

NEW JERSEY WATER SUPPLY AUTHORITY

A COMPONENT UNIT
OF THE STATE OF NEW JERSEY



2022 ANNUAL REPORT

AND THE

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED

JUNE 30, 2022 AND 2021



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, 2021

Christopher P. Morrill

Executive Director/CEO

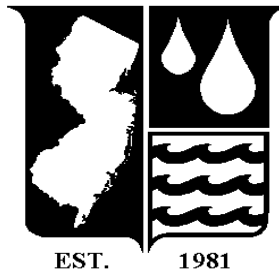
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OF THE STATE OF NEW JERSEY



FOR THE FISCAL YEARS ENDED
JUNE 30, 2022 AND 2021

Prepared by:
Finance and Accounting Staff

Marc Brooks
Executive Director

2022 Annual Report

Governor
Philip D. Murphy



Authority Members

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Chair

Steven J. Picco
Vice Chair
Chair, Audit Committee

Robert J. Iacullo
Treasurer
Chair, Finance Committee
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Chair, Personnel Committee

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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

2023 Monthly Meetings

The 2023 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 9, 2023

February 6, 2023

March 6, 2023

April 3, 2023

May 1, 2023

June 5, 2023

July 3, 2023

August 7, 2023

September 11, 2023

October 2, 2023

November 6, 2023

December 4, 2023

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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Table of Contents

Introductory Section.....	5
Table of Organization	6
Letter to Governor and Legislature.....	7
Operations - Raritan System	10
Operations - Manasquan System	20
Watershed Protection Programs Unit.....	23
Policies and Economic Growth Strategies of the State of New Jersey.....	28
Annual Review of Authority Operations	28
Letter of Transmittal	29
Financial Section.....	33
Financial Statements and Supplementary Information June 30, 2022.....	34
Independent Auditors' Report.....	35
Financial Highlights – Fiscal Year 2022	39
Financial Highlights – Fiscal Year 2021	40
Overview of the Financial Statements	41
Financial Analysis of the Authority	41
Operating Activities	43
Capital Assets and Debt Administration.....	44
Current and New Business.....	46
Contacting the Authority's Financial Management.....	46
Basic Financial Statements	47
Statements of Net Position.....	48
Statements of Revenues, Expenses and Changes in Net Position	49
Statements of Cash Flows.....	50
Notes to Financial Statements.....	51
Required Supplementary Schedules (Unaudited).....	81
Schedule of Proportionate Share of PERS Net Pension Liability (NPL)	82
Schedule of Contributions.....	82
Schedule of Changes in Net Pension Liability	82
Schedule of Proportionate Share of the Net OPEB Liability.....	83
Other Supplementary Information	84
Combining Schedule of Net Position.....	85

Combining Schedule Of Revenue, Expenses and Changes in Net Position.....	86
Schedule of Changes in Cash and Investments - Raritan Basin System.....	87
Schedule of Changes in Cash and Investments - Manasquan Water Supply System.....	91
Statistical Section.....	95
Summary of Financial Information.....	96
Summary of Water Use Contracts	98
Series 1988, D&R System Revenue Bond Coverage	101
Series 1998, D&R System Revenue Refunding Bond Coverage	101
Series 2005, Manasquan System Revenue Bond Coverage.....	101
Water Charges.....	102
Spruce Run Rain Gauge.....	103
West Windsor Rain Gauge.....	103
Spruce Run Rain Reservoir Storage	104
Round Valley Reservoir Storage	104
Manasquan Water System Rainfall.....	105
Manasquan Water Reservoir Storage Data.....	105
Bonds, Notes and Loans Payable.....	106
State of New Jersey Ten Largest Employers	107
Population and Employment Trends.....	108
Valuations of Taxable Real Property, Personal and Per Capita Income.....	108
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.....	109
Schedule of Current Year Findings and Recommendations	111

Introductory Section

Table of Organization

Letter to Governor and Legislature

Operations – Raritan System

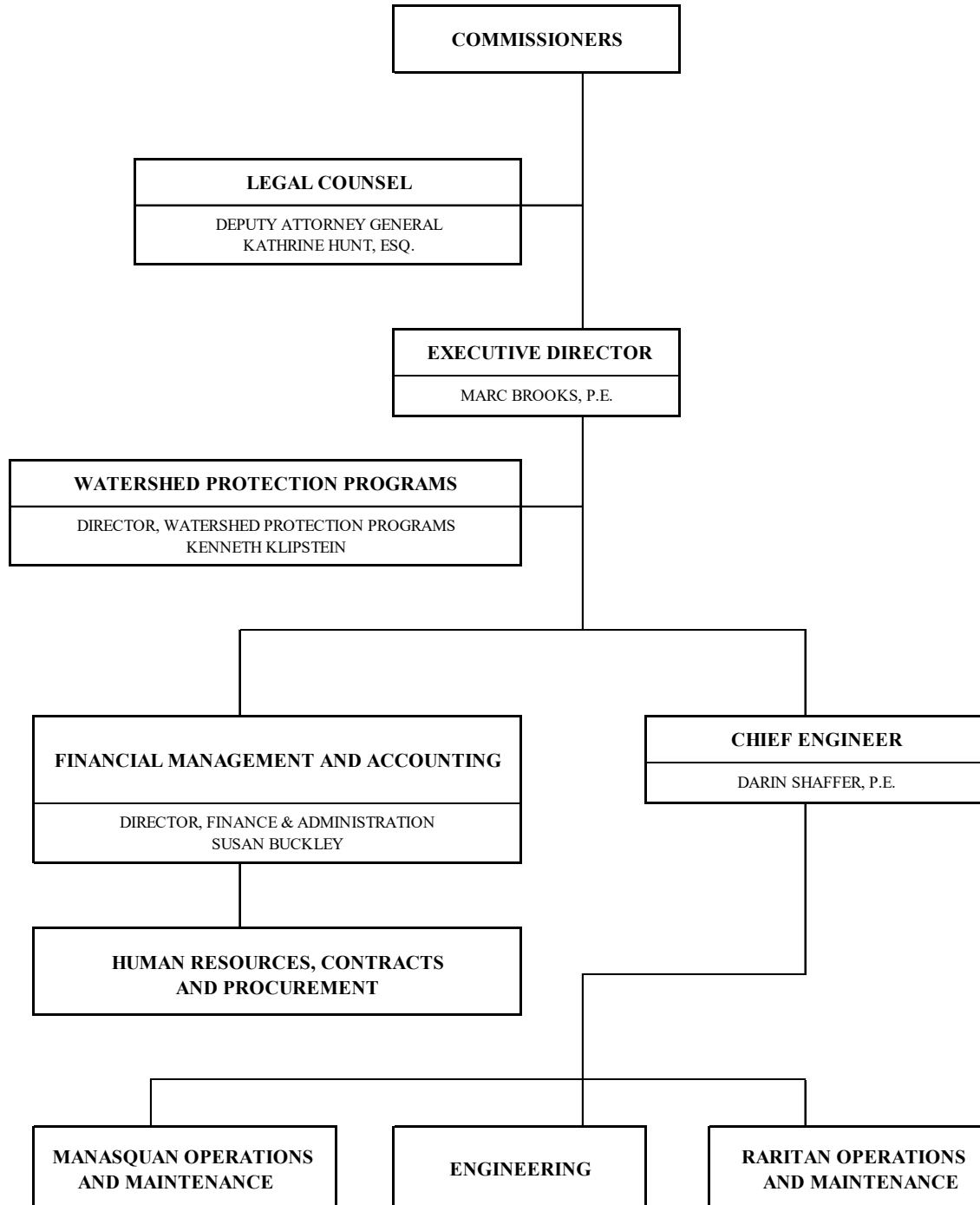
Operations – Manasquan System

Watershed Protection Programs Unit

Letter of Transmittal

New Jersey Water Supply Authority

Table of Organization



Letter to Governor and Legislature

NEW JERSEY WATER SUPPLY AUTHORITY



Post Office Box 5196 • Clinton, NJ 08809 • (908) 638-6121
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February 6, 2023

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

I am pleased to submit the 41st 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. The report is late this year because of delays in the reporting of the Authority’s portion of Other Postemployment Employee Benefits (OPEB) data that must be included in the Authority’s financial statements. This report contains the Authority's Independent Auditors’ Report, and all required reporting to be in compliance with Executive Order No. 37 (2006), for FY2022.

Staff continues to demonstrate flexibility in response to the new and changing working conditions associated with the COVID-19 pandemic. As we have gained a better understanding of the virus, operations continue to return to more normal or “new normal” levels, often with only slightly modified procedures to ensure continued safety. Dam safety and delivery of raw and treated water have remained paramount concerns and were never compromised.

During 2022, the Authority continued to implement two transformational resiliency projects of great importance to its operations and New Jersey residents. These two construction projects, the Delaware and Raritan Canal Dredging Project and the Round Valley Dam Rehabilitation Project, are by far the largest and most significant undertakings by the Authority since the construction of Manasquan Reservoir in the early 1990s. These projects position the Authority to optimally 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 components projects were completed in 2020.

By far the most consequential 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 over one million 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 new constructed earthen dams.

Construction on the embankments started in early 2020. Work is now substantially complete at the Dike and North Dam, and more than half of the construction effort has been completed at the South Dam (the final embankment). Work is scheduled for substantial completion at the South Dam in late 2023.

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.

The Engineer of Record has been procured to design the foundation improvements (grouting) at Spruce Run Reservoir. Construction is anticipated to begin in late 2023/early 2024 and will last one to two years.

Other water supply projects are ongoing in the Manasquan System and in the Delaware and Raritan Canal. On the canal, the approximately \$40 million project to dredge a ten-mile reach of this waterway began in 2018 and is now complete. This work took place between Lincoln Highway (Route 27) and Amwell Road in Franklin Township, Somerset County. Construction associated with the rehabilitation of the Landing Lane Spillway in New Brunswick started in late 2022 and is expected to be completed in the first half of 2023.

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. Rebidding using a modified contract document is planned for early 2023. Two traveling water screens and a pump were rehabilitated at the Manasquan Water Intake Pump Station. At the Manasquan Water Treatment Plant in 2022, the last of the three residuals drying lagoons was rehabilitated.

Once again in 2022, cyanobacterial blooms, also called harmful algal blooms (HABs) impacted the Spruce Run Reservoir and Manasquan 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. This past summer, for the first time, 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). The Watershed Office performed in-situ monitoring, collected samples, and coordinated with partners to share data regarding this unprecedented event. At the request of the Authority, the USGS re-installed continuous water quality sensors at the Millstone River at Blackwells Mills. The HAB naturally attenuated after approximately six weeks with rain and cooling temperatures. Data analyses from 2022 are in progress; however, preliminary results indicate that high nutrient loading during low flows in the Millstone River contributes to cyanobacteria blooms.

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 \$135.3 million as of June 30, 2022, and has increased over June 30, 2021 and June 30, 2020. In fiscal year 2022, total assets and deferred outflows were \$369.1 million and total liabilities and deferred inflows were \$233.7 million.

The Authority received its 29th consecutive Certificate of Achievement in Financial Reporting Award for its FY2020 annual report. The FY2021 report is currently being reviewed for this award, and the Authority plans on submitting its FY2022 annual report for consideration for this same award.

Sincerely,



Marc Brooks
Executive Director



Sunrise at the Round Valley Reservoir South Dam

Operations - Raritan System

Operations and maintenance activities have been somewhat atypical. The system was stressed during the summer of 2022 due to extreme lack of rainfall in July and August and the presence of extremely high levels of harmful algal blooms (HABs) in the Millstone River. The Round Valley pumping program did not run in 2020, 2021, or spring 2022 due to the drawdown for the Round Valley Project. Reservoir drawdown for the project was completed in fall 2019. The targeted maximum pool elevation for the duration of the project is elevation 360.8, or 25 feet below normal full pool. Round Valley has dropped approximately eight feet further down to elevation 352 as of September 2022 due to water supply demand. It is the Authority's intention to

pump it back up to elevation 360 by the end of spring 2023, if river conditions allow. Spruce Run Reservoir capacity has been extremely taxed due to water supply demand as well and will need an average or above average amount of rainfall in the winter and spring months to refill to elevation 360. As of September 1, 2022, the Millstone HAB has ended and releases have been reduced drastically to conserve water.

Round Valley Project and Dam Inspections

In July 2015, the Authority re-convened the Technical Review Board (TRB) it previously utilized to study the condition of the Round Valley embankments to perform a PFMA on the three Round Valley Embankments. A PFMA is an analysis,

commonly used in the dam safety community, which consists of a robust study of the construction and past performance records of an embankment, and 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 RV Force Main to the RV South Vault.
- Dredge the Round Valley South Tower Intake Channel.
- Repair the Round Valley building structures (towers and vaults).
- 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.



Ongoing and recent restoration work at the Dike includes establishing grass, instrumentation wiring, and security fence installation.

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 and will last at least through 2023. Major earthwork was completed at the Dike in 2021 and the North Dam in 2022, but extensive restoration work continues at both structures. Major earthwork is ongoing at the South Dam. Security improvements will be implemented after the rehabilitation project is complete.

The Authority’s consultant created and maintains a project-specific website to keep the public informed about the status of the project. The website can be accessed at <http://www.roundvalleyproject.com/>.



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

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 of greater than 50 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 operation, equipment for remote reading of outlet releases, a hardened security gate at the vault, and various 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 the 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 design storm. The NJ Dam Safety regulations require large dams to be designed to safely pass 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.

In January 2022, construction began on one aspect of this project aiming to clear all trees and herbaceous vegetation from the 14.2-acre spillway discharge channel. This work has been completed and will facilitate the monitoring of springs as recommended by the TRB and will improve the channel's hydraulic capacity.

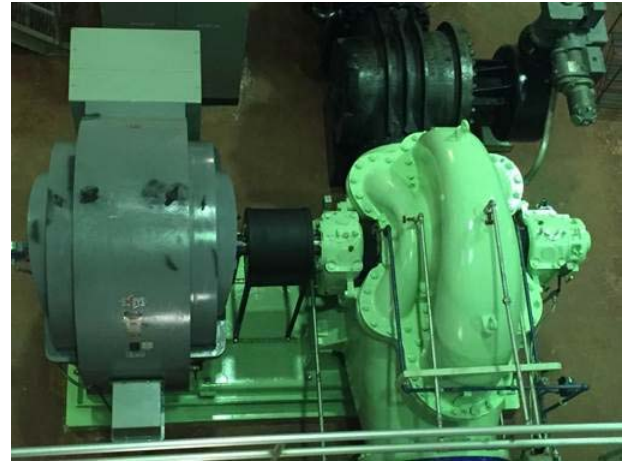


Tree clearing equipment at the spillway discharge channel

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.

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 Raritan River to the Round Valley Reservoir. Ten pumps, each operated by a 2,000 HP motor, can transfer up to 400 million gallons per day to the reservoir through a 3.2-mile long, 108-inch diameter force main.



South Branch Pump Station 2000-HP pump, motor and baseplate after 2016 rehabilitation

A program is underway to refurbish four of the main pumps and motors, including replacement of the baseplates, which anchor the units to the floor and control vibration. 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 contracts. These two pumps were successfully rehabilitated with new base plates, tested, and placed back into service in 2016. The refurbished pumps have performed well during pumping since that time.

In 2021, professional engineering services were procured for the rehabilitation of the additional four 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 conducted to minimize the impact on operations.

The investigation and testing phase of this project is complete. The consulting engineer is now in the process of completing the design of the pump, motor, and baseplate rehabilitation. As of September 2022, the consultant is preparing final plans and specifications, and the project is near the construction bid phase.

Construction is anticipated to occur in multiple phases/contracts from 2022 through

the summer of 2024. Construction work at the Pumping Station requires the pumps to be temporarily out of service; however, there is minimal impact to the station since the four pumps selected for this project are units that have been non-operational and out of service for years due to misalignment issues. The station currently has six active pumps, which is more than adequate considering that only two to four pumps are typically run at one time due to limited water availability in the river.

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. There is also a crossover switch option to connect the two.

D & R Canal - Dredging

Flow in the 10.5-mile section of the D&R Canal (Canal) in Franklin Township between Route 27 and Amwell Road, near Millstone Borough, was being impeded by sediment accumulation. This issue was compounded by the growth of weeds during the summer months, when flow demand is the greatest. The water surface elevation is typically raised during these periods, which causes water to discharge over the lower elevation spillways.

The Authority procured an engineering consultant who developed a design to remove up to an estimated 248,000 cubic yards of sediment from the Canal.

The Authority reached an agreement with Wyeth Holdings LLC for beneficial reuse of the sediment at the former American

Cyanamid Superfund Site in Bridgewater, New Jersey.

This project also included disposal of sediment from the US Route 202 stockpile site, which is used to temporarily store sediment removed from the Canal as part of the Authority's Maintenance Dredging Program.

A contract for the dredging was awarded to the lowest responsive bidder and the contractor mobilized on March 14, 2018. Dredging was completed in all of the reaches in December 2020, and the last of the dredged sediment was dewatered and trucked off-site in spring 2021. Approximately 182,488 cubic yards of dredged sediment were removed from the Canal. In total, 312,000 tons of material (which includes the Route 202 stockpile) were transferred to the beneficial reuse site. Slightly more than 3,000 tons went to an alternate disposal site.



The sediment dewatering site during operations

In summer 2021, restoration of the staging area, Canal Road, and all access areas was completed. Mitigation planting to compensate for disturbed riparian vegetation was completed in fall 2021. Final road repairs were completed in June 2022, and the project is now considered 100% complete. The dewatering site, which was purchased with Capital project funds for this project, has been conveyed to Somerset County for the same price the Authority paid for it in 2015.



The sediment dewatering site after restoration

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 fifteen years, numerous flood events have caused two full breaches of the embankment, and another near breach in 2011. The breaches were repaired on an emergency basis to restore flow in the Canal, however, a more stable and permanent solution to restore the embankment is being pursued.

The Authority has retained both an engineering and a cultural resources consultant to work together to develop a long-term solution to stabilize the embankment.

Considerable design work has been completed throughout the 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 steel sheet pile cut-off walls as a potential solution. It is noted that some

traditional engineering methods to improve stability are not suitable due to site-specific constraints. These include historic concerns, limited access, narrow crest width, and the presence of watercourses on each side of the embankment.

Recently, Authority staff has decided to approach the project in two phases. Phase I will deal with the geometric and aesthetic restoration of the embankment. This includes removal of tarps, clearing of all trees, soil restoration of the 2011 emergency repair areas on the Canal-side slope, repairs to the historic dry-laid stone armoring on the river-side slope, and regrading the embankment crest to eliminate low areas which concentrate flows and increase erosion during storms.

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

Currently, the Authority is working to implement the construction of Phase I in the near future. A construction date for Phase II will be determined after a suitable engineering solution for the stabilization of the embankment has been submitted to and approved by the Authority.

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 of 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, 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. It was intended to make final repairs in accordance with approved plans as soon as practicable. In most cases, the size and shape of the original embankment was not maintained.

The Authority has contracted with both engineering and cultural resources consultants to investigate and provide a design for rehabilitation of the embankment. The engineering consultant has prepared an amendment to the schematic design report to include removal of all the trees from the embankment. This revision was submitted to the DRCC in June 2022. After approval of the modified schematic design report by the DRCC and SHPO, final design will start in 2022. Construction is anticipated to begin in 2024.

D & R Canal - Landing Lane Spillway

The Landing Lane Spillway is located immediately up canal of the Landing Lane Bridge in New Brunswick. This spillway was rehabilitated in 1991 with the construction of a concrete cutoff wall on the Canal side slope to control leakage. Timber planks were installed on the concrete wall for historical appearance. The spillway was finished with hand-placed stones across the crest and the river side slope. The stones were laid with soil bedding without the benefit of mortar. The spillway is deteriorating. Seepage over the top of the cutoff wall is infiltrating and eroding the structure below the river side slope. Further,

the stones are being dislodged and the spillway crest needs to be stabilized.

The planned rehabilitation consists of dismantling the existing spillway and installing new concrete slabs on the crest, down the river side slope, and at the river side toe. These new slabs will act as substructure to reinforce the stonework, which will be reinstalled over the concrete and anchored with mortar and steel. The project also includes restoration of the spillway’s toe area, which has been eroded over time by preferential flow paths. The area will be regraded and reinforced with gabions and riprap.



Crest of the Landing Lane Spillway. In 2021, flooding from remnants of Hurricane Ida washed away most of the towpath screenings which had previously covered the crest.

Authority staff retained an engineering consultant who prepared design plans and specifications for the rehabilitation of the spillway. A cultural resources consultant was also procured to ensure that historically significant features are preserved and documented.

In summer 2021, a contractor was engaged to perform the rehabilitation work. Shortly thereafter, the NJDOT initiated emergency repairs to the Landing Lane Bridge adjacent to the project site. As a result, access to the spillway site was limited, and it was eventually decided to postpone the project until 2022. In early 2022, the contractor cited supply chain/material procurement issues as cause for further delay of the project start. At this

time, it is expected that the Authority's contractor will begin work in fall 2022.

Round Valley Reservoir North & South Tower Sluice Gate Refurbishment

There are a total of nine sluice gates at the Round Valley Reservoir: three in the South Tower, and six in the North Tower. In basic terms, the gates consist of a large rectangular cast iron "disc" which is mounted on a frame attached to the concrete wall within the tower. The gate discs are attached by stems to mechanical operators in the tower interiors, which are used to move the gates up and down.

The sluice gates, in combination with stop logs, allow the Authority to release water from the reservoir. At the South Tower, the gates are also opened to allow water into the reservoir through the force main from the South Branch Pumping Station.

The sluice gates date back to the original construction of the reservoir and its appurtenant structures in the 1960s. As part of the larger Round Valley Project, underwater inspections of the sluice gates were conducted by both an engineering consultant and a contractor. The contractor also cleaned the gates and replaced some components of their assemblies.

During the contractor's work, it was determined that there are remaining components of the sluice gate assemblies that require replacement. These include stem couplings, gate wedges, and hardware for the stem guides and gate side rails.

The purpose of the refurbishment project is to replace the deficient components for all nine sluice gate assemblies at the North and South Towers. Also, it has been recommended that the Authority implement a program to have the gates cleaned and inspected regularly. As such, the project will also require a contractor to thoroughly inspect and clean all components of the sluice gate assemblies. This project is in the

design phase, and plans and specifications are being developed in-house by Authority staff. It is anticipated that the project will be advertised for bid in the spring of 2023.

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 is considered a bridge as it spans more than 20 linear feet. The culvert structure is maintained by the Authority and the roadway portion (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 will consist of the full engineered design rehabilitation. The project is in the final design and permitting phase. It is anticipated that construction of the rehabilitation project will take place in 2023.



Dye testing for leaks being performed in canal above the Six Mile Run Culvert.

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.

In spring 2022, the Authority solicited Statements of Qualifications and Technical Proposals for professional engineering services for the rehabilitation of the Prallsville Culvert Pit. It is expected that the project will 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.

Authority staff have received and reviewed technical proposals for the required engineering services, and it is anticipated that a contract will be awarded to a consultant in late 2022. The consultant will be responsible for preparing design plans and specifications, securing permits, overseeing construction, and providing cultural resource services for the project.

Spruce Run Administration Building - Replace Fuel System Pumps and Software/Inventory System

The Spruce Run fuel facility was installed in 1991, including one 5,000-gallon underground storage tank (UST) for unleaded gasoline, one 2,000-gallon UST for diesel fuel, and a fuel dispensing island with an operational fuel management unit, pumps, and an attendant's booth. In addition, the Authority also maintained a 5,000-gallon heating oil tank and a 550-gallon tank for waste oil in the administration building's courtyard.

The fuel dispenser system performed adequately for almost 30 years. However, it became evident that repairs were necessary due to observed deterioration, constant repair of the equipment, and failure of the system to comply with standards. As a result, the Authority retained the services of a professional engineering consultant to

investigate, design develop, and oversee the project's construction in 2018.

The engineering consultant subsequently designed a new fuel dispensing system to address the aforementioned deficiencies. Their design also included replacement of the card readers system, expansion of the Veeder-Root monitoring system to the fuel oil tank, and replacement of the underground waste oil tank with an above ground unit.

The project was publicly bid in 2019, and the selected contractor removed the underground waste oil tank in August 2019 without incident, and in full compliance with DEP regulations.

During the project's construction, it was determined by the operator and the Authority's licensed annual inspection company that the fuel facility's diesel and gasoline sump pits would likely fail the state-regulated hydrostatic testing due to the inability to isolate them from the piping. Upon recommendation of the Licensed Operator and the contractor, it was determined that the sumps and all equipment within the sumps should be replaced to ensure testing reliability.

Additional work included fuel piping, spill and overflow protection, and access manways replacement, which prompted contractual and design modifications. These modifications and the COVID-19 pandemic delayed the original schedule of the project. Regulatory approval of the modifications was obtained by the end of 2020. Construction resumed in 2021, and the project is expected to be completed by the end of 2022 due to extreme delays in the contractor's completion of punch list items.

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 had broken, weathered, open water-bearing cavities and solution channels typical of limestone formations.

To address these challenges, it was decided to construct a grout curtain, approximately 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 made recommendations to implement interim risk

reduction measures for the Spruce Run dam embankment. These 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 has fulfilled all recommendations from the 2014 TRB meeting.

The TRB reconvened in March 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. The selected engineering consultant will be responsible for design, permitting, and construction management. Bidding of the construction aspect is expected during the 2024 Fiscal Year. It is anticipated that construction may last 12 to 14 months.

Operations - Manasquan System

Raw water contracts were maintained at a total of 19.443 million gallons per day (MGD) in 2022. As of the end of September, an additional 90 million gallons of water was purchased in excess of contract

volume for the year due to low rainfall during the summer. Drier weather in the summer of 2022 resulted in below normal reservoir volumes throughout the summer and well into the fall. Reservoir water quality was normal during the first eight months of the year but deteriorated in early September. In anticipation of the fall turnover potentially causing a mid-fall algae bloom, the reservoir was treated with an algaecide in mid-September. This treatment lowered the algae counts and improved the water clarity. The Authority followed its Harmful Algae Bloom (HAB) mitigation plan throughout the year with good results and no measurable toxins detected.

A team of staff from many disciplines is developing a Request for Proposals for professional engineering services for the design of an Aeration System to improve water quality at the Manasquan Reservoir. 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 end of 2023 with construction in 2024.

Pump Replacement

One of the five Manasquan River intake pumps is scheduled to be reworked in October 2022. This pump was originally placed in service 30 years ago, and is known to be deteriorating at its flanged connections. The remainder of the pump, including its lineshafts and piping, will be refurbished as well.

Following an underwater inspection of the large pumps at the Manasquan Reservoir Pump Station, preventative repairs are planned for January 2023. The work will consist of replacing all connection bolts to prevent more costly damage to three pumps found to be close to the point of failure at the connections.



Reassembly of the intake pump

Sediment Removal at the River Intake Facility

Depending on storms and rainfall, an accumulation of sediment builds up in the underwater sections of the Manasquan Intake Pump Station Facility. This happens over time and is monitored annually by staff. If not removed periodically, leaves, sediment, and other plant material can inhibit the traveling water screens' operation and cause suction lift problems for the intake pumps. Again in 2022, sediment was measured to have accumulated to the extent that removal is required. This work is scheduled to be completed in October 2022 by pumping the sediment laden water into large filter bags.

66-Inch Diameter Transmission Pipeline Inspection

As part of our asset management program, the five-mile-long 66-inch pipeline from the reservoir to the pump station was inspected internally by Authority staff. The overall

pipeline was found to be in good condition. Two line valves that were not closing fully due to tuberculation build-up were made fully operable again and tested.



Transmission pipeline inspection and valve repair

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 2022. Staff conducted quarterly maintenance inspections in both March and June 2022. Minor issues that were detected are being addressed. Additionally, staff continues to implement the consultant's recommendations from the 2018 and 2021 formal dam inspections. This includes the ongoing repair and replacement of embankment instrumentation. Design has been completed and permitted to locate and drill eight new piezometer wells. Each well will house a new vibrating wire piezometer. These 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.

Operations - Manasquan Water Treatment Plant ("MWTP")

Below average summer rainfall made for consistent treatment procedures and necessitated less use of chemicals than during normal summers. Very little discolored Manasquan River water was encountered from June through September.

No major improvements or upgrades to the MWTP were made in 2022. However, a design project to replace one or both of the static mixers with a mechanical mixer is underway.

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 reducing the time that the existing processes need to be offline during the flushing of accumulated solids. This will also significantly 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 are due to be replaced or improved in 2022. Engineering design of the recommended improvements is accounted for in the Authority's budget and is under consideration. Authority staff is seeking concurrence from the Southeast Monmouth Municipal Utilities Authority to advance the design and construction.

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 our 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 2022, the Watershed Office partnered with land owners, 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 has partnered with New Jersey American Water Company (“NJAW”) to develop a watershed control plan (“WCP”) for cryptosporidium, a persistent protozoan parasite. The Authority has worked collaboratively with NJAW to address comments from the New Jersey Department of Environmental Protection (“NJDEP”) regarding specific elements of the WCP, including documenting completed projects that support WCP implementation and developing a workplan for future implementation. The Authority’s agricultural cost-share program is an important component of WCP implementation. Additionally, the Authority is partnering with NJAW and the US Geological Survey (“USGS”) in 2023 to undertake a source trackdown study in the defined cryptosporidium area of influence. This study will help target implementation strategies to specific land uses and areas that

will provide the most effective cryptosporidium removal.

In 2020, the Authority was awarded a grant from the NJDEP to develop a watershed restoration and protection plan (“WRPP”) for the Spruce Run and Mulhockaway Creek watersheds and Spruce Run Reservoir. Staff completed significant field work in support of the WRPP, including stream visual assessments and riparian buffer project reconnaissance. Staff also worked with Rutgers Cooperative Extension to collect sediment samples from Spruce Run Reservoir to aid in developing a pollutant loading analysis.

Conservation Practice Implementation for Water Quality

The Authority’s Agricultural Cost-Share program continued in 2022, utilizing funds from NJDEP and the US Department of Agriculture, Natural Resources Conservation Service (“USDA-NRCS”). Staff continued to assist agricultural producers enrolled in our first two Regional Conservation Partnership Program (“RCPP”) projects (Raritan Basin Partners for Source Water Protection and Black River Greenway) and our NJDEP-funded project. Staff also began enrolling agricultural producers in our newest RCPP project, Protecting Source Water in the Raritan System. The Authority’s source water protection fund and funds from NJDEP are used to match USDA-NRCS financial assistance for each of these projects to enable staff to work with 22 farmers. Staff also began developing performance metrics for the agricultural cost-share program, including pollutant load reductions.

In 2022, the Authority executed a new conservation technical assistance agreement with USDA-NRCS to continue our shared conservation planner position for an additional five years.

Stewarding Watershed Lands for Source Water Protection

The conservation 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 2022, Authority staff monitored and/or stewarded 19 parcels, totaling over 880 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.
- Participating with the New Jersey Forest Service and the USDA in a parasitic wasp biocontrol release study to combat the invasive Emerald Ash Borer.



Parasitic Wasp biocontrol to combat invasive Emerald Ash Borer

Stormwater Management and Monitoring

The Authority continued to perform visual and vegetation monitoring at the five stormwater basins that were retrofitted with NJDEP and Delaware and Raritan Canal Commission funding in 2020 and 2021. Adaptive management was completed at one of the basins to improve its ability to manage the volume of stormwater runoff. Staff plan to continue the post-construction water quality monitoring in 2023, and will utilize models to estimate the pollutant load reductions achieved by the projects. Authority staff worked with the Watershed Management Area 9 Americorps Watershed Ambassador to implement a riparian buffer improvement project along a tributary to the Cedar Grove Brook.

Staff continued to work with a consultant to review design alternatives for modification of the Cedar Grove Brook weir to improve sediment removal prior to the Brook's discharge into the Delaware & Raritan Canal.

Staff began working with the Somerset County Park Commission, Franklin

Township (Somerset County) and Union Township (Hunterdon County) to develop new stormwater management projects in the Delaware & Raritan Canal, Cedar Grove Brook and Mulhockaway Creek Watersheds.

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, the Authority initiated a sixth year of a low-dosage continuous herbicide treatment in July 2022. The Authority continued engaging stakeholders, including all water purveyors, prior to and throughout the process. A post-treatment survey was conducted which documented effective aquatic plant suppression throughout the Canal. Overall, plant growth was reduced in the Canal, both upcanal and within the treatment area. No hydrilla plants or tubers have been found since 2020. The D&R Canal Aquatic Plant Management Plan will continue in 2023 with a shift to intensive vegetation monitoring without herbicide application unless hydrilla is found.

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, the Authority is working to engage a qualified engineering firm to evaluate options for aeration and prepare design specifications of a system for the Manasquan Reservoir 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 2022 and continues to suppress hydrilla growth and tuber production.

A Boat Stewards Program was conducted for the fourth year at the Manasquan Reservoir Boat Launch in a partnership with the Monmouth County Park System. In an effort to reduce the spread of aquatic invasive species, this partnership sees two seasonal boat stewards inspect launching and retrieved vessels on summer weekends and holidays for attached organisms and educate the public. A total of 1041 inspections were conducted in 2022, 99 percent of survey respondents conducted at least one method of boat cleaning to ensure Aquatic Invasive Species (“AIS”) did not travel on their vessel between waterbodies, up from 95 percent of survey respondents in 2021. Attached organisms were only found on two percent of launching vessels in 2022; again, an improvement from 2021 when seven percent of launching vessels had attached organisms. Organisms were found attached to five percent of retrieved vessels. In 2022, the most frequently attached

organisms on vessels were Eurasian Water Milfoil and Hydrilla.

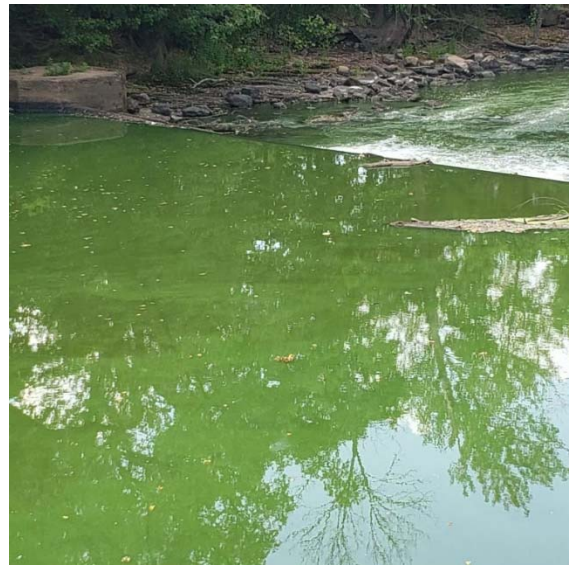
This marked the second year of a similar Boat Steward Program at Spruce Run Reservoir in a partnership with the New Jersey State Park Service. The steward inspected a total of 1009 vessels. Attached organisms were found on two percent of launching vessels in 2022, with 99 percent of survey respondents indicated they performed at least one form of boat cleaning. This is an improvement from 2021, when attached organisms were found on three percent of launching vessels and 94 percent of respondents in 2021. In 2022, most organisms attached to launching vessels were either mat algae or Eurasian Water Milfoil.

Cyanobacteria Monitoring and Response (Harmful Algal Blooms)

In 2022 Cyanobacterial blooms, also called Harmful Algal Blooms (“HABs”), affected both Spruce Run Reservoir, Manasquan Reservoir, and the Millstone River 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.



The Millstone River HAB at Blackwells Mills, 7/25/22

NJDEP also collects data at the Spruce Run swim beach 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. 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; however, preliminary results indicated high nutrient loading at low flows in the Millstone River that contribute cyanobacteria blooms; and that only certain cyanobacteria genera leaving Spruce Run Reservoir survive the downstream transport to drinking water intakes near South Bound

Brook, and this only occurs during periods of increased stream velocity.

During low-flow conditions this summer, 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). The Watershed Office performed in-situ monitoring, collected samples, and coordinated with partners to share data regarding this unprecedented event. At the request of the Authority, the USGS re-installed continuous water quality sensors at the Millstone River at Blackwells Mills. The HAB naturally attenuated after approximately six weeks with rain and cooling temperatures.



Harmful algal bloom and senescence of the invasive aquatic plant hydrilla at Manasquan Reservoir

A bloom in Spruce Run Reservoir was first confirmed on June 1, 2019 and continued throughout the winters and into 2022. In 2020, the Authority was awarded a Federal Clean Water Act Section 319(h) grant from NJDEP for HABs mitigation at Spruce Run Reservoir to install an innovative biochar filter system on the Mulhockaway Creek. The biochar was

installed in late June 2021 after permit approval, and intensive results monitoring showed positive results. Unfortunately, the biochar bags and anchors were heavily damaged in Tropical Storm Henri and from the remnants of Hurricane Ida. Due to significant geomorphological changes in the Mulhockaway Creek following the storms, the project was concluded without re-installation. Low water levels in Spruce Run this summer resulted in reduced HAB activity at the reservoir.

The Watershed Office worked with the Manasquan Operations team to develop and implement a Cyanotoxin Management Plan for Manasquan Reservoir. The plan was submitted and reviewed by NJDEP in 2020 and has been updated in 2022. This year, to facilitate plan implementation, the Watershed Office has performed in-house cyanotoxin analysis using an automated enzyme-linked immunoassay analyzer (or ELISA).

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 2022, the River-Friendly Technical Advisory Committee certified five schools. The United States Golf Association was certified as a River-Friendly Business and Raritan Valley Community College was recertified through the Business Program.

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 20th Watershed Ambassador in 2022-2023. 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. 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 2022, the Watershed Area 9 ambassador worked with the Authority to implement a riparian buffer improvement project in the Cedar Grove Brook watershed as part of the D&R Canal/Franklin Township Nonpoint Source Implementation Project.

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 2022, the Authority's operations continued to support the sustainability of the State's water resources through its operation of the reservoir systems, through 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 2022, 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 2022, the Authority promoted or hired personnel from outside the Authority at salaries which were lower than the departing incumbent. During FY2022, the Authority filled multiple vacancies that were primarily a result of retirements and promotions, and realized approximately \$190,000 in turnover savings through exercising this diligence. Overall, FY2022 expenses were approximately 12% under budget due largely to savings in salary and fringe and maintenance expense categories. Rates were further stabilized in FY2022 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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March 6, 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, 2022 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 fund 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, 2022, were \$355,425,497, an increase of 1.3 percent over the previous year's total of \$350,782,612. Net capital assets increased by \$16,076,279 or 7.7 percent, from \$207,739,965 to \$223,816,244.

The total of cash, cash equivalents and investments for the Authority increased \$6,397,111, or 6.5 percent, from \$98,170,907 to \$104,568,018. The increase in this this category of asset is associated with normal fluctuations in cash balances and a decrease to accounts receivable. Current liabilities increased \$49,002, or .3 percent, from \$15,808,252 to \$15,857,254 due primarily to an increase in unearned revenue. Total non-current liabilities decreased from \$203,690,065 to \$196,177,942 or 3.7 percent. The decrease is primarily due to a decrease in non-current portion of bonds, notes, and loans payable and a decrease in net pension liability. Total Operating Revenue increased by \$645,482 or 2.0 percent, from \$32,709,757 to \$33,355,239. Total Operating Expenses increased \$2,435,592, or 13.0 percent, from \$18,703,742 to 21,139,334 due to an increase in fringe benefits related to GASB 75 Other Post-Employment Benefits (OPEB) expenses recategorized as deferred outflow of resources. Non-operating

Revenue decreased \$5,011 or 1.1 percent, from \$460,271 to \$455,260, reflecting decreases in investment income. Non-operating expenses decreased \$2,668,555, or 132.9 percent, from \$2,007,405 to a credit of \$661,150 primarily due to a decrease in recovery of deferred inflows of resources.

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 29 consecutive years through FY2020.

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 FY2021 report is currently being reviewed for this award, and the Authority plans on submitting its FY2022 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 2022, 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 13 contractual customers of the Manasquan System, which provides water to approximately 250,000 people in the Monmouth County area. Two customers accounted for approximately 84 percent of total Raritan Basin System operating revenues. Three customers accounted for approximately 85 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 2022, 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

Statements of Cash Flows

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, 2022**

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, 2022 and 2021, 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, 2022 and 2021, 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.

Emphasis of Matter

As discussed in Note K to the financial statements, in fiscal year 2022 the Authority adopted new accounting guidance GASB Statement No. 87, Leases. Our opinion is not modified with respect to this matter.

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 February 10, 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.

Mercadieu, P.C.
Certified Public Accountants

February 10, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

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, 2022 and June 30, 2021. Please read it in conjunction with the Authority's basic financial statements and accompanying notes.

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 .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 decreased 1.1% to \$.5 million, primarily because of a decrease in investment income offset by an increase in other income.
- Non-operating expenses for fiscal year 2022 decreased 132.9% to (\$.7) million, primarily related to a decrease in GASB 62 cost recovery offset by an increase in 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 decreased 5.3% mainly due to decreases in the Pension category. Deferred inflows of resources decreased 8.4% due mainly to decreases in the Cost Recovery category.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

FINANCIAL HIGHLIGHTS – FISCAL YEAR 2021

- Operating revenue for fiscal year 2021 was \$32.7 million, a .5% decrease over fiscal year 2020, which was the result of a .4% increase in Raritan sales and a 2.9% 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 decreased to \$1,010.75 per million gallons. The fiscal year 2021 sales base remained at 19.443 mgd. Income from operations increased 36.3% for the Raritan System and decreased .7% for the Manasquan System.
- Total operating expenses for fiscal year 2021 decreased to \$18.7 million, which represents a 13.8% decrease from fiscal year 2020. The decrease was primarily due to a decrease in fringe benefits related to GASB 75 Other Post-Employment Benefits (OPEB) expenses re-categorized as a deferred outflow of resources in fiscal year 2021. This decrease was augmented by lower salary expense due to turnover, and lower operations and maintenance costs.
- Other changes for fiscal year 2021 include the following: non-operating revenue decreased 72.4% to \$.5 million, primarily because of decreases in grant related income and investment income.
- Non-operating expenses for fiscal year 2021 increased 29.3% to \$2.0 million, primarily related to an increase in the interest component of debt service associated with the permanent financing of the Authority's Raritan Basin System Canal Dredging project.
- Unrestricted cash and cash equivalents for fiscal year 2021 were \$66.0 million, an increase of 14.8% compared to fiscal year 2020.
- Total liabilities for fiscal year 2021 were \$219.5 million. This is an increase of 27.2% from fiscal year 2020 and reflects additional interim financing related to the Authority's Raritan Basin System Round Valley Refurbishment and Resource Preservation project as well as an increase in the Authority's portion of the net OPEB liability.
- Deferred outflows of resources increased 149.2% mainly due to increases in the OPEB category. Deferred inflows of resources decreased 5.4% due mainly to decreases in the OPEB category.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

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 \$135.3 million as of June 30, 2022. In fiscal year 2022, total assets and deferred outflows increased 1.1% to \$369.1 million, primarily due to an increase in investments in capital assets, offset by a decrease in unrestricted current assets. Total liabilities decreased 3.4% to \$212.0 million. Total net position as of June 30, 2021 was approximately \$122.0 million. Total assets and deferred outflows at June 30, 2021 increased 18.9% to \$365.2 million, primarily due to investments in capital assets and an increase in accounts receivable related to the second interim financing for the Raritan Basin System Round Valley Refurbishment and Resource Preservation project that occurred in fiscal year 2021. Total liabilities increased 27.2% to \$219.5 million. Changes in assets, liabilities and net position at June 30, 2022, 2021 and 2020 are summarized in the following table:



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

FINANCIAL ANALYSIS OF THE AUTHORITY (CONTINUED)

	2022	2021	2020	Percentage Change 2022-2021	Percentage Change 2021-2020
Assets and deferred outflows of resources					
Current assets	\$ 131,609,253	\$ 142,794,658	\$ 120,022,283	(7.83) %	18.97 %
Capital assets, net	223,816,244	207,739,965	179,008,561	7.74	16.05
Other non-current assets	-	247,989	2,328,482	(100.00)	(89.35)
Total assets	355,425,497	350,782,612	301,359,326	1.32	16.40
Deferred outflows of resources	13,648,004	14,418,801	5,787,217	(5.35)	149.15
Total assets and deferred outflows of resources	\$ 369,073,501	\$ 365,201,413	\$ 307,146,543	1.06	18.90
Liabilities, deferred inflows of resources, and net position					
Current liabilities	\$ 15,857,254	\$ 15,808,252	\$ 19,623,499	0.31	(19.44)
Non-current liabilities	43,322,867	47,186,377	40,369,889	(8.19)	16.89
Non-current portion of bonds, notes and loans payable	152,855,075	156,503,688	112,562,593	(2.33)	39.04
Total liabilities	212,035,196	219,498,317	172,555,981	(3.40)	27.20
Deferred inflows of resources	21,692,643	23,689,749	25,036,096	(8.43)	(5.38)
Net investment in capital assets	93,104,101	73,667,713	87,368,795	26.38	(15.68)
Restricted for cash, investments, and unearned revenue	30,166,251	27,135,716	24,965,590	11.17	8.69
Unrestricted	12,075,310	21,209,918	(2,779,919)	(43.07)	862.97
Total net position	135,345,662	122,013,347	109,554,466	10.93	11.37
Total liabilities, deferred inflows of resources, and net position	\$ 369,073,501	\$ 365,201,413	\$ 307,146,543	1.06	18.90



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

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 2021 and 2020 Authority meetings, respectively, based on anticipated operating expenses:

	Rate Effective <u>7/01/2021</u>	Rate Effective <u>7/01/2020</u>	Percent <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 2022 was \$33.4 million, an increase of 2.0% from fiscal year 2021, due to a 3.2% increase in Raritan water sales and a .7% decrease in Manasquan water sales. The Authority's total operating expenses for fiscal year 2022 were \$21.1 million, an increase of 13.0% from fiscal year 2021, mainly because of an increase in operating and maintenance expenses related to Hurricane Ida repairs. The Authority's total operating revenue for fiscal year 2021 was \$32.7 million, a decrease of .5% from fiscal year 2020. The Authority's total operating expenses for fiscal year 2021 were \$18.7 million, a decrease of 13.8% from fiscal year 2020. The following table summarizes the changes in revenue, expenses and net position between fiscal years 2022, 2021 and 2020:



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

OPERATING ACTIVITIES (CONTINUED)

	2022	2021	2020	Percentage Change 2022-2021	Percentage Change 2021-2020
Operating revenues:					
Water sales	\$ 30,775,239	\$ 30,100,645	\$ 30,230,221	2.24 %	(0.43) %
Reimbursement of operating expenses	2,580,000	2,609,112	2,640,312	(1.12)	(1.18)
Total operating revenues	<u>33,355,239</u>	<u>32,709,757</u>	<u>32,870,533</u>	1.97	(0.49)
Non-operating revenues:					
State of New Jersey - Grant Programs	237,951	218,765	599,099	8.77	(63.48)
Investment and interest income	103,990	169,069	1,000,041	(38.49)	(83.09)
Rental income	60,419	65,489	57,659	(7.74)	13.58
Other income	52,900	6,948	11,883	661.37	(41.53)
Total non-operating revenues	<u>455,260</u>	<u>460,271</u>	<u>1,668,682</u>	(1.09)	(72.42)
Total revenues	<u>33,810,499</u>	<u>33,170,028</u>	<u>34,539,215</u>	1.93	(3.96)
Operating expenses:					
Payroll	8,232,535	7,884,810	8,003,155	4.41	(1.48)
Operations and maintenance	6,800,089	5,461,461	5,706,936	24.51	(4.30)
Fringe benefits	1,362,488	647,530	3,244,536	110.41	(80.04)
Depreciation	4,744,222	4,709,941	4,730,685	0.73	(0.44)
Total operating expenses	<u>21,139,334</u>	<u>18,703,742</u>	<u>21,685,312</u>	13.02	(13.75)
Non-operating expenses:					
Interest component of debt service to the State of New Jersey	604,151	372,069	158,308	62.38	135.03
Recovery of deferred inflows of resources	(1,265,301)	1,635,336	1,394,399	(177.37)	17.28
Total non-operating expenses	<u>(661,150)</u>	<u>2,007,405</u>	<u>1,552,707</u>	(132.94)	29.28
Total Expenses	<u>20,478,184</u>	<u>20,711,147</u>	<u>23,238,019</u>	(1.12)	(10.87)
Changes in net position	<u>13,332,315</u>	<u>12,458,881</u>	<u>11,301,196</u>	7.01	10.24
Net position, beginning of year, as restated	122,013,347	-	-	100.00	-
Net position, beginning of year, as previously reported	-	109,554,466	98,253,270	(100.00)	11.50
Net position, end of year, as previously reported	-	122,013,313	109,554,466		
GASB 87 adjustment (see Note K)	-	34	-	(100.00)	100.00
Net position, end of year, as restated	<u>\$ 135,345,662</u>	<u>\$ 122,013,347</u>	<u>\$ 109,554,466</u>	10.93	11.37

CAPITAL ASSETS AND DEBT ADMINISTRATION

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 last year. At June 30, 2021, the Authority had a total of \$207,739,965 invested in the Systems that it operates: \$159,000,029 invested in the Raritan Basin System, and \$48,739,936 invested in the Manasquan System. This total amount represents a 16.0% increase from the prior year.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2022

CAPITAL ASSETS AND DEBT ADMINISTRATION (CONTINUED)

The following table summarizes the changes in capital assets, net of depreciation, between fiscal years 2022, 2021 and 2020:

	2022	2021	2020	Percentage Change 2022-2021	Percentage Change 2021-2020
Land and land rights	\$ 26,444,952	\$ 26,444,952	\$ 26,444,952	- %	- %
Dams	43,486,485	44,248,251	45,013,036	(1.72)	(1.70)
Building, structures and improvements	46,834,126	45,995,010	47,718,259	1.82	(3.61)
Machinery and equipment	2,006,536	1,503,309	1,374,790	33.47	9.35
Leased equipment	33,896	7,032	-	382.03	100.00
Construction work in progress	105,010,249	89,541,411	58,457,524	17.28	53.17
Total capital assets	\$ 223,816,244	\$ 207,739,965	\$ 179,008,561	7.74	16.05

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 2022, 2021 and 2020:

	2022	2021	2020	Percentage Change 2022-2021	Percentage Change 2021-2020
Bonds payable	\$ 5,488,656	\$ 5,936,022	\$ 9,355,100	(7.54) %	(36.55) %
Notes payable	33,566,892	33,566,892	33,566,892	-	-
Loans payable	116,982,962	119,872,023	73,907,816	(2.41)	62.19
Total	\$ 156,038,510	\$ 159,374,937	\$ 116,829,808	(2.09)	36.42

At year-end, the Authority had \$156,038,510 in bonds, notes and loans principal outstanding, compared to \$159,374,937 at June 30, 2021. This change represents a decrease of 2.1%. The change in bonds, notes and loans principal outstanding at June 30, 2021, compared to the total of \$116,829,808 at June 30, 2020, represents an increase of 36.4%, 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, 2022

CURRENT AND NEW BUSINESS

During fiscal year 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 84% 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 2023. In addition, during fiscal year 2022, the Authority provided water to 13 contractual customers of the Manasquan Water Supply System, who provided water to approximately 250,000 people in the Monmouth County area. During fiscal years 2022 and 2021, three customers accounted for approximately 85% 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 2023.

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,	
	2022	2021*
Assets		
Current assets:		
Unrestricted assets:		
Cash and cash equivalents	\$ 68,938,148	\$ 65,972,752
Unbilled sales	1,749,325	1,581,175
Accounts receivable, less allowance for doubtful accounts of \$1,000 at June 30, 2022 and 2021	23,904,476	41,526,367
Interest receivable	-	2,275
Prepaid expenses and other current assets	1,387,434	1,761,923
Total unrestricted current assets	<u>95,979,383</u>	<u>110,844,492</u>
Restricted assets:		
Cash equivalents	35,629,870	31,950,166
Total current assets	<u>131,609,253</u>	<u>142,794,658</u>
Non-current assets:		
Investments	-	247,989
Capital assets, net	223,816,244	207,739,965
Total non-current assets	<u>223,816,244</u>	<u>207,987,954</u>
Total assets	<u>355,425,497</u>	<u>350,782,612</u>
Deferred outflows of resources:		
Pension related	2,085,383	3,614,185
OPEB related	10,820,046	10,062,041
Construction loan DEP fee	742,575	742,575
Total deferred outflows of resources	<u>13,648,004</u>	<u>14,418,801</u>
Total assets and deferred outflows of resources	<u>\$ 369,073,501</u>	<u>\$ 365,201,413</u>
Liabilities		
Current liabilities:		
Current portion of bonds, notes and loans payable	\$ 3,183,435	\$ 2,871,249
Accounts payable	4,356,299	5,378,515
Accrued liabilities	2,853,901	2,744,038
Unearned revenue	5,463,619	4,814,450
Total current liabilities	<u>15,857,254</u>	<u>15,808,252</u>
Non-current liabilities:		
Non-current portion of bonds, notes and loans payable	152,855,075	156,503,688
Lease liability	34,205	6,998
Net pension liability	12,251,099	17,210,868
Net OPEB liability	31,037,563	29,968,511
Total non-current liabilities	<u>196,177,942</u>	<u>203,690,065</u>
Total liabilities	<u>212,035,196</u>	<u>219,498,317</u>
Deferred inflows of resources:		
Cost recovery	(685,718)	1,210,498
Pension related	8,086,696	7,381,453
OPEB related	14,054,948	14,837,299
Gain on refunding	236,817	260,499
Total deferred inflows of resources	<u>21,692,643</u>	<u>23,689,749</u>
Total liabilities and deferred inflows of resources	<u>233,727,839</u>	<u>243,188,066</u>
Net Position		
Net investment in capital assets	93,104,101	73,667,713
Restricted for cash, investments, and unearned revenue	30,166,251	27,135,716
Unrestricted	12,075,310	21,209,918
Total net position	<u>135,345,662</u>	<u>122,013,347</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 369,073,501</u>	<u>\$ 365,201,413</u>

*Certain account balances have been restated to conform with current year presentation. See Note K for details.

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,	
	2022	2021*
Operating revenues:		
Water sales	\$ 30,775,239	\$ 30,100,645
Reimbursement of operating expenses	2,580,000	2,609,112
Total operating revenues	<u>33,355,239</u>	<u>32,709,757</u>
Operating expenses:		
Payroll	8,232,535	7,884,810
Operations and maintenance	6,800,089	5,461,461
Fringe benefits	1,362,488	647,530
Depreciation	4,744,222	4,709,941
Total operating expenses	<u>21,139,334</u>	<u>18,703,742</u>
Income from operations	12,215,905	14,006,015
Non-operating revenues:		
State of New Jersey - Grant Programs	237,951	218,765
Investment and interest income	103,990	169,069
Rental income	60,419	65,489
Other income	52,900	6,948
Total non-operating revenues	<u>455,260</u>	<u>460,271</u>
Non-operating expenses:		
Interest component of debt service to the State of New Jersey	604,151	372,069
Recovery of deferred inflows of resources	(1,265,301)	1,635,336
Total non-operating expenses	<u>(661,150)</u>	<u>2,007,405</u>
Changes in net position	13,332,315	12,458,881
Net position, beginning of year, as restated	122,013,347	-
Net position, beginning of year, as previously reported	-	109,554,466
Net position, end of year, as previously reported	-	122,013,313
GASB 87 adjustment (see Note K)		34
Net position, end of year, as restated	<u>\$ 135,345,662</u>	<u>\$ 122,013,347</u>

*Certain account balances have been restated to conform with current year presentation.
See Note K for details.

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

STATEMENTS OF CASH FLOWS

	Years Ended June 30,	
	2022	2021*
Cash flows from operating activities		
Cash received from water sales	\$ 29,246,329	\$ 30,419,116
Cash received from reimbursable expenses	2,643,838	2,602,723
Cash received from rental income	46,281	92,222
Cash paid to or on behalf of employees	(12,770,802)	(12,258,524)
Cash paid to suppliers	(6,386,029)	(5,893,171)
Net cash provided by operating activities	<u>12,779,617</u>	<u>14,962,366</u>
Cash flows from noncapital financing activities		
Cash received for grant programs	192,324	712,805
Net cash provided by non-capital financing activities	<u>192,324</u>	<u>712,805</u>
Cash flows from capital and related financing activities		
Proceeds from borrowing	19,021,110	33,852,028
Principal paid on bonds, notes and loans	(3,426,702)	(4,339,192)
Lease liability	27,207	6,998
Interest paid on bonds, notes and loans	(409,405)	(418,790)
Acquisition and construction of capital assets	(21,937,110)	(35,601,441)
Proceeds from sale of capital assets	43,805	2,369
Net cash used in capital and related financing activities	<u>(6,681,095)</u>	<u>(6,498,028)</u>
Cash flows from investing activities		
Sale of investment securities	250,000	2,090,000
Purchase of investment securities	(2,011)	(17,122)
Interest received on investments	106,265	186,863
Premium on matured investments	-	7,615
Net cash provided/(used) by investing activities	<u>354,254</u>	<u>2,267,356</u>
Net increase in cash and cash equivalents	6,645,100	11,444,499
Cash and cash equivalents, beginning of year	97,922,918	86,478,419
Cash and cash equivalents, end of year	<u>\$ 104,568,018</u>	<u>\$ 97,922,918</u>
Reconciliation of income from operations to net cash provided by operating activities:		
Income from operations	\$ 12,215,905	\$ 14,006,015
Adjustments to reconcile income from operations to net cash provided by operating activities:		
Cash received for operating activity included in other income	165,270	70,068
Depreciation	4,744,222	4,709,941
Increase (decrease) in cash from:		
Unbilled sales	(168,150)	(86,205)
Accounts receivable	(1,395,447)	393,526
Prepaid expenses and other current assets	374,489	605,771
Accounts payable	40,492	(994,322)
Accrued liabilities	(11,869)	(35,010)
Accrued payroll and taxes	11,833	25,565
Net pension liability	(2,725,824)	(575,255)
Net OPEB liability	(471,304)	(3,157,728)
Net cash provided by operating activities	<u>\$ 12,779,617</u>	<u>\$ 14,962,366</u>
Non-cash financing activities		
Issuance of NJIB loan payable	\$ -	\$ (59,775,405)
Accounts receivable from NJIB loan	-	59,775,405
Total non-cash financing activities	<u>\$ -</u>	<u>\$ -</u>
Non-cash investing activities		
Increase in fair value of investments	\$ 2,011	\$ 9,507

*Certain account balances have been restated to conform with current year presentation. See Note K for details.

**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.
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 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 inflows of resources. The deferred inflows will be recovered through future revenue in accordance with the rate model. The deferred amounts for the years ended June 30, 2022 and 2021 were determined as follows:

**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)

Deferred Inflows and Outflows of Resources (Continued)

Raritan Basin System	<u>2022</u>	<u>2021</u>
Cost excluded from rate model:		
Depreciation of debt-financed capital assets recoverable from rate payers	\$ (835,209)	\$ (835,209)
Excess vacation expense over vacation paid	45,359	(28,761)
Accrued sick pay	26,741	3,591
	<u>(763,109)</u>	<u>(860,379)</u>
Cost included in rate model:		
Debt principal repayment	-	-
Subtotal Raritan Basin System	<u>(763,109)</u>	<u>(860,379)</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	11,903	4,451
Accrued sick pay	844	5,223
	<u>(1,528,107)</u>	<u>(1,531,180)</u>
Cost included in rate model:		
Debt principal repayment	395,000	3,170,000
Subtotal Manasquan System	<u>(1,133,107)</u>	<u>1,638,820</u>
 Total Raritan Basin and Manasquan	 (1,896,216)	 778,441
Balance, beginning of year	<u>1,210,498</u>	432,057
Balance, end of year	<u>\$ (685,718)</u>	<u>\$ 1,210,498</u>

As shown in the statements of revenue, expenses and changes in net position for the year ended June 30, 2022, the recovery of deferred inflows of resources credit balance of \$1,265,301 includes a debit balance of \$715,762 of Manasquan Water Treatment Plant unearned revenue, which is not part of the rate model, and does not include a debit balance of \$84,847 of accrued vacation and sick pay. The June 30, 2021, deferred inflows of resources debit balance of \$1,635,336 includes a debit balance of \$841,399 of Manasquan Water Treatment Plant unearned revenue, which is not part of the rate model, and does not include a credit balance of \$15,496 of accrued vacation and sick pay.

**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)

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, 2022 and 2021, unearned revenue amounting to \$4,642,192 and \$3,926,430, respectively, was determined as follows:

	<u>2022</u>	<u>2021</u>
Reimbursement of operating expenses	\$ 2,583,507	\$ 2,614,605
Operating expenses	1,867,745	1,773,206
Unearned revenue	715,762	841,399
Balance, beginning of year	<u>3,926,430</u>	<u>3,085,031</u>
Balance, end of year	<u>\$ 4,642,192</u>	<u>\$ 3,926,430</u>

**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)

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, 2022 and 2021, the amount included in unearned revenue was \$267,942 and \$286,227, respectively.

Accounting for Watershed Protection Program

For the fiscal years ended June 30, 2022 and 2021, the Authority received \$107,250 and \$592,598, respectively, from the 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, 2022, all of the funds received had been recognized as revenue.

Accounting for Mitigation funds

During fiscal years ended June 30, 2022, 2020, 2019, and 2011, the Authority received \$86,768, \$247,000, \$475,000, and \$20,000, 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, 2022 and 2021, the balance of unearned revenue was \$553,485 and \$601,793, 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 \$95,756 and \$0 for the fiscal years ending June 30, 2022, and 2021, respectively.

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

NOTES TO FINANCIAL STATEMENTS

C. CAPITAL ASSETS

Capital assets activity for the years ended June 30, 2022 and 2021 was as follows:

	2022 Beginning Balance	Additions	Retirements	2022 Ending 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

	2021 Beginning Balance	Additions*	Retirements	2021* Ending Balance
Capital assets not being depreciated:				
Land	\$ 26,444,952	\$ -	\$ -	\$ 26,444,952
Construction work in progress	58,457,524	33,024,608	(1,940,721)	\$ 89,541,411
Total capital assets not being depreciated	84,902,476	33,024,608	(1,940,721)	115,986,363
Capital assets being depreciated:				
Dams	77,369,160	-	-	77,369,160
Building, structures and improvements	143,381,322	1,788,644	-	145,169,966
D & R canal dredging	21,160,274	-	-	21,160,274
Machinery and equipment	6,950,522	547,652	(53,971)	7,444,203
Leased equipment	-	56,520	-	56,520
Total capital assets being depreciated	248,861,278	2,392,816	(53,971)	251,200,123
Less accumulated depreciation for:				
Dams	(32,356,124)	(764,785)	-	(33,120,909)
Building, structures and improvements	(95,663,063)	(3,511,893)	-	(99,174,956)
D & R canal dredging	(21,160,274)	-	-	(21,160,274)
Machinery and equipment	(5,575,732)	(419,133)	53,971	(5,940,894)
Leased equipment	-	(49,488)	-	(49,488)
Total accumulated depreciation	(154,755,193)	(4,745,299)	53,971	(159,446,521)
Total capital assets being depreciated, net	94,106,085	(2,352,483)	-	91,753,602
Total net investment in capital assets	\$ 179,008,561	\$ 30,672,125	\$ (1,940,721)	\$ 207,739,965

*Certain account balances have been restated to conform with current year presentation. See Note K for details.

**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, 2022 and 2021, the Authority’s bank balances were \$104,682,169 and \$98,082,732, respectively, of which \$250,000 was covered through the FDIC. The remaining balances of \$104,432,169 and \$97,832,732 as of June 30, 2022 and 2021, respectively, were collateralized through two irrevocable stand-by letters of credit issued by the Federal Home Loan Bank of Pittsburgh through TD Bank. The letters of credit cover up to a maximum of \$104,000,000 and \$2,000,000 of Authority deposits, respectively. The letters expired on August 23, 2022 and were subsequently renewed with a single letter in the amount of \$100,000,000 for an additional period ending March 28, 2023. The cash balance per the statements of net position is shown exclusive of outstanding checks totaling \$114,451 and \$160,114, respectively. The statement of net position amount includes petty cash totaling \$300 as of June 30, 2022 and 2021, 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 \$104,682,169 and \$98,082,732 as of June 30, 2022 and 2021, respectively, were exposed to custodial credit risk as follows:

	<u>2022</u>	<u>2021</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.

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

NOTES TO FINANCIAL STATEMENTS

D. CASH, CASH EQUIVALENTS AND INVESTMENTS (CONTINUED)

3. Investments and Cash Equivalents (Continued)

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		\$ -	\$ -	\$ -

As of June 30, 2021, 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	\$ 250,264	\$ 250,264	\$ -
Total		\$ 250,264	\$ 250,264	\$ -

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, 2022, all deposits were collateralized.

5. Investment Income

The following comprises investment income for the years ended June 30, 2022 and 2021:

	2022	2021
Interest earned on bank accounts and certificates of deposit	\$ 101,698	\$ 150,439
Interest earned on securities	281	9,123
Increase in fair value of securities	2,011	9,507
	\$ 103,990	\$ 169,069

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

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 of New Jersey (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, 2022 and 2021.

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, 2022 and 2021, the State Loan Notes and Completion Loan Notes are summarized as follows:

State Loan Notes	2022	2021
Current Notes	\$ -	\$ -
Deferred Notes	30,365,115	30,365,115
Completion Notes		
Current Notes	\$ -	\$ -
Deferred Notes	3,201,777	3,201,777
	<u>\$ 33,566,892</u>	<u>\$ 33,566,892</u>

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

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, 2022 and 2021, 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 \$4,965,000 at June 30, 2022, carry a bond yield of 1.6%, and mature in incremental annual principal amounts through 2031. Principal maturities for the year ending June 30, 2023, are \$415,000.

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.

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

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, 2022 and 2021, interest expense on the 2016 Bonds amounted to \$179,083 and \$210,926, 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 \$236,817 and \$260,499 as of June 30, 2022, and 2021, 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, 2022:

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%	\$1,539,181	8/1/2031

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

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 .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, 2022:

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%	\$ 98,218	8/1/2023
2004A	11/4/2004	1,030,000	75%	350,000	25%	1.31%	224,619	8/1/2024
2005A	11/10/2005	2,940,974	75%	1,050,000	25%	1.25%	411,720	8/1/2025
2006A	11/9/2006	2,099,363	75%	745,000	25%	1.26%	740,888	8/1/2026
2007A	11/8/2007	1,740,563	75%	620,000	25%	1.06%	782,114	8/1/2027
2008A	11/6/2008	1,152,000	64%	660,000	36%	1.74%	736,197	8/1/2028
2010A	3/10/2010	300,493	51%	290,000	49%	1.69%	246,568	8/1/2029
2010B	12/2/2010	1,064,338	52%	990,000	48%	1.87%	1,048,072	8/1/2030
2012A	5/3/2012	1,501,455	76%	465,000	24%	0.65%	1,033,004	8/1/2031
2021A	6/10/2021	27,724,230	77%	8,325,000	23%	0.41%	34,293,280	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			\$ 114,614,681	

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

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 2022, 2021 and 2020:

	Less Payments, Net of			Fiscal Year	Due Within
	Fiscal Year 2021	Amortization	Debt Issued	2022	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

	Less Payments, Net of			Fiscal Year	Due Within
	Fiscal Year 2020	Amortization	Debt Issued	2021	One Year
Bonds payable	\$ 9,355,100	\$ 3,419,078	\$ -	\$ 5,936,022	\$ 395,000
Notes payable	\$ 33,566,892	-	-	33,566,892	-
Loans payable	73,907,816	1,106,671	47,070,878	119,872,023	2,476,249
Total	\$ 116,829,808	\$ 4,525,749	\$ 47,070,878	\$ 159,374,937	\$ 2,871,249

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

Year Ending June 30,	Raritan Basin System	Manasquan Reservoir System	Notes Payable Manasquan System	Manasquan System Revenue	Totals
				Bonds Series 2016	
2023	\$ 2,997,233	\$ 172,697	\$ -	\$ 581,962	\$ 3,751,892
2024	2,875,206	175,822	-	580,712	3,631,740
2025	2,811,976	173,822	-	578,463	3,564,261
2026	2,754,992	171,822	-	575,213	3,502,027
2027	2,611,355	174,697	-	575,838	3,361,890
2028-2032	11,326,223	779,621	-	2,857,931	14,963,775
2033-2037	9,845,389	-	-	-	9,845,389
2038-2042	7,411,638	-	-	-	7,411,638
Pending Project Completion	75,000,000	-	-	-	75,000,000
Deferred Portion	-	-	33,566,892	-	33,566,892
Subtotal	117,634,012	1,648,481	33,566,892	5,750,119	158,599,504
Less amounts representing interest	3,019,331	109,300	-	785,119	3,913,750
Plus unamortized bond premium	801,668	27,432	-	523,656	1,352,756
Total	115,416,349	1,566,613	33,566,892	5,488,656	156,038,510
Less:					
Current principal portion	2,615,863	152,572	-	415,000	3,183,435
Non-current principal portion	\$ 112,800,486	\$ 1,414,041	\$ 33,566,892	\$ 5,073,656	\$ 152,855,075

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

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/21fr/NJFRFY2021Complete.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, 2022.

Net Pension Liabilities	\$ 12,251,099
Deferred Outflows of Resources	874,269
Deferred Inflows of Resources	8,086,596
Pension Expense	(1,458,153)
Contributions Made	1,211,114

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

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

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-pers22.pdf>.

The payroll for employees covered by PERS for the years ended June 30, 2022, 2021, and 2020 was \$8,048,394, \$7,796,833, and \$7,691,681, respectively. The Authority's total payroll for the years ended June 30, 2022, 2021 and 2020 was \$8,232,535, \$7,884,810, and \$8,003,155, respectively. The actuarial contribution requirements and the contributions made for the years ended June 30, 2022, 2021 and 2020 were \$1,822,549, \$1,731,864, and \$1,616,629, respectively, which consisted of \$1,211,114, \$1,154,558, and \$1,015,374 from the Authority, and \$611,435, \$577,306, and \$601,255 from employees, respectively. As required by PERS, the employer and employee contributions represented 15.0% and 7.6% of covered payroll for the year ended June 30, 2022, 14.8% and 7.4% of covered payroll for the year ended June 30, 2021, and 13.2% and 7.8% of covered payroll for the year ended June 30, 2020, respectively. Contributions were made in accordance with the actuarial funding requirement.

Assumptions

The collective pension liability for the June 30, 2021, measurement date was determined by an actuarial valuation as of July 1, 2020. The pension liability was rolled forward to June 30, 2021. The actuarial valuation used an inflation rate of 2.75% on price and 3.25% on wage, projected salary increases through 2026 of 2.0% to 6.0% based on years of service and thereafter 3.0% to 7.0% 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, 2021 and 2020. 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.

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

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.nj.gov/treasury/pensions/documents/financial/gasb/gasb68-pers22-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, 2021 and 2020, 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%)
2021	<u>\$17,041,101</u>	<u>\$12,251,099</u>	<u>\$8,671,531</u>
	At 1% Decrease (6.00%)	At Current Discount Rate (7.00%)	At 1% Increase (8.00%)
2020	<u>\$21,665,612</u>	<u>\$17,210,868</u>	<u>\$13,430,896</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, 2021 and 2020 are based on the ratio of each employer's contributions to total employer contributions of the group for the fiscal years ended June 30, 2021 and 2020, respectively.

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

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, collected 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, 2020 to June 30, 2021 and July 1, 2019 to June 30, 2020, respectively. The Authority's proportionate share of the collective net pension liability as of June 30, 2021 and 2020 was .1034% and .1055%, respectively.

At June 30, 2022, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$12,251,099. At June 30, 2021, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$17,210,868. For the years ended June 30, 2022 and 2021, the Authority recognized a PERS pension expense of (\$1,458,153) and \$718,688, respectively. At June 30, 2022, deferred outflows of resources and deferred inflows of resources related to the PERS pension are as follows:

	June 30, 2022		June 30, 2021	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference Between Expected and Actual Experience	\$ 193,216	\$ 87,703	\$ 313,382	\$ 60,865
Change in Assumptions	63,804	4,361,471	558,340	7,206,353
Net Difference Between Projected and Actual Investment Earnings	-	3,227,261	588,281	-
Net Change in Proportions	617,249	410,161	999,624	114,235
Total Contributions and Proportionate Share of Contributions After the Measurement Date	1,211,114	-	1,154,558	-
	<u>\$ 2,085,383</u>	<u>\$ 8,086,596</u>	<u>\$ 3,614,185</u>	<u>\$ 7,381,453</u>

The Authority recognizes the \$1,211,114 and \$1,154,558 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
2022	\$ (2,810,041)
2023	(2,006,362)
2024	(1,367,997)
2025	(1,028,327)
2026	400
Total	<u>\$ (7,212,327)</u>

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

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.state.nj.us/treasury/pensions/financial-reports.shtml>.

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 of the employers. 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.

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

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, 2022.

Net OPEB Liabilities	\$31,037,563
Deferred Outflows of Resources	10,820,046
Deferred Inflows of Resources	14,054,948
OPEB (Benefit) Expense	311,814
Contributions Made	2,823,595

Retirees and Employees Covered by the OPEB Plan

At June 30, 2022, total plan members covered by the benefit terms were: 182

Retirees currently receiving benefits: 70

The Authority's contributions to the Plan for the years ended June 30, 2022 and June 30, 2021, were \$2,823,595 and \$2,666,194 respectively.

Net OPEB Liability

The Authority’s net OPEB liability of \$31,037,563 as of June 30, 2022 was measured as of June 30, 2021. The Authority’s net OPEB liability of \$29,968,511 as of June 30, 2021, was measured as of June 30, 2020. The Authority has fully recognized this liability in the statements of net position as of June 30, 2022 and 2021, in accordance with GASB 75.

Actuarial Methods and Assumptions

The net OPEB liabilities as of the June 30, 2021 and 2020, measurement dates were determined actuarial valuations as of June 30, 2020 and 2019, respectively, which was rolled forward to June 30, 2021, and 2020, respectively. The actuarial valuations used the following actuarial assumptions, applied to all periods in the measurement:

Inflation rate	2.50%
Salary increases*:	
Rate through 2026	2.00% to 6.00%
Rate thereafter	3.00% to 7.00%

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

Actuarial assumptions used in the July 1, 2020, valuation were based on the results of the PERS experience studies prepared for the July 1, 2014 to June 30, 2018.

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

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

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 5.6% and decreases to a 4.5% long-term trend rate after seven years. For post-65 medical benefits, the actual fully-insured Medicare Advantage trend rates for fiscal year 2021 through 2022 are reflected. The rates used for 2023 and 2024 are 21.83% and 18.53%, respectively, trending to 4.5% for all future years. For prescription drug benefits, the initial trend rate is 7.00% and decreases to a 4.5% long-term trend rate after seven years.

Discount Rate

The discount rates for June 30, 2021 and 2020, were 2.16% and 2.21%, 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, 2021 and 2020, 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 (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>
	At 1% Decrease (1.21%)	At Current Discount Rate (2.21%)	At 1% Increase (3.21%)
2020	<u>\$35,429,111</u>	<u>\$29,968,511</u>	<u>\$25,645,949</u>

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

The following presents the net OPEB liability as of June 30, 2021 and 2020, 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
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

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)

	<u>At 1% Decrease</u>	<u>Healthcare Cost Trend Rate</u>	<u>At 1% Increase</u>
2021	<u>\$25,895,812</u>	<u>\$31,037,563</u>	<u>\$37,746,952</u>
		<u>Healthcare Cost Trend Rate</u>	
	<u>At 1% Decrease</u>	<u>At 1% Increase</u>	
2020	<u>\$24,798,973</u>	<u>\$29,968,511</u>	<u>\$36,738,090</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, 2021 and 2020 was .1724% and .1670%, respectively.

At June 30, 2022 and 2021, the amounts recognized as the Authority’s proportionate share of the net OPEB liability were \$31,037,563 and \$29,968,511, respectively. For the years ended June 30, 2022 and 2021, the Authority recognized OPEB expense of \$311,814 and \$55,210, respectively. At June 30, 2022 and 2021, deferred outflows of resources and deferred inflows of resources related to OPEB are as follows:

	<u>June 30, 2022</u>		<u>June 30, 2021</u>	
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net Difference Between Expected and Actual Experience	\$ 696,446	\$ 6,493,516	\$ 789,348	\$ 5,580,696
Change of Assumptions	4,464,846	5,486,254	4,482,346	6,664,534
Net Difference Between Projected and Actual Investment Earnings	14,840	-	19,032	-
Net Change in Proportions	2,820,319	2,075,178	2,105,121	2,592,069
Authority Contributions After the Measurement Date	2,823,595	-	2,666,194	-
	<u>\$ 10,820,046</u>	<u>\$ 14,054,948</u>	<u>\$ 10,062,041</u>	<u>\$ 14,837,299</u>

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

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
2022	\$ (1,650,262)
2023	(1,652,432)
2024	(1,654,417)
2025	(1,181,424)
2026	(198,606)
Thereafter	278,644
Total	<u>\$ (6,058,497)</u>

G. MAJOR WATER CUSTOMERS

During fiscal years 2022 and 2021, the Authority supplied water to approximately 30 customers of the Raritan Basin System and 13 customers of the Manasquan System.

Revenue

During fiscal years 2022 and 2021, two customers accounted for approximately 84% of total Raritan Basin System operating revenue. During fiscal years 2022 and 2021, three customers accounted for approximately 85% of total Manasquan System operating revenue.

Accounts Receivable

During fiscal year 2022, two customers accounted for approximately 100% of total Raritan Basin System accounts receivable and three customers accounted for approximately 95% of total Manasquan System accounts receivable. During fiscal year 2021, three customers accounted for approximately 90% of total Raritan Basin System accounts receivable and three customers accounted for approximately 85% of total Manasquan System 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
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

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, 2022 and 2021.

J. COMMITMENTS AND CONTINGENCIES

Commitments

Construction Projects

The Authority had several outstanding or planned construction projects as of June 30, 2022. These projects are evidenced by contractual commitments with contractors and include:

Project	Awarded	Commitment Remaining
RV Reservoir Structures Refurbishment and Resource Preservation Project	\$85,925,563	\$31,395,834
Dredging of the D&R Canal From Kingston to Anwell Road	46,263,004	7,061,563
Formal Inspection of the Dams, Dikes, and Appurtenant Structures at SR & RV	2,584,665	245,295
Aquatic Plant Management of the D&R Canal	887,497	563,547
SR Reservoir Multidisciplinary Release Works Improvement & Studies	1,285,000	615,400
Rehab of Four Pump Assemblies, Mechanical and Electrical Upgrades SBPS	1,049,432	727,982
Rehabilitate Western Embankment Stockton Borough	637,329	241,981
Stormwater Basin Retrofitting Franklin Township	547,314	25,565
Rehabilitation of Landing Lane Spillway and Slope D/S of Island Weir Farm	1,650,565	50,750
Rehab of Upper Canal Embankment - Raven Rock to Prallsville	301,212	164,901
Replacement of the Spruce Run Fuel Facilities Dispenser Unit	300,520	18,995
	<u>\$141,432,101</u>	<u>\$41,111,813</u>

Operating Leases

Lease	Commencement Date	Payment Terms	Annual Payment Amount	Interest Rate	Total Lease Liability	Balance June 30, 2022
Various Copiers	01/01/22-12/31/25	48 Months	\$ 10,440	3.73%	\$ 38,738	\$ 34,205

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
2023	\$ 9,322	\$ 1,118	\$ 10,440
2024	9,676	764	10,440
2025	10,043	397	10,440
2026	5,164	56	5,220
	<u>\$ 34,205</u>	<u>\$ 2,335</u>	<u>\$ 36,540</u>

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

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. CHANGE IN ACCOUNTING PRINCIPLE AND PRIOR PERIOD RESTATEMENT

Effective June, 30, 2022, the New Jersey Water Supply Authority implemented GASB Statement No. 87, *Leases*. The requirements of this Statement improve financial reporting by increasing the usefulness of the Authority's financial statements by requiring recognition of lease assets and liabilities for leases that previously were classified as capital and operating leases. It established a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset. These changes were incorporated in the Authority's financial statements and had an effect on the beginning net position. The implementation of GASB Statement No. 87 had the following effect on net position as reported June 30, 2021:

Net position, June 30, 2021	\$ 122,013,313
Adjustments:	
Right-of-use asset, net of accumulated amortization	7,032
Lease liability	(6,998)
Restated net position, June 30, 2021	<u>\$ 122,013,347</u>

L. IMPACT OF COVID-19

On January 30, 2020, the World Health Organization declared the coronavirus outbreak a "Public Health Emergency of International Concern" and on March 10, 2020, declared it to be a pandemic. Actions taken around the world to help mitigate the spread of the coronavirus include restrictions on travel, quarantines in certain areas, and forced closures for certain types of public places and businesses. The coronavirus and actions taken to mitigate it have had and are expected to continue to have an adverse impact on the economies and financial markets of many countries, including the geographical area in which the Authority operates. Due to the impact of New Jersey Governor Murphy's Executive Order No. 107, dated March 21, 2020, mandating statewide stay-at-home practices and closure of all non-essential retail businesses; and Executive Order 244, dated June 4, 2021, terminating the Public Health Emergency; it is reasonably possible that there still may be certain expense and accounts receivable increases, and that related collections may be adversely impacted. It is unknown how long these conditions will last and what the complete financial impact will be on the Authority.

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

NOTES TO FINANCIAL STATEMENTS

M. 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, 2022		June 30, 2021*	
	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	\$ 71,024,278	\$ 25,112,662	\$ 88,960,517	\$ 22,030,562
Restricted cash	29,396,027	6,233,843	25,809,651	6,140,515
Capital assets	176,725,120	47,091,124	159,000,029	48,739,936
Other non-current assets	-	-	247,989	-
Deferred outflows of resources	10,746,992	2,901,012	11,257,968	3,160,833
Total assets and deferred outflows of resources	<u>\$ 287,892,417</u>	<u>\$ 81,338,641</u>	<u>\$ 285,276,154</u>	<u>\$ 80,071,846</u>
Liabilities and deferred inflows of resources:				
Current liabilities	\$ 9,704,047	\$ 6,310,764	\$ 10,214,536	\$ 5,740,303
Non-current liabilities	146,551,723	49,626,219	152,191,169	51,498,896
Deferred inflows of resources	26,269,895	(4,577,252)	26,910,835	(3,221,086)
Total liabilities and deferred inflows of resources	<u>182,525,665</u>	<u>51,359,731</u>	<u>189,316,540</u>	<u>54,018,113</u>
Net position:				
Net investment in capital assets	61,308,771	31,795,330	40,849,979	32,817,734
Restricted for cash, investments, and unearned revenue	28,842,542	1,323,709	25,207,858	1,927,858
Unrestricted	15,215,439	(3,140,129)	29,901,777	(8,691,859)
Total net position	<u>105,366,752</u>	<u>29,978,910</u>	<u>95,959,614</u>	<u>26,053,733</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 287,892,417</u>	<u>\$ 81,338,641</u>	<u>\$ 285,276,154</u>	<u>\$ 80,071,846</u>

*Certain account balances have been restated to conform with current year presentations. See Note K for details.

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

NOTES TO FINANCIAL STATEMENTS

M. INFORMATION BY BUSINESS SEGMENT (CONTINUED)

	Year Ended June 30, 2022		Year Ended June 30, 2021*	
	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	\$ 23,414,896	\$ 7,360,343	\$ 22,689,906	\$ 7,410,739
Operating expenses	11,900,572	2,626,795	9,602,185	2,618,410
Depreciation	2,885,995	1,858,227	2,844,427	1,865,514
Operating income	8,628,329	2,875,321	10,243,294	2,926,815
Non-operating revenues	426,348	25,405	416,620	38,158
Non-operating expenses (recovery)	(352,461)	(1,024,451)	(332,450)	1,498,456
Changes in net position	9,407,138	3,925,177	10,992,364	1,466,517
Net position, beginning of year	95,959,614	26,053,733	84,967,250	24,587,216
Net position, end of year	<u>\$ 105,366,752</u>	<u>\$ 29,978,910</u>	<u>\$ 95,959,614</u>	<u>\$ 26,053,733</u>
Condensed statement of cash flows				
Net cash provided by:				
Operating activities	\$ 8,636,194	\$ 4,143,423	\$ 10,114,464	\$ 4,847,902
Non-capital financing activities	192,324	-	712,805	-
Capital and related financing activities	(5,620,011)	(1,061,084)	(2,799,420)	(3,698,608)
Investing activities	326,755	27,499	2,228,656	38,700
Net increase in cash and cash equivalents	3,535,262	3,109,838	10,256,505	1,187,994
Beginning cash and cash equivalent balances	71,583,098	26,339,820	61,326,593	25,151,826
Ending cash and cash equivalent balances	<u>\$ 75,118,360</u>	<u>\$ 29,449,658</u>	<u>\$ 71,583,098</u>	<u>\$ 26,339,820</u>

*Certain account balances have been restated to conform with current year presentations. See Note K for details.

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

The GASB has issued Statement No. 87, "Leases." This statement is required to be 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 as described in Note K.

The GASB has issued Statement No. 89, "Accounting for Interest Cost Incurred before the End of a Construction Period." This statement is required to be 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. 93, "Replacement of Interbank Offered Rates." This statement is required to be 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. 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 is required to be adopted by the Authority for the year ending June 30, 2022. The adoption of this statement had no effect on previously reported amounts.

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

NOTES TO FINANCIAL STATEMENTS

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

The GASB has issued Statement No. 98, "*The Annual Comprehensive Financial Report.*" This statement is required to be 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 are required to be adopted by the Authority for the year ended June 30, 2022. The adoption of these provisions had no effect on previously reported amounts.

O. PENDING GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENTS

The GASB has issued Statement No. 91, "*Conduit Debt Obligations.*" This statement is required to be adopted by the Authority for the year ending June 30, 2023. The Authority has not determined the effect of Statement No. 91 on the financial statements.

The GASB has issued Statement No. 92, "*Omnibus 2020.*" This statement clarifies the effective date of Statement No. 87 and addresses other topics that are required to be adopted by the Authority for the year ended June 30, 2023. The Authority has not determined the effect of Statement No. 92 on the financial statements.

The GASB has issued Statement No. 94, "*Public-Private and Public-Public Partnerships and Availability Payment Arrangements.*" This statement is required to be adopted by the Authority for the year ending June 30, 2023. The Authority has not determined the effect of Statement No. 94 on the financial statements.

The GASB has issued Statement No. 95, "*Postponement of the Effective Dates of Certain Authoritative Guidance.*" This statement postpones 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 GASB has issued Statement No. 96, "*Subscription-Based Information Technology Arrangements.*" This statement is required to be adopted by the Authority for the year ending June 30, 2023. The Authority has not determined the effect of Statement No. 96 on the financial statements.

The GASB has issued Statement No. 99, "*Omnibus 2022.*" Certain provisions of this Statement are required to be adopted by the Authority for the years ending June 30, 2023 and 2024. The Authority has not determined the effect of these provisions on the financial 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.

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

NOTES TO FINANCIAL STATEMENTS

**O. PENDING GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) STATEMENTS
(CONTINUED)**

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. 100 on the financial statements.

REQUIRED SUPPLEMENTARY SCHEDULES (UNAUDITED)

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

**SCHEDULE OF PROPORTIONATE SHARE OF PERS NET PENSION LIABILITY (NPL)
DETERMINED AS OF JUNE 30, 2021, 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
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
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	Changes in Assumptions	Difference Between Expected and Actual Earnings	Change in Proportion and Actual Less Proportionate Share	Other Changes and Reclassifications	Ending Balance Total Net Pension Liability
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 eight years of pension information to the Authority. Additional years' information will be displayed as it becomes available.

**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, 2021, OPEB MEASUREMENT DATE**

	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Authority's proportion of the net OPEB liability	0.1724330%	0.1669870%	0.1591680%	0.1680130%	0.1639400%	0.1737960%
Authority's proportionate share of the net OPEB liability (asset)	\$ 31,037,563	\$ 29,968,511	\$ 21,561,010	\$ 26,321,955	\$ 33,469,644	\$ 37,744,085
Authority's covered payroll	\$ 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	385.6%	384.4%	280.3%	344.7%	455.3%	539.0%
Plan fiduciary net position as a percentage of the total OPEB liability	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 six 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, 2022

	Raritan Basin System	Manasquan Reservoir System	Elimination Entries	Combined Total
Assets				
Current assets:				
Unrestricted assets:				
Cash and cash equivalents	\$ 45,722,333	\$ 23,215,815	\$ -	\$ 68,938,148
Unbilled sales	1,749,325	-	-	1,749,325
Accounts receivable, less allowance for doubtful accounts of \$1,000 at June 30, 2022	22,482,393	1,579,640	(157,557)	23,904,476
Prepaid expenses and other current assets	1,070,227	317,207	-	1,387,434
Total unrestricted assets	<u>71,024,278</u>	<u>25,112,662</u>	<u>(157,557)</u>	<u>95,979,383</u>
Restricted assets:				
Cash equivalents	29,396,027	6,233,843	-	35,629,870
Total current assets	<u>100,420,305</u>	<u>31,346,505</u>	<u>(157,557)</u>	<u>131,609,253</u>
Non-current assets:				
Capital assets net of accumulated depreciation of \$163,610,843 at June 30, 2022	176,725,120	47,091,124	-	223,816,244
Total non-current assets	<u>176,725,120</u>	<u>47,091,124</u>	<u>-</u>	<u>223,816,244</u>
Total assets	<u>277,145,425</u>	<u>78,437,629</u>	<u>(157,557)</u>	<u>355,425,497</u>
Deferred outflows of resources				
Pension related	1,619,742	465,641	-	2,085,383
OPEB related	8,384,675	2,435,371	-	10,820,046
Construction loan DEP fee	742,575	-	-	742,575
Total deferred outflows of resources	<u>10,746,992</u>	<u>2,901,012</u>	<u>-</u>	<u>13,648,004</u>
Total assets and deferred outflows of resources	<u>\$ 287,892,417</u>	<u>\$ 81,338,641</u>	<u>\$ (157,557)</u>	<u>\$ 369,073,501</u>
Liabilities				
Current liabilities:				
Current portion of bonds, notes and loans payable	\$ 2,615,863	\$ 567,572	\$ -	\$ 3,183,435
Accounts payable	4,193,812	320,044	(157,557)	4,356,299
Accrued liabilities	2,340,887	513,014	-	2,853,901
Unearned revenue	553,485	4,910,134	-	5,463,619
Total current liabilities	<u>9,704,047</u>	<u>6,310,764</u>	<u>(157,557)</u>	<u>15,857,254</u>
Non-current liabilities:				
Non-current portion of bonds, notes and loans payable	112,800,486	40,054,589	-	152,855,075
Lease liability	26,362	7,843	-	34,205
Net pension liability	9,515,576	2,735,523	-	12,251,099
Total OPEB liability	24,209,299	6,828,264	-	31,037,563
Total non-current liabilities	<u>146,551,723</u>	<u>49,626,219</u>	<u>-</u>	<u>196,177,942</u>
Total liabilities	<u>156,255,770</u>	<u>55,936,983</u>	<u>(157,557)</u>	<u>212,035,196</u>
Deferred inflows of resources				
Cost recovery	9,026,080	(9,711,798)	-	(685,718)
Pension related	6,280,956	1,805,640	-	8,086,596
OPEB related	10,962,859	3,092,089	-	14,054,948
Gain on refunding	-	236,817	-	236,817
Total deferred inflows of resources	<u>26,269,895</u>	<u>(4,577,252)</u>	<u>-</u>	<u>21,692,643</u>
Net position				
Net investment in capital assets	61,308,771	31,795,330	-	93,104,101
Restricted for cash, investments and unearned revenue	28,842,542	1,323,709	-	30,166,251
Unrestricted	15,215,439	(3,140,129)	-	12,075,310
Total net position	<u>105,366,752</u>	<u>29,978,910</u>	<u>-</u>	<u>135,345,662</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 287,892,417</u>	<u>\$ 81,338,641</u>	<u>\$ (157,557)</u>	<u>\$ 369,073,501</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, 2022

	Raritan Basin System	Manasquan Reservoir System	Manasquan Water Treatment Plant	Combined Total
Operating revenue:				
Water sales	\$ 23,414,896	\$ 7,360,343	\$ -	\$ 30,775,239
Reimbursement of operating expenses	-	-	2,580,000	2,580,000
Total operating revenue	<u>23,414,896</u>	<u>7,360,343</u>	<u>2,580,000</u>	<u>33,355,239</u>
Operating expenses:				
Payroll	6,408,927	924,589	899,019	8,232,535
Operations and maintenance (direct)	4,658,602	1,080,512	896,933	6,636,047
Operations and maintenance (general and administrative)	-	96,771	67,271	164,042
Fringe benefits	1,508,043	(58,077)	(87,478)	1,362,488
Headquarters overhead	(675,000)	583,000	92,000	-
Depreciation	2,885,995	1,858,227	-	4,744,222
Total operating expenses	<u>14,786,567</u>	<u>4,485,022</u>	<u>1,867,745</u>	<u>21,139,334</u>
Income from operations	<u>8,628,329</u>	<u>2,875,321</u>	<u>712,255</u>	<u>12,215,905</u>
Non-operating revenue:				
State of New Jersey - Grant Programs	237,951	-	-	237,951
Investment and interest income	76,491	23,992	3,507	103,990
Rental income	60,419	-	-	60,419
Other income/(loss)	51,487	1,413	-	52,900
Total non-operating revenue	<u>426,348</u>	<u>25,405</u>	<u>3,507</u>	<u>455,260</u>
Non-operating expenses:				
Interest component of debt service to the State of New Jersey	482,748	121,403	-	604,151
Recovery of deferred inflows of resources	(835,209)	(1,145,854)	715,762	(1,265,301)
Total non-operating expenses	<u>(352,461)</u>	<u>(1,024,451)</u>	<u>715,762</u>	<u>(661,150)</u>
Changes in net position	9,407,138	3,925,177	-	13,332,315
Net position, beginning of year	95,959,614	26,053,733	-	122,013,347
Net position, end of year	<u>\$ 105,366,752</u>	<u>\$ 29,978,910</u>	<u>\$ -</u>	<u>\$ 135,345,662</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, 2022**

	Operating Fund										
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Depreciation Reserve	Pumping Reserve	Capital Improvements Investments	Source Water Protection Fund	Subtotal
Cash and investments - July 1, 2021	\$ 1,335,360	\$ 1,859,130	\$ 177,816	\$ 3,286,994	\$ 3,645,173	\$ 931,682	\$ 4,980,517	\$ 1,884,786	\$ 326,418	\$ 4,336,904	\$ 22,764,780
Cash receipts:											
Water sales operations and maintenance	11,954,559	-	-	-	-	-	-	-	-	-	11,954,559
Water sales debt service	5,316,713	-	-	-	-	-	-	-	-	-	5,316,713
Water sales capital fund	2,064,136	-	-	-	-	-	-	-	-	-	2,064,136
Water sales source water protection fund	1,501,190	-	-	-	-	-	-	-	-	-	1,501,190
Water sales overdrafts	1,052,582	-	-	-	-	-	-	-	-	-	1,052,582
Rental income	47,281	-	-	-	-	-	-	-	-	-	47,281
Manasquan Reservoir support	68,558	-	-	-	-	-	-	-	-	-	68,558
Headquarters overhead	-	-	-	664,750	-	-	-	-	-	-	664,750
Disposition of property	12,899	-	-	-	-	-	-	-	-	-	12,899
Recycling revenue	1,479	-	-	-	-	-	-	-	-	-	1,479
Sale of investment securities	252,555	-	-	-	-	-	-	-	-	-	252,555
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-
Insurance reimbursement	9,002	-	-	-	-	-	-	-	-	-	9,002
Miscellaneous expense reimbursement	227,241	52,485	-	-	-	-	-	-	-	-	279,726
Transfers:											
Contributions from operating fund	1,262,390	31,063,061	3,841,837	(47,228,830)	-	-	270,098	150,000	-	548,880	(10,092,564)
Contributions to operating fund	(2,740,490)	-	-	24,119,627	-	-	(394,253)	-	-	(505,734)	20,479,150
Transfers for operations	(21,880,005)	-	-	21,880,005	-	-	-	-	-	-	-
Transfers for investments	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	-	49,069	-	-	-	-	-	-	-	-	49,069
Investment income	265	1,991	-	-	4,185	1,006	5,780	2,200	4	4,962	20,393
Per resolution, Section 603:											
Investment income, transfer from	5,192	-	-	-	(4,186)	(1,006)	-	-	-	-	-
Investment income, transfer to	(5,192)	-	-	-	5,192	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	-	-	-	-	(264)	-	(264)
Total cash receipts	(849,645)	31,166,606	3,841,837	(564,448)	5,191	-	(118,375)	152,200	(260)	48,108	33,681,214
Total available cash and investments	\$ 485,715	\$ 33,025,736	\$ 4,019,653	\$ 2,722,546	\$ 3,650,364	\$ 931,682	\$ 4,862,142	\$ 2,036,986	\$ 326,158	\$ 4,385,012	\$ 56,445,994

**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, 2022**

	Subtotal	Party 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, 2021	\$ 22,764,780	\$ 333,049	\$ 643,009	\$ 1,431,509	\$ 17,705,704	\$ 753,224	\$ 25,004,324	\$ 1,075,667	\$ 88,016	\$ 2,034,080	\$ 71,833,362
Cash receipts:											
Water sales operations and maintenance	11,954,559	-	-	-	-	-	-	-	-	-	11,954,559
Water sales debt service	5,316,713	-	-	-	-	-	-	-	-	-	5,316,713
Water sales capital fund	2,064,136	-	-	-	-	-	-	-	-	-	2,064,136
Water sales source water protection fund	1,501,190	-	-	-	-	-	-	-	-	-	1,501,190
Water sales overdrafts	1,052,582	-	-	-	-	-	-	-	-	-	1,052,582
Rental income	47,281	-	-	-	-	-	-	-	-	-	47,281
Manasquan Reservoir support	68,558	-	-	-	-	-	-	-	-	-	68,558
Headquarters overhead	664,750	-	-	-	-	-	-	-	-	-	664,750
Disposition of property	12,899	-	-	-	-	-	-	-	-	-	12,899
Recycling revenue	1,479	-	-	-	-	-	-	-	-	-	1,479
Sale of investment securities	252,555	-	-	-	-	-	-	-	-	-	252,555
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-
Insurance reimbursement	9,002	-	-	-	-	-	-	-	-	-	9,002
Miscellaneous expense reimbursement	279,726	-	-	-	19,021,110	86,768	-	-	-	2,186	19,389,790
Transfers:											
Contributions from operating fund	(10,092,564)	354,552	693,852	-	2,196,273	-	5,657,067	150,000	-	1,040,820	-
Contributions to operating fund	20,479,150	-	-	(19,765)	(19,328,460)	(190,207)	-	-	-	(940,718)	-
Transfers for operations	-	-	-	-	-	-	-	-	-	-	-
Transfers for investments	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	49,069	-	-	-	-	-	-	-	-	(49,069)	-
Investment income	20,393	126	341	1,591	17,212	712	30,402	1,252	17	2,155	74,201
Per resolution, Section 603:											
Investment income, transfer from	-	-	-	-	-	-	-	-	-	-	-
Investment income, transfer to	-	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	(264)	-	-	-	-	-	-	-	-	-	(264)
Total cash receipts	33,681,214	354,678	694,193	(18,174)	1,906,135	(102,727)	5,687,469	151,252	17	55,374	42,409,431
Total available cash and investments	\$ 56,445,994	\$ 687,727	\$ 1,337,202	\$ 1,413,335	\$ 19,611,839	\$ 650,497	\$ 30,691,793	\$ 1,226,919	\$ 88,033	\$ 2,089,454	\$ 114,242,793

**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, 2022**

	Operating Fund										
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Depreciation Reserve	Pumping Reserve	Capital Improvements Investments	Source Water Protection Fund	Subtotal
Total available cash and investments	\$ 485,715	\$ 33,025,736	\$ 4,019,653	\$ 2,722,546	\$ 3,650,364	\$ 931,682	\$ 4,862,142	\$ 2,036,986	\$ 326,158	\$ 4,385,012	\$ 56,445,994
Cash disbursements:											
Payroll	-	-	3,841,837	-	-	-	-	-	-	-	3,841,837
Fringe benefits	-	73,736	-	1,725,046	-	-	-	-	-	-	1,798,782
Employee deferred compensation and credit union	-	1,943,721	-	263,702	-	-	-	-	-	-	2,207,423
Operations and maintenance	-	28,947,462	-	(1,005,248)	-	-	-	-	-	-	27,942,214
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous disbursements	-	-	-	-	-	-	-	-	-	-	-
Watershed Management Fund	-	-	-	-	-	-	-	-	-	-	-
Capital improvements:											
Capital assets	-	-	-	-	-	-	-	-	-	-	-
New five-year construction project	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	-	-	-	-	-	-	-	-	250,000	-	250,000
Principal on NJEIT bonds	-	-	-	-	-	-	-	-	-	-	-
Interest on NJEIT revenue bonds	-	-	-	-	-	-	-	-	-	-	-
Total cash disbursements	-	30,964,919	3,841,837	983,500	-	-	-	-	250,000	-	36,040,256
Cash and investments - June 30, 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
Summary of cash and investments:											
Cash	\$ 485,715	\$ 2,060,817	\$ 177,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,724,348
Short-term investments	-	-	-	1,739,046	3,650,364	931,682	4,862,142	2,036,986	76,158	4,385,012	17,681,390
Long-term investments	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (current)	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

**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, 2022**

	Subtotal	Party 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	\$ 56,445,994	\$ 687,727	\$ 1,337,202	\$ 1,413,335	\$ 19,611,839	\$ 650,497	\$ 30,691,793	\$ 1,226,919	\$ 88,033	\$ 2,089,454	\$ 114,242,793
Cash disbursements:											
Payroll	3,841,837	-	-	-	-	-	-	-	-	-	3,841,837
Fringe benefits	1,798,782	-	-	-	-	-	-	-	-	-	1,798,782
Employee deferred compensation and credit union	2,207,423	-	-	-	-	-	-	-	-	-	2,207,423
Operations and maintenance	27,942,214	-	-	-	-	-	-	-	-	-	27,942,214
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous disbursements	-	-	-	-	-	-	-	-	-	66,714	66,714
Watershed Management Fund	-	-	-	-	-	-	-	-	-	-	-
Capital improvements:											
Capital assets	-	-	-	-	-	-	-	-	-	-	-
New five-year construction project	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	250,000	-	-	-	-	-	-	-	-	-	250,000
Principal on NJEIT bonds	-	334,943	598,930	-	-	-	1,403,646	-	-	-	2,337,519
Interest on NJEIT revenue bonds	-	13,140	76,955	-	-	-	589,849	-	-	-	679,944
Total cash disbursements	36,040,256	348,083	675,885	-	-	-	1,993,495	-	-	66,714	39,124,433
Cash and investments - June 30, 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
Summary of cash and investments:											
Cash	\$ 2,724,348	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52,104	\$ 2,776,452
Short-term investments	17,681,390	339,644	661,317	1,413,335	19,611,839	650,497	28,698,298	1,226,919	88,033	1,970,636	72,341,908
Long-term investments	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (current)	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

**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, 2022**

	Revenue Fund	Operating Fund				Self-Insurance Reserve	Renewal & Replacement Account	Water Reuse & Recycling	Source Water Protections	Depreciation Reserve	Pumping Reserve	Capital Improvement Fund	Sediment Reserve	Subtotal
		Operating Account	Payroll Account	Operating Fund	Reserve for O&M									
Cash and investments - July 1, 2021	\$ 2	\$ 377,002	\$ 55,872	\$ 8,175,618	\$ 1,604,939	\$ 217,965	\$ 4,161,631	\$ 30,386	\$ 1,489,202	\$ 602,767	\$ 154,799	\$ 2,401,212	\$ 316,297	\$ 19,587,692
Cash receipts:														
Water sales operations and maintenance	3,161,734	-	-	-	-	-	-	-	-	-	-	-	-	3,161,734
Water sales capital fund	3,197,172	-	-	-	-	-	-	-	-	-	-	-	-	3,197,172
Water sales debt service	713,459	-	-	-	-	-	-	-	-	-	-	-	-	713,459
Source water protection	106,379	-	-	-	-	-	-	-	-	-	-	-	-	106,379
Water sales debt service NJEIT	176,802	-	-	-	-	-	-	-	-	-	-	-	-	176,802
Water sales overdrafts	3,287	-	-	-	-	-	-	-	-	-	-	-	-	3,287
NJ-American pumping costs	190,318	-	-	-	-	-	-	-	-	-	-	-	-	190,318
Headquarters overhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reimbursement of WTP capital expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposition of assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reimbursement from/(to) Raritan Basin	25,573	-	-	-	-	-	-	-	-	-	-	-	-	25,573
Sale of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonre fundable bid deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous reimbursement	14,013	-	-	-	-	-	-	-	-	-	-	-	-	14,013
Transfers:														
Contributions from operating fund	-	4,044,620	1,124,339	(9,937,322)	-	-	120,000	-	106,452	2,369	-	3,199,664	30,000	(1,309,678)
Contributions to operating fund	-	-	-	1,716,787	-	-	(222,253)	-	(141,247)	-	-	-	-	1,353,287
Transfers for operations	(7,660,205)	(561)	-	7,660,205	-	-	-	-	-	-	-	-	-	(561)
Distribution from reserves to operations	409,750	14,109	-	-	-	-	-	-	-	-	-	-	-	423,859
Investment income	110	223	-	8,913	1,794	170	4,739	-	1,623	623	96	4,659	303	23,253
Per resolution, Section 603:														
Investment income, transfer from	11,275	-	-	(8,912)	(1,794)	(170)	-	-	-	-	(96)	-	(303)	-
Investment income, transfer to	(11,275)	-	-	11,275	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash receipts	338,392	4,058,591	1,124,339	(549,054)	-	-	(97,514)	-	(33,172)	2,992	-	3,204,323	30,000	8,078,897
Total cash and investments	\$ 338,394	\$ 4,435,593	\$ 1,180,211	\$ 7,626,564	\$ 1,604,939	\$ 217,965	\$ 4,064,117	\$ 30,386	\$ 1,456,030	\$ 605,759	\$ 154,799	\$ 5,605,535	\$ 346,297	\$ 27,666,589

**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, 2022**

	Water Treatment Plant/Transmission System											General Reserve Fund	Employment Benefit Funds	Totals
	Subtotal	Operating Account	Operating Fund	Residual Reserve	Carbon Filter Reserve	Self-Insurance Reserve	Capital Improvement Reserve	NJEIT Debt Service	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund			
Cash and investments - July 1, 2021	\$ 19,587,692	\$ 171,992	\$ 2,789,971	\$ 9,480	\$ 98,435	\$ 253,189	\$ 112,017	\$ 164,612	\$ 543,671	\$ 1,746,553	\$ 250,594	\$ 41,197	\$ 570,417	\$ 26,339,820
Cash receipts:														
Water sales operations and maintenance	3,161,734	-	-	-	-	-	-	-	-	-	-	-	-	3,161,734
Water sales capital fund	3,197,172	-	-	-	-	-	-	-	-	-	-	-	-	3,197,172
Water sales debt service	713,459	-	-	-	-	-	-	-	-	-	-	-	-	713,459
Source water protection	106,379	-	-	-	-	-	-	-	-	-	-	-	-	106,379
Water sales debt service NJEIT	176,802	-	-	-	-	-	-	-	-	-	-	-	-	176,802
Water sales overdrafts	3,287	-	-	-	-	-	-	-	-	-	-	-	-	3,287
NJ-American pumping costs	190,318	-	-	-	-	-	-	-	-	-	-	-	-	190,318
Headquarters overhead	-	-	2,579,000	-	-	-	-	-	-	-	-	-	-	2,579,000
Reimbursement of WTP capital expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposition of assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reimbursement from (to) Raritan Basin	25,573	-	-	-	-	-	-	-	-	-	-	-	-	25,573
Sale of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous reimbursement	14,013	2,325	101,142	-	-	-	-	-	-	-	-	-	-	117,480
Transfers:														
Contributions from operating fund	(1,309,678)	900,000	(1,138,076)	-	-	-	101,142	176,920	592,337	-	-	409,750	287,805	-
Contributions to operating fund	1,353,287	-	(1,218,287)	-	-	-	(135,000)	-	-	-	-	-	-	-
Transfers for operations	(561)	561	-	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	423,859	(308)	-	-	-	-	-	-	-	-	-	(409,750)	(13,801)	-
Investment income	23,253	22	3,225	-	29	211	19	55	-	-	209	-	474	27,497
Per resolution, Section 603:														
Investment income, transfer from	-	-	312	-	(48)	(264)	-	-	-	-	-	-	-	-
Investment income, transfer to	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash receipts	8,078,897	902,600	327,316	-	(19)	(53)	(33,839)	176,975	592,337	-	209	-	254,278	10,298,701
Total cash and investments	\$ 27,666,589	\$ 1,074,592	\$ 3,117,287	\$ 9,480	\$ 98,416	\$ 253,136	\$ 78,178	\$ 341,587	\$ 1,136,008	\$ 1,746,553	\$ 250,803	\$ 41,197	\$ 824,695	\$ 36,638,521

**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, 2022**

	Operating Fund													Subtotal
	Revenue Fund	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Renewal & Replacement Account	Water Reuse & Recycling	Source Water Protections	Depreciation Reserve	Pumping Reserve	Pumping Reserve	Sediment Reserve	
Total available cash and investments	\$ 338,394	\$ 4,435,593	\$ 1,180,211	\$ 7,626,564	\$ 1,604,939	\$ 217,965	\$ 4,064,117	\$ 30,386	\$ 1,456,030	\$ 605,759	\$ 154,799	\$ 5,605,535	\$ 346,297	\$ 27,666,589
Cash disbursements:														
Payroll	-	-	1,124,339	-	-	-	-	-	-	-	-	-	-	1,124,339
Fringe benefits	-	143	-	246,997	-	-	-	-	-	-	-	-	-	247,140
Employee deferred compensation and credit union	-	2,172,553	-	(1,725,046)	-	-	-	-	-	-	-	-	-	447,507
Operations and maintenance	-	1,806,683	-	767,819	-	-	-	-	-	-	-	-	-	2,654,502
NJ-American pumping costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headquarters overhead	-	-	-	572,750	-	-	-	-	-	-	-	-	-	572,750
Capital assets reservoir	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvement program (reservoir)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal on bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest on bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash disbursements	-	4,059,379	1,124,339	(137,480)	-	-	-	-	-	-	-	-	-	5,046,238
Cash and investments - June 30, 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
Summary of cash and investments:														
Cash (Manasquan)	\$ 338,394	\$ 376,214	\$ 55,872	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 770,480
Cash (Water Treatment Plant/TS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term investments	-	-	-	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	21,849,871
Short-term investments (Water Treatment Plant/TS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Long-term investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (current)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

**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, 2022**

	Water Treatment Plant/Transmission System											General Reserve Fund	Employment Benefit Funds	Totals
	Subtotal	Operating Account	Operating Fund	Residual Reserve	Carbon Filter Reserve	Self-Insurance Reserve	Capital Improvement Reserve	NJE IT Debt Service	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund			
Total available cash and investments	\$ 27,666,589	\$ 1,074,592	\$ 3,117,287	\$ 9,480	\$ 98,416	\$ 253,136	\$ 78,178	\$ 341,587	\$ 1,136,008	\$ 1,746,553	\$ 250,803	\$ 41,197	\$ 824,695	\$ 36,638,521
Cash disbursements:														
Payroll	1,124,339	-	-	-	-	-	-	-	-	-	-	-	-	1,124,339
Fringe benefits	247,140	-	-	-	-	-	-	-	-	-	-	-	270,428	517,568
Employee deferred compensation and credit union	447,507	-	-	-	-	-	-	-	-	-	-	-	-	447,507
Operations and maintenance	2,654,502	1,025,744	-	-	-	-	-	-	-	-	-	-	-	3,680,246
NJ-American pumping costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headquarters overhead	572,750	-	92,000	-	-	-	-	-	-	-	-	-	-	664,750
Capital assets reservoir	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvement program (reservoir)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal on bonds	-	-	-	-	-	-	-	150,670	395,000	-	-	-	-	545,670
Interest on bonds	-	-	-	-	-	-	-	21,571	187,212	-	-	-	-	208,783
Total cash disbursements	5,046,238	1,025,744	92,000	-	-	-	-	172,241	582,212	-	-	-	270,428	7,188,863
Cash and investments - June 30, 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
Summary of cash and investments:														
Cash (Manasquan)	\$ 770,480	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 770,480
Cash (Water Treatment Plant/TS)	-	48,848	-	-	-	-	-	-	-	-	-	-	-	48,848
Short-term investments	21,849,871	-	-	-	-	-	-	-	-	-	-	41,197	554,267	22,445,335
Short-term investments (Water Treatment Plant/TS)	-	-	3,025,287	9,480	98,416	253,136	78,178	-	-	-	-	-	-	3,464,497
Long-term investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (current)	-	-	-	-	-	-	-	169,346	553,796	1,746,553	250,803	-	-	2,720,498
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

Statistical Section

FINANCIAL TREND DATA

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

Summary of Financial Information.....	2013 - 2022
Summary of Raritan Basin System Water Use Contracts	2013 - 2022
Summary of Manasquan Water Supply System Water Use Contracts	2013 - 2022

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	2013 - 2022
Manasquan System Revenue Bond Coverage	2013 - 2022

REVENUE CAPACITY DATA

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

Raritan Basin System Water Charges	2013 - 2022
Manasquan Water Supply System Water Charges	2013 - 2022

OPERATING INFORMATION

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

Spruce Run Rain Gauge	2013 - 2022
West Windsor Rain Gauge	2013 - 2022
Spruce Run Reservoir Storage	2013 - 2022
Round Valley Reservoir Storage	2013 - 2022
Manasquan System Rainfall	2013 - 2022
Manasquan Reservoir Storage Data.....	2013 - 2022

DEBT, ECONOMIC AND DEMOGRAPHIC INFORMATION

Bonds, Notes and Loans Payable	2013 - 2022
Ten Largest State of New Jersey Employers	2011 - 2020
State of New Jersey Population and Employment Trends	2011 - 2020

New Jersey Water Supply Authority
Summary of Financial Information 2012 – 2021

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
REVENUE AND EXPENSES				
Water sales	\$23,430,025	\$23,240,511	\$24,168,432	\$25,199,424
Reimbursement of operating exp	<u>\$2,495,982</u>	<u>\$2,600,238</u>	<u>\$2,642,400</u>	<u>\$2,642,400</u>
Total operating revenues	25,926,007	25,840,749	26,810,832	27,841,824
Operating expense	<u>21,792,193</u>	<u>20,750,987</u>	<u>21,449,303</u>	<u>21,413,585</u>
Income from operations	4,133,814	5,089,762	5,361,529	6,428,239
Non-operating revenues	7,283,979	603,011	531,655	1,186,165
Non-operating expenses	<u>4,592,986</u>	<u>4,680,739</u>	<u>2,140,777</u>	<u>2,101,399</u>
Change in net position	6,824,807	1,012,034	3,752,407	5,513,005
GASB 75 adjustment				
Net position, beginning of year	<u>113,845,395</u>	<u>120,670,202</u>	<u>104,343,335</u>	<u>108,095,742</u>
Net position, end of year	120,670,202	121,682,236	108,095,742	113,608,747
ASSETS				
Current assets, unrestricted	45,087,108	41,600,989	42,450,358	46,612,558
Current assets, restricted	14,671,723	12,336,186	12,339,659	7,032,591
Non-current assets	<u>149,151,534</u>	<u>153,571,758</u>	<u>153,061,564</u>	<u>151,909,258</u>
Total assets	208,910,365	207,508,933	207,851,581	205,554,407
Deferred outflows of resources			1,280,619	3,646,920
LIABILITIES				
Current liabilities	11,411,225	10,041,207	9,039,888	6,027,320
Non-current liabilities	<u>79,269,979</u>	<u>75,345,060</u>	<u>89,372,731</u>	<u>86,489,391</u>
Total liabilities	90,681,204	85,386,267	98,412,619	92,516,711
Deferred Inflows of Resources	(2,441,041)	440,430	2,623,839	3,075,869
NET POSITION				
Net investment in capital assets	83,560,654	87,589,285	91,638,454	98,890,303
Restricted for repayment debt principal and interest	12,126,909	9,084,491	9,229,092	3,876,937
Unrestricted	<u>24,982,639</u>	<u>25,008,460</u>	<u>7,228,196</u>	<u>10,841,507</u>
Total net position	\$120,670,202	\$121,682,236	\$108,095,742	\$113,608,747

New Jersey Water Supply Authority
Summary of Financial Information 2012 – 2021

<u>2017</u>	<u>2018</u>	<u>2019*</u>	<u>2020</u>	<u>2021*</u>	<u>2022</u>
\$25,394,799	\$30,030,868	\$30,060,964	\$30,230,221	\$30,100,645	\$30,775,239
<u>\$2,642,400</u>	<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>
28,037,199	32,673,268	32,703,364	32,870,533	32,709,757	33,355,239
<u>24,686,037</u>	<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>
3,351,162	7,637,008	9,866,510	11,185,221	14,006,015	12,215,905
2,906	559,918	1,281,332	1,668,682	460,271	455,260
<u>(2,025,379)</u>	<u>1,017,778</u>	<u>1,317,829</u>	<u>1,552,707</u>	<u>2,007,405</u>	<u>(661,150)</u>
5,379,447	7,179,148	9,830,013	11,301,196	12,458,881	13,332,315
(37,744,085)					
<u>113,608,747</u>	<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>
81,244,109	88,423,257	98,253,270	109,554,466	122,013,347	135,345,662
49,025,001	100,119,822	103,682,146	91,018,051	110,844,492	95,979,383
9,427,648	15,609,357	23,143,255	29,004,232	31,950,166	35,629,870
<u>150,570,753</u>	<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>
209,023,402	270,881,557	290,835,584	301,359,326	350,782,612	355,425,497
9,612,405	7,402,086	6,967,231	5,787,217	14,418,801	13,648,004
8,585,118	16,190,347	15,069,049	19,623,499	15,808,252	15,857,254
<u>128,466,486</u>	<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>
137,051,604	178,894,281	178,362,910	172,555,981	219,498,317	212,035,196
340,094	10,966,105	21,186,635	25,036,096	23,689,749	21,692,643
61,887,512	59,275,272	58,476,549	87,368,795	73,667,713	93,104,101
7,262,065	13,434,461	19,997,698	24,965,590	27,135,716	30,166,251
<u>12,094,532</u>	<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>
\$81,244,109	\$88,423,257	\$98,253,270	\$109,554,466	\$122,013,347	\$135,345,662

* 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>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
UNITED WATER LAMBERTVILLE, INC	0.490	0.490	0.490	0.490	0.490
MERCER COUNTY PARK - GOLF	0.132	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	0.075	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	0.074	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	0.025	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
EASTERN CONCRETE MATERIALS			0.023	0.023	0.023
HUNTERDON MEDICAL CENTER				0.031	0.031
PRINCETON UNIVERSITY OPERATIONS				0.027	0.027
RENAISSANCE AT MONROE CONDOMINIUM ASSOCIATION					0.014
SYSTEM TOTAL	<u>182.347</u>	<u>182.281</u>	<u>182.271</u>	<u>182.339</u>	<u>182.353</u>

**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>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</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	182.353	182.353	182.353

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

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
WALL TOWNSHIP	2.275	2.275	2.275	2.00	2.00
BOROUGH OF AVON	0.142	0.142	0.142	0.126	0.126
SHORELANDS WATER COMPANY	1.928	1.928	1.928	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	0.778	0.548	0.548
BOROUGH OF SEA GIRT	0.075	0.075	0.075	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	0.425	0.386	0.386
BOROUGH OF BELMAR	0.65	0.65	0.65	0.288	0.288
BOROUGH OF BRIELLE	0.45	0.45	0.45	0.45	0.45
BOROUGH OF KEYPORT	0.458	0.458	0.458	0.356	0.356
BOROUGH OF MATAWAN	0.469	0.469	0.469	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>20.560</u>	<u>19.443</u>	<u>19.443</u>
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</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
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>7/1/2013</u>	<u>7/1/2014</u>	<u>7/1/2015</u>	<u>7/1/2016</u>	<u>7/1/2017</u>
RATE PER MGD	\$231.00	\$246.00	\$253.00	\$253.00	\$336.00

<u>EFFECTIVE DATE</u>	<u>7/1/2018</u>	<u>7/1/19</u>	<u>7/1/2020</u>	<u>7/1/21</u>	<u>7/1/22</u>
RATE PER MGD	\$336.00	\$336.00	\$336.00	\$336.00	\$336.00

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

<u>EFFECTIVE DATE</u>	<u>7/01/2013</u>	<u>7/01/2014</u>	<u>7/01/2015</u>	<u>7/01/2016</u>	<u>7/01/2017</u>
RATE PER MGD	\$1,015.90	\$1,015.90	\$1,057.40	\$1,104.58	\$1,043.35
(Delayed Contracts)	\$1,168.49	\$1,168.49	\$1,190.86	\$1,238.04	\$1,137.76

<u>EFFECTIVE DATE</u>	<u>7/01/2018</u>	<u>7/01/2019</u>	<u>7/01/2020</u>	<u>7/01/2021</u>	<u>7/01/2022</u>
RATE PER MGD	\$1,043.35	\$1,043.35	\$1,010.75	\$1,010.75	\$1,010.75
(Delayed Contracts)	\$1,137.76	\$1,137.76	\$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
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
2013	2.67	1.65	2.08	2.16	6.27	10.40	5.85	3.79	3.94	0.79	2.77	3.66	46.03
TOTAL	28.60	31.43	34.38	39.75	48.89	44.90	56.18	48.41	42.30	39.95	38.32	39.96	493.07
AVERAGE	2.86	3.14	3.44	3.98	4.89	4.49	5.62	4.84	4.23	4.00	3.83	4.00	49.31
MAXIMUM	5.27	6.64	4.91	7.35	10.29	10.40	9.47	9.83	9.52	6.99	12.77	8.58	83.68
MINIMUM	1.86	0.86	1.11	1.66	2.38	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
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
2013	3.15	2.59	3.06	2.40	3.48	10.78	5.70	4.87	2.37	0.87	3.83	3.88	46.98
TOTAL	30.45	34.44	38.30	39.81	45.48	43.13	57.30	41.67	40.14	44.20	36.59	42.02	493.53
AVERAGE	3.05	3.44	3.83	3.98	4.55	4.31	5.73	4.17	4.01	4.42	3.66	4.20	49.35
MAXIMUM	4.35	7.05	5.53	7.36	7.57	10.78	9.42	7.90	9.99	7.14	8.88	6.56	66.04
MINIMUM	1.80	1.38	2.29	1.49	1.38	1.82	0.82	1.11	1.05	0.87	0.78	1.56	38.83

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

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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
2013	7.8	8.5	9.2	9.8	10.6	11.0	10.9	10.7	10.6	9.8	8.3	7.5
AVERAGE	8.0	8.3	8.9	9.8	10.4	10.6	10.3	9.8	9.0	7.7	7.2	7.4
MAXIMUM	11.2	11.1	11.1	11.2	11.4	11.1	11.0	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
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
2013	51.6	51.7	51.7	51.8	51.8	52.1	52.7	53.1	53.2	53.0	52.6	52.5
AVERAGE	43.19	43.25	43.43	43.70	44.19	44.74	44.54	44.08	43.39	42.09	41.39	41.06
MAXIMUM	52.6	52.7	53.1	53.3	53.9	53.7	52.7	53.1	53.2	53.0	52.6	52.5
MINIMUM	36.2	36.2	36.4	36.4	36.3	36.4	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
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
2013	2.66	3.65	3.08	2.17	4.24	9.29	4.31	3.55	1.92	1.06	2.61	7.71
TOTAL	34.99	36.24	44.16	38.79	47.41	41.59	51.76	40.73	29.88	54.01	36.42	47.58
AVERAGE	3.50	3.62	4.42	3.88	4.74	4.16	5.18	4.07	2.99	5.40	3.64	4.76
MAXIMUM	5.20	7.63	7.68	6.95	10.34	9.29	8.32	7.02	8.00	8.57	9.30	7.71
MINIMUM	2.15	1.22	1.94	2.15	1.14	1.54	1.49	0.58	1.23	1.06	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
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
2013	4.57	4.61	4.58	4.52	4.59	4.35	4.21	3.88	3.69	3.47	3.42	4.33
2012	4.59	4.51	4.56	4.56	4.56	4.39	4.08	4.85	3.83	3.66	3.92	4.49
AVERAGE	4.48	4.55	4.57	4.58	4.58	4.49	4.28	4.12	3.75	3.61	3.76	4.13
MAXIMUM	4.59	4.64	4.66	4.64	4.62	4.59	4.46	4.85	4.58	4.58	4.55	4.53
MINIMUM	4.17	4.46	4.50	4.52	4.52	4.35	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
2022	\$5,488,656	\$33,566,892	\$116,982,962	\$156,038,510	0.079%	\$63.67
2021	\$5,936,022	\$33,566,892	\$119,872,023	\$159,374,937	0.081%	\$65.03
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
2020 as Compared To 2011**

2020 RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	62,651	1.6%
2	Amazon	49,000	1.2%
3	Wakefern Food Corporation (ShopRite)	37,566	0.9%
4	Wal-Mart Stores, Inc.	21,969	0.5%
5	United Parcel Service (UPS)	20,331	0.5%
6	Johnson & Johnson	14,500	0.4%
7	The Home Depot	13,806	0.3%
8	Bank of America	11,000	0.3%
9	PSEG	10,712	0.3%
10	JP Morgan Chase & Company	9,500	0.2%
		251,035	6.2%

2011 RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	69,901	1.7%
2	Wakefern Food Corporation (ShopRite)	35,952	0.9%
3	Wal-Mart Stores, Inc.	17,888	0.4%
4	Verizon Communications	15,800	0.4%
5	United Parcel Service (UPS)	14,788	0.4%
6	Johnson & Johnson	13,500	0.3%
7	United Continental Holdings (formerly Continental Airlines)	13,440	0.3%
8	Caesars Entertainment (formerly Harrah's Entertainment, LLC)	13,065	0.3%
9	The Great Atlantic and Pacific Tea Company (A&P)	12,373	0.3%
10	Bank of America	12,000	0.3%
		218,707	5.3%

Notes:

Aggregate New Jersey resident employment for Calendar Years 2020 and 2011 totaled 4.0 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. (2012, August). "40th Annual Top 100 employers." *New Jersey Business*, 58(8), 24-33.

New Jersey Department of the Treasury, Office of Management and Budget.

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

Amazon, "Investing in the US – New Jersey".

* Most recent available data.

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

YEAR	NEW JERSEY POPULATION	CIVILIAN LABOR FORCE ¹	RESIDENT EMPLOYMENT ¹	RESIDENT UNEMPLOYMENT ¹	NEW JERSEY UNEMPLOYMENT RATE (%) ²	UNITED STATES UNEMPLOYMENT RATE (%) ²
2011	8,829	4,575	4,151	424	9.3	9.3
2012	8,846	4,582	4,160	422	9.2	8.6
2013	8,858	4,476	4,142	334	7.5	7.2
2014	8,867	4,509	4,220	289	6.4	5.9
2015	8,870	4,493	4,268	225	5.0	5.3
2016	8,874	4,482	4,270	212	4.7	4.9
2017	8,888	4,455	4,255	201	4.5	4.3
2018	8,892	4,469	4,308	161	3.6	4.1
2019	8,891	4,580	4,415	165	3.6	3.7
2020	8,882	4,377	4,040	338	7.7	7.2

Notes:

¹ New Jersey Population data for 2011 and 2014 through 2019 has been revised to reflect seasonally adjusted data.

² Civilian Labor Force, Resident Employment and Unemployment data for 2011 through 2019 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(S) ²	PER CAPITA INCOME (\$Thousands) ³
2011	8,829	983,963	1,278,578	474,016	53.7
2012	8,846	988,356	1,235,474	491,662	55.6
2013	8,858	990,697	1,183,032	496,465	56.0
2014	8,867	971,600	1,158,322	520,079	58.7
2015	8,870	983,032	1,164,399	542,299	61.1
2016	8,874	981,731	1,183,048	557,462	62.8
2017	8,888	1,000,760	1,207,591	577,408	65.0
2018	8,892	1,017,307	1,238,936	602,870	67.8
2019	8,891	1,063,181	1,281,169	625,938	70.4
2020	8,882	1,086,003	1,319,216	668,354	75.2

Notes:

¹ New Jersey Population data for 2011, and 2014 through 2019 has been revised.

² Personal Income data for 2015 through 2019 has been revised.

³ Per Capita Income equals Personal Income divided by New Jersey Population. Data for 2016, 2018, and 2019 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, 2022, and the related notes to financial statements, which comprise the Authority's basic financial statements, and have issued our report thereon dated February 10, 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.

Mercadieu, P.C.

Certified Public Accountants

February 10, 2023

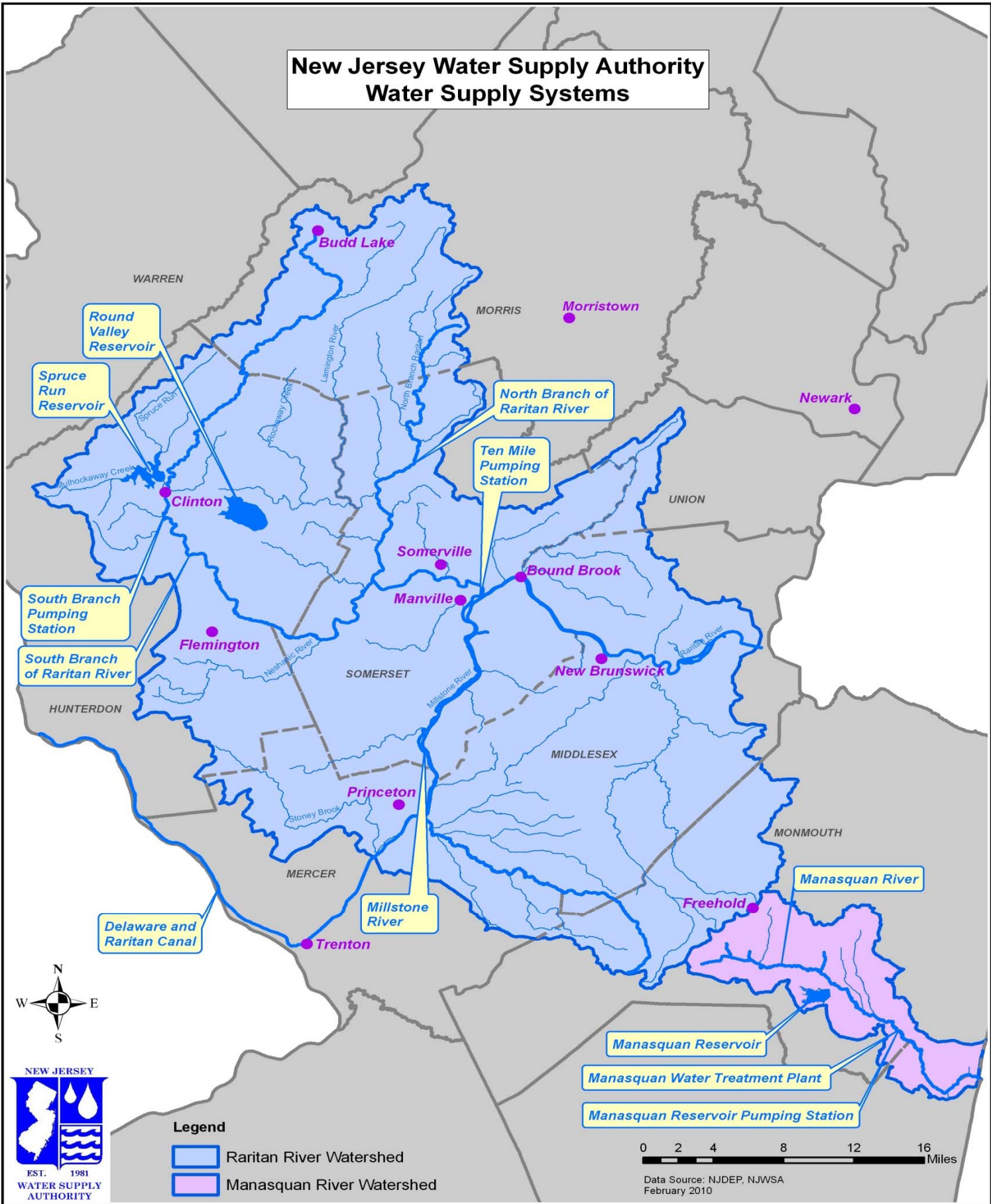
**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)**

SCHEDULE OF CURRENT YEAR FINDINGS AND RECOMMENDATIONS

None reported.

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New Jersey Water Supply Authority Water Supply Systems



New Jersey Water Supply Authority
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