June 30, 2023.

Net Pension Liabilities	\$16,101,898
Deferred Outflows of Resources	3,016,579
Deferred Inflows of Resources	2,796,346
Pension Expense	(890,786)
Contributions Made	1,345,488

Plan Description and Benefits

PERS is a cost-sharing, multiple-employer defined benefit pension plan. PERS provides retirement and disability benefits, annual cost of living adjustments, and benefits to plan members and their beneficiaries. As a condition of employment, all Authority full-time employees are required to be members of PERS. PERS members can apply for a service retirement at age 60 if enrolled before November 2, 2008 (Tier 1 or Tier 2), or at age 62 if enrolled on or after November 2, 2008, but before June 28, 2011 (Tier 3 or Tier 4), or at age 65 if enrolled on or after June 28, 2011 (Tier 5), regardless of the amount of service credit earned.

For Tier 1, 2 or 3, the Annual Benefit equals Years of Service Credit, divided by 55, times Final Average Salary (average salary of the last three years of credited service or the highest three fiscal years of credited service, whichever provides the higher benefit). For Tier 4 or Tier 5, the Annual Benefit equals Years of Service Credit, divided by 60, times Final Average Salary (average salary of the last five years of credited service or the highest five fiscal years of credited service, whichever provides the higher benefit). Pension benefits fully vest on reaching 10 years of service. Vested employees who were enrolled prior to July 1, 2007, and who have established 25 years or more of creditable service may retire without penalty at or after age 55 and receive full retirement benefits. PERS also provides death and disability benefits. Benefits are established by state statute.

Contributions

Employee contribution rates to PERS governed by P.L. 2011, C. 78, effective June 28, 2011, were increased from 5.5% of salary to 6.5% of salary, and a phase-in to 7.5% of salary over a

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Pension and Retirement Plans (Continued)

Contributions (Continued)

seven-year period. Covered Authority employees are required by PERS to contribute 7.5% of their salaries. State statute requires the Authority to contribute an actuarially determined rate which includes the normal cost and the unfunded accrued liability. The amount of the Authority's contribution is certified each year by PERS on the recommendation of the actuary, who makes an annual actuarial valuation. The valuation is based on a determination of the financial condition of the retirement system. It includes the computation of the present dollar value of benefits payable to former and present members and the present dollar value of future employer and employee contributions, giving effect to mortality among active and retired members and also to the rates of disability, retirement, withdrawal, former service, salary and interest. In accordance with state statute, the long-term expected rate of return on plan investments is determined by the State Treasurer, after consultation with the Directors of the Division of Investments and Division of Pensions and Benefits, the board of trustees, and the actuaries. Specific information on actuarial assumptions and rates of return can be found at

<https://www.state.nj.us/treasury/pensions/documents/financial/gasb/gasb68-pers23.pdf>.

The payroll for employees covered by PERS for the years ended June 30, 2023, 2022, and 2021 was \$7,927,695, \$8,048,394, and \$7,796,833, respectively. The Authority's total payroll for the years ended June 30, 2023, 2022, and 2021 was \$8,312,516, \$8,232,535, and \$7,884,810, respectively. The actuarial contribution requirements and the contributions made for the years ended June 30, 2023, 2022, and 2021 were \$1,987,120, \$1,822,549, and \$1,731,864, respectively, which consisted of \$1,345,488, \$1,211,114, and \$1,154,558, respectively from the Authority, and \$641,632, \$611,435, and \$577,306, from employees, respectively. As required by PERS, the employer and employee contributions represented 17.0% and 8.1% of covered payroll for the year ended June 30, 2023, 15.0% and 7.6% of covered payroll for the year ended June 30, 2022, and 14.8% and 7.4% of covered payroll for the year ended June 30, 2021, respectively. Contributions were made in accordance with the actuarial funding requirement.

Assumptions

The collective pension liability for the June 30, 2022, measurement date was determined by an actuarial valuation as of July 1, 2021, which was rolled forward to June 30, 2022. The actuarial valuation used an inflation rate of 2.75% on price and 3.25% on wage, projected salary increases of 2.75% to 6.55% based on years of service and an investment rate of return of 7.0%.

The discount rate used to measure the total pension liability was 7.00% as of June 30, 2022 and 2021. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers and the nonemployer contributing entity will be made based on 100% of the actuarially determined contributions for the State employer and 100% of actuarially determined contributions for the local employers. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all projected benefit payments to determine the total pension liability.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Pension and Retirement Plans (Continued)

Assumptions (Continued)

More information on mortality rates and other assumptions and investment policies can be found at

<https://www.state.nj.us/treasury/pensions/documents/financial/gasb/gasb68-pers23-val.pdf>.

The following presents the Authority's proportionate share of the PERS net pension liability calculated using the discount rate of 7.00% as of June 30, 2022 and 2021, as well as what the PERS net pension liability would be if it was calculated using a discount rate that is one percentage point lower or one percentage point higher than the assumed rate.

Sensitivity of the Authority's Proportionate Share of the PERS Local Share Net Pension Liability to Changes in the Discount Rate

	At 1% Decrease (6.00%)	At Current Discount Rate (7.00%)	At 1% Increase (8.00%)
2022	<u>\$20,686,222</u>	<u>\$16,101,898</u>	<u>\$12,200,454</u>
	At 1% Decrease (6.00%)	At Current Discount Rate (7.00%)	At 1% Increase (8.00%)
2021	<u>\$17,041,101</u>	<u>\$12,251,099</u>	<u>\$8,671,531</u>

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pension

Although the Division administers one cost-sharing multiple-employer defined benefit pension plan, separate (sub) actuarial valuations are prepared to determine the actuarially determined contribution rate by group. Following this method, the measurement of the collective net pension liability, deferred outflows of resources, deferred inflows of resources, and pension expense excluding that attributable to employer-paid member contributions are determined separately for each individual employer of the State and local groups of the plan.

To facilitate the separate (sub) actuarial valuations, the Division maintains separate accounts to identify additions, deductions, and fiduciary net position applicable to each group. The allocation percentages presented for each group in the schedule of employer and nonemployer allocations are applied to amounts presented in the schedules of pension amounts by employer and nonemployer. The allocation percentages for each group as of June 30, 2022 and 2021 are based on the ratio of each employer's contributions to total employer contributions of the group for the fiscal years ended June 30, 2022 and 2021, respectively.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Pension and Retirement Plans (Continued)

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pension (Continued)

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, requires participating employers in PERS to recognize their proportionate share of the collective net pension liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective pension expense. The employer and nonemployer allocation percentages presented in the schedule of pension amounts by employer and nonemployer are based on the ratio of the contributions of an individual employer to total contributions to PERS during the measurement periods of July 1, 2021, to June 30, 2022, and July 1, 2020 to June 30, 2021, respectively. The Authority's proportionate share of the collective net pension liability as of June 30, 2022, and 2021 was .1067% and .1034%, respectively.

At June 30, 2023, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$16,101,898. At June 30, 2022, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$12,251,099. For the years ended June 30, 2023, and 2022, the Authority recognized a PERS pension benefit of \$890,786 and \$1,458,153, respectively. At June 30, 2023, deferred outflows of resources and deferred inflows of resources related to the PERS pension are as follows:

	June 30, 2023		June 30, 2022	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference Between Expected and Actual Experience	\$ 116,216	\$ 102,486	\$ 193,216	\$ 87,703
Change in Assumptions	49,889	2,411,092	63,804	4,361,471
Net Difference Between Projected and Actual Investment Earnings	666,443	-	-	3,227,261
Net Change in Proportions	838,543	282,768	617,249	410,161
Total Contributions and Proportionate Share of Contributions After the Measurement Date	1,345,488	-	1,211,114	-
	<u>\$ 3,016,579</u>	<u>\$ 2,796,346</u>	<u>\$ 2,085,383</u>	<u>\$ 8,086,596</u>

The Authority recognizes the \$1,345,488 and \$1,211,114 reported as deferred outflows of resources resulting from pension contributions after the measurement date, but before the end of the Authority's reporting period, as noted in the previous table, as a reduction of the PERS net pension liability in the subsequent fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in PERS pension expense as follows:

Year Ending June 30	Amortization
2023	\$ (924,557)
2024	(471,031)
2025	(229,712)
2026	501,146
2027	(1,101)
Total	<u>\$ (1,125,255)</u>

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits

Other Post-Employment Benefits Other than Pensions

On July 1, 2017, The Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Statement No. 75 requires participating employers in the Plan to recognize their proportionate share of the collective net OPEB liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective OPEB expense based on the ratio of plan members of an individual employer to the total members of the plan. For additional information about the Plan, please refer to the Division's Annual Comprehensive Financial Report (ACFR) which can be found at <https://www.nj.gov/treasury/omb/publications/22fr/NJFRFY2022Complete.pdf>.

Plan Description and Benefits

The Authority provides post-employment healthcare benefits (including Medicare Part B reimbursement) and prescription drug coverage through participation in the New Jersey State Health Benefits Program. The plan is a cost-sharing multiple employer defined benefit other post-employment benefit (OPEB) plan that provides medical and prescription drug coverage to retirees and their covered dependents. Under the provisions of Chapter 88, P.L. 1974 and Chapter 48, P.L. 1999, local government employers electing to provide post-retirement medical coverage to their employees must file a resolution with the Division of Pension and Benefits. Under Chapter 88, local employers elect to provide benefit coverage based on the eligibility rules and regulations promulgated by the State Health Benefits Commission. Chapter 48 allows local employers to establish their own age and service eligibility for employer-paid health benefits coverage for retired employees. Under Chapter 48, the employer may assume the cost of post-retirement medical coverage for employees and their dependents who: 1) retired on a disability pension; or 2) retired with 25 or more years of service credit in a state or locally administered retirement system and a period of service of up to 25 years with the employer at the time of retirement as established by the employer; or 3) retired and reached the age of 65 with 25 or more years of service credit in a state or locally administered retirement system and a period of service of up to 25 years with the employer at the time of retirement as established by the employer; or 4) retired and reached age 62 with at least 15 years of service with the employer. Further, the law provides that the employer-paid obligations for retiree coverage may be determined by means of a collective negotiations agreement.

Pursuant to Chapter 78, P.L. 2011, future retirees eligible for post-retirement medical coverage who have less than 20 years of creditable service on June 28, 2011, will be required to pay a percentage of the cost of their health care coverage in retirement provided they retire with 25 or more years of pension service credit. The percentage of premium for which the retiree will be responsible will be determined based on the retiree's annual retirement benefit and level of coverage.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

Other Post-Employment Benefits (“OPEB”) Other than Pensions (Continued)

Following is the total of the local portion of the System’s OPEB liabilities, deferred outflows of resources, and deferred inflows of resources related to OPEB and the OPEB expense and expenditures for the fiscal year ended June 30, 2023.

Net OPEB Liabilities	\$27,662,158
Deferred Outflows of Resources	10,685,054
Deferred Inflows of Resources	16,528,732
OPEB (Benefit) Expense	198,704
Contributions Made	3,068,819

Retirees and Employees Covered by the OPEB Plan

At June 30, 2023, total plan members covered by the benefit terms were: 182

Retirees currently receiving benefits: 71

The Authority's contributions to the Plan for the years ended June 30, 2023 and June 30, 2022, were \$3,068,820 and \$2,823,595 respectively.

Net OPEB Liability

The Authority's net OPEB liability of \$27,662,158 as of June 30, 2023, was measured as of June 30, 2022. The Authority's net OPEB liability of \$31,037,563 as of June 30, 2022, was measured as of June 30, 2021. The Authority has fully recognized this liability in the statements of net position as of June 30, 2023, and 2022, in accordance with GASB 75.

Actuarial Methods and Assumptions

The net OPEB liabilities as of June 30, 2022, and 2021, measurement dates were determined by actuarial valuations as of June 30, 2021 and 2020, respectively, which were rolled forward to June 30, 2022, and 2021, respectively. The actuarial valuations used the following actuarial assumptions, applied to all periods in the measurement:

Inflation rate	2.75%
Salary increases*:	
Rate for all future years:	2.75 - 6.55%

* Salary increases are based on years of service within the plan.

Actuarial assumptions used in the July 1, 2021, valuation were based on the results of the PERS experience studies prepared for the July 1, 2018 to June 30, 2021.

One hundred percent of active members are considered to participate in the Plan upon retirement.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

Other Post-Employment Benefits (“OPEB”) Other than Pensions (Continued)

Health Care Trend Assumptions

For pre-Medicare medical benefits, the trend rate is initially 6.25% and decreases to a 4.5% long-term trend rate after seven years and for all future years. For post-65 PPO and HMO medical benefits, the actual fully-insured Medicare Advantage trend rates for fiscal year 2023 through 2033 and all future years are reflected. The rates used for 2023 are -1.89% and -1.99%, respectively, trending to 4.5% in 2033 and for all future years. For prescription drug benefits, the initial trend rate is 8.00% and decreases to a 4.5% long-term trend rate after seven years and for all future years.

Discount Rate

The discount rates for June 30, 2022 and 2021, were 3.54% and 2.16%, respectively. This represents the municipal bond return rate as chosen by the State. The source is the Bond Buyer GO 20-Bond Municipal Bond Index, which includes tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. As the long-term rate of return is less than the municipal bond rate, it is not considered in the calculation of the discount rate, rather the discount rate is set at the municipal bond rate.

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

The following presents the Authority’s net OPEB liability as of June 30, 2022 and 2021, calculated using the discount rate as disclosed above as well as what the Authority’s net OPEB liability would be if it was calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	At 1% Decrease (2.54%)	At Current Discount Rate (3.54%)	At 1% Increase (4.54%)
2022	<u>\$ 32,066,009</u>	<u>\$ 27,662,158</u>	<u>\$ 24,118,847</u>
	At 1% Decrease (1.16%)	At Current Discount Rate (2.16%)	At 1% Increase (3.16%)
2021	<u>\$ 36,525,258</u>	<u>\$ 31,037,563</u>	<u>\$ 26,688,446</u>

Sensitivity of Net OPEB Liability to Changes in the Healthcare Trend Rate

The following presents the net OPEB liability as of June 30, 2022 and 2021, respectively, calculated using the healthcare trend rate as disclosed above as well as what the net OPEB liability would be if it was calculated using a healthcare trend rate that is one percentage point lower or one percentage point higher than the current rate:

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

Other Post-Employment Benefits (“OPEB”) Other than Pensions (Continued)

Sensitivity of Net OPEB Liability to Changes in the Healthcare Trend Rate (Continued)

		Healthcare Cost	
	At 1% Decrease	Trend Rate	At 1% Increase
2022	<u>\$ 23,466,641</u>	<u>\$ 27,662,158</u>	<u>\$ 33,035,433</u>
		Healthcare Cost	
	At 1% Decrease	Trend Rate	At 1% Increase
2021	<u>\$ 25,895,812</u>	<u>\$ 31,037,563</u>	<u>\$ 37,746,952</u>

GASB Statement No. 75, *Reporting for the Post-employment Benefits Other Than Pensions*, requires participating employers recognize their proportionate share of the collective net OPEB liability, collected deferred outflows of resources, collective deferred inflows of resources, and collective OPEB expense. The Authority's proportionate share of the collective net OPEB liability as of June 30, 2022, and 2021 was .1713% and .1724%, respectively.

At June 30, 2023 and 2022, the amounts recognized as the Authority's proportionate share of the net OPEB liability were \$27,662,158 and \$31,037,563, respectively. For the years ended June 30, 2023, and 2022, the Authority recognized OPEB expense of \$198,704 and \$311,814, respectively. At June 30, 2023 and 2022, deferred outflows of resources and deferred inflows of resources related to OPEB are as follows:

	June 30, 2023		June 30, 2022	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference Between Expected and Actual Experience	\$ 1,428,503	\$ 5,127,388	\$ 696,446	\$ 6,493,516
Changes of Assumptions	3,691,630	9,440,561	4,464,846	5,486,254
Net Difference Between Projected and Actual Investment Earnings	7,282	-	14,840	-
Net Change in Proportions	2,488,820	1,960,783	2,820,319	2,075,178
Authority Contributions After the Measurement Date	3,068,819	-	2,823,595	-
	<u>\$ 10,685,054</u>	<u>\$ 16,528,732</u>	<u>\$ 10,820,046</u>	<u>\$ 14,054,948</u>

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

Other Post-Employment Benefits (“OPEB”) Other than Pensions (Continued)

Sensitivity of Net OPEB Liability to Changes in the Healthcare Trend Rate (Continued)

Deferred inflows and outflows of resources related to OPEB will be recognized in OPEB expense as follows:

Years Ending June 30,	Amortization
2023	\$ (2,366,380)
2024	(2,368,469)
2025	(1,870,345)
2026	(835,307)
2027	(187,273)
Thereafter	(1,284,723)
Total	<u>\$ (8,912,497)</u>

G. MAJOR WATER CUSTOMERS

During fiscal years 2023 and 2022, the Authority supplied water to approximately 30 customers of the Raritan Basin System and 12 customers of the Manasquan System.

Revenue

During fiscal years 2023 and 2022, two customers accounted for approximately 86% and 85%, respectively, of total Raritan Basin System operating revenue. During fiscal years 2023 and 2022, two customers accounted for approximately 86% and 85%, respectively, of the total Manasquan System operating revenue.

Accounts Receivable

During fiscal years 2023 and 2022, two customers accounted for approximately 91% and 90%, respectively, of total Raritan Basin System water sales accounts receivable. During fiscal years 2023 and 2022, two customers accounted for approximately 91% and 95%, respectively, of the total Manasquan System water sales accounts receivable.

H. RISK MANAGEMENT

The Authority carries insurance for all of its facilities, covering direct physical loss or damage and loss of revenue resulting therefrom, with such deductibles as it deems appropriate. The Authority also carries General and Umbrella Public Liability Insurance with such self-insured retainers as it deems appropriate. Automotive and Public Officials Liability coverage is also maintained with deductibles. Workers' Compensation coverage is also maintained, as required by state law. Settled claims resulting from the aforementioned risks have not exceeded insurance coverage in any of the past three fiscal years.

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

I. INSURANCE REIMBURSEMENTS

There are no insurance reimbursements included in "Other income" on the statement of revenues, expenses and changes in net position for the years ended June 30, 2023 and 2022.

J. COMMITMENTS AND CONTINGENCIES

Commitments

Construction Projects

The Authority had several outstanding or planned construction projects as of June 30, 2023. These projects are evidenced by contractual commitments with contractors and include:

Project	Awarded	Commitment Remaining
RV Reservoir Structures Refurbishment and Resource Preservation Project	\$ 83,392,222	\$ 21,374,360
Dredging of the D&R Canal From Kingston to Amwell Road	5,107,416	64,929
Spruce Run Dam Foundation Grouting Design & Inspection	4,127,700	3,800,470
Formal Inspection of the Dams, Dikes, and Appurtenant Structures at SR & RV	2,681,525	208,271
Rehabilitation of Landing Lane Spillway and Slope Downstream of Island Weir Farm	1,683,118	401,128
Rehabilitation of Four Pump Assemblies, Mechanical and Electrical Upgrades SBPS	1,049,432	661,846
SR Reservoir Multidisciplinary Release Works Improvement & Studies	964,000	607,400
Aquatic Plant Management of the D&R Canal	887,497	254,720
Stabilization of Canal @ Station 125 & 207	637,329	186,957
Stormwater Basin Retrofitting Franklin Township	547,314	25,565
Rehabilitation of Prallsville Culvert Pit	343,175	296,782
Rehab of Upper Canal Embankment - Raven Rock to Prallsville	314,042	127,126
	<u>\$ 101,734,770</u>	<u>\$ 28,009,554</u>

Operating Leases

Lease	Commencement Date	Payment Terms	Annual Payment Amount	Interest Rate	Total Lease Liability	Balance June 30, 2023
Various Copiers	01/01/22-12/31/25	48 Months	\$ 10,440	3.75%	\$ 38,738	\$ 24,884

The Authority has entered into leases for various copy machines. The interest rates on the leases are fixed based on an assumed incremental borrowing rate of 3.75% at lease commencement. All lease agreements contain a purchase option at the end of the lease term which the Authority does not expect to exercise; accordingly, the right-to-use assets are amortized at the useful life of the asset, which is four years for all leases.

Annual requirements to amortize long-term obligations and related interest are as follows:

Year Ending June 30,	Principal	Interest	Total
2024	9,677	763	10,440
2025	10,043	397	10,440
2026	5,164	56	5,220
	<u>\$ 24,884</u>	<u>\$ 1,216</u>	<u>\$ 26,100</u>

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NOTES TO FINANCIAL STATEMENTS

J. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Contingencies

The Authority is party to various legal actions and disputes. Although the ultimate effect, if any, of these matters is not presently determinable, management believes that collectively they will not have a material effect on the results of operations or the financial position of the Authority.

K. INFORMATION BY BUSINESS SEGMENT

The Authority issued revenue bonds to finance the construction of various capital assets, including the construction of the reservoir systems for both the Manasquan and Raritan Basin Systems. Each of these Systems must provide sufficient revenue each year to cover its own operating expenses and debt service. Investors in the revenue bonds rely solely on the revenue generated by the individual activities for repayment. The chart represents information by Business Segment and is not consistent with the consolidated balances on the statement of net position. Summary financial information for the operating segments is presented below:

	June 30, 2023		June 30, 2022*	
	Raritan Basin System	Manasquan Reservoir System	Raritan Basin System	Manasquan Reservoir System
Condensed statement of net position				
Assets and deferred outflows of resources:				
Current assets	\$ 47,551,999	\$ 26,772,634	\$ 71,024,278	\$ 25,112,662
Restricted cash	13,458,087	6,365,487	29,396,027	6,233,843
Capital assets	189,746,975	45,577,908	176,725,120	47,091,124
Other non-current assets	33,156,399	1,595,057	-	-
Deferred outflows of resources	3,247,388	13,869,677	1,720,912	12,612,810
Total assets and deferred outflows of resources	<u>\$ 287,160,848</u>	<u>\$ 94,180,763</u>	<u>\$ 278,866,337</u>	<u>\$ 91,050,439</u>
Liabilities and deferred inflows of resources:				
Current liabilities	\$ 10,254,585	\$ 7,041,970	\$ 9,704,047	\$ 6,310,764
Non-current liabilities	144,682,042	48,747,443	146,551,723	49,626,219
Deferred inflows of resources	15,203,039	4,335,175	17,243,815	5,134,546
Total liabilities and deferred inflows of resources	<u>170,139,666</u>	<u>60,124,588</u>	<u>173,499,585</u>	<u>61,071,529</u>
Net position:				
Net investment in capital assets	76,989,720	30,928,520	61,308,771	31,795,330
Restricted for cash, investments, and unearned revenue	12,551,434	738,304	28,842,542	1,323,709
Unrestricted	27,480,028	2,389,351	15,215,439	(3,140,129)
Total net position	<u>117,021,182</u>	<u>34,056,175</u>	<u>105,366,752</u>	<u>29,978,910</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 287,160,848</u>	<u>\$ 94,180,763</u>	<u>\$ 278,866,337</u>	<u>\$ 91,050,439</u>

* Certain account balances have been reclassified to conform with current year presentations.

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

K. INFORMATION BY BUSINESS SEGMENT (CONTINUED)

	Year Ended June 30, 2023		Year Ended June 30, 2022*	
	Raritan Basin System	Manasquan Reservoir System	Raritan Basin System	Manasquan Reservoir System
Condensed statement of revenues, expenses and changes in net assets				
Total operating revenues	\$ 24,898,964	\$ 7,552,538	\$ 23,414,896	\$ 7,360,343
Operating expenses	12,308,990	3,017,407	11,900,572	2,626,795
Depreciation	3,070,603	1,853,114	2,885,995	1,858,227
Operating income	9,519,371	2,682,017	8,628,329	2,875,321
Non-operating revenues	2,701,957	1,494,239	1,261,557	1,171,259
Non-operating expenses (recovery)	566,898	98,991	482,748	121,403
Changes in net position	11,654,430	4,077,265	9,407,138	3,925,177
Net position, beginning of year	105,366,752	29,978,910	95,959,614	26,053,733
Net position, end of year	<u>\$ 117,021,182</u>	<u>\$ 34,056,175</u>	<u>\$ 105,366,752</u>	<u>\$ 29,978,910</u>
Condensed statement of cash flows				
Net cash provided by:				
Operating activities	\$ 11,757,150	\$ 3,697,417	\$ 8,636,194	\$ 4,143,423
Non-capital financing activities	85,382	-	192,324	-
Capital and related financing activities	(9,315,442)	(993,409)	(5,620,011)	(1,061,084)
Investing activities	(32,489,156)	(1,198,097)	326,755	27,499
Net increase in cash and cash equivalents	(29,962,066)	1,505,911	3,535,262	3,109,838
Beginning cash and cash equivalent balances	75,118,360	29,449,658	71,583,098	26,339,820
Ending cash and cash equivalent balances	<u>\$ 45,156,294</u>	<u>\$ 30,955,569</u>	<u>\$ 75,118,360</u>	<u>\$ 29,449,658</u>

*Certain account balances have been reclassified to conform with current year presentations.

L. ADOPTION OF GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENTS

The GASB has issued Statement No. 87, "Leases." This statement was adopted by the Authority for the year ending June 30, 2022. The adoption of this statement resulted in a prior period restatement of net position and updated reporting for leases.

The GASB has issued Statement No. 89, "Accounting for Interest Cost Incurred before the End of a Construction Period." This statement was adopted by the Authority for the year ending June 30, 2022. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 91, "Conduit Debt Obligations." This statement was adopted by the Authority for the year ending June 30, 2023. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 92, "Omnibus 2020." This statement clarifies the effective date of Statement No. 87 and addresses other topics that were adopted by the Authority for the year ended June 30, 2023. The adoption of these provisions had no effect on previously reported amounts.

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NOTES TO FINANCIAL STATEMENTS

L. ADOPTION OF GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENTS (CONTINUED)

The GASB has issued Statement No. 93, "*Replacement of Interbank Offered Rates.*" This statement was adopted by the Authority for the year ending June 30, 2022. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 94, "*Public-Private and Public-Public Partnerships and Availability Payment Arrangements.*" This statement was adopted by the Authority for the year ending June 30, 2023. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 95, "*Postponement of the Effective Dates of Certain Authoritative Guidance.*" This statement postponed the effective dates of applicable pending statements described above. The effective dates mentioned above are the applicable postponed dates as prescribed by statement No. 95. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 96, "*Subscription-Based Information Technology Arrangements.*" This statement was adopted by the Authority for the year ending June 30, 2023. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 97, "*Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans - an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB No. 32.*" This statement was adopted by the Authority for the year ending June 30, 2022. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 98, "*The Annual Comprehensive Financial Report.*" This statement was adopted by the Authority for the year ending June 30, 2022. The adoption of this statement had no effect on previously reported amounts.

The GASB has issued Statement No. 99, "*Omnibus 2022.*" Certain provisions of this Statement were adopted by the Authority for the year ended June 30, 2022. The adoption of these provisions had no effect on previously reported amounts.

M. PENDING GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENTS

The GASB has issued Statement No. 100, "*Accounting Changes and Error Corrections – an amendment of GASB Statement No. 62.*" This statement is required to be adopted by the Authority for the year ending June 30, 2024. The Authority has not determined the effect of Statement No. 100 on the financial statements.

The GASB has issued Statement No. 101, "*Compensated Absences.*" This statement is required to be adopted by the Authority for the year ending June 30, 2025. The Authority has not determined the effect of Statement No. 101 on the financial statements.

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

N. SUBSEQUENT EVENT

Effective July 1, 2023, the Authority modified the capital asset definition to an asset as having an initial individual cost of \$5,000 (previously \$1,000) or more and an estimated useful life in excess of three years.

Effective July 1, 2023, Raritan Basin System water rates increased to \$365.00 per million gallons (8.6%). There were no changes to the Manasquan Water Supply System water rates for fiscal year 2024.

REQUIRED SUPPLEMENTARY SCHEDULES (UNAUDITED)

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF PROPORTIONATE SHARE OF PERS NET PENSION LIABILITY (NPL)
DETERMINED AS OF JUNE 30, 2022, PERS MEASUREMENT DATE**

Fiscal Year	Authority's Proportion	Authority's Proportionate Share	Authority's Covered Payroll	Authority's Proportionate Share of NPL as a % of Covered Payroll	PERS Local Fiduciary Net Position as a % of Total Pension Liability
2023	0.11%	\$ 16,101,898	\$ 8,048,394	200%	68.63%
2022	0.10%	\$ 12,251,099	\$ 7,796,833	157%	84.48%
2021	0.11%	\$ 17,210,868	\$ 7,691,681	224%	58.32%
2020	0.10%	\$ 18,808,879	\$ 7,636,273	246%	56.27%
2019	0.10%	\$ 19,884,740	\$ 7,351,319	270%	45.37%
2018	0.10%	\$ 23,038,776	\$ 7,002,687	329%	47.58%
2017	0.10%	\$ 29,886,847	\$ 6,949,632	430%	40.14%
2016	0.10%	\$ 21,534,789	\$ 6,808,193	316%	47.94%

SCHEDULE OF CONTRIBUTIONS

Fiscal Year	Required Contribution	Contributions Recognized by PERS	Contribution-Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
2023	\$ 1,345,488	\$ 1,345,488	\$ -	\$ 7,927,695	16.97%
2022	\$ 1,211,114	\$ 1,211,114	\$ -	\$ 8,048,394	15.05%
2021	\$ 1,154,559	\$ 1,154,558	\$ 1	\$ 7,796,833	14.81%
2020	\$ 1,015,378	\$ 1,015,374	\$ 4	\$ 7,691,681	13.20%
2019	\$ 1,004,540	\$ 1,004,540	\$ -	\$ 7,636,273	13.15%
2018	\$ 916,857	\$ 916,857	\$ -	\$ 7,351,319	12.47%
2017	\$ 896,476	\$ 896,476	\$ -	\$ 7,002,687	12.80%
2016	\$ 823,798	\$ 823,798	\$ -	\$ 6,949,632	11.85%
2015	\$ 798,757	\$ 798,757	\$ -	\$ 6,808,193	11.73%

SCHEDULE OF CHANGES IN NET PENSION LIABILITY

Fiscal Year	Beginning Balance Total Net Pension Liability	Difference between Expected and Actual Experience	Change of Assumptions	Difference between Expected and Actual Earnings	Change In Proportion and Actual Less Proportion Share	Other Changes and Reclassifications	Ending Balance Total Net Pension Liability
2023	\$ 12,251,099	\$ (91,783)	\$ 1,936,464	\$ 3,893,704	\$ 348,687	\$ (2,236,273)	\$ 16,101,898
2022	\$ 17,210,868	\$ 105,513	\$ (4,297,667)	\$ (3,227,261)	\$ 207,088	\$ 2,252,558	\$ 12,251,099
2021	\$ 18,808,879	\$ 252,517	\$ (6,648,013)	\$ 588,281	\$ 885,389	\$ 3,323,815	\$ 17,210,868
2020	\$ 19,884,740	\$ 254,506	\$ (4,650,366)	\$ (296,905)	\$ 932,879	\$ 2,684,025	\$ 18,808,879
2019	\$ 23,038,776	\$ 276,673	\$ (3,081,406)	\$ (186,520)	\$ 346,971	\$ (509,754)	\$ 19,884,740
2018	\$ 29,886,847	\$ 542,484	\$ 17,016	\$ 156,878	\$ (73,348)	\$ (7,491,101)	\$ 23,038,776
2017	\$ 21,534,789	\$ 555,805	\$ 6,190,858	\$ 1,139,613	\$ 304,163	\$ 161,619	\$ 29,886,847
2016	\$ 18,141,342	\$ 513,147	\$ 1,739,535	\$ 735,251	\$ (206,140)	\$ 611,654	\$ 21,534,789
2015	\$ 19,250,440	\$ -	\$ 570,440	\$ (1,081,086)	\$ (772,427)	\$ 173,975	\$ 18,141,342

The pension schedules are intended to show information for ten years. The State of New Jersey has issued nine years of pension information to the Authority. Additional years' information will be displayed as it becomes available.

See independent auditors' report.

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

**SCHEDULE OF PROPORTIONATE SHARE OF THE NET OPEB LIABILITY
STATE HEALTH BENEFIT LOCAL GOVERNMENT RETIRED EMPLOYEES PLAN
DETERMINED AS OF JUNE 30, 2022, OPEB MEASUREMENT DATE**

	2023	2022	2021	2020	2019	2018	2017
Authority's proportion of the net OPEB liability	0.1712870%	0.1724330%	0.1669870%	0.1591680%	0.1680130%	0.1639400%	0.1737960%
Authority's proportionate share of the net OPEB liability (asset)	\$ 27,662,158	\$ 31,037,563	\$ 29,968,511	\$ 21,561,010	\$ 26,321,955	\$ 33,469,644	\$ 37,744,085
Authority's covered payroll	\$ 7,927,695	\$ 8,048,394	\$ 7,796,833	\$ 7,691,681	\$ 7,636,273	\$ 7,351,319	\$ 7,002,687
Authority's proportionate share of the net OPEB liability (asset) as a percentage of its covered-employee payroll	348.9%	385.6%	384.4%	280.3%	344.7%	455.3%	539.0%
Plan fiduciary net position as a percentage of the total OPEB liability	(.36%)	0.28%	0.92%	1.98%	1.97%	1.03%	1.69%

The OPEB schedules are intended to show information for ten years. The State of New Jersey has issued seven years of OPEB information to the Authority. Additional years' information will be displayed as it becomes available.

OTHER SUPPLEMENTARY INFORMATION

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

**COMBINING SCHEDULE OF NET POSITION
JUNE 30, 2023**

	Raritan Basin System	Manasquan Reservoir System	Elimination Entries	Combined Total
Assets				
Current assets:				
Unrestricted assets:				
Cash and cash equivalents	\$ 31,698,207	\$ 24,590,082	\$ -	\$ 56,288,289
Unbilled sales	1,853,997	-	-	1,853,997
Accounts receivable, less allowance for doubtful accounts of \$1,000 at June 30, 2023	12,353,274	1,782,654	(168,392)	13,967,536
Interest receivable	268,730	16,814	-	285,544
Prepaid expenses and other current assets	1,377,791	383,084	-	1,760,875
Total unrestricted assets	<u>47,551,999</u>	<u>26,772,634</u>	<u>(168,392)</u>	<u>74,156,241</u>
Restricted assets:				
Cash equivalents	13,458,087	6,365,487	-	19,823,574
Total current assets	<u>61,010,086</u>	<u>33,138,121</u>	<u>(168,392)</u>	<u>93,979,815</u>
Non-current assets:				
Investments	33,156,399	1,595,057	-	34,751,456
Capital assets net of accumulated depreciation of \$168,245,336 at June 30, 2023	189,746,975	45,577,908	-	235,324,883
Total non-current assets	<u>222,903,374</u>	<u>47,172,965</u>	<u>-</u>	<u>270,076,339</u>
Total assets	<u>283,913,460</u>	<u>80,311,086</u>	<u>(168,392)</u>	<u>364,056,154</u>
Deferred outflows of resources				
Cost recovery	(8,157,196)	10,830,053	-	2,672,857
Pension related	2,373,143	643,436	-	3,016,579
OPEB related	8,288,866	2,396,188	-	10,685,054
Construction loan DEP fee	742,575	-	-	742,575
Total deferred outflows of resources	<u>3,247,388</u>	<u>13,869,677</u>	<u>-</u>	<u>17,117,065</u>
Total assets and deferred outflows of resources	<u>\$ 287,160,848</u>	<u>\$ 94,180,763</u>	<u>\$ (168,392)</u>	<u>\$ 381,173,219</u>
Liabilities				
Current liabilities:				
Current portion of bonds, notes and loans payable	\$ 2,523,574	\$ 592,572	\$ -	\$ 3,116,146
Accounts payable	4,369,987	348,912	(168,392)	4,550,507
Accrued liabilities	2,454,371	473,303	-	2,927,674
Unearned revenue	906,653	5,627,183	-	6,533,836
Total current liabilities	<u>10,254,585</u>	<u>7,041,970</u>	<u>(168,392)</u>	<u>17,128,163</u>
Non-current liabilities:				
Non-current portion of bonds, notes and loans payable	110,233,681	39,406,864	-	149,640,545
Lease liability	19,178	5,706	-	24,884
Net pension liability	12,667,363	3,434,535	-	16,101,898
Total OPEB liability	21,761,820	5,900,338	-	27,662,158
Total non-current liabilities	<u>144,682,042</u>	<u>48,747,443</u>	<u>-</u>	<u>193,429,485</u>
Total liabilities	<u>154,936,627</u>	<u>55,789,413</u>	<u>(168,392)</u>	<u>210,557,648</u>
Deferred inflows of resources				
Pension related	2,199,886	596,460	-	2,796,346
OPEB related	13,003,153	3,525,579	-	16,528,732
Gain on refunding	-	213,136	-	213,136
Total deferred inflows of resources	<u>15,203,039</u>	<u>4,335,175</u>	<u>-</u>	<u>19,538,214</u>
Net position				
Net investment in capital assets	76,989,720	30,928,520	-	107,918,240
Restricted for cash, investments and unearned revenue	12,551,434	738,304	-	13,289,738
Unrestricted	27,480,028	2,389,351	-	29,869,379
Total net position	<u>117,021,182</u>	<u>34,056,175</u>	<u>-</u>	<u>151,077,357</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 287,160,848</u>	<u>\$ 94,180,763</u>	<u>\$ (168,392)</u>	<u>\$ 381,173,219</u>

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

**COMBINING SCHEDULE OF REVENUE, EXPENSES AND CHANGES IN NET POSITION
YEAR ENDED JUNE 30, 2023**

	Raritan Basin System	Manasquan Reservoir System	Manasquan Water Treatment Plant	Combined Total
Operating revenue:				
Water sales	\$ 24,898,964	\$ 7,552,538	\$ -	\$ 32,451,502
Reimbursement of operating expenses	-	-	2,580,000	2,580,000
Total operating revenue	<u>24,898,964</u>	<u>7,552,538</u>	<u>2,580,000</u>	<u>35,031,502</u>
Operating expenses:				
Payroll	6,480,284	982,284	849,948	8,312,516
Operations and maintenance (direct)	4,872,093	1,260,958	966,701	7,099,752
Operations and maintenance (general and administrative)	-	108,587	72,022	180,609
Fringe benefits	1,705,613	19,578	2,159	1,727,350
Headquarters overhead	(749,000)	646,000	103,000	-
Depreciation	3,070,603	1,853,114	-	4,923,717
Total operating expenses	<u>15,379,593</u>	<u>4,870,521</u>	<u>1,993,830</u>	<u>22,243,944</u>
Income from operations	<u>9,519,371</u>	<u>2,682,017</u>	<u>586,170</u>	<u>12,787,558</u>
Non-operating revenue:				
State of New Jersey - Grant Programs	820,500	-	-	820,500
Investment and interest income	935,973	359,992	53,782	1,349,747
Rental income	60,987	-	-	60,987
Other income/(loss)	61,074	8,393	-	69,467
Recovery of deferred outflows of resources	823,423	1,125,854	-	1,949,277
Total non-operating revenue	<u>2,701,957</u>	<u>1,494,239</u>	<u>53,782</u>	<u>4,249,978</u>
Non-operating expenses:				
Interest component of debt service to the State of New Jersey	566,898	98,991	-	665,889
SMMUA operations, net	-	-	639,952	639,952
Total non-operating expenses	<u>566,898</u>	<u>98,991</u>	<u>639,952</u>	<u>1,305,841</u>
Changes in net position	11,654,430	4,077,265	-	15,731,695
Net position, beginning of year	105,366,752	29,978,910	-	135,345,662
Net position, end of year	<u>\$ 117,021,182</u>	<u>\$ 34,056,175</u>	<u>\$ -</u>	<u>\$ 151,077,357</u>

NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY

SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM
YEAR ENDED JUNE 30, 2023

	Operating Fund											Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Depreciation Reserve	Dredging RV/SR Investments	Pumping Reserve	Capital Improvements Investments II	Source Water Protection Fund	
Cash and investments - July 1, 2022	\$ 485,715	\$ 2,060,817	\$ 177,816	\$ 1,739,046	\$ 3,650,364	\$ 931,682	\$ 4,862,142	\$ -	\$ 2,036,986	\$ 76,158	\$ 4,385,012	\$ 20,405,738
Cash receipts:												
Water sales operations and maintenance	13,592,191	-	-	-	-	-	-	-	-	-	-	13,592,191
Water sales NJEIFP	5,946,607	-	-	-	-	-	-	-	-	-	-	5,946,607
Water sales capital fund	2,308,683	-	-	-	-	-	-	-	-	-	-	2,308,683
Water sales source water protection fund	1,679,041	-	-	-	-	-	-	-	-	-	-	1,679,041
Water sales overdrafts	2,434,477	-	-	-	-	-	-	-	-	-	-	2,434,477
Rental income	44,896	-	-	-	-	-	-	-	-	-	-	44,896
Manasquan reservoir support	49,029	-	-	-	-	-	-	-	-	-	-	49,029
Headquarters overhead	-	-	-	733,250	-	-	-	-	-	-	-	733,250
Disposition of property	896,280	-	-	-	-	-	-	-	-	-	-	896,280
Recycling revenue	2,074	-	-	-	-	-	-	-	-	-	-	2,074
Sale/Transfer for investment securities	-	-	-	-	2,500,048	750,000	3,500,000	-	-	7,000,000	-	13,750,048
Grant Programs	1,097,236	-	-	-	-	-	-	-	-	-	-	1,097,236
Insurance reimbursement	198,824	-	-	-	-	-	-	-	-	-	-	198,824
Miscellaneous expense reimbursement	1,477,377	8,254	-	-	-	-	-	-	-	-	-	1,485,631
Transfers:												
Contributions from operating fund	1,086,340	29,146,097	3,899,166	(46,244,531)	-	-	351,076	-	150,000	-	565,968	(11,045,884)
Contributions to operating fund	-	-	-	18,100,936	-	-	(214,004)	-	(359,408)	-	(623,755)	16,903,769
Transfers for operations	(30,394,500)	8,112	-	30,394,500	-	-	-	20,000,000	-	-	-	20,008,112
Transfers for investments	-	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	200,000	10,700	-	168,143	-	-	(168,143)	-	-	-	(200,000)	10,700
Investment income	7,475	39,011	-	37,868	97,843	24,972	130,785	121,131	33,292	246,324	66,137	804,838
Per resolution, Section 603:												
Investment income, transfer from	362,193	-	-	(37,869)	(59,370)	(17,191)	(72,995)	-	-	(174,768)	-	-
Investment income, transfer to	(53,570)	-	-	-	53,976	(406)	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	(91,297)	(22,851)	(115,327)	(97,484)	-	(201,445)	-	(528,404)
Total cash receipts	934,653	29,212,174	3,899,166	3,152,297	2,501,200	734,524	3,411,392	20,023,647	(176,116)	6,870,111	(191,650)	70,371,398
Total available cash and investments	\$ 1,420,368	\$ 31,272,991	\$ 4,076,982	\$ 4,891,343	\$ 6,151,564	\$ 1,666,206	\$ 8,273,534	\$ 20,023,647	\$ 1,860,870	\$ 6,946,269	\$ 4,193,362	\$ 90,777,136

See independent auditors' report.

**NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY**

**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2023**

	Subtotal	Parity SWP Bond Fund	Subordinated SWP Bond Fund	Major Rehabilitation	Capital Improvement Fund	D&R Mitigation Fund	D&R Canal Dredging	Capital Equipment Reserve	Rate Stabilization Fund	Employment Benefit Funds	Totals
Cash and investments - July 1, 2022	\$ 20,405,738	\$ 339,644	\$ 661,317	\$ 1,413,335	\$ 19,611,839	\$ 650,497	\$ 28,698,298	\$ 1,226,919	\$ 88,033	\$ 2,022,740	\$ 75,118,360
Cash receipts:											
Water sales operations and maintenance	13,592,191	-	-	-	-	-	-	-	-	-	13,592,191
Water sales NJEIFP	5,946,607	-	-	-	-	-	-	-	-	-	5,946,607
Water sales capital fund	2,308,683	-	-	-	-	-	-	-	-	-	2,308,683
Water sales source water protection fund	1,679,041	-	-	-	-	-	-	-	-	-	1,679,041
Water sales overdrafts	2,434,477	-	-	-	-	-	-	-	-	-	2,434,477
Rental income	44,896	-	-	-	-	-	-	-	-	-	44,896
Manasquan reservoir support	49,029	-	-	-	-	-	-	-	-	-	49,029
Headquarters overhead	733,250	-	-	-	-	-	-	-	-	-	733,250
Disposition of property	896,280	-	-	-	-	-	-	-	-	-	896,280
Recycling revenue	2,074	-	-	-	-	-	-	-	-	-	2,074
Sale/Transfer for investment securities	13,750,048	-	-	-	-	-	-	-	-	-	13,750,048
Grant Programs	1,097,236	-	-	-	-	-	-	-	-	-	1,097,236
Insurance reimbursement	198,824	-	-	-	-	-	-	-	-	-	198,824
Miscellaneous expense reimbursement	1,485,631	-	-	-	9,000,866	-	-	-	-	6,505	10,493,002
Transfers:											
Contributions from operating fund	(11,045,884)	317,412	713,904	-	3,193,274	8,940	5,657,067	150,000	-	1,005,287	-
Contributions to operating fund	16,903,769	-	-	-	(15,749,213)	(85,075)	-	-	-	(1,069,481)	-
Transfers for operations	20,008,112	-	-	-	-	-	(20,000,000)	-	-	(8,112)	-
Transfers for investments	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	10,700	-	-	-	-	-	-	-	-	(10,700)	-
Investment income	804,838	2,807	6,061	22,063	167,644	8,548	463,970	20,414	832	31,931	1,529,108
Per resolution, Section 603:											
Investment income, transfer from	-	-	-	-	-	-	-	-	-	-	-
Investment income, transfer to	-	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	(528,404)	-	-	-	-	-	-	-	-	-	(528,404)
Total cash receipts	70,371,398	320,219	719,965	22,063	(3,387,429)	(67,587)	(13,878,963)	170,414	832	(44,570)	54,226,342
Total available cash and investments	\$ 90,777,136	\$ 659,863	\$ 1,381,282	\$ 1,435,398	\$ 16,224,410	\$ 582,910	\$ 14,819,335	\$ 1,397,333	\$ 88,865	\$ 1,978,170	\$ 129,344,702

See independent auditors' report.

NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY

SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2023

	Operating Fund											Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Depreciation Reserve	Dredging RV/SR Investments	Pumping Reserve	Capital Improvements Investments II	Source Water Protection Fund	
Total available cash and investments	\$ 1,420,368	\$ 31,272,991	\$ 4,076,982	\$ 4,891,343	\$ 6,151,564	\$ 1,666,206	\$ 8,273,534	\$ 20,023,647	\$ 1,860,870	\$ 6,946,269	\$ 4,193,362	\$ 90,777,136
Cash disbursements:												
Payroll	-	-	3,899,182	-	-	-	-	-	-	-	-	3,899,182
Fringe benefits	-	40,675	-	1,699,447	-	-	-	-	-	-	-	1,740,122
Employee deferred compensation and credit union	-	2,104,557	-	(79,282)	-	-	-	-	-	-	-	2,025,275
Operations and maintenance	-	27,086,625	-	(663,687)	-	-	-	-	-	-	-	26,222,938
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous disbursements	-	-	-	-	1,079	792	2,973	33,865	-	26,258	-	64,987
Watershed Management Fund	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvements:												
Capital assets	-	-	-	-	-	-	-	-	-	-	-	-
New five year construction project	-	-	-	-	-	-	-	-	-	-	-	-
Purchase/Sale of investments securities	-	-	-	-	2,500,048	750,000	3,500,000	-	-	-	-	6,750,048
Principal on NJEIT bonds	-	-	-	-	-	-	-	-	-	-	-	-
Interest, Fees, and Credits on NJIB loans	-	-	-	-	-	-	-	-	-	-	-	-
Total cash disbursements	-	29,231,857	3,899,182	756,478	2,501,127	750,792	3,502,973	33,865	-	26,258	-	40,702,552
Cash and investments - June 30, 2023	\$ 1,420,368	\$ 2,041,134	\$ 177,800	\$ 4,134,865	\$ 3,650,437	\$ 915,414	\$ 4,770,561	\$ 19,989,762	\$ 1,860,870	\$ 6,920,011	\$ 4,193,362	\$ 50,074,584
Summary of cash and investments:												
Cash	\$ 1,420,368	\$ 2,041,134	\$ 177,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,639,302
Short-term investments	-	-	-	4,134,865	1,209,629	181,730	1,352,896	1	1,860,870	76,800	4,193,362	13,010,153
Long-term investments	-	-	-	-	2,440,808	733,684	3,417,665	19,989,761	-	6,843,211	-	33,425,129
Restricted investments (current)	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 1,420,368	\$ 2,041,134	\$ 177,800	\$ 4,134,865	\$ 3,650,437	\$ 915,414	\$ 4,770,561	\$ 19,989,762	\$ 1,860,870	\$ 6,920,011	\$ 4,193,362	\$ 50,074,584

See independent auditors' report.

NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY

SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2023

	Subtotal	Parity SWP Bond Fund	Subordinated SWP Bond Fund	Major Rehabilitation	Capital Improvement Fund	D&R Mitigation Fund	D&R Canal Dredging	Capital Equipment Reserve	Rate Stabilization Fund	Employment Benefit Funds	Totals
Total available cash and investments	\$ 90,777,136	\$ 659,863	\$ 1,381,282	\$ 1,435,398	\$ 16,224,410	\$ 582,910	\$ 14,819,335	\$ 1,397,333	\$ 88,865	\$ 1,978,170	\$ 129,344,702
Cash disbursements:											
Payroll	3,899,182	-	-	-	-	-	-	-	-	-	3,899,182
Fringe benefits	1,740,122	-	-	-	-	-	-	-	-	-	1,740,122
Employee deferred compensation and credit union	2,025,275	-	-	-	-	-	-	-	-	-	2,025,275
Operations and maintenance	26,222,938	-	-	-	-	-	-	-	-	-	26,222,938
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous disbursements	64,987	-	-	-	-	-	-	-	-	60,206	125,193
Watershed Management Fund	-	-	-	-	-	-	-	-	-	-	-
Capital improvements:											
Capital assets	-	-	-	-	-	-	-	-	-	-	-
New five year construction project	-	-	-	-	-	-	-	-	-	-	-
Purchase/Sale of investments securities	6,750,048	-	-	-	7,000,000	-	-	-	-	-	13,750,048
Principal on NJEIT bonds	-	301,735	632,970	-	-	-	1,681,158	-	-	-	2,615,863
Interest, Fees, and Credits on NJIB loans	-	9,277	64,474	-	-	-	310,907	-	-	-	384,658
Total cash disbursements	40,702,552	311,012	697,444	-	7,000,000	-	1,992,065	-	-	60,206	50,763,279
Cash and investments - June 30, 2023	\$ 50,074,584	\$ 348,851	\$ 683,838	\$ 1,435,398	\$ 9,224,410	\$ 582,910	\$ 12,827,270	\$ 1,397,333	\$ 88,865	\$ 1,917,964	\$ 78,581,423
Summary of cash and investments:											
Cash	\$ 3,639,302	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,815	\$ 3,687,117
Short-term investments	13,010,153	348,851	683,838	1,435,398	9,224,410	582,910	12,827,270	1,397,333	88,865	1,870,149	41,469,177
Long-term investments	33,425,129	-	-	-	-	-	-	-	-	-	33,425,129
Restricted Investments (current)	-	-	-	-	-	-	-	-	-	-	-
Restricted Investments (long-term)	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 50,074,584	\$ 348,851	\$ 683,838	\$ 1,435,398	\$ 9,224,410	\$ 582,910	\$ 12,827,270	\$ 1,397,333	\$ 88,865	\$ 1,917,964	\$ 78,581,423

See independent auditors' report.

**NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY**

**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM
YEAR ENDED JUNE 30, 2023**

	Operating Fund													Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self - Insurance Reserve	Renewal and Replacement Account	Water Reuse & Recycling	Source Water Protection	Depreciation Reserve	Pumping Reserve	Capital Improvement Fund	Sediment Reserve	
Cash and investments - July 1, 2022	\$ 338,394	\$ 376,214	\$ 55,872	\$ 7,764,044	\$ 1,604,939	\$ 217,965	\$ 4,064,117	\$ 30,386	\$ 1,456,030	\$ 605,759	\$ 154,799	\$ 5,605,535	\$ 346,297	\$ 22,620,351
Cash receipts:														
Water sales operations and maintenance	3,073,179	-	-	-	-	-	-	-	-	-	-	-	-	3,073,179
Water sales capital fund	3,096,760	-	-	-	-	-	-	-	-	-	-	-	-	3,096,760
Water sales debt service	710,512	-	-	-	-	-	-	-	-	-	-	-	-	710,512
Source water protection	103,510	-	-	-	-	-	-	-	-	-	-	-	-	103,510
Water sales debt service NJEIT	172,034	-	-	-	-	-	-	-	-	-	-	-	-	172,034
Water sales overdrafts	195,141	-	-	-	-	-	-	-	-	-	-	-	-	195,141
NJ-American pumping costs	216,232	-	-	-	-	-	-	-	-	-	-	-	-	216,232
Headquarters overhead	-	-	-	(307,250)	-	-	-	-	-	-	-	-	-	(307,250)
Reimbursement of WTP capital expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposition of assets	8,000	-	-	-	-	-	-	-	-	-	-	-	-	8,000
Reimbursement from/(to) Raritan Basin	27,739	-	-	-	1,000,000	150,000	-	-	-	400,000	100,000	-	-	1,677,739
Sale/Transfer for investment securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous reimbursement	11,324	-	-	-	-	-	-	-	-	3,289	-	-	-	14,613
Transfers:														
Contributions from operating fund	-	5,456,768	1,112,678	(11,653,145)	-	-	120,000	-	106,452	29,962	-	3,199,664	30,000	(1,597,621)
Contributions to operating fund	-	-	-	2,058,965	-	-	(297,094)	-	(115,276)	(6,009)	-	-	(119,972)	1,520,614
Transfers for operations	(8,530,770)	-	-	8,530,770	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	584,130	4,405	-	-	-	-	-	-	-	-	-	-	-	588,535
Investment income	2,183	8,893	-	113,428	39,972	5,171	63,739	15	22,614	14,692	3,435	121,891	5,101	401,134
Per resolution, Section 603:														
Investment income, transfer from	162,172	-	-	(113,429)	(29,427)	(2,966)	-	-	-	(9,089)	(1,981)	-	(5,101)	157
Investment income, transfer to	(129,029)	-	-	129,029	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	(32,094)	(5,603)	-	-	-	(10,685)	(3,735)	-	-	(52,117)
Total cash receipts	(296,883)	5,470,066	1,112,678	(1,241,632)	978,451	146,580	(113,355)	15	13,790	422,160	97,719	3,321,555	(89,972)	9,821,172
Total cash and investments	\$ 41,511	\$ 5,846,280	\$ 1,168,550	\$ 6,522,412	\$ 2,583,390	\$ 364,545	\$ 3,950,762	\$ 30,401	\$ 1,469,820	\$ 1,027,919	\$ 252,518	\$ 8,927,090	\$ 256,325	\$ 32,441,523

See independent auditors' report.

**NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY**

**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2023**

	Water Treatment Plant/Transmission System													
	Subtotal	Operating Account	Operating Fund	Residuals Reserve	Carbon Filter Reserve	Self-Insurance Reserve	Capital Improvement Reserve	NJEIT Debt Service	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund	General Reserve Fund	Employment Benefit Funds	Totals
Cash and investments - July 1, 2022	\$ 22,620,351	\$ 48,848	\$ 3,025,287	\$ 9,480	\$ 98,416	\$ 253,136	\$ 78,178	\$ 169,346	\$ 553,796	\$ 1,746,553	\$ 250,803	\$ 41,197	\$ 554,267	\$ 29,449,658
Cash receipts:	0													
Water sales operations and maintenance	3,073,179	-	-	-	-	-	-	-	-	-	-	-	-	3,073,179
Water sales capital fund	3,096,760	-	-	-	-	-	-	-	-	-	-	-	-	3,096,760
Water sales debt service	710,512	-	-	-	-	-	-	-	-	-	-	-	-	710,512
Source water protection	103,510	-	-	-	-	-	-	-	-	-	-	-	-	103,510
Water sales debt service NJEIT	172,034	-	-	-	-	-	-	-	-	-	-	-	-	172,034
Water sales overdrafts	195,141	-	-	-	-	-	-	-	-	-	-	-	-	195,141
NJ-American pumping costs	216,232	-	-	-	-	-	-	-	-	-	-	-	-	216,232
Headquarters overhead	(307,250)	-	2,580,000	-	-	-	-	-	-	-	-	-	-	2,272,750
Reimbursement of WTP capital expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposition of assets	8,000	-	-	-	-	-	-	-	-	-	-	-	-	8,000
Reimbursement from/(to) Raritan Basin	1,677,739	-	-	-	-	-	-	-	-	-	-	-	-	1,677,739
Sale/Transfer for investment securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous reimbursement	14,613	697	130,007	-	-	-	-	-	-	-	-	-	-	145,317
Transfers:														
Contributions from operating fund	(1,597,621)	1,199,985	(1,325,900)	-	-	-	107,697	176,920	591,588	-	-	584,130	263,201	-
Contributions to operating fund	1,520,614	-	(1,481,399)	-	-	-	(35,207)	-	-	-	-	-	(4,008)	-
Transfers for operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	588,535	-	-	-	-	-	-	-	-	-	-	(584,130)	(4,405)	-
Investment income	401,134	2,140	46,395	-	997	3,466	785	1,603	-	-	3,439	157	7,440	467,556
Per resolution, Section 603:														
Investment income, transfer from	157	-	1,300	-	(238)	(1,062)	-	-	-	-	-	(157)	-	-
Investment income, transfer to	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	(52,117)	-	-	-	-	-	-	-	-	-	-	-	-	(52,117)
Total cash receipts	9,821,172	1,202,922	(49,597)	-	759	2,404	73,275	178,523	591,588	-	3,439	-	262,228	12,086,613
Total cash and investments	\$ 32,441,523	\$ 1,251,670	\$ 2,975,690	\$ 9,480	\$ 99,175	\$ 255,540	\$ 151,453	\$ 347,869	\$ 1,145,384	\$ 1,746,553	\$ 254,242	\$ 41,197	\$ 816,495	\$ 41,536,271

See independent auditors' report.

**NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY**

**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2023**

	Operating Fund													Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self - Insurance Reserve	Renewal and Replacement Account	Water Reuse & Recycling	Source Water Protection	Depreciation Reserve	Pumping Reserve	Capital Improvement Fund	Sediment Reserve	
Total available cash and investments	\$ 41,511	\$ 5,846,280	\$ 1,168,550	\$ 6,522,412	\$ 2,583,390	\$ 364,545	\$ 3,950,762	\$ 30,401	\$ 1,469,820	\$ 1,027,919	\$ 252,518	\$ 8,927,090	\$ 256,325	\$ 32,441,523
Cash disbursements:														
Payroll	-	-	1,112,678	-	-	-	-	-	-	-	-	-	-	1,112,678
Fringe benefits	-	(2,321)	-	254,535	-	-	-	-	-	-	-	-	-	252,214
Employee deferred compensation and credit union	-	2,141,534	-	(1,699,447)	-	-	-	-	-	-	-	-	-	442,087
Operations and maintenance	-	2,158,184	-	866,975	1,084	5	-	-	-	617	5	-	-	3,026,870
NJ-American pumping costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headquarters overhead	-	-	-	323,000	-	-	-	-	-	-	-	-	-	323,000
Capital assets reservoir	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvement program (reservoir)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of Investments securities	-	-	-	-	1,000,000	150,000	-	-	-	400,000	100,000	-	-	1,650,000
Principal on bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest, Fees, and Credits on NJIB loans and bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash disbursements	-	4,297,397	1,112,678	(254,937)	1,001,084	150,005	-	-	-	400,617	100,005	-	-	6,806,849
Cash and investments - June 30, 2023	\$ 41,511	\$ 1,548,883	\$ 55,872	\$ 6,777,349	\$ 1,582,306	\$ 214,540	\$ 3,950,762	\$ 30,401	\$ 1,469,820	\$ 627,302	\$ 152,513	\$ 8,927,090	\$ 256,325	\$ 25,634,674
Summary of cash and investments:														
Cash (Manasquan)	\$ 41,511	\$ 1,548,883	\$ 55,872	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,646,266
Cash (Water Treatment Plant/TS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term investments	-	-	-	6,777,349	605,718	67,960	3,950,762	30,401	1,469,820	236,320	54,792	8,927,090	256,325	22,376,537
Short-term investments (Water Treatment Plant/TS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Long-term investments	-	-	-	-	976,588	146,580	-	-	-	390,982	97,721	-	-	1,611,871
Restricted investments (current)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 41,511	\$ 1,548,883	\$ 55,872	\$ 6,777,349	\$ 1,582,306	\$ 214,540	\$ 3,950,762	\$ 30,401	\$ 1,469,820	\$ 627,302	\$ 152,513	\$ 8,927,090	\$ 256,325	\$ 25,634,674

See independent auditors' report.

NEW JERSEY WATER SUPPLY AUTHORITY
A COMPONENT UNIT OF THE STATE OF NEW JERSEY

SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2023

	Water Treatment Plant/Transmission System													Totals
	Subtotal	Operating Account	Operating Fund	Residuals Reserve	Carbon Filter Reserve	Self - Insurance Reserve	Capital Improvement Reserve	NJEIT Debt Service	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund	General Reserve Fund	Employment Benefit Funds	
Total available cash and investments	\$ 32,441,523	\$ 1,251,670	\$ 2,975,690	\$ 9,480	\$ 99,175	\$ 255,540	\$ 151,453	\$ 347,869	\$ 1,145,384	\$ 1,746,553	\$ 254,242	\$ 41,197	\$ 816,495	\$ 41,536,271
Cash disbursements:														
Payroll	1,112,678	-	-	-	-	-	-	-	-	-	-	-	-	1,112,678
Fringe benefits	252,214	-	-	-	-	-	-	-	-	-	-	-	2,321	254,535
Employee deferred compensation and credit union	442,087	-	-	-	-	-	-	-	-	-	-	-	-	442,087
Operations and maintenance	3,026,870	1,018,494	170	-	-	-	-	-	-	-	-	-	286,968	4,332,502
NJ-American pumping costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headquarters overhead	323,000	-	103,000	-	-	-	-	-	-	-	-	-	-	426,000
Capital assets reservoir	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvement program (reservoir)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	1,650,000	-	-	-	-	-	-	-	-	-	-	-	-	1,650,000
Principal on bonds	-	-	-	-	-	-	-	152,572	493,294	-	-	-	-	645,866
Interest, Fees, and Credits on NJIB loans and bonds	-	-	-	-	-	-	-	16,494	88,669	-	-	-	-	105,163
Total cash disbursements	-	1,018,494	103,170	-	-	-	-	169,066	581,963	-	-	-	289,289	8,968,831
Cash and investments - June 30, 2023	\$ -	\$ 233,176	\$ 2,872,520	\$ 9,480	\$ 99,175	\$ 255,540	\$ 151,453	\$ 178,803	\$ 563,421	\$ 1,746,553	\$ 254,242	\$ 41,197	\$ 527,206	\$ 32,567,440
Summary of cash and investments:														
Cash (Manasquan)	\$ 1,646,266	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,646,266
Cash (Water Treatment Plant/TS)	-	233,176	-	-	-	-	-	-	-	-	-	-	-	233,176
Short-term investments	22,375,537	-	-	-	-	-	-	-	-	-	-	41,197	527,206	22,944,940
Short-term investments (Water Treatment Plant/TS)	-	-	2,872,520	9,480	99,175	255,540	151,453	-	-	-	-	-	-	3,388,168
Long-term investments	1,611,871	-	-	-	-	-	-	-	-	-	-	-	-	1,611,871
Restricted investments (current)	-	-	-	-	-	-	-	178,803	563,421	1,746,553	254,242	-	-	2,743,019
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 25,634,674	\$ 233,176	\$ 2,872,520	\$ 9,480	\$ 99,175	\$ 255,540	\$ 151,453	\$ 178,803	\$ 563,421	\$ 1,746,553	\$ 254,242	\$ 41,197	\$ 527,206	\$ 32,567,440

See independent auditors' report.

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Statistical Section

FINANCIAL TREND DATA

These schedules contain trend information on the Authority's financial performance over time.

Summary of Financial Information.....	2014 - 2023
Summary of Raritan Basin System Water Use Contracts	2014 - 2023
Summary of Manasquan Water Supply System Water Use Contracts	2014 - 2023

DEBT CAPACITY DATA

The schedules present information on the Authority's current levels of outstanding debt and the ability to issue debt in the future.

Raritan Basin System Revenue Bond Coverage	2014 - 2023
Manasquan System Revenue Bond Coverage	2014 - 2023

REVENUE CAPACITY DATA

These schedules contain information on the Authority's most significant revenue source.

Raritan Basin System Water Charges	2014 - 2023
Manasquan Water Supply System Water Charges	2014 - 2023

OPERATING INFORMATION

These schedules contain operational and infrastructure data in relation to the services the Authority provides.

Spruce Run Rain Gauge	2014 - 2023
West Windsor Rain Gauge	2014 - 2023
Spruce Run Reservoir Storage	2014 - 2023
Round Valley Reservoir Storage	2014 - 2023
Manasquan System Rainfall	2014 - 2023
Manasquan Reservoir Storage Data.....	2014 - 2023

DEBT, ECONOMIC AND DEMOGRAPHIC INFORMATION

Bonds, Notes and Loans Payable	2014 - 2023
Ten Largest State of New Jersey Employers	2012 - 2021
State of New Jersey Population and Employment Trends	2012 - 2021

**New Jersey Water Supply Authority
Summary of Financial Information 2014 – 2023**

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
REVENUE AND EXPENSES				
Water sales	\$23,240,511	\$24,168,432	\$25,199,424	\$25,394,799
Reimbursement of operating exp	<u>\$2,600,238</u>	<u>\$2,642,400</u>	<u>\$2,642,400</u>	<u>\$2,642,400</u>
Total operating revenues	25,840,749	26,810,832	27,841,824	28,037,199
Operating expense	<u>20,750,987</u>	<u>21,449,303</u>	<u>21,413,585</u>	<u>24,686,037</u>
Income from operations	5,089,762	5,361,529	6,428,239	3,351,162
Non-operating revenues	603,011	531,655	1,186,165	2,906
Non-operating expenses	<u>4,680,739</u>	<u>2,140,777</u>	<u>2,101,399</u>	<u>(2,025,379)</u>
Change in net position	1,012,034	3,752,407	5,513,005	5,379,447
GASB 75 adjustment				(37,744,085)
Net position, beginning of year	<u>120,670,202</u>	<u>104,343,335</u>	<u>108,095,742</u>	<u>113,608,747</u>
Net position, end of year	121,682,236	108,095,742	113,608,747	81,244,109
ASSETS				
Current assets, unrestricted	41,600,989	42,450,358	46,612,558	49,025,001
Current assets, restricted	12,336,186	12,339,659	7,032,591	9,427,648
Non-current assets	<u>153,571,758</u>	<u>153,061,564</u>	<u>151,909,258</u>	<u>150,570,753</u>
Total assets	207,508,933	207,851,581	205,554,407	209,023,402
Deferred outflows of resources		1,280,619	3,646,920	9,612,405
LIABILITIES				
Current liabilities	10,041,207	9,039,888	6,027,320	8,585,118
Non-current liabilities	<u>75,345,060</u>	<u>89,372,731</u>	<u>86,489,391</u>	<u>128,466,486</u>
Total liabilities	85,386,267	98,412,619	92,516,711	137,051,604
Deferred Inflows of Resources	440,430	2,623,839	3,075,869	340,094
NET POSITION				
Net investment in capital assets	87,589,285	91,638,454	98,890,303	61,887,512
Restricted for repayment debt principal and interest	9,084,491	9,229,092	3,876,937	7,262,065
Unrestricted	<u>25,008,460</u>	<u>7,228,196</u>	<u>10,841,507</u>	<u>12,094,532</u>
Total net position	\$121,682,236	\$108,095,742	\$113,608,747	\$81,244,109

New Jersey Water Supply Authority
Summary of Financial Information 2014 – 2023

2018	2019	2020	2021*	2022*	2023
\$30,030,868	\$30,060,964	\$30,230,221	\$30,100,645	\$30,775,239	\$32,451,502
<u>\$2,642,400</u>	<u>\$2,642,400</u>	<u>\$2,640,312</u>	<u>\$2,609,112</u>	<u>\$2,580,000</u>	<u>\$2,580,000</u>
32,673,268	32,703,364	32,870,533	32,709,757	33,355,239	35,031,502
<u>25,036,260</u>	<u>22,836,854</u>	<u>21,685,312</u>	<u>18,703,742</u>	<u>21,139,334</u>	<u>22,243,944</u>
7,637,008	9,866,510	11,185,221	14,006,015	12,215,905	12,787,558
559,918	1,281,332	1,668,682	(333,666)	2,436,323	4,249,978
<u>1,017,778</u>	<u>1,317,829</u>	<u>1,552,707</u>	<u>1,213,468</u>	<u>1,319,913</u>	<u>1,305,841</u>
7,179,148	9,830,013	11,301,196	12,458,881	13,332,315	15,731,695
<u>81,244,109</u>	<u>88,423,257</u>	<u>98,253,270</u>	<u>109,554,466</u>	<u>122,013,347</u>	<u>135,345,662</u>
88,423,257	98,253,270	109,554,466	122,013,347	135,345,662	151,077,357
100,119,822	103,682,146	91,018,051	110,844,492	95,979,383	74,156,241
15,609,357	23,143,255	29,004,232	31,950,166	35,629,870	19,823,574
<u>155,152,378</u>	<u>164,010,183</u>	<u>181,337,043</u>	<u>207,987,954</u>	<u>223,816,244</u>	<u>270,076,339</u>
270,881,557	290,835,584	301,359,326	350,782,612	355,425,497	364,056,154
7,402,086	6,967,231	5,787,217	14,418,801	14,333,722	17,117,065
16,190,347	15,069,049	19,623,499	15,808,252	15,857,254	17,128,163
<u>162,703,934</u>	<u>163,293,861</u>	<u>152,932,482</u>	<u>203,690,065</u>	<u>196,177,942</u>	<u>193,429,485</u>
178,894,281	178,362,910	172,555,981	219,498,317	212,035,196	210,557,648
10,966,105	21,186,635	25,036,096	23,689,749	22,378,361	19,538,214
59,275,272	58,476,549	87,368,795	73,667,713	93,104,101	107,918,240
13,434,461	19,997,698	24,965,590	27,135,716	30,166,251	13,289,738
<u>15,713,524</u>	<u>19,779,023</u>	<u>(2,779,919)</u>	<u>21,209,918</u>	<u>12,075,310</u>	<u>29,869,379</u>
\$88,423,257	\$98,253,270	\$109,554,466	\$122,013,347	\$135,345,662	\$151,077,357

* Certain balances have been reclassified or restated to conform to current year presentation.

**New Jersey Water Supply Authority
Raritan Basin System
Summary of Water Use Contracts
Daily Contract in Million Gallons Per Day – MGD**

<u>WATER USER</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
UNITED WATER LAMBERTVILLE, INC	0.490	0.490	0.490	0.490	0.490
MERCER COUNTY PARK - GOLF	0.067	0.067	0.067	0.067	0.067
TRENTON COUNTRY CLUB	0.126	0.126	0.126	0.126	0.126
PRINCETON UNIVERSITY	0.150	0.150	0.150	0.150	0.150
NORTH BRUNSWICK TOWNSHIP	8.000	8.000	8.000	8.000	8.000
NEW JERSEY AMERICAN WATER	126.600	126.600	126.600	126.600	126.600
EAST BRUNSWICK TOWNSHIP	8.000	8.000	8.000	8.000	8.000
NEW BRUNSWICK, CITY OF	10.500	10.500	10.500	10.500	10.500
MIDDLESEX WATER COMPANY	27.000	27.000	27.000	27.000	27.000
ROYCE BROOK GOLF CLUB	0.165	0.165	0.165	0.165	0.165
DUKE FARMS	0.000	0.000	0.000	0.000	0.000
BOROUGH OF GLEN GARDNER	0.008	0.008	0.008	0.008	0.008
RIDGE AT BACK BROOK	0.111	0.111	0.111	0.111	0.111
ROXBURY WATER COMPANY	0.074	0.041	0.041	0.041	0.041
HUNTERDON COUNTY (HERON GLEN GOLF)	0.079	0.079	0.079	0.079	0.079
RARITAN VALLEY COUNTRY CLUB	0.012	0.012	0.012	0.012	0.012
EAST WINDSOR MUA	0.011	0.011	0.011	0.011	0.011
SOMERSET CTY (NESCHANIC VALLEY GOLF)	0.142	0.142	0.142	0.142	0.142
TRUMP NATIONAL GOLF CLUB	0.170	0.170	0.170	0.170	0.170
MORRIS COUNTY MUA	0.079	0.079	0.079	0.079	0.079
APPLIED WATER MGMT (MT. OLIVE TWP)	0.010	0.010	0.010	0.010	0.010
WASHINGTON TOWNSHIP MUA	0.025	0.025	0.035	0.035	0.035
ROXITICUS GOLF CLUB	0.046	0.046	0.046	0.046	0.046
HAMILTON GOLF CLUB	0.138	0.138	0.138	0.138	0.138
SPRINGDALE GOLF CLUB	0.098	0.098	0.098	0.098	0.098
NJ DEPT OF CORRECTIONS	0.025	0.025	0.025	0.025	0.025
STONEBRIDGE COMMUNITY ASSOC	0.081	0.081	0.081	0.081	0.081
VILLAGE GRANDE @ BEAR CREEK	0.074	0.074	0.074	0.074	0.074
EASTERN CONCRETE MATERIALS		0.023	0.023	0.023	0.023
HUNTERDON MEDICAL CENTER			0.031	0.031	0.031
PRINCETON UNIVERSITY OPERATIONS			0.027	0.027	0.027
RENAISSANCE AT MONROE CONDOMINIUM ASSOC.				0.014	0.014
SYSTEM TOTAL	182.281	182.271	182.339	182.353	182.353

**New Jersey Water Supply Authority
Raritan Basin System
Summary of Water Use Contracts
Daily Contract in Million Gallons Per Day – MGD**

<u>WATER USER</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
UNITED WATER LAMBERTVILLE, INC	0.490	0.490	0.490	0.490	0.490
MERCER COUNTY PARK COMMISSION	0.067	0.067	0.067	0.067	0.067
TRENTON COUNTRY CLUB	0.126	0.126	0.126	0.126	0.126
PRINCETON UNIVERSITY	0.150	0.150	0.150	0.150	0.150
NORTH BRUNSWICK TOWNSHIP	8.000	8.000	8.000	8.000	8.000
NEW JERSEY AMERICAN WATER	126.600	126.600	126.600	126.600	126.600
EAST BRUNSWICK TOWNSHIP	8.000	8.000	8.000	8.000	8.000
NEW BRUNSWICK, CITY OF	10.500	10.500	10.500	10.500	10.500
MIDDLESEX WATER COMPANY	27.000	27.000	27.000	27.000	27.000
ROYCE BROOK GOLF CLUB	0.165	0.165	0.165	0.165	0.165
DUKE FARMS	0.000	0.000	0.000	0.000	0.000
BOROUGH OF GLEN GARDNER	0.008	0.008	0.008	0.008	0.008
RIDGE AT BACK BROOK	0.111	0.111	0.111	0.111	0.111
ROXBURY WATER COMPANY	0.041	0.041	0.041	0.041	0.041
HUNTERDON COUNTY (HERON GLEN GOLF)	0.079	0.079	0.079	0.079	0.079
RARITAN VALLEY COUNTRY CLUB	0.012	0.012	0.012	0.012	0.012
EAST WINDSOR MUA	0.011	0.011	0.011	0.011	0.011
SOMERSET CTY (NESCHANIC VALLEY GOLF)	0.142	0.142	0.142	0.142	0.142
TRUMP NATIONAL GOLF CLUB	0.170	0.170	0.170	0.170	0.170
MORRIS COUNTY MUA	0.079	0.079	0.079	0.079	0.079
APPLIED WATER MGMT (MT. OLIVE TWP)	0.010	0.010	0.010	0.010	0.010
WASHINGTON TOWNSHIP MUA	0.035	0.035	0.035	0.035	0.035
ROXITICUS GOLF CLUB	0.046	0.046	0.046	0.046	0.046
HAMILTON FARM GOLF CLUB	0.138	0.138	0.138	0.138	0.138
SPRINGDALE GOLF CLUB	0.098	0.098	0.098	0.098	0.098
NJ DEPT OF CORRECTIONS	0.025	0.025	0.025	0.025	0.025
STONEBRIDGE COMMUNITY ASSOC	0.081	0.081	0.081	0.081	0.081
VILLAGE GRANDE@ BEAR CREEK	0.074	0.074	0.074	0.074	0.074
EASTERN CONCRETE MATERIALS	0.023	0.023	0.023	0.023	0.023
HUNTERDON MEDICAL CENTER	0.031	0.031	0.031	0.031	0.031
PRINCETON UNIVERSITY OPERATIONS	0.027	0.027	0.027	0.027	0.027
RENAISSANCE AT MONROE CONDOMINIUM ASSOC.	0.014	0.014	0.014	0.014	0.014
SYSTEM TOTAL	182.353	182.353	182.339	182.339	182.339

**New Jersey Water Supply Authority
Manasquan Water Supply System
Summary of Water Use Contracts
Daily Contract in Million Gallons Per Day – MGD**

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
WALL TOWNSHIP	2.275	2.275	2.00	2.00	2.00
BOROUGH OF AVON	0.142	0.142	0.126	0.126	0.126
SHORELANDS WATER COMPANY	1.928	1.928	2.007	2.007	2.007
NEW JERSEY AMERICAN WATER	12.5	12.5	12.5	12.5	12.5
BOROUGH OF RED BANK	0.778	0.778	0.548	0.548	0.548
BOROUGH OF SEA GIRT	0.075	0.075	0.04	0.04	0.04
BOROUGH OF SPRING LAKE	0.31	0.31	0.31	0.31	0.31
BOROUGH OF SPRING LAKE HEIGHTS	0.425	0.425	0.386	0.386	0.386
BOROUGH OF BELMAR	0.65	0.65	0.288	0.288	0.288
BOROUGH OF BRIELLE	0.45	0.45	0.45	0.45	0.45
BOROUGH OF KEYPORT	0.458	0.458	0.356	0.356	0.356
BOROUGH OF MATAWAN	0.469	0.469	0.332	0.332	0.332
BOROUGH OF LAKE COMO	0.100	0.100	0.100	0.100	0.100
	<u>20.560</u>	<u>20.560</u>	<u>19.443</u>	<u>19.443</u>	<u>19.443</u>
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
WALL TOWNSHIP	2.00	2.00	2.00	2.00	2.00
BOROUGH OF AVON	0.126	0.126	0.126	0.126	0.126
SHORELANDS WATER COMPANY	2.007	2.007	2.007	2.007	2.007
NEW JERSEY AMERICAN WATER	12.5	12.5	12.5	12.5	12.5
BOROUGH OF RED BANK	0.548	0.548	0.548	0.548	0.548
BOROUGH OF SEA GIRT	0.04	0.04	0.04	0.04	0.04
BOROUGH OF SPRING LAKE	0.31	0.31	0.31	0.31	0.31
BOROUGH OF SPRING LAKE HEIGHTS	0.386	0.386	0.386	0.386	0.386
BOROUGH OF BELMAR	0.288	0.288	0.288	0.288	0.288
BOROUGH OF BRIELLE	0.45	0.45	0.45	0.45	0.45
BOROUGH OF KEYPORT	0.356	0.356	0.356	0.356	0.356
BOROUGH OF MATAWAN	0.332	0.332	0.332	0.332	0.332
BOROUGH OF LAKE COMO	0.100	0.100	0.100	0.100	0.100
	<u>19.443</u>	<u>19.443</u>	<u>19.443</u>	<u>19.443</u>	<u>19.443</u>

**New Jersey Water Supply Authority
Raritan Basin System
Series 1988, D&R System Revenue Bond Coverage*¹
Series 1998, D&R System Revenue Refunding Bond Coverage**

Fiscal Year	Gross Revenue	Operating Expenses	Net Revenue Available for Debt Service	Debt Service Payments	Coverage
2021 ²					
2020 ²					
2019 ²					
2018 ²					
2017 ²					
2016 ²					
2015 ²					
2014	\$17,584,676	\$12,099,450	\$5,485,226	\$2,669,875	2.05
2013	\$17,504,982	\$11,677,600	\$5,827,382	\$2,670,997	2.18
2012	\$17,799,191	\$11,935,100	\$5,864,091	\$2,680,266	2.19
2011	\$18,055,011	\$11,765,800	\$6,289,211	\$2,688,219	2.34
2010	\$17,968,946	\$11,678,300	\$6,290,646	\$2,698,931	2.33

Note 1. Section 713 of the Delaware & Raritan Canal - Spruce Run/Round Valley Reservoirs System Bond Resolution, adopted November 17, 1988, requires that the Net Revenues in each fiscal year be at least 120% of the Debt Service on the 1988 bonds for the twelve-month period in such fiscal year.

Note 2. The last principal payment of \$2,600,000 was made on November 1, 2013.

**Manasquan Water Supply System
Series 2005, Manasquan System Revenue Bond Coverage*¹**

Fiscal Year	Gross Revenue	Operating Expenses	Net Revenue Available for Debt Service	Debt Service Payments	Coverage
2023	9046777	3017407	\$6,029,370	\$581,963	10.360
2022	\$7,385,748	\$2,626,795	\$4,758,953	\$582,213	8.174
2021	\$7,448,897	\$2,620,677	\$4,828,220	\$3,446,338	1.401
2020	\$7,815,996	\$2,809,333	\$5,006,663	\$3,445,963	1.453
2019	\$7,838,524	\$3,026,023	\$4,812,501	\$3,443,937	1.397
2018	\$7,686,455	\$3,146,165	\$4,540,290	\$3,454,588	1.314
2017	\$8,075,400	\$3,171,399	\$4,904,001	\$718,532	6.825
2016	\$8,519,609	\$3,032,555	\$5,487,054	\$3,969,827	1.382
2015	\$8,715,369	\$3,096,047	\$5,619,322	\$4,250,454	1.322
2014	\$8,456,993	\$2,981,200	\$5,475,793	\$4,082,274	1.340
2013	\$8,174,391	\$2,862,600	\$5,311,791	\$4,080,204	1.300
2012	\$8,210,668	\$2,866,100	\$5,344,568	\$4,071,454	1.310
2011	\$7,976,636	\$2,956,600	\$5,020,036	\$3,809,328	1.320
2010	\$7,785,670	\$2,823,200	\$4,962,470	\$3,816,713	1.300

Note 1. Section 712 of the Manasquan Reservoir System Bond Resolution, adopted June 6, 2005, as supplemented by the Second Supplemental Bond Resolution, adopted April 4, 2016, requires that the Net Revenues in each fiscal year be at least 120% of the Debt Service on the 2005 and 2016 Bonds for the twelve-month period in such fiscal year.

* Numbers to calculate bond coverage were extracted from the corresponding budget for the applicable fiscal year.

**New Jersey Water Supply Authority
Delaware and Raritan Canal – Spruce Run/Round Valley Reservoirs System
Water Charges Per Million Gallons of Raw Water Daily**

<u>EFFECTIVE DATE</u>	<u>7/1/2014</u>	<u>7/1/2015</u>	<u>7/1/2016</u>	<u>7/1/2017</u>	<u>7/1/2018</u>
RATE PER MGD	\$246.00	\$253.00	\$253.00	\$336.00	\$336.00

<u>EFFECTIVE DATE</u>	<u>7/1/19</u>	<u>7/1/2020</u>	<u>7/1/21</u>	<u>7/1/22</u>	<u>7/1/23</u>
RATE PER MGD	\$336.00	\$336.00	\$336.00	\$336.00	\$365.00

**New Jersey Water Supply Authority
Manasquan Water Supply System
Water Charges Per Million Gallons of Raw Water Daily**

<u>EFFECTIVE DATE</u>	<u>7/01/2014</u>	<u>7/01/2015</u>	<u>7/01/2016</u>	<u>7/01/2017</u>	<u>7/01/2018</u>
RATE PER MGD	\$1,015.90	\$1,057.40	\$1,104.58	\$1,043.35	\$1,043.35
(Delayed Contracts)	\$1,168.49	\$1,190.86	\$1,238.04	\$1,137.76	\$1,137.76

<u>EFFECTIVE DATE</u>	<u>7/01/2019</u>	<u>7/01/2020</u>	<u>7/01/2021</u>	<u>7/01/2022</u>	<u>7/01/2023</u>
RATE PER MGD	\$1,043.35	\$1,010.75	\$1,010.75	\$1,010.75	\$1,010.75
(Delayed Contracts)	\$1,137.76	\$1,124.67	\$1,124.67	\$1,124.67	\$1,124.67

**New Jersey Water Supply Authority
Raritan Basin System
Spruce Run Rain Gauge (inches)**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2023	4.96	1.26	2.50	5.46	0.83	7.24	5.93	5.32	6.05	1.32	3.32	9.83	54.02
2022	2.94	3.06	2.88	6.37	5.65	3.19	1.14	3.84	5.54	6.09	3.37	4.50	48.57
2021	1.86	4.98	3.68	2.18	4.14	2.67	6.98	7.69	8.35	5.29	1.14	1.92	50.88
2020	2.58	2.80	3.40	5.00	2.62	1.77	3.69	7.27	5.18	3.82	5.86	4.05	48.04
2019	5.27	2.93	4.51	4.39	10.29	7.15	8.19	5.40	1.23	6.99	2.73	4.95	64.03
2018	2.99	6.64	4.78	5.95	5.66	3.38	9.47	9.83	9.52	4.11	12.77	8.58	83.68
2017	3.32	1.87	4.91	2.66	5.15	3.08	7.88	4.87	2.47	5.76	1.52	1.44	44.93
2016	2.03	4.60	1.11	1.66	4.07	3.03	7.00	2.98	1.74	0.53	3.02	3.25	35.02
2015	2.38	0.86	3.91	2.03	2.38	5.98	2.02	0.78	2.76	3.37	1.66	4.23	32.36
2014	2.56	2.04	3.12	7.35	2.66	4.25	3.96	1.96	1.57	3.20	3.48	3.38	39.53
TOTAL	30.89	31.04	34.80	43.05	43.45	41.74	56.26	49.94	44.41	40.48	38.87	46.13	501.06
AVERAGE	3.09	3.10	3.48	4.31	4.35	4.17	5.63	4.99	4.44	4.05	3.89	4.61	50.11
MAXIMUM	5.27	6.64	4.91	7.35	10.29	7.24	9.47	9.83	9.52	6.99	12.77	9.83	83.68
MINIMUM	1.86	0.86	1.11	1.66	0.83	1.77	1.14	0.78	1.23	0.53	1.14	1.44	32.36

**New Jersey Water Supply Authority
Raritan Basin System
West Windsor Rain Gauge (inches)**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2023	4.83	1.76	2.98	5.70	0.93	4.42	9.40	4.06	6.97	1.75	3.06	8.41	54.27
2022	3.74	2.28	2.90	5.29	6.87	2.75	0.82	2.47	3.87	7.14	3.63	4.94	46.70
2021	1.80	3.75	3.42	2.41	4.53	2.09	6.66	7.20	9.99	5.31	0.78	1.56	49.50
2020	2.20	2.80	4.04	4.88	2.20	2.31	7.40	6.37	5.20	5.45	4.86	3.98	51.69
2019	4.34	3.38	3.93	4.84	7.57	4.61	5.46	2.66	1.21	6.46	2.17	5.57	52.20
2018	2.89	7.05	4.80	4.74	5.98	3.99	6.03	4.57	8.39	2.16	8.88	6.56	66.04
2017	4.35	1.38	3.74	3.86	6.59	5.16	5.41	7.90	2.69	4.94	1.68	1.60	49.30
2016	2.21	5.30	2.29	1.49	3.83	1.82	9.42	1.11	2.10	2.18	3.78	3.30	38.83
2015	3.18	2.46	5.53	2.54	1.38	6.04	2.79	1.72	3.27	5.27	1.98	5.28	41.44
2014	2.59	3.45	4.59	7.36	3.05	3.58	7.61	2.80	1.05	4.42	5.00	5.35	50.85
TOTAL	32.13	33.61	38.22	43.11	42.93	36.77	61.00	40.86	44.74	45.08	35.82	46.55	500.82
AVERAGE	3.21	3.36	3.82	4.31	4.29	3.68	6.10	4.09	4.47	4.51	3.58	4.66	50.08
MAXIMUM	4.83	7.05	5.53	7.36	7.57	6.04	9.42	7.90	9.99	7.14	8.88	8.41	66.04
MINIMUM	1.80	1.38	2.29	1.49	0.93	1.82	0.82	1.11	1.05	1.75	0.78	1.56	38.83

**New Jersey Water Supply Authority
Raritan Basin System
Spruce Run Reservoir Storage
Billion Gallons**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2023	6.5	8.4	9.2	10.1	11.0	11.1	11.1	11.0	11.0	10.8	10.8	10.9
2022	10.7	10.1	10.7	11.2	11.1	11.0	10.4	8.1	4.9	3.9	4.6	5.1
2021	11.1	10.9	11.1	11.1	11.0	11.1	10.7	10.6	11.8	11.0	11.1	10.9
2020	10.2	10.3	10.3	11.0	11.2	11.0	10.5	9.5	10.0	9.4	9.2	10.0
2019	11.2	11.1	11.0	10.6	10.7	11.1	11.0	11.0	10.3	9.4	9.4	9.5
2018	5.6	6.0	7.9	9.9	11.1	11.0	11.0	10.9	10.9	10.5	10.3	11.1
2017	4.1	4.9	5.3	6.6	8.1	9.3	9.8	10.4	10.4	8.1	6.2	6.1
2016	5.3	6.0	8.2	8.9	9.3	9.8	7.8	7.0	6.2	4.9	3.7	3.7
2015	5.8	6.4	6.3	8.8	9.8	10.1	10.7	9.7	7.1	5.4	4.9	5.3
2014	8.4	9.1	9.2	10.0	11.4	10.5	10.5	10.5	8.2	5.0	4.5	4.7
AVERAGE	7.9	8.3	8.9	9.8	10.5	10.6	10.3	9.9	9.1	7.8	7.5	7.7
MAXIMUM	11.2	11.1	11.1	11.2	11.4	11.1	11.1	11.0	11.8	11.0	11.1	11.1
MINIMUM	4.1	4.9	5.3	6.6	8.1	9.3	7.8	7.0	4.9	3.9	3.7	3.7

MAXIMUM CAPACITY 11.0 BG

**New Jersey Water Supply Authority
Raritan Basin System
Round Valley Reservoir Storage
Billion Gallons**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2023	31.2	31.5	31.6	33.9	36.4	36.3	36.5	36.4	36.4	36.5	36.4	36.9
2022	36.2	36.2	36.4	36.5	36.4	36.5	36.2	34.8	32.3	30.7	30.9	30.9
2021	36.4	36.3	36.6	36.4	36.3	36.4	36.3	36.3	36.2	36.2	36.3	36.2
2020	36.6	36.6	36.7	36.6	36.4	36.6	36.5	36.6	36.4	36.4	36.5	36.4
2019	47.4	47.7	47.1	47.5	47.8	47.8	47.3	46.6	45.4	41.1	37.9	35.9
2018	42.1	41.3	41.7	42.0	44.7	47.0	47.0	47.0	47.0	47.2	47.2	47.7
2017	36.2	36.9	37.4	38.7	40.4	42.6	43.0	43.1	42.8	42.6	42.7	42.5
2016	44.3	44.5	44.9	45.0	45.0	45.7	45.6	44.3	43.4	39.4	37.0	35.9
2015	48.5	48.7	48.7	49.1	49.2	49.0	49.1	49.0	47.4	44.6	44.1	44.3
2014	52.6	52.7	53.1	53.3	53.9	53.7	51.7	50.1	49.9	49.6	48.6	48.4
AVERAGE	41.14	41.23	41.42	41.91	42.65	43.16	42.92	42.41	41.71	40.44	39.77	39.51
MAXIMUM	52.6	52.7	53.1	53.3	53.9	53.7	51.7	50.1	49.9	49.6	48.6	48.4
MINIMUM	31.2	31.5	31.6	33.9	36.3	36.3	36.2	34.8	32.3	30.7	30.9	30.9

MAXIMUM CAPACITY 55.0 BG

**New Jersey Water Supply Authority
Manasquan Water System Rainfall (inches)**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
2023	3.28	1.77	3.75	9.16	1.23	1.94	6.69	5.20	11.44	2.34	1.85	9.59
2022	4.90	3.15	2.98	5.08	5.06	3.73	1.49	2.73	1.98	8.57	3.13	5.63
2021	2.62	5.42	5.55	2.75	4.32	2.61	8.32	5.91	3.74	6.60	0.74	1.21
2020	2.60	2.90	4.11	4.88	1.61	4.97	4.97	5.15	2.15	7.16	5.88	4.55
2019	4.23	3.43	4.2	4.55	6.29	5.35	5.36	3.48	1.23	4.80	1.56	7.07
2018	3.31	7.63	7.20	4.01	10.34	2.89	6.16	7.02	8.00	6.37	9.30	6.12
2017	5.01	1.22	7.68	3.96	8.07	2.31	4.13	4.17	2.49	5.98	2.52	1.36
2016	2.15	3.81	1.94	2.15	3.42	1.54	7.59	0.58	4.49	3.58	2.93	3.63
2015	5.20	1.87	4.29	2.29	1.14	5.44	3.01	2.35	2.11	4.82	2.42	4.49
2014	2.31	3.16	3.13	6.95	2.92	3.46	6.42	5.79	1.77	5.07	5.33	5.81
TOTAL	35.61	34.36	44.83	45.78	44.40	34.24	54.14	42.38	39.40	55.29	35.66	49.46
AVERAGE	3.56	3.44	4.48	4.58	4.44	3.42	5.41	4.24	3.94	5.53	3.57	4.95
MAXIMUM	5.20	7.63	7.68	9.16	10.34	5.44	8.32	7.02	11.44	8.57	9.30	9.59
MINIMUM	2.15	1.22	1.94	2.15	1.14	1.54	1.49	0.58	1.23	2.34	0.74	1.21

**New Jersey Water Supply Authority
Manasquan Water Reservoir Storage Data
Billion Gallons**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
2023	4.51	4.59	4.58	4.59	4.60	4.48	4.25	3.95	3.73	3.87	3.88	3.97
2022	4.36	4.46	4.56	4.61	4.56	4.51	4.20	3.69	3.16	3.14	3.41	3.80
2021	4.53	4.48	4.57	4.54	4.56	4.58	4.46	4.21	4.01	3.91	4.15	4.33
2020	4.55	4.48	4.50	4.54	4.52	4.44	4.22	3.94	3.65	3.50	3.73	4.24
2019	4.53	4.49	4.61	4.55	4.61	4.58	4.44	4.35	4.17	3.98	4.08	4.17
2018	4.17	4.64	4.66	4.64	4.62	4.59	4.43	4.54	4.58	4.58	4.55	4.53
2017	4.37	4.61	4.56	4.62	4.60	4.54	4.34	4.14	4.00	3.76	4.00	4.05
2016	4.44	4.60	4.58	4.60	4.58	4.38	4.02	3.71	3.19	3.02	3.01	3.52
2015	4.58	4.54	4.52	4.59	4.60	4.51	4.34	3.91	3.35	3.12	3.20	3.52
2014	4.59	4.62	4.61	4.62	4.62	4.55	4.35	4.15	3.64	3.52	3.86	4.46
AVERAGE	4.46	4.55	4.57	4.59	4.59	4.51	4.30	4.06	3.75	3.64	3.79	4.06
MAXIMUM	4.59	4.64	4.66	4.64	4.62	4.59	4.46	4.54	4.58	4.58	4.55	4.53
MINIMUM	4.17	4.46	4.50	4.54	4.52	4.38	4.02	3.69	3.16	3.02	3.01	3.52

MAXIMUM CAPACITY 4.7 BG

**New Jersey Water Supply Authority
Bonds, Notes and Loans Payable**

Fiscal Year Ending	Revenue Bonds	Deferred Notes to the State of New Jersey	Loans to the State of New Jersey and NJEIT	Total Bonds, Notes and Loans Payable	Outstanding Debt to Total Personal Income Ratio ¹	Outstanding Debt Per Capita Ratio ²
2023	\$5,021,291	\$33,566,892	\$114,168,508	\$152,756,691	0.070%	\$59.86
2022	\$5,488,656	\$33,566,892	\$116,982,962	\$156,038,510	0.072%	\$61.14
2021	\$5,936,022	\$33,566,892	\$119,872,023	\$159,374,937	0.075%	\$62.32
2020	\$9,355,100	\$33,566,892	\$73,907,816	\$116,829,808	0.059%	\$47.67
2019	\$12,619,179	\$33,566,892	\$74,976,680	\$121,162,751	0.064%	\$49.33
2018	\$15,748,257	\$33,566,892	\$60,811,617	\$110,126,766	0.060%	\$44.68
2017	\$18,802,335	\$33,566,892	\$12,318,018	\$64,687,245	0.037%	\$25.94
2016	\$19,281,414	\$33,566,892	\$13,382,948	\$66,231,254	0.040%	\$26.74
2015	\$27,135,913	\$33,647,103	\$14,379,107	\$75,162,123	0.047%	\$30.38
2014	\$30,058,222	\$33,649,796	\$15,420,970	\$79,128,988	0.051%	\$32.03
2013	\$35,456,893	\$33,652,337	\$16,393,574	\$85,502,804	0.058%	\$34.72

Note 1. Total personal income for the service area of Hunterdon, Middlesex, Somerset, Union and Monmouth Counties using Bureau of Economic Analysis
CAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income - County
Last updated November 16, 2021; new statistics for 2020; revised statistics for 1998-2019.

Note 2. Population estimates for the service area of Hunterdon, Middlesex, Somerset, Union and Monmouth Counties using Bureau of Economic Analysis
CAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income - County
Last updated November 16, 2021; new statistics for 2020; revised statistics for 1998-2019.

**State of New Jersey Ten Largest Employers
2021 as Compared To 2012**

2021 RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	61,640	1.4%
2	Amazon	49,000	1.1%
3	Wakefern Food Corporation (ShopRite)	36,409	0.8%
4	Wal-Mart Stores, Inc.	22,191	0.5%
5	United Parcel Service (UPS)	16,435	0.4%
6	Johnson & Johnson	13,996	0.3%
7	The Home Depot	13,936	0.3%
8	Bank of America	10,650	0.2%
9	Wawa, Inc.	10,586	0.2%
10	United Airlines	10,537	0.2%
		245,380	5.4%

2012 RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	69,195	1.7%
2	Wakefern Food Corporation (ShopRite)	35,734	0.9%
3	Wal-Mart Stores, Inc.	17,661	0.4%
4	United Parcel Service (UPS)	16,067	0.4%
5	Verizon Communications	15,400	0.4%
6	Johnson & Johnson	14,500	0.3%
7	The Home Depot	13,628	0.3%
8	United Continental Holdings (formerly Continental Airlines)	13,600	0.3%
9	The Great Atlantic and Pacific Tea Company (A&P)	12,373	0.3%
10	Caesars Entertainment (formerly Harrah's Entertainment, LLC)	12,194	0.3%
		220,352	5.3%

Notes:

Aggregate New Jersey resident employment for Calendar Years 2021 and 2012 totaled 4.5 million and 4.2 million, respectively.
 New Jersey State Government data excludes State authorities, colleges and universities.
 New Jersey Business' Top 100 Employers data derived from annual questionnaires submitted by private sector respondents, excluding government, higher education institutions, and non-profit hospitals.
 Data reprinted with permission from the New Jersey Business and Industry Association.

Sources:

Birritteri, A. (2021, August). "Top 25 NJ Employers." *New Jersey Business*, 67(8), 38.
 Saliba, G.N. (2013, August). "41st Annual Top 100 employers." *New Jersey Business*, 59(8), 48-55.
 New Jersey Department of the Treasury, Office of Management and Budget.
 New Jersey Department of the Treasury, Office of Revenue & Economic Analysis.

* Most recent available data.

**State of New Jersey
Population and Employment Trends
(Expressed in Thousands)**

YEAR	NEW JERSEY POPULATION ¹	CIVILIAN LABOR FORCE ²	RESIDENT EMPLOYMENT ²	RESIDENT UNEMPLOYMENT ²	NEW JERSEY UNEMPLOYMENT RATE (%) ²	UNITED STATES UNEMPLOYMENT RATE (%) ²
2012	8,933	4,640	4,210	430	9.3	7.8
2013	8,985	4,558	4,210	348	7.6	7.0
2014	9,034	4,607	4,309	298	6.5	5.7
2015	9,077	4,605	4,371	234	5.1	5.0
2016	9,120	4,622	4,400	222	4.8	4.8
2017	9,175	4,603	4,394	209	4.5	4.2
2018	9,219	4,615	4,447	168	3.6	3.8
2019	9,259	4,734	4,565	169	3.6	3.6
2020	9,280	4,604	4,260	344	7.5	6.8
2021	9,267	4,638	4,396	242	5.2	4.2

Notes:

¹ New Jersey Population data for 2012 through 2020 has been revised to reflect seasonally adjusted data.

² Civilian Labor Force, Resident Employment and Unemployment data for 2012 through 2020 has been revised to reflect seasonally adjusted data.

Sources:

United States Department of Labor, Bureau of Labor Statistics.

New Jersey Department of the Treasury, Office of Revenue & Economic Analysis.

**State of New Jersey
Valuations of Taxable Real Property, Personal and Per Capita Income
(Expressed in Millions Except as Indicated)**

YEAR	NEW JERSEY POPULATION (Thousands) ¹	ASSESSED VALUATION OF PROPERTY (\$)	TRUE VALUATION OF PROPERTY (\$)	PERSONAL INCOME(\$) ²	PER CAPITA INCOME (\$Thousands) ³
2012	8,933	988,356	1,235,474	487,528	54.6
2013	8,985	990,697	1,183,032	492,488	54.8
2014	9,034	971,600	1,158,322	515,515	57.1
2015	9,077	983,032	1,164,399	537,106	59.2
2016	9,120	981,731	1,183,048	552,051	60.5
2017	9,175	1,000,760	1,207,591	572,482	62.4
2018	9,219	1,017,307	1,238,936	597,005	64.8
2019	9,259	1,063,181	1,281,169	619,066	66.9
2020	9,280	1,086,003	1,319,216	652,499	70.3
2021	9,267	1,117,743	1,349,649	693,223	74.8

Notes:

¹ New Jersey Population data for 2012 through 2020 has been revised.

² Personal Income data for 2012 through 2020 has been revised.

³ Per Capita Income equals Personal Income divided by New Jersey Population. Data for 2012 through 2020 has been revised.

Sources:

United States Census Bureau, Population Division.

New Jersey Department of the Treasury, Office of Revenue & Economic Analysis.

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Commissioners of
New Jersey Water Supply Authority

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities of the New Jersey Water Supply Authority (a component unit of the State of New Jersey) (the "Authority"), as of and for the year ended June 30, 2023, and the related notes to financial statements, which comprise the Authority's basic financial statements, and have issued our report thereon dated November 2, 2023.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting ("internal control") as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Authority's financial statements will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS (CONTINUED)

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Meradieu, P.C.
Certified Public Accountants

November 2, 2023

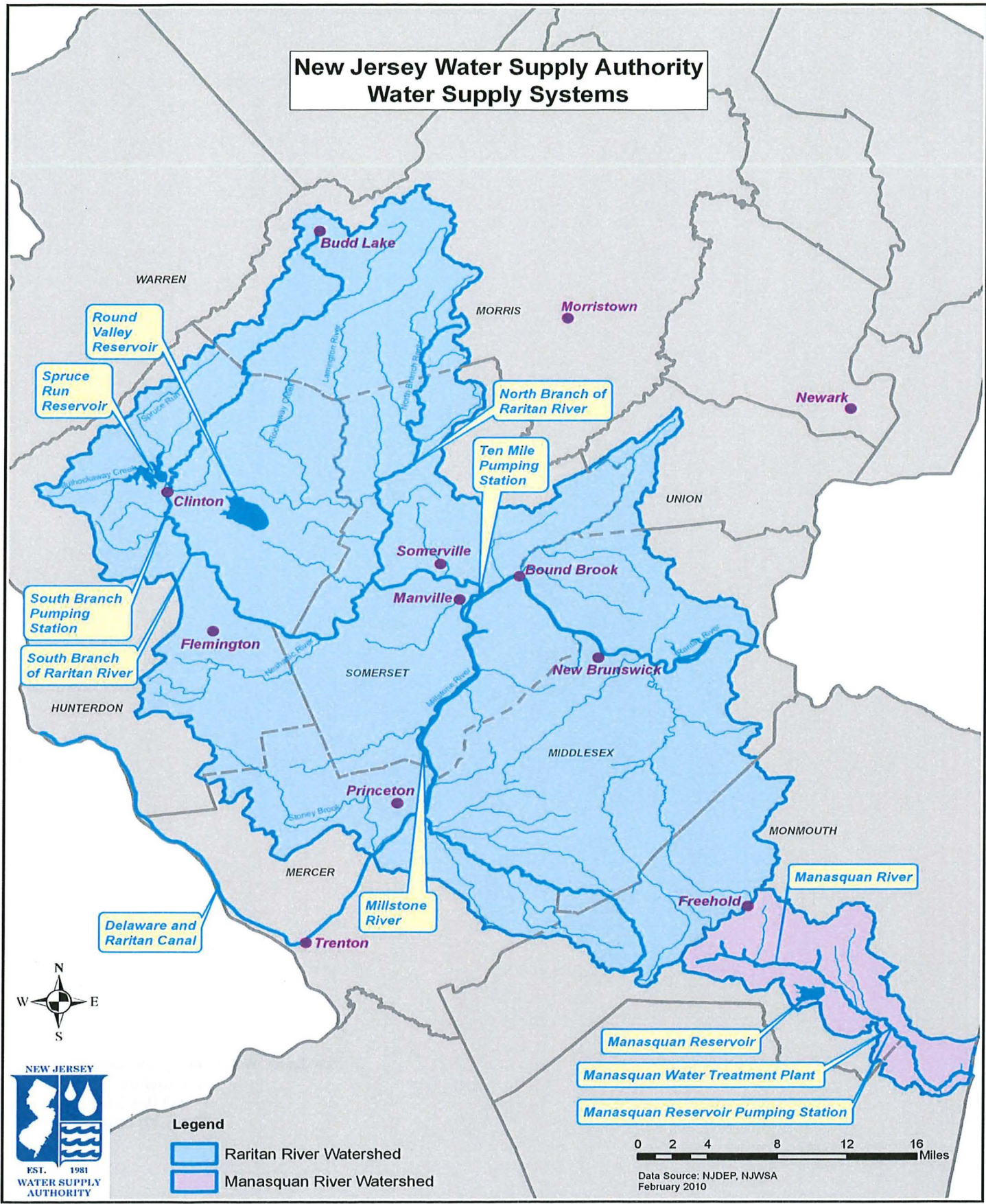
**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

SCHEDULE OF CURRENT YEAR FINDINGS AND RECOMMENDATIONS

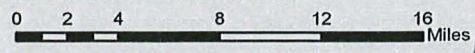
None reported.

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New Jersey Water Supply Authority Water Supply Systems



- Legend**
- Raritan River Watershed
 - Manasquan River Watershed



Data Source: NJDEP, NJWSA
February 2010

New Jersey Water Supply Authority
1851 Highway 31
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Clinton, NJ 08809