

NEW JERSEY WATER SUPPLY AUTHORITY

A COMPONENT UNIT
OF THE STATE OF NEW JERSEY



2021 ANNUAL REPORT

AND THE

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED

JUNE 30, 2021 AND 2020



The Government Finance Officers Association of
the United States and Canada

presents this

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to

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New Jersey Water Supply Authority



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Executive Director

Christopher P. Morill

Date: 8/12/2021

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FOR THE FISCAL YEARS ENDED
JUNE 30, 2021 AND 2020

Prepared by:
Finance and Accounting Staff

Marc Brooks
Executive Director

2021 Annual Report

Governor
Philip D. Murphy



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Assistant Secretary
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Chair, Insurance Committee

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Marc Brooks, P.E.
Executive Director

Kathrine Hunt, Esq.
Deputy Attorney General

2022 Monthly Meetings

The 2022 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 3, 2022

February 7, 2022

March 7, 2022

April 4, 2022

May 2, 2022

June 6, 2022

July 11, 2022

August 1, 2022

September 12, 2022

October 3, 2022

November 7, 2022

December 5, 2022

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 Bill Gumulak, Aerial view of Spruce Run 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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Introductory Section

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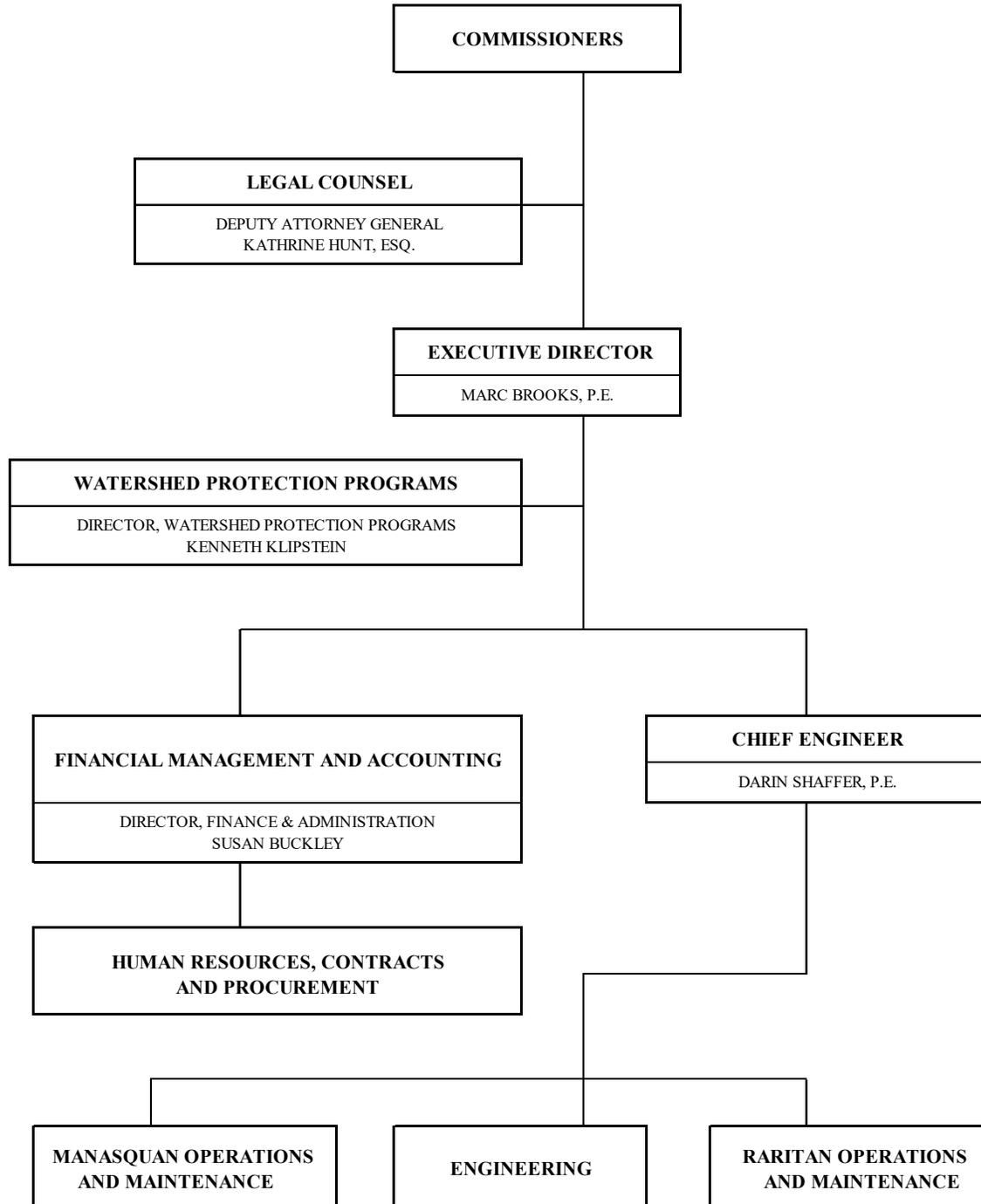
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New Jersey Water Supply Authority

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Letter to Governor and Legislature

NEW JERSEY WATER SUPPLY AUTHORITY



Post Office Box 5196 • Clinton, NJ 08809 • (908) 638-6121
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May 2, 2022

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

I am pleased to submit the 40th 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 FY2021.

Staff continued 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 have returned to a more normal level, 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.

In recent years, the Authority has been furthering its studies of the Round Valley and Spruce Run embankments. As part of these efforts, the Authority convened Technical Review Boards (TRBs) in 2014 and 2015 and again in 2017 and 2018 to discuss the conditions of the Spruce Run and Round Valley embankments. The Round Valley and Spruce Run embankments were both constructed in the early 1960s. The Authority is actively managing significant capital projects to implement the recommendations of the TRB.

The TRB recommended a major rehabilitation project of the Round Valley embankments. Project components that included the grouting of the abutments at the Round Valley North and South Dams and dredging of the inlet to the Round Valley South Dam Tower are now complete. The major embankment improvements to retrofit the downstream slopes of all three Round Valley embankments with improved internal drains that also act as filters are ongoing. Work at the Round Valley Dike is now substantially complete, and work is progressing at the North and South Dams.

The TRB 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 reservoir is impounded by the Spruce Run Dam and Dikes A and B, and provides stream flow regulation as well as recreation. Discharge from the reservoir is either from the reservoir 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. Many components of the outlet works date to the original construction in the early 1960’s. Some of the outlet works equipment and structures have exceeded their anticipated design life and must be rehabilitated. Most of the outlet works projects at Spruce Run Reservoir are currently in the schematic design stages. One project, however, was completed in the winter

2021-2022. The Spruce Run spillway channel was cleared of trees and vegetation which allows improved visibility which benefits dam safety inspections. The design of foundation improvements is anticipated to begin in 2022, ahead of the recommended schedule proposed by the TRB.

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 substantially complete. This work took place between Lincoln Highway (Route 27) and Amwell Road in Franklin Township, Somerset County.

In Manasquan, the triennial 2021 Formal Dam Inspection was performed by an outside consultant. Replacement of several of the originally installed piezometers (monitoring wells in the embankment) is planned for 2022. A pump and two traveling water screens were rehabilitated at the Manasquan Water Intake Pump Station. At the Manasquan Water Treatment Plant, 2021 upgrades included rehabilitation of the drainage systems for two of the three residuals drying lagoons and replacement of an underground fuel tank with an above ground version.

In 2021, cyanobacteria blooms, also known as harmful algal blooms (HABs), reoccurred in both the Spruce Run and Manasquan Reservoirs. HABs are a cause of growing concern across the state and nation. Some HABs can produce toxins that are harmful to humans and animals. These toxins can pose treatment challenges to drinking water supplies. Given these risks, the Authority is taking proactive steps to monitor and manage HABs in its source water supplies. The Authority works in cooperation with NJDEP and other organizations to utilize a combination of screening tools and data points to identify the potential location and estimated cyanobacteria cell density at Manasquan, Spruce Run, and Round Valley Reservoirs. NJDEP also collects data at the Manasquan Reservoir tower that provides continuous, real-time water quality data. This year, to facilitate plan implementation, the Watershed Office added in-house cyanotoxin analysis capabilities by acquiring an automated enzyme-linked immunoassay analyzer (or ELISA). The ELISA provides us with the capacity to quantitatively measure the presence (or absence) of cyanotoxins in a water sample.

Reducing nutrient pollution, such as excess phosphorus, in drinking water sources is important for the long-term management of the risks HABs pose to public health and water quality. Within the entire Raritan Basin, our watershed management programs focus on prioritizing projects designed to cost-effectively maintain the quality and quantity of our source water supplies.

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 \$119.2 million as of June 30, 2021 and has increased over June 30, 2020 and June 30, 2019. In fiscal year 2021, total assets and deferred outflows were \$355.9 million and total liabilities and deferred inflows were \$236.7 million.

The Authority received its 29th consecutive Certificate of Achievement in Financial Reporting Award for its FY2020 annual report and will submit its FY2021 annual report for consideration for this same award.

Sincerely,



Marc Brooks
Executive Director



Sunrise at the Round Valley Reservoir South Dam

Operations - Raritan System

Operation and maintenance activities at all Authority facilities have been typical. The Round Valley pumping program did not run in 2020 or 2021 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 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



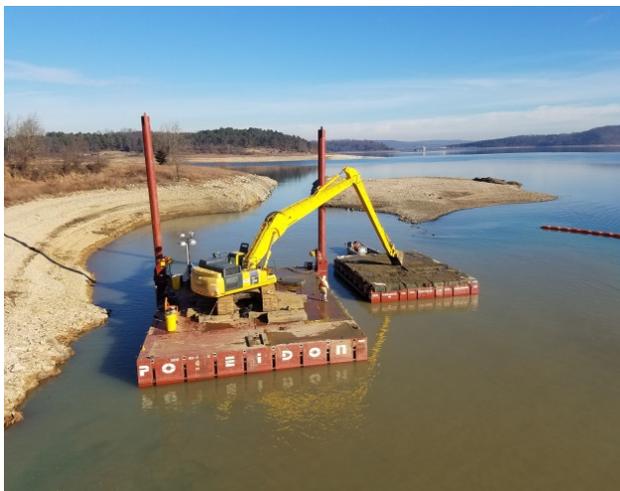
Major earthwork has been completed at the Round Valley Reservoir Dike Embankment. Restoration work including placement of topsoil and hydroseeding is being conducted.

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.



Excavator removes sediment from the channel at the Round Valley Reservoir South Dam Tower

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 2022. The security improvements will be implemented after the rehabilitation project is complete.

The Authority’s consultant created and now 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/>.



Drilling work occurs on the left abutment of the South Dam during the Round Valley Reservoir North and South Dam Abutment Grouting Project.

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.
- Improve the spillway discharge channel for conveyance, inspection and seepage monitoring.
- Replace the Howell-Bunger valves, 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 for 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

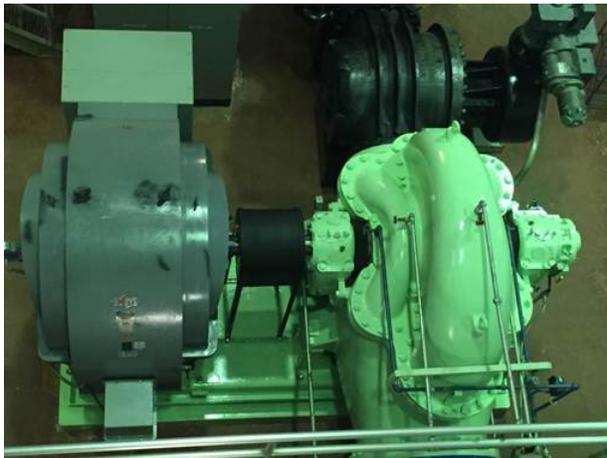
In addition to the previous items, at the recommendation of the TRB, the consultant will critically review the operation of the outlet works and consider potential modifications to improve the unconventional procedures required to release water for emergency drawdown. Updated hydrologic and hydraulic modeling studies for Spruce Run Reservoir and the flow measuring weir are included in this contract to verify the spillway capacity and to aid in optimization of rapid drawdown.

One aspect of this project is close to moving to the construction phase. The consulting engineer has prepared design documents and secured permits to clear all trees and herbaceous vegetation from the 14.2-acre spillway discharge channel. Spillway flows are conveyed to a downstream stilling basin via a 1,900-foot long channel. This discharge channel was originally constructed by removing overburden soil and blasting through bedrock. In its current state, the channel prism is covered with thick vegetation including trees and brush. This work will facilitate the monitoring of springs as recommended by the TRB and it will improve the channel's hydraulic capacity. A construction contract for the performance of the work was bid in August 2021. It is anticipated that construction will begin in fall 2021 and conclude by spring 2022

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.

Construction is anticipated to occur in multiple phases/contracts from 2021 through the spring of 2023. Construction work at the Pumping Station requires the pumps to be temporarily out of service. As such, the work will be scheduled to coincide with intervals when pumping is not anticipated.

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.



Geobags in drying (staging) area during dredging operations. Silt-laden water is directed to the geobags that filter the sediment. Clean water is discharged back to the Canal.

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 is scheduled to be completed in fall 2021. Final completion is expected in spring 2022 when final road repairs are completed. The dewatering site, which was purchased with Capital project funds for this project, will be 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. The historic hand-laid stone armoring along the embankment's river-side slope will be restored in the area down-canal from Bridge Street in Stockton. In addition, all areas of the Canal-side slope that were repaired on an emergency basis in 2011 will be restored, and the embankment crest will be regraded to eliminate low areas which concentrate flows and increase erosion during storms.

The consultants are currently working on the greatest challenge of this project, which is designing improvements to increase the stability of the very steep slopes to reduce the potential for future breaches. Some traditional engineering methods to improve stability are not suitable due to historic concerns and/or the numerous site constraints that include limited access, narrow crest width and watercourses on each side of the embankment.

The construction start date will be determined after a demonstrated 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 hand 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 is in the process of preparing an amendment to the schematic design report to remove all the trees from the embankment. After the approval of the modified schematic design report by the DRCC and SHPO, final design will start in 2022. Construction is anticipated to begin in 2023.

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

Authority staff retained an engineering consultant who designed repairs to the spillway. A cultural resources consultant was also procured to work on the project.

As of fall 2021, the project is in the construction phase with a contractor engaged to perform the work. Due to coordination with NJDOT regarding its own ongoing work on the Landing Lane Bridge, this project may not begin major work until 2022.

D & R Canal - Embankment Repairs Downstream of Island Farm Weir

A narrow embankment separates the Canal from the Raritan River just downstream of the Island Farm Weir on the Raritan. The river side slope just downstream of the weir experienced significant erosion and was in need of rehabilitation. Continued erosion and deterioration could lead to a breach of the Canal.

The engineering and cultural resources consultants completed design and permitting, and the construction project was bid in the summer of 2020. Construction began in fall of 2020, and finished in the spring of 2021.



Stabilized embankment between Raritan River (Right in photo) and D&R Canal with gabions and rip-rap downstream of the Island Farm Weir (weir in background)

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 the 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 project was intended to be split into two phases. Phase I was to include cleaning, dewatering, and inspection of the culvert; however, the bids were cost prohibitive, so alternative investigations and inspections were completed by the engineering consultant in 2020. Phase II will consist of the engineered design rehabilitation. The project is in schematic design phase and is anticipated to go into permitting in late 2021. It is anticipated that construction of the rehabilitation project will take place in 2022-2023.



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

Retrofitting of Several Detention Basins in Franklin Township

Since 1997, several of the Canal water purveyors have reported increased concentrations of Total Suspended Solids (TSS) in the raw water during and immediately after precipitation events. As a result, the Authority has been working since 2001 on a nonpoint source (NPS) pollution prevention program to reduce TSS and phosphorous in tributaries and infalls within the final eleven miles of the Canal. The NPS program has been funded by the New Jersey Department of Environmental Protection under Section 319(h) NPS Pollution Grant Program and the Corporate Business Tax Watershed Fund. In 2007, an

engineering consultant was retained to implement Best Management Practices (BMPs) for stormwater entering the Canal in Franklin Township and South Bound Brook Borough, Somerset County.



Laird Terrace Stormwater Detention Basin after modifications to improve water quality

In 2013, the Authority's Watershed staff identified several detention basins in Franklin Township as potential candidates for BMP improvements. The engineering consultant designed projects to naturalize the basins and to increase the detention time and infiltration of stormwater. The four subject basins were located at Gauguin Way, Laird Terrace, Renoir Way and the Municipal Complex. Construction of the designed improvements was completed in the summer of 2020.

Subsequently, the consultant completed design documents and permitting for similar improvements to an additional detention basin located at Dellwood Lane, also in Franklin Township. The construction of this project was completed in June 2021.



Dellwood Stormwater Basin naturalized area

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, a fuel dispensing island with an operational fuel management unit, pumps, and an attendant's booth. In addition, the Authority also maintains a 5,000-gallon heating oil tank and a 550-gallon tank for waste oil. Both of these tanks are located in the 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 publically 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, the fuel facility's diesel and gasoline sump pits failed the state-regulated hydrostatic testing. Upon recommendation of the Licensed Operator and the contractor, it was determined that the sumps should be replaced and new testing boots installed to ensure reliable hydrostatic testing.

Additional work to replace the tank sumps, fuel piping, spill and overflow protection, and access man-ways resulted in 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 2021.

Operations - Manasquan System

Raw water contracts were maintained at a total of 19.443 MGD in 2021. No water in excess of the contract volume was purchased during the year. Wetter weather in the summer of 2021 allowed the reservoir to remain at above normal volumes throughout the summer and well into the fall. Reservoir water quality was normal during the first six months of the year, and then improved markedly in the late summer and fall despite the remnants of Hurricane IDA.

Cyanobacteria Algae was dominant in the summer, however, count levels were never near the range of what is considered a harmful algal bloom until mid-October. A harmful algae bloom was confirmed in the Manasquan Reservoir in mid-October. The Authority followed our NJDEP-approved plan with respect to harmful algae blooms and treatment.

Rainfall was normal for most months of the year, so selective pumping to the

reservoir was employed to maintain the best reservoir water quality achievable without artificial aeration.

Pump Replacement

One of the five Manasquan River Intake Pumps was reworked in 2021. This pump was originally placed in service 30 years ago, and was found to be deteriorating at its flange connections. The balance of the pump, including its lineshafts and piping, was refurbished. The bowl assembly was also replaced with one of a more appropriate size. Preventative Asset Repair prevented more costly damage to this pump had it been allowed to run until failure.



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, the sediment, leaves, and other plant material can inhibit the traveling water screens' operation and cause suction lift problems for the intake pumps. Due to high rainfall in 2019 and 2020, sediment accumulated to the extent that removal was required. This work was completed in July 2021 by pumping the sediment into geobags.



Geobag used to dewater sediment at intake pump station

Traveling Water Screen Repairs

Replacement of chains, sprockets, and connection pieces was necessary for two of the eight traveling water screens located at the river intake building. This repair corrected misalignments caused by the worn parts and prevented further damage. This work was completed in June 2021.



Disassembled traveling water screens

Formal Dam Inspection

In accordance with New Jersey Dam Safety regulations, a formal inspection of the Manasquan Dam was conducted in September 2021. No major issues were detected. Staff continues to implement the consultant recommendations from the 2018 formal dam inspection. This includes the ongoing repair and replacement of embankment instrumentation and the replacement of the automated data acquisition system. Design is in progress to locate and drill new piezometer wells to install eight new piezometers. 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 with an integral data logger that supplies reporting, trends, and warning alarms.

Operations - Manasquan Water Treatment Plant (“MWTP”)

The treatment plant provided water that met all NJDEP standards throughout 2021. Above average summer rainfall was again managed through the use of the distribution tank separation wall. This allows for more practical treatment of the discolored Manasquan River water that results from rainy summers such as that of 2021.

Based on the Asset Management Plan guidance, improvements and upgrades to MWTP equipment were completed in 2021 including:

- Rehabilitation of the drainage systems for two of the three residuals drying lagoons.
- Replacement of an Underground Fuel Tank.
- Submersible pump refurbishments.
- Replacement of online monitoring instrumentation.

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 plate settler pretreatment system process which will increase the plant resiliency and capacity by reducing the time that the existing processes need to be offline during the flushing of accumulated solids. It will also significantly reduce wastewater generation, and reduce dependency on the use of reservoir storage water during storm events. 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 in the Authority's budget and under consideration. Authority staff is seeking concurrence from 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 2021, 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

The Watershed Protection Office and New Jersey American Water Company ("NJAW") partnered to develop a watershed control plan for cryptosporidium, a persistent protozoan parasite. A second draft of the watershed control plan was submitted to NJDEP in response to their comments. The Authority is partnering with NJAW on the various implementation strategies outlined in the plan. Projects such as agricultural practice implementation and waterfowl management will be important tools.

In 2020, the Authority was awarded a grant from the New Jersey Department of Environmental Protection ("NJDEP") to develop a watershed restoration and protection plan for the Spruce Run watershed, its tributaries and Spruce Run Reservoir. In 2021, the Authority worked with NJDEP to include the Mulhockaway Creek watershed into the grant project to more fully characterize pollutant loads flowing into the Spruce Run Reservoir. The Authority has engaged the Water Resources Program at Rutgers University as a partner in plan development. The completed plan will conform to the United States Environmental Protection Agency's guidelines for a comprehensive watershed restoration plan. The Authority also received financial support from the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) to develop portions of the plan with the goal of meeting the eligibility standard to quality for future water quality practice implementation funding through the National Water Quality Initiative.

Watershed Quality Conservation Practice Implementation

In 2021, the Authority continued its partnership with the NJDEP and the USDA-NRCS to implement a variety of Agricultural Cost-Share Programs. Funds from NJDEP and the Authority's source water protection fund matched funds from USDA-NRCS to provide additional cost-share to agricultural producers. During 2021, the Authority leveraged funding from three USDA-NRCS Regional Conservation Partnership Program ("RCPP") agreements and one NJDEP grant agreement to provide additional cost-share to 22 farmers:

RCPP – Raritan Basin Partners for Source Water Protection: The Authority's first Regional Conservation Partnership Program project with USDA-NRCS was approved in 2015 and expired in 2021. Staff worked with eight producers to implement a variety of conservation practices. Staff also estimated the pollutant load reductions achieved through this program.

RCPP – Black River Greenway: Staff worked with four producers in this project area.

RCPP – Protecting Source Water in the Raritan System: In 2021, the Authority was awarded a new RCPP project by USDA-NRCS. This project will focus on the cryptosporidium area of influence, as well as significant source water areas such as the Spruce Run, Mulhockaway Creek, Locketong Creek and Wickecheoke Creek.

NJDEP-Agricultural Mini-Grants: Staff worked with eight farmers through this program.

Stormwater Management and Monitoring

In 2021, the Authority continued its work to reduce pollutant impacts to the Delaware and Raritan Canal through improved stormwater management. Using a re-scoped watershed restoration grant from NJDEP, in 2020 the Authority completed retrofits of

four stormwater basins in Franklin Township and our 2021 post implementation monitoring demonstrated a significant water quality improvement. A fifth basin, at Dellwood Lane in Franklin Township, was retrofitted in 2021 using stormwater mitigation funding from the Delaware & Raritan Canal Commission. Post implementation monitoring will begin next year.

In 2019, the Authority received stormwater mitigation funds through the Delaware and Raritan Canal Commission to undertake feasibility studies to improve sediment removal at the Cedar Grove Brook Lower Pond Weir. The Cedar Grove Brook is a significant tributary to the Delaware & Raritan Canal and discharges to the Canal approximately two miles upstream of the water supply intakes for Middlesex Water Company, the Township of East Brunswick and the City of New Brunswick. A 2005 study established that the Cedar Grove Brook is a significant contributor of total suspended solids and turbidity pollutant loads to the Canal during and immediately after precipitation events. Modification of the existing weir configuration may provide significant sediment transport reductions into the Canal. The Authority retained a consultant to conduct a feasibility study regarding the modification of the existing weir. The consultant also provided design alternatives that will help to reduce the amount of sediment being transported from the Cedar Grove Brook into the D&R Canal. Next steps are under Authority review.

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. The 2021 participation stands at: 19 schools (13 certified), 20 businesses (18 certified), and 9 golf courses (7 certified).

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 fifth year of a low-dosage continuous herbicide treatment in July 2021. 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. The D&R Canal Aquatic Plant Management Plan will continue in 2022.

The presence of invasives, 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 a draft plan for review. The Authority has reviewed the management

plan and is working with the consultant to evaluate long-term strategies for cyanobacteria and aquatic plant management. After pausing in 2020, the Authority resumed the pilot herbicide application at Manasquan Reservoir for hydrilla control in 2021, and the hydrilla was moderately affected in treated areas after experiencing significant regrowth without treatment in 2020.



Hydrilla tuber sampling along the D&R Canal

In a partnership between the Authority and the Monmouth County Park System, a Boat Stewards Program was conducted for the third year at the Manasquan Reservoir Boat Launch on weekends and holidays throughout the summer of 2021 designed to reduce the spread of aquatic invasive plant species. The program was modeled after successful Boat Steward Programs in New York and other northeastern states. To stop the spread of aquatic invasive plants like hydrilla, stewards inspected 832 boats for “hitchhiking” invasive species fragments, intercepting 36 boats from entering the reservoir with plant fragments and 128 vessels leaving the Manasquan Reservoir with fragments.

This year also marked the first year of a Boat Steward Program at Spruce Run Reservoir in a partnership with the New Jersey State Park Service. The steward inspected 887 boats for “hitchhiking” invasive species fragments, intercepting 27 boats at Spruce Run Reservoir with fragments, 21 of which were invasive

species, including Eurasian Watermilfoil, curly leaf pondweed, and mudmat. Stewards at both waterbodies also educated patrons on aquatic invasive species and surveyed boat owners on boat cleaning habits, typical boat usage, and level of familiarity with invasive species.



Boat Steward Inspection at Spruce Run Reservoir (photo by Deidre Supple, NJ State Park Service)

Cyanobacteria Monitoring and Response (Harmful Algal Blooms)

In 2021 Cyanobacterial (harmful algal) blooms, also called HABs, affected both Spruce Run Reservoir and Manasquan Reservoir, 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, 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 New Jersey Department of Environmental Protection (“NJDEP”), United States Geological Survey, New Jersey Water Science Center (“USGS”), and New Jersey Division of Parks and Forestry. The Watershed Office utilizes a combination

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

NJDEP also collects data at the Manasquan Reservoir tower that provides continuous, real-time water quality data. The Authority, along with partners at USGS, NJDEP, and Montclair State University, were awarded a federally-competitive Cooperative Matching Funds Grant to study the downstream fate and transport of cyanobacteria and cyanotoxins in the Raritan Basin. This project combines 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).



Passive cyanotoxin (SPATT) sampler, July 2021

A bloom in Spruce Run Reservoir was first confirmed on June 1, 2019 and continued throughout the winters and into 2021. 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.



Mulhockaway Creek Biochar Installation, June 2021

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. This year, to facilitate plan implementation, the Watershed Office added in-house cyanotoxin analysis capabilities by acquiring an automated enzyme-linked immunoassay analyzer (or ELISA).



Cyanobacteria bloom at Spruce Run Reservoir, September 2021 (Photo by Deidre Supple, NJ State Park Service)

AmeriCorp New Jersey Watershed Ambassador Program

AmeriCorps is a national service initiative with programs across the country. New Jersey's AmeriCorp Program, the NJ Watershed Ambassador Program is in its twenty-second year and the Authority has served as a host agency partner for 19 years. 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.

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 NJDEP 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 2021, 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 2021, 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 2021, the Authority made certain that personnel were promoted or hired from outside the Authority at salaries which were lower than the departing incumbent. During FY2021, the Authority filled multiple vacancies that were primarily a result of retirements and promotions, and realized approximately \$200,000 in turnover savings through exercising this diligence. Overall, FY2021 expenses were approximately 15% under budget due largely to savings in salary and fringe, professional services, printing and office, and insurance expense categories. Rates were further stabilized in FY2021 by the use of unanticipated revenue of \$1,075,140 resulting from prior year surpluses, overdrafts and excess debt service coverage.

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Letter of Transmittal

NEW JERSEY WATER SUPPLY AUTHORITY



Post Office Box 5196 • Clinton, NJ 08809 • (908) 638-6121
www.njwsa.org Fax • (908) 638-5241

May 2, 2022

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, 2021 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, 2021 were \$350,775,580, an increase of 16.4 percent over the previous year's total of \$301,359,326. Net capital assets increased by \$28,724,372 or 16.1 percent, from \$179,008,561 to \$207,732,933.

The total of cash, cash equivalents and investments for the Authority increased \$9,364,006, or 10.5 percent, from \$88,806,901 to \$98,170,907. The increase is mainly the result of cash raised related to the debt service component of rates in the Raritan system. Current liabilities decreased \$3,815,247, or 19.4 percent, from \$19,623,499 to \$15,808,252 due primarily to a decrease in accounts payable. Total non-current liabilities increased from \$152,932,482 to \$203,683,067 or 33.2 percent. The increase is primarily due to additional interim financing related to the Raritan Basin System Round Valley Refurbishment and Resource Preservation project as well as an increase in the Authority's net OPEB liability. Total Operating Revenue decreased by \$160,776 or 0.5 percent, from \$32,870,533 to \$32,709,757. Total Operating Expenses decreased \$2,981,536, or 13.8 percent, from \$21,685,312 to 18,703,776 due to a decrease in fringe benefits related to GASB 75 Other Post-Employment Benefits (OPEB)

expenses reclassified as deferred outflow of resources. Non-operating Revenue decreased \$1,208,411 or 72.4 percent, from \$1,668,682 to \$460,271, reflecting decreases in investment and grant income. Non-operating expenses increased \$454,698, or 29.3 percent, from \$1,552,707 to \$2,007,405 primarily due to an increase in cost recovery related 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 2021 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. It is the Authority's intention to submit the FY2021 Annual Financial Comprehensive Report to the GFOA during the calendar year of 2022.

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 2021, 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 2021, 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, 2021**

INDEPENDENT AUDITORS' REPORT

To the Commissioners of
New Jersey Water Supply Authority

Report on the Financial Statements

We have audited the accompanying 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 years ended June 30, 2021 and 2020, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility 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; this includes 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.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of the Authority as of June 30, 2021 and 2020, 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.

Other Matters

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, 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 auditing standards generally accepted in the United States of America, 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 audit 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.

Other Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The other supplementary information, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The other supplementary 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. Such 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 auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 18, 2022, 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.

Mercedien, P.C.
Certified Public Accountants

April 18, 2022

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MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2021

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, 2021 and June 30, 2020. Please read it in conjunction with the Authority's basic financial statements and accompanying notes.

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, 2021

FINANCIAL HIGHLIGHTS – FISCAL YEAR 2020

- Operating revenue for fiscal year 2020 was \$32.9 million, a .5% increase over fiscal year 2019, which was the result of a .5% increase in Raritan sales and a .7% increase in Manasquan sales. In the Raritan Basin System, rates remained at \$336.00 per million gallons, and the sales base decreased slightly to 182.339 million gallons per day (“mgd”). In the Manasquan Reservoir System, rates remained at \$1,043.35 per million gallons. The fiscal year 2020 sales base remained at 19.443 mgd. Income from operations increased 12.6% for the Raritan System and increased 7.7% for the Manasquan System.
- Total operating expenses for fiscal year 2020 decreased to \$21.7 million, which represents a 5.0% decrease from fiscal year 2019. The decrease was primarily due to reduced health care expenses for active and retired employees that resulted from union contract negotiations and a reduction in OPEB related expenses resulting from changes in the plan estimates and assumptions as well as the prior period restatement.
- Other changes for fiscal year 2020 include the following: non-operating revenue increased 30.2% to \$1.7 million, primarily because of an increase in grant related income.
- Non-operating expenses for fiscal year 2020 increased 17.8% to \$1.6 million. The interest component of debt service decreased significantly with the continued pay-down of system debt. There was an increase in the reduction in costs to be recovered from future revenue, (deferred inflows of resources) and the change in the rate model is outlined in Note B to the basic financial statements.
- Unrestricted cash and cash equivalents for fiscal year 2020 were \$57.5 million, an increase of 22.7% compared to fiscal year 2019.
- Total liabilities for fiscal year 2020 were \$172.6 million. This is a decrease of 3.3% from fiscal year 2019 and includes a reduction in the Postemployment Benefits Other Than Pensions (OPEB) liability and pension liability.
- Deferred outflows of resources decreased 16.9% mainly due to reductions in the pension category. Deferred inflows of resources increased 18.2% mainly due to an increase in the OPEB category.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2021

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 \$122.0 million as of June 30, 2021. In fiscal year 2021, total assets and deferred outflows 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. Total net position as of June 30, 2020 was approximately \$109.6 million. Total assets and deferred outflows at June 30, 2020 increased 3.1% to \$307.1 million, primarily due to investments in capital assets and an increase in restricted cash related to the Raritan System debt service rate component. Total liabilities decreased 3.3% to \$172.6 million. Changes in assets, liabilities and net position at June 30, 2021, 2020 and 2019 are summarized in the following table:



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2021

FINANCIAL ANALYSIS OF THE AUTHORITY (CONTINUED)

	2021	2020	2019	Percentage Change 2021-2020	Percentage Change 2020-2019
Assets and deferred outflows of resources					
Current assets	\$ 142,794,658	\$ 120,022,283	\$ 126,825,401	18.97 %	(5.36) %
Capital assets, net	207,732,933	179,008,561	154,561,900	16.05	15.82
Other non-current assets	247,989	2,328,482	9,448,283	(89.35)	(75.36)
Total assets	350,775,580	301,359,326	290,835,584	16.40	3.62
Deferred outflows of resources	14,418,801	5,787,217	6,967,231	149.15	(16.94)
Total assets and deferred outflows of resources	\$ 365,194,381	\$ 307,146,543	\$ 297,802,815	18.90	3.14
Liabilities, deferred inflows of resources, and net position					
Current liabilities	\$ 15,808,252	\$ 19,623,499	\$ 15,069,049	(19.44)	30.22
Non-current liabilities	47,179,379	40,369,889	46,206,695	16.87	(12.63)
Non-current portion of bonds, notes and loans payable	156,503,688	112,562,593	117,087,166	39.04	(3.86)
Total liabilities	219,491,319	172,555,981	178,362,910	27.20	(3.26)
Deferred inflows of resources	23,689,749	25,036,096	21,186,635	(5.38)	18.17
Net investment in capital assets	73,660,681	87,368,795	58,476,549	(15.69)	49.41
Restricted for cash, investments, and unearned revenue	27,135,716	24,965,590	19,997,698	8.69	24.84
Unrestricted	21,216,916	(2,779,919)	19,779,023	863.22	(114.05)
Total net position	122,013,313	109,554,466	98,253,270	11.37	11.50
Total liabilities, deferred inflows of resources, and net position	\$ 365,194,381	\$ 307,146,543	\$ 297,802,815	18.90	3.14



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2021

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 2020 and 2019 Authority meetings, respectively, based on anticipated operating expenses:

	Rate Effective <u>7/01/2020</u>	Rate Effective <u>7/01/2019</u>	Percent <u>Change</u>
Raritan Basin System	\$ 336.00/mg	\$ 336.00/mg	- %
Manasquan Water Supply System			
Initial users	\$1,010.75/mg	\$1,043.35/mg	(3.1) %
Delayed water users	\$1,124.67/mg	\$1,137.76/mg	(1.2) %

The Authority's total operating revenue for fiscal year 2021 was \$32.7 million, a decrease of .5% from fiscal year 2020, due to a .4% increase in Raritan water sales and a 2.9% decrease in Manasquan water sales. The Authority's total operating expenses for fiscal year 2021 were \$18.7 million, a decrease of 13.8% from fiscal year 2020, mainly because of a decrease in fringe benefit expense. The Authority's total operating revenue for fiscal year 2020 was \$32.9 million, an increase of .5% from fiscal year 2019. The Authority's total operating expenses for fiscal year 2020 were \$21.7 million, a decrease of 5.0% from fiscal year 2019. The following table summarizes the changes in revenue, expenses and net position between fiscal years 2021, 2020 and 2019:



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2021

OPERATING ACTIVITIES (CONTINUED)

	<u>2021</u>	<u>2020</u>	<u>2019</u>	Percentage Change 2021-2020	Percentage Change 2020-2019
Operating revenues:					
Water sales	\$ 30,100,645	\$ 30,230,221	\$ 30,060,964	(0.43) %	0.56 %
Reimbursement of operating expenses	2,609,112	2,640,312	2,642,400	(1.18)	(0.08)
Total operating revenues	<u>32,709,757</u>	<u>32,870,533</u>	<u>32,703,364</u>	(0.49)	0.51
Non-operating revenues:					
State of New Jersey - Grant Programs	218,765	599,099	46,130	(63.48)	1,198.72
Investment and interest income	169,069	1,000,041	1,111,940	(83.09)	(10.06)
Rental income	65,489	57,659	57,179	13.58	0.84
Other income	6,948	11,883	66,083	(41.53)	(82.02)
Total non-operating revenues	<u>460,271</u>	<u>1,668,682</u>	<u>1,281,332</u>	(72.42)	30.23
Total revenues	<u>33,170,028</u>	<u>34,539,215</u>	<u>33,984,696</u>	(3.96)	1.63
Operating expenses:					
Payroll	7,884,810	8,003,155	8,014,260	(1.48)	(0.14)
Operations and maintenance	5,475,625	5,706,936	5,224,452	(4.05)	9.24
Fringe benefits	647,530	3,244,536	4,865,124	(80.04)	(33.31)
Depreciation	4,695,811	4,730,685	4,733,018	(0.74)	(0.05)
Total operating expenses	<u>18,703,776</u>	<u>21,685,312</u>	<u>22,836,854</u>	(13.75)	(5.04)
Non-operating expenses:					
Interest component of debt service to the State of New Jersey	372,069	158,308	320,110	135.03	(50.55)
Recovery of deferred inflows of resources	1,635,336	1,394,399	997,719	17.28	39.76
Total non-operating expenses	<u>2,007,405</u>	<u>1,552,707</u>	<u>1,317,829</u>	29.28	17.82
Total Expenses	20,711,181	23,238,019	24,154,683	(10.87)	(3.79)
Changes in net position	12,458,847	11,301,196	9,830,013	10.24	14.97
Net position, beginning of year	109,554,466	98,253,270	88,423,257	11.50	11.12
Net position, end of year	<u>\$ 122,013,313</u>	<u>\$ 109,554,466</u>	<u>\$ 98,253,270</u>	11.37	11.50

CAPITAL ASSETS AND DEBT ADMINISTRATION

At June 30, 2021, the Authority had a total of \$207,732,933 invested in the Systems that it operates: \$158,994,122 invested in the Raritan Basin System, and \$48,738,811 invested in the Manasquan System. This total amount represents a 16.1% increase from last year. At June 30, 2020, the Authority had a total of \$179,008,561 invested in the Systems that it operates: \$128,620,734 invested in the Raritan Basin System, and \$50,387,827 invested in the Manasquan System. This total amount represents a 15.8% increase from the prior year.



MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2021

CAPITAL ASSETS AND DEBT ADMINISTRATION (CONTINUED)

The following table summarizes the changes in capital assets, net of depreciation, between fiscal years 2021, 2020 and 2019:

	2021	2020	2019	Percentage Change 2021-2020	Percentage Change 2020-2019
Land and land rights	\$ 26,444,952	\$ 26,444,952	\$ 26,444,952	- %	- %
Dams	44,248,251	45,013,036	45,811,031	(1.70)	(1.74)
Building, structures and improvements	45,995,010	47,718,259	50,298,692	(3.61)	(5.13)
Machinery and equipment	1,503,309	1,374,790	1,706,230	9.35	(19.43)
Construction work in progress	89,541,411	58,457,524	30,300,995	53.17	92.92
Total capital assets	\$ 207,732,933	\$179,008,561	\$154,561,900	16.05	15.82

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 2021, 2020 and 2019:

	2021	2020	2019	Percentage Change 2021-2020	Percentage Change 2020-2019
Bonds payable	\$ 5,936,022	\$ 9,355,100	\$ 12,619,179	(36.55) %	(25.87) %
Notes payable	33,566,892	33,566,892	33,566,892	-	-
Loans payable	119,872,023	73,907,816	74,976,680	62.19	(1.43)
Total	\$ 159,374,937	\$116,829,808	\$121,162,751	36.42	(3.58)

At year-end, the Authority had \$159,374,937 in bonds, notes and loans principal outstanding, compared to \$116,829,808 at June 30, 2020. This change represents an increase of 36.4%. The change in bonds, notes and loans principal outstanding at June 30, 2020, compared to the total of \$121,162,751 at June 30, 2019, represents a decrease of 3.6%, 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, 2021

CURRENT AND NEW BUSINESS

During fiscal year 2021, 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 2022. In addition, during fiscal year 2021, 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 2021 and 2020, 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 2022.

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,	
	2021	2020
Assets		
Current assets:		
Unrestricted assets:		
Cash and cash equivalents	\$ 65,972,752	\$ 57,474,187
Unbilled sales	1,581,175	1,494,970
Accounts receivable, less allowance for doubtful accounts of \$1,000 at June 30, 2021 and 2020	41,526,367	29,661,131
Interest receivable	2,275	20,069
Prepaid expenses and other current assets	1,761,923	2,367,694
Total unrestricted current assets	<u>110,844,492</u>	<u>91,018,051</u>
Restricted assets:		
Cash equivalents	31,950,166	29,004,232
Total current assets	<u>142,794,658</u>	<u>120,022,283</u>
Non-current assets:		
Investments	247,989	2,328,482
Capital assets, net	207,732,933	179,008,561
Total non-current assets	<u>207,980,922</u>	<u>181,337,043</u>
Total assets	<u>350,775,580</u>	<u>301,359,326</u>
Deferred outflows of resources:		
Pension related	3,614,185	4,431,402
OPEB related	10,062,041	714,496
Construction loan DEP fee	742,575	641,319
Total deferred outflows of resources	<u>14,418,801</u>	<u>5,787,217</u>
Total assets and deferred outflows of resources	<u>\$ 365,194,381</u>	<u>\$ 307,146,543</u>
Liabilities		
Current liabilities:		
Current portion of bonds, notes and loans payable	\$ 2,871,249	\$ 4,267,215
Accounts payable	5,378,515	8,532,933
Accrued liabilities	2,744,038	2,784,709
Unearned revenue	4,814,450	4,038,642
Total current liabilities	<u>15,808,252</u>	<u>19,623,499</u>
Non-current liabilities:		
Non-current portion of bonds, notes and loans payable	156,503,688	112,562,593
Net pension liability	17,210,868	18,808,879
Net OPEB liability	29,968,511	21,561,010
Total non-current liabilities	<u>203,683,067</u>	<u>152,932,482</u>
Total liabilities	<u>219,491,319</u>	<u>172,555,981</u>
Deferred inflows of resources:		
Cost recovery	1,210,498	432,057
Pension related	7,381,453	7,175,914
OPEB related	14,837,299	17,054,983
Gain on refunding	260,499	373,142
Total deferred inflows of resources	<u>23,689,749</u>	<u>25,036,096</u>
Total liabilities and deferred inflows of resources	<u>243,181,068</u>	<u>197,592,077</u>
Net Position		
Net investment in capital assets	73,660,681	87,368,795
Restricted for cash, investments, and unearned revenue	27,135,716	24,965,590
Unrestricted	21,216,916	(2,779,919)
Total net position	<u>122,013,313</u>	<u>109,554,466</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 365,194,381</u>	<u>\$ 307,146,543</u>

See notes to financial statements.

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,	
	2021	2020
Operating revenues:		
Water sales	\$ 30,100,645	\$ 30,230,221
Reimbursement of operating expenses	2,609,112	2,640,312
Total operating revenues	32,709,757	32,870,533
Operating expenses:		
Payroll	7,884,810	8,003,155
Operations and maintenance	5,475,625	5,706,936
Fringe benefits	647,530	3,244,536
Depreciation	4,695,811	4,730,685
Total operating expenses	18,703,776	21,685,312
Income from operations	14,005,981	11,185,221
Non-operating revenues:		
State of New Jersey - Grant Programs	218,765	599,099
Investment and interest income	169,069	1,000,041
Rental income	65,489	57,659
Other income	6,948	11,883
Total non-operating revenues	460,271	1,668,682
Non-operating expenses:		
Interest component of debt service to the State of New Jersey	372,069	158,308
Recovery of deferred inflows of resources	1,635,336	1,394,399
Total non-operating expenses	2,007,405	1,552,707
Changes in net position	12,458,847	11,301,196
Net position, beginning of year	109,554,466	98,253,270
Net position, end of year	\$ 122,013,313	\$ 109,554,466

See notes to financial statements.

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

STATEMENTS OF CASH FLOWS

	Years Ended June 30,	
	2021	2020
Cash flows from operating activities		
Cash received from water sales	\$ 30,419,116	\$ 31,522,235
Cash received from reimbursable expenses	2,602,723	2,666,662
Cash received from rental income	92,222	37,321
Cash paid to or on behalf of employees	(12,258,524)	(12,255,269)
Cash paid to suppliers	(5,907,335)	(6,416,125)
Net cash provided by operating activities	<u>14,948,202</u>	<u>15,554,824</u>
Cash flows from noncapital financing activities		
Cash received for grant programs	712,805	52,575
Net cash provided by non-capital financing activities	<u>712,805</u>	<u>52,575</u>
Cash flows from capital and related financing activities		
Proceeds from borrowing	33,852,028	23,654,455
Principal paid on bonds, notes and loans	(4,339,192)	(4,307,963)
Interest paid on bonds, notes and loans	(418,790)	(226,071)
Acquisition and construction of capital assets	(35,580,279)	(26,518,413)
Proceeds from sale of capital assets	2,369	10,222
Net cash used in capital and related financing activities	<u>(6,483,864)</u>	<u>(7,387,770)</u>
Cash flows from investing activities		
Sale of investment securities	2,090,000	9,602,661
Purchase of investment securities	(17,122)	(4,073,213)
Interest received on investments	186,863	1,140,191
Premium on matured investments	7,615	1,590,353
Net cash provided/(used) by investing activities	<u>2,267,356</u>	<u>8,259,992</u>
Net increase in cash and cash equivalents	11,444,499	16,479,621
Cash and cash equivalents, beginning of year	86,478,419	69,998,798
Cash and cash equivalents, end of year	<u>\$ 97,922,918</u>	<u>\$ 86,478,419</u>
Reconciliation of income from operations to net cash provided by operating activities:		
Income from operations	\$ 14,005,981	\$ 11,185,221
Adjustments to reconcile income from operations to net cash provided by operating activities:		
Cash received for operating activity included in other income	70,068	59,320
Depreciation	4,695,811	4,730,685
Increase (decrease) in cash from:		
Unbilled sales	(86,205)	(1,139)
Accounts receivable	393,526	1,316,099
Prepaid expenses and other current assets	605,771	(1,291,622)
Accounts payable	(994,322)	578,078
Accrued liabilities	(35,010)	12,741
Accrued payroll and taxes	25,565	162,091
Net pension liability	(575,255)	28,909
Net OPEB liability	(3,157,728)	(1,225,559)
Net cash provided by operating activities	<u>\$ 14,948,202</u>	<u>\$ 15,554,824</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	<u>\$ 9,507</u>	<u>\$ 132,198</u>

See notes to financial statements.

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

NOTES TO FINANCIAL STATEMENTS

A. ORGANIZATION AND OPERATIONS

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

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

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

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

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

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

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Basis of Accounting (Continued)

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

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

Revenues

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

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

Capital Assets

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

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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.

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. During fiscal year 2020, three customers accounted for approximately 90% of total Raritan Basin System accounts receivable and two customers accounted for approximately 85% of total Manasquan System accounts receivable.

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.

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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, 2021 and 2020 were determined as follows:

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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Deferred Inflows and Outflows of Resources (Continued)

Raritan Basin System	2021	2020
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	(28,761)	(124,605)
Accrued sick pay	3,591	8,104
	<u>(860,379)</u>	<u>(951,710)</u>
Cost included in rate model:		
Debt principal repayment	-	-
Subtotal Raritan Basin System	(860,379)	(951,710)
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	4,451	(17,843)
Accrued sick pay	5,223	(2,632)
	<u>(1,531,180)</u>	<u>(1,561,329)</u>
Cost included in rate model:		
Debt principal repayment	3,170,000	3,015,000
Subtotal Manasquan System	1,638,820	1,453,671
Total Raritan Basin and Manasquan	778,441	501,961
Balance, beginning of year	<u>432,057</u>	<u>(69,904)</u>
Balance, end of year	<u>\$ 1,210,498</u>	<u>\$ 432,057</u>

As shown in the statements of revenue, expenses and changes in net position for the year ended June 30, 2021, the recovery of deferred inflows of resources debit balance of \$1,635,336 includes a debit balance \$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. The June 30, 2020, deferred inflows of resources debit balance of \$1,394,399 includes a debit balance of \$755,462 of Manasquan Water Treatment Plant unearned revenue and does not include a credit balance of \$136,976 of accrued vacation and sick pay.

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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Deferred Inflows and Outflows of Resources (Continued)

Deferred Inflows/Outflows of Resources – Debt Refunding

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

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

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

Accounting for Southeast Monmouth Municipal Utilities Authority Agreement

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

Because of the difference resulting from billing the SMMUA for budgeted expenses versus actual expenses appearing in the financial statements, the Authority includes unearned costs (actual costs exceeding SMMUA billings) or unearned revenue (SMMUA billings exceeding actual costs) in its statements of net position. These excess costs or billings will be recovered or recognized in future periods. As of June 30, 2021 and 2020, unearned revenue amounting to \$3,926,430 and \$3,085,031, respectively, was determined as follows:

	<u>2021</u>	<u>2020</u>
Reimbursement of operating expenses	\$ 2,614,605	\$ 2,669,559
Operating expenses	<u>1,773,206</u>	<u>1,914,097</u>
Unearned revenue	<u>841,399</u>	755,462
Balance, beginning of year	<u>3,085,031</u>	2,329,569
Balance, end of year	<u>\$ 3,926,430</u>	<u>\$ 3,085,031</u>

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NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Accounting for Southeast Monmouth Municipal Utilities Authority Agreement (Continued)

In previous years, the Authority received additional funds that are restricted for use by the SMMUA for costs associated in operating the Water Treatment Plant. As of June 30, 2021 and 2020, the amounts included in unearned revenue were \$286,227 and \$231,611, respectively.

Accounting for Watershed Protection Program

For the fiscal years ended June 30, 2021 and 2020, the Authority received \$592,598 and \$52,575, 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, 2021, all of the funds received had been recognized as revenue.

Accounting for Mitigation funds

During fiscal years ended June 30, 2020, 2019, and 2011, the Authority received \$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, 2021 and 2020, the balance of unearned revenue was \$601,793 and \$722,000, respectively.

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NOTES TO FINANCIAL STATEMENTS

C. CAPITAL ASSETS

Capital assets activity for the years ended June 30, 2021 and 2020 was as follows:

	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	<u>84,902,476</u>	<u>33,024,608</u>	<u>(1,940,721)</u>	<u>115,986,363</u>
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
Total capital assets being depreciated	<u>248,861,278</u>	<u>2,336,296</u>	<u>(53,971)</u>	<u>251,143,603</u>
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)
Total accumulated depreciation	<u>(154,755,193)</u>	<u>(4,695,811)</u>	<u>53,971</u>	<u>(159,397,033)</u>
Total capital assets being depreciated, net	<u>94,106,085</u>	<u>(2,359,515)</u>	<u>-</u>	<u>91,746,570</u>
Total net investment in capital assets	<u>\$ 179,008,561</u>	<u>\$ 30,665,093</u>	<u>\$ (1,940,721)</u>	<u>\$ 207,732,933</u>

	2020 Beginning Balance	Additions	Retirements	2020 Ending Balance
Capital assets not being depreciated:				
Land	\$ 26,444,952	\$ -	\$ -	\$ 26,444,952
Construction work in progress	30,300,995	29,024,038	(867,509)	58,457,524
Total capital assets not being depreciated	<u>56,745,947</u>	<u>29,024,038</u>	<u>(867,509)</u>	<u>84,902,476</u>
Capital assets being depreciated:				
Dams	77,369,160	-	-	77,369,160
Building, structures and improvements	142,452,358	928,964	-	143,381,322
D & R canal dredging	21,160,274	-	-	21,160,274
Machinery and equipment	6,981,742	91,853	(123,073)	6,950,522
Total capital assets being depreciated	<u>247,963,534</u>	<u>1,020,817</u>	<u>(123,073)</u>	<u>248,861,278</u>
Less accumulated depreciation for:				
Dams	(31,558,129)	(797,995)	-	(32,356,124)
Building, structures and improvements	(92,153,666)	(3,509,397)	-	(95,663,063)
D & R canal dredging	(21,160,274)	-	-	(21,160,274)
Machinery and equipment	(5,275,512)	(423,293)	123,073	(5,575,732)
Total accumulated depreciation	<u>(150,147,581)</u>	<u>(4,730,685)</u>	<u>123,073</u>	<u>(154,755,193)</u>
Total capital assets being depreciated, net	<u>97,815,953</u>	<u>(3,709,868)</u>	<u>-</u>	<u>94,106,085</u>
Total net investment in capital assets	<u>\$ 154,561,900</u>	<u>\$ 25,314,170</u>	<u>\$ (867,509)</u>	<u>\$ 179,008,561</u>

**NEW JERSEY WATER SUPPLY AUTHORITY
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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, 2021 and 2020, the Authority’s bank balances were \$98,082,732 and \$86,919,617, respectively, of which \$250,000 was covered through the FDIC. The remaining balances of \$97,832,732 and \$86,669,617 as of June 30, 2021 and 2020, 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 \$97,000,000 and \$4,000,000 of Authority deposits, respectively. The letters expired on August 24, 2021, and were subsequently renewed with a single letter in the amount of \$100,000,000 for an additional period ending May 23, 2022. The cash balance per the statements of net position is shown exclusive of outstanding checks totaling \$160,114 and \$441,497, respectively. The statement of net position amount includes petty cash totaling \$300 as of June 30, 2021 and 2020, 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 balance of \$98,082,732 and \$86,919,617 as of June 30, 2021 and 2020, respectively, was exposed to custodial credit risk as follows:

	<u>2021</u>	<u>2020</u>
Uninsured and uncollateralized	\$ -	\$ -

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, 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	\$ -

As of June 30, 2020, 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	\$ 2,348,551	\$ 2,093,593	\$ 254,958
Total		\$ 2,348,551	\$ 2,093,593	\$ 254,958

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, 2021, all deposits were collateralized.

5. Investment Income

The following comprises investment income for the years ended June 30, 2021 and 2020, respectively:

	2021	2020
Interest earned on bank accounts and certificates of deposit	\$ 150,439	\$ 770,297
Interest earned on securities	9,123	97,546
Increase in fair value of securities	9,507	132,198
	\$ 169,069	\$ 1,000,041

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE

Manasquan System

1. Notes Due to State of New Jersey

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

The \$63,600,000 of Manasquan Reservoir Water Supply System State Loan Notes (the "State Loan Notes") issued June 3, 1987, pursuant to the terms of the State Loan Agreement between the Authority and the State 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, 2021 and 2020.

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, 2021 and 2020, the State Loan Notes and Completion Loan Notes are summarized as follows:

State Loan Notes	2021	2020
Current Notes	\$ -	\$ -
Deferred Notes	30,365,115	30,365,115
Completion Notes		
Current Notes	\$ -	\$ -
Deferred Notes	3,201,777	3,201,777
	\$ 33,566,892	\$ 33,566,892

**NEW JERSEY WATER SUPPLY AUTHORITY
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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

Manasquan System (Continued)

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

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

The property, and 100% of the revenue generated by the Debt Service Component of the Rate for both initial system customers and delayed water purchase customers of the Manasquan System, was pledged as collateral for the 2005 Bonds. The Debt Service Component of the Rate represents 120% of the principal and interest requirements. For the years ended June 30, 2021 and 2020, the Debt Service Component of the Rate generated \$710,513 and \$4,213,360, respectively.

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 \$5,360,000 at June 30, 2021, carry a bond yield of 1.6%, and mature in incremental annual principal amounts through 2031. Principal maturities for the year ending June 30, 2022, are \$395,000.

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

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

Manasquan System (Continued)

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

For the years ended June 30, 2021 and 2020, interest expense on the 2016 Bonds amounted to \$210,926 and \$369,086, respectively, and the related interest income earned on the restricted investments account amounted to \$0 and \$0, respectively.

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 \$260,499 and \$373,142 as of June 30, 2021, and 2020, 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, 2021:

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%	\$1,691,753	8/1/2031

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

Raritan System

5. New Jersey Environmental Infrastructure Financing Program (“NJEIFP”)

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

In fiscal year 2018, the Authority borrowed \$49,548,569 from the New Jersey Infrastructure Bank (NJIB - formerly known as the New Jersey Environmental Infrastructure Trust) through an interim note to finance its Raritan Basin System Canal Dredging project. In fiscal year 2021 the interim note was converted to permanent long-term financing with the NJIB and the State of New Jersey 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, 2021:

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%	\$142,437	8/1/2023
2004A	11/4/2004	1,030,000	75%	350,000	25%	1.31%	\$303,946	8/1/2024
2005A	11/10/2005	2,940,974	75%	1,050,000	25%	1.25%	\$622,145	8/1/2025
2006A	11/9/2006	2,099,363	75%	745,000	25%	1.26%	\$891,503	8/1/2026
2007A	11/8/2007	1,740,563	75%	620,000	25%	1.06%	\$903,225	8/1/2027
2008A	11/6/2008	1,152,000	64%	660,000	36%	1.74%	\$827,277	8/1/2028
2010A	3/10/2010	300,493	51%	290,000	49%	1.69%	\$276,847	8/1/2029
2010B	12/2/2010	1,064,338	52%	990,000	48%	1.87%	\$1,152,191	8/1/2030
2012A	5/3/2012	1,501,455	76%	465,000	24%	0.65%	\$1,134,349	8/1/2031
2021A	6/10/2021	27,724,230	77%	8,325,000	23%	0.41%	\$36,049,230	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			\$117,303,150	

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NOTES TO FINANCIAL STATEMENTS

E. BONDS, NOTES AND LOANS PAYABLE (CONTINUED)

The following table summarizes the changes in bonds, notes and loans payable between fiscal years 2021, 2020 and 2019:

	Fiscal Year 2020	Less Payments, Net of Amortization	Debt Issued	Fiscal Year 2021	Due Within 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

	Fiscal Year 2019	Less Payments, Net of Amortization	Debt Issued	Fiscal Year 2020	Due Within One Year
Bonds payable	\$ 12,619,179	\$ 3,264,079	\$ -	\$ 9,355,100	\$ 3,170,000
Notes payable	\$ 33,566,892	-	-	33,566,892	-
Loans payable	74,976,680	1,068,864	-	73,907,816	1,097,215
Total	\$ 121,162,751	\$ 4,332,943	\$ -	\$ 116,829,808	\$ 4,267,215

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 Bonds Series 2016	Totals
2022	\$ 3,011,688	\$ 174,447	\$ -	\$ 582,212	\$ 3,768,347
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
2027-2031	11,880,954	867,185	-	2,865,369	15,613,508
2032-2036	9,931,705	87,133	-	568,400	10,587,238
2037-2041	9,382,945	-	-	-	9,382,945
Pending project completion	75,000,000	-	-	-	75,000,000
Deferred portion	-	-	33,566,892	-	33,566,892
Subtotal	120,646,699	1,822,928	33,566,892	6,332,331	162,368,850
Less amounts representing interest	3,343,549	131,175	-	972,331	4,447,055
Plus unamortized bond premium	846,900	30,220	-	576,022	1,453,142
Subtotal	118,150,050	1,721,973	33,566,892	5,936,022	159,374,937
Less:					
Current principal portion	2,323,677	152,572	-	395,000	2,871,249
Total	\$ 115,826,373	\$ 1,569,401	\$ 33,566,892	\$ 5,541,022	\$ 156,503,688

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS

Pension and Retirement Plans

Full-time employees of the Authority are covered by the Public Employees' Retirement System of the State of New Jersey ("PERS"). PERS is administered by the State of New Jersey, Division of Pensions and Benefits ("Division"). The Authority has adopted GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* and Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date*. Statements No. 68 and 71 require the Authority to report its share of the defined benefit pension liability and expense, as well as the related deferred outflows of resources and deferred inflows of resources, allocated to it by the PERS. For additional information about PERS, please refer to the Division's Annual Comprehensive Financial Report (ACFR) which can be found at <https://www.nj.gov/treasury/pensions/documents/financial/gasb/gasb68-pers21.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, 2021.

Net Pension Liabilities	\$17,210,868
Deferred Outflows of Resources	3,614,185
Deferred Inflows of Resources	7,381,453
Pension Expense	718,688
Contributions Made	1,154,558

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.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Pension and Retirement Plans (Continued)

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 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.nj.gov/treasury/pensions/documents/financial/gasb/gasb68-pers21-val.pdf>.

The payroll for employees covered by PERS for the years ended June 30, 2021, 2020 and 2019 was \$7,796,833, \$7,691,681, and \$7,636,273, respectively. The Authority's total payrolls for the years ended June 30, 2021, 2020 and 2019 were \$7,884,810, \$8,003,155, and \$8,014,260, respectively. The actuarial contribution requirements and the contributions made for the years ended June 30, 2021, 2020 and 2019 were \$1,731,864, \$1,616,629, and \$1,581,911, respectively, which consisted of \$1,154,558, \$1,015,374, and \$1,004,540 from the Authority, and \$577,306, \$601,255, and \$577,371 from employees, respectively. As required by PERS, the employer and employee contributions represented 14.8% and 7.4% of covered payroll for the year ended June 30, 2021, 13.2% and 7.8% of covered payroll for the year ended June 30, 2020, and 13.2% and 7.6% of covered payroll for the year ended June 30, 2019, respectively. Contributions were made in accordance with the actuarial funding requirement.

Assumptions

The total pension liability for the June 30, 2020, measurement date was determined by an actuarial valuation as of July 1, 2019. The pension liability was rolled forward to June 30, 2020. 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% and 6.28% as of June 30, 2020 and 2019, respectively. 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 78% 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

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Pension and Retirement Plans (Continued)

Assumptions (Continued)

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. 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-pers21-val.pdf>.

The following presents the Authority's proportionate share of the PERS net pension liability calculated using the discount rate of 7.00% and 6.28% as of June 30, 2020 and 2019, respectively, 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%)
2020	<u>\$21,665,612</u>	<u>\$17,210,868</u>	<u>\$13,430,896</u>
	At 1% Decrease (5.28%)	At Current Discount Rate (6.28%)	At 1% Increase (7.28%)
2019	<u>\$23,923,953</u>	<u>\$18,808,879</u>	<u>\$14,739,811</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, 2020 and 2019 are based on the ratio of each employer's contributions to total employer contributions of the group for the fiscal years ended June 30, 2020 and 2019, respectively.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Pension and Retirement Plans (Continued)

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

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, requires participating employers in PERS to recognize their proportionate share of the collective net pension liability, 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, 2019 to June 30, 2020 and July 1, 2018 to June 30, 2019. The Authority's proportionate share of the collective net pension liability as of June 30, 2020 and 2019 was .1055% and .1044%, respectively.

At June 30, 2021, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$17,210,868. At June 30, 2020, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$18,808,879. For the years ended June 30, 2021 and 2020, the Authority recognized PERS pension expense of \$718,688 and \$1,076,936, respectively. At June 30, 2021, deferred outflows of resources and deferred inflows of resources related to the PERS pension are as follows:

	June 30, 2021		June 30, 2020	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Net Difference Between Expected and Actual Experience	\$ 313,382	\$ 60,865	\$ 337,595	\$ 83,089
Change of Assumptions	558,340	7,206,353	1,878,136	6,528,502
Net Difference Between Projected and Actual Investment Earnings	588,281	-	-	296,905
Net Change in Proportions	999,624	114,235	1,200,297	267,418
Total Contributions and Proportionate Share of Contributions after the Measurement Date	1,154,558	-	1,015,374	-
	<u>\$ 3,614,185</u>	<u>\$ 7,381,453</u>	<u>\$ 4,431,402</u>	<u>\$ 7,175,914</u>

The Authority recognizes the \$1,154,558 and \$1,015,374 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
2021	\$ (1,830,381)
2022	(1,668,751)
2023	(953,649)
2024	(385,639)
2025	(83,406)
Total	<u>\$ (4,921,826)</u>

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits

Other Post-Employment Benefits Other than Pensions

On July 1, 2017, The Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Statement No. 75 requires participating employers in the Plan to recognize their proportionate share of the collective net OPEB liability, collective deferred outflows of resources, collective deferred inflows of resources, and collective OPEB expense based on the ratio of plan members of an individual employer to the total members of the plan. For additional information about the Plan, please refer to the Division's Annual Financial Comprehensive Report which can be found at <https://www.state.nj.us/treasury/pensions/documents/financial/annrpt2020/fr-fy2020.pdf>.

Plan Description and Benefits

The Authority provides post-employment healthcare benefits (including Medicare Part B reimbursement) and prescription drug coverage through participation in the New Jersey State Health Benefits Program. The plan is a cost-sharing multiple employer defined benefit other post-employment benefit (OPEB) plan that provides medical and prescription drug coverage to retirees and their covered dependents 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 had less than 20 years of creditable service on June 28, 2011, will be required to pay a percentage of the cost of their health care coverage in retirement provided they retire with 25 or more years of pension service credit. The percentage of premium for which the retiree will be responsible will be determined based on the retiree's annual retirement benefit and level of coverage.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

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

Following is the total of the local portion of the System’s OPEB liabilities, deferred outflows of resources, and deferred inflows of resources related to OPEB and the OPEB expense and expenditures for the fiscal year ended June 30, 2021.

Net OPEB Liabilities	\$29,968,511
Deferred Outflows of Resources	10,062,041
Deferred Inflows of Resources	14,837,299
OPEB (Benefit) Expense	55,210
Contributions Made	2,666,194

Retirees and Employees Covered by the OPEB Plan

At June 30, 2021, total plan members covered by the benefit terms were: 174

Retirees currently receiving benefits: 66

The Authority's contributions to the Plan for the years ended June 30, 2021 and June 30, 2020, were \$2,666,194 and \$2,910,576 respectively.

Net OPEB Liability

The Authority’s net OPEB liability of \$29,968,511 as of June 30, 2021 was measured as of June 30, 2020. The Authority’s net OPEB liability of \$21,561,010 as of June 30, 2020, was measured as of June 30, 2019. The Authority has fully recognized this liability in the statements of net position as of June 30, 2021 and 2020, in accordance with GASB 75.

Actuarial Methods and Assumptions

The net OPEB liabilities as of the June 30, 2020 and 2019, measurement dates were determined actuarial valuations as of June 30, 2019 and 2018, respectively, which was rolled forward to June 30, 2020 and 2019, 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, 2019, 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.

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

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

Health Care Trend Assumptions

For pre-Medicare medical benefits, the trend rate is initially 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, 2020 and 2019, were 2.21% and 3.5%, 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, 2020 and 2019, 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 (1.21%)	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>
	At 1% Decrease (2.50%)	At Current Discount Rate (3.50%)	At 1% Increase (4.50%)
2019	<u>\$24,930,013</u>	<u>\$21,561,010</u>	<u>\$18,823,251</u>

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

The following presents the net OPEB liability as of June 30, 2020 and 2019, 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:

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NOTES TO FINANCIAL STATEMENTS

F. EMPLOYEE BENEFITS (CONTINUED)

Post-Retirement Health Care Benefits (Continued)

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

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

	<u>At 1% Decrease</u>	<u>Healthcare Cost Trend Rate</u>	<u>At 1% Increase</u>
2020	<u>\$24,798,973</u>	<u>\$29,968,511</u>	<u>\$36,738,090</u>
		<u>Healthcare Cost Trend Rate</u>	
	<u>At 1% Decrease</u>	<u>At 1% Increase</u>	
2019	<u>\$18,194,836</u>	<u>\$21,561,010</u>	<u>\$25,855,133</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, 2020 and 2019 was .1670% and .1592%, respectively.

At June 30, 2021 and 2020, the amounts recognized as the Authority’s proportionate share of the net OPEB liability were \$29,968,511 and \$21,561,010, respectively. For the years ended June 30, 2021 and 2020, the Authority recognized OPEB expense of \$55,210 and \$604,375, respectively. At June 30, 2021 and 2020, deferred outflows of resources and deferred inflows of resources related to OPEB are as follows:

	<u>June 30, 2021</u>		<u>June 30, 2020</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	\$ 789,348	\$ 5,580,696	\$ -	\$ 6,305,280
Change of Assumptions	4,482,346	6,664,534	-	7,640,743
Net Difference Between Projected and Actual Investment Earnings	19,032	-	17,760	-
Net Change in Proportions	2,105,121	2,592,069	696,736	3,108,960
Total Contributions and Proportionate Share of Contributions after the Measurement Date	<u>2,666,194</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>\$ 10,062,041</u>	<u>\$ 14,837,299</u>	<u>\$ 714,496</u>	<u>\$ 17,054,983</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:

Year Ending June 30	Amortization
2021	\$ (1,723,755)
2022	(1,725,317)
2023	(1,727,844)
2024	(1,730,152)
2025	(1,179,744)
Thereafter	645,360
Total	<u>\$ (7,441,452)</u>

G. MAJOR WATER CUSTOMERS

During fiscal years 2021 and 2020, the Authority supplied water to approximately 30 customers of the Raritan Basin System and 13 customers of the Manasquan System.

During fiscal years 2021 and 2020, two customers accounted for approximately 84% of total Raritan Basin System operating revenue. During fiscal years 2021 and 2020, three customers accounted for approximately 85% of total Manasquan System operating revenue.

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.

I. INSURANCE REIMBURSEMENTS

There are no insurance or Federal Emergency Management Agency reimbursements included in “Other income” on the statement of revenues, expenses and changes in net position for the years ended June 30, 2021 and 2020.

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

NOTES TO FINANCIAL STATEMENTS

J. COMMITMENTS AND CONTINGENCIES

Commitments

The Authority had several outstanding or planned construction projects as of June 30, 2021. These projects are evidenced by contractual commitments with contractors and include:

Project	Awarded	Commitment Remaining
RV Reservoir Structures Refurbishment and Resource Preservation Project	\$ 85,421,064	\$ 47,995,882
Dredging of the D&R Canal From Kingston to Amwell Road	46,188,173	8,648,041
Formal Inspection of the Dams, Dikes, and Appurtenant Structures at SR & RV	2,584,665	293,369
Aquatic Plant Management of the D&R Canal	1,558,983	182,726
SR Reservoir Multidisciplinary Release Works Improvement & Studies	940,000	705,400
Rehabilitate Western Embankment Stockton Borough	637,329	245,591
Stormwater Basin Retrofitting Franklin Township	547,314	25,565
Rehabilitation of Landing Lane Spillway and Slope D/S of Island Weir Farm	507,546	64,667
D&R Stormwater BMP's Implementation	327,655	15,429
Rehab of Upper Canal Embankment - Raven Rock to Prallsville	301,212	185,324
Replacement of the Spruce Run Fuel Facilities Dispenser Unit	300,520	122,320
	<u>\$ 139,314,461</u>	<u>\$ 58,484,314</u>

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. 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
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NOTES TO FINANCIAL STATEMENTS

L. 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, 2021		June 30, 2020	
	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	\$ 88,960,517	\$ 22,030,562	\$ 72,771,300	\$ 18,394,474
Restricted cash	25,809,651	6,140,515	20,364,228	8,640,004
Capital assets	158,994,122	48,738,811	128,620,734	50,387,827
Other non-current assets	247,989	-	2,328,482	-
Deferred outflows of resources	11,257,968	3,160,833	4,620,489	1,166,728
Total assets and deferred outflows of resources	<u>\$ 285,270,247</u>	<u>\$ 80,070,721</u>	<u>\$ 228,705,233</u>	<u>\$ 78,589,033</u>
Liabilities and deferred inflows of resources:				
Current liabilities	\$ 10,214,536	\$ 5,740,303	\$ 12,161,290	\$ 7,609,932
Non-current liabilities	152,185,290	51,497,777	102,242,084	50,690,398
Deferred inflows of resources	26,910,835	(3,221,086)	29,334,609	(4,298,513)
Total liabilities and deferred inflows of resources	<u>189,310,661</u>	<u>54,016,994</u>	<u>143,737,983</u>	<u>54,001,817</u>
Net Position:				
Net investment in capital assets	40,844,072	32,816,609	56,590,250	30,778,545
Restricted for cash, investments and unearned revenue	25,207,858	1,927,858	19,642,228	5,323,362
Unrestricted	29,907,656	(8,690,740)	8,734,772	(11,514,691)
Total net position	<u>95,959,586</u>	<u>26,053,727</u>	<u>84,967,250</u>	<u>24,587,216</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 285,270,247</u>	<u>\$ 80,070,721</u>	<u>\$ 228,705,233</u>	<u>\$ 78,589,033</u>

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

NOTES TO FINANCIAL STATEMENTS

L. INFORMATION BY BUSINESS SEGMENT (CONTINUED)

	<u>Year Ended June 30, 2021</u>		<u>Year Ended June 30, 2020</u>	
	<u>Raritan Basin System</u>	<u>Manasquan Reservoir System</u>	<u>Raritan Basin System</u>	<u>Manasquan Reservoir System</u>
Condensed statement of revenue, expenses and changes in net assets				
Total operating revenues	\$ 22,689,906	\$ 7,410,739	\$ 22,599,507	\$ 7,630,714
Operating expenses	9,614,082	2,620,677	12,231,197	2,809,333
Depreciation	<u>2,832,558</u>	<u>1,863,253</u>	<u>2,855,672</u>	<u>1,875,013</u>
Operating income	10,243,266	2,926,809	7,512,638	2,946,368
Non-operating revenues	416,620	38,158	1,454,153	185,282
Non-operating expenses (recovery)	<u>(332,450)</u>	<u>1,498,456</u>	<u>(706,123)</u>	<u>1,503,368</u>
Changes in net position	10,992,336	1,466,511	9,672,914	1,628,282
Net position, beginning of year	<u>84,967,250</u>	<u>24,587,216</u>	<u>75,294,336</u>	<u>22,958,934</u>
Net position, end of year	<u>\$ 95,959,586</u>	<u>\$ 26,053,727</u>	<u>\$ 84,967,250</u>	<u>\$ 24,587,216</u>
Condensed statement of cash flows				
Net cash provided by:				
Operating activities	\$ 10,102,567	\$ 4,845,635	\$ 10,330,606	\$ 5,224,218
Non-capital financing activities	712,805	-	52,575	-
Capital and related financing activities	(2,787,523)	(3,696,341)	(3,539,365)	(3,848,405)
Investing activities	<u>2,228,656</u>	<u>38,700</u>	<u>7,203,217</u>	<u>1,056,775</u>
Net increase in cash and cash equivalents	10,256,505	1,187,994	14,047,033	2,432,588
Beginning cash and cash equivalent balances	<u>61,326,593</u>	<u>25,151,826</u>	<u>47,279,560</u>	<u>22,719,238</u>
Ending cash and cash equivalent balances	<u>\$ 71,583,098</u>	<u>\$ 26,339,820</u>	<u>\$ 61,326,593</u>	<u>\$ 25,151,826</u>

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, 2020, PERS MEASUREMENT DATE**

Fiscal Year	Authority's Proportion	Authority's Proportion 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
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
2021	\$ 1,154,559	\$ 1,154,558	\$ 1	\$ 7,796,833	14.81%
2020	\$ 1,015,378	\$ 1,015,374	\$ 4	\$ 7,691,681	13.20%
2019	\$ 1,004,540	\$ 1,004,540	\$ -	\$ 7,636,273	13.15%
2018	\$ 916,857	\$ 916,857	\$ -	\$ 7,351,319	12.47%
2017	\$ 896,476	\$ 896,476	\$ -	\$ 7,002,687	12.80%
2016	\$ 823,798	\$ 823,798	\$ -	\$ 6,949,632	11.85%
2015	\$ 798,757	\$ 798,757	\$ -	\$ 6,808,193	11.73%

SCHEDULE OF CHANGES IN NET PENSION LIABILITY

Fiscal Year	Beginning Balance Total Net Pension Liability	Difference between Expected and Actual Experience	Change of Assumptions	Difference between Expected and Actual Earnings	Change in Proportion and Actual Less Proportion Share	Other Changes and Reclassifications	Ending Balance Total Net Pension Liability
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 seven 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, 2020, OPEB MEASUREMENT DATE**

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

	<u>Raritan Basin System</u>	<u>Manasquan Reservoir System</u>	<u>Elimination Entries</u>	<u>Combined Total</u>
Assets				
Current assets:				
Unrestricted assets:				
Cash and cash equivalents	\$ 45,773,447	\$ 20,199,305	\$ -	\$ 65,972,752
Unbilled sales	1,581,175	-	-	1,581,175
Accounts receivable, less allowance for doubtful accounts of \$1,000 at June 30, 2021	40,117,312	1,555,642	(146,587)	41,526,367
Interest receivable	2,275	-	-	2,275
Prepaid expenses and other current assets	1,486,308	275,615	-	1,761,923
Total unrestricted assets	<u>88,960,517</u>	<u>22,030,562</u>	<u>(146,587)</u>	<u>110,844,492</u>
Restricted assets:				
Cash equivalents	25,809,651	6,140,515	-	31,950,166
Total current assets	<u>114,770,168</u>	<u>28,171,077</u>	<u>(146,587)</u>	<u>142,794,658</u>
Non-current assets:				
Investments	247,989	-	-	247,989
Capital assets net of accumulated depreciation of \$159,397,033 at June 30, 2021	158,994,122	48,738,811	-	207,732,933
Total non-current assets	<u>159,242,111</u>	<u>48,738,811</u>	<u>-</u>	<u>207,980,922</u>
Total assets	<u>274,012,279</u>	<u>76,909,888</u>	<u>(146,587)</u>	<u>350,775,580</u>
Deferred outflows of resources				
Pension related	2,789,390	824,795	-	3,614,185
OPEB related	7,726,003	2,336,038	-	10,062,041
Construction loan DEP fee	742,575	-	-	742,575
Total deferred outflows of resources	<u>11,257,968</u>	<u>3,160,833</u>	<u>-</u>	<u>14,418,801</u>
Total assets and deferred outflows of resources	<u>\$ 285,270,247</u>	<u>\$ 80,070,721</u>	<u>\$ (146,587)</u>	<u>\$ 365,194,381</u>
Liabilities				
Current liabilities:				
Current portion of bonds, notes and loans payable	\$ 2,323,677	\$ 547,572	\$ -	\$ 2,871,249
Accounts payable	5,116,467	408,635	(146,587)	5,378,515
Accrued liabilities	2,172,599	571,439	-	2,744,038
Unearned revenue	601,793	4,212,657	-	4,814,450
Total current liabilities	<u>10,214,536</u>	<u>5,740,303</u>	<u>(146,587)</u>	<u>15,808,252</u>
Non-current liabilities:				
Non-current portion of bonds, notes and loans payable	115,826,373	40,677,315	-	156,503,688
Net pension liability	13,283,164	3,927,704	-	17,210,868
Net OPEB liability	23,075,753	6,892,758	-	29,968,511
Total non-current liabilities	<u>152,185,290</u>	<u>51,497,777</u>	<u>-</u>	<u>203,683,067</u>
Total liabilities	<u>162,399,826</u>	<u>57,238,080</u>	<u>(146,587)</u>	<u>219,491,319</u>
Deferred inflows of resources				
Cost recovery	9,789,189	(8,578,691)	-	1,210,498
Pension related	5,696,926	1,684,527	-	7,381,453
OPEB related	11,424,720	3,412,579	-	14,837,299
Gain on refunding	-	260,499	-	260,499
Total deferred inflow of resources	<u>26,910,835</u>	<u>(3,221,086)</u>	<u>-</u>	<u>23,689,749</u>
Net position				
Net investment in capital assets	40,844,072	32,816,609	-	73,660,681
Restricted for cash, investments and unearned revenue	25,207,858	1,927,858	-	27,135,716
Unrestricted	29,907,656	(8,690,740)	-	21,216,916
Total net position	<u>95,959,586</u>	<u>26,053,727</u>	<u>-</u>	<u>122,013,313</u>
Total liabilities, deferred inflows of resources, and net position	<u>\$ 285,270,247</u>	<u>\$ 80,070,721</u>	<u>\$ (146,587)</u>	<u>\$ 365,194,381</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, 2021

	Raritan Basin System	Manasquan Reservoir System	Manasquan Water Treatment Plant	Combined Total
Operating revenue:				
Water sales	\$ 22,689,906	\$ 7,410,739	\$ -	\$ 30,100,645
Reimbursement of operating expenses	-	-	2,609,112	2,609,112
Total operating revenue	<u>22,689,906</u>	<u>7,410,739</u>	<u>2,609,112</u>	<u>32,709,757</u>
Operating expenses:				
Payroll	6,097,406	942,979	844,425	7,884,810
Operations and maintenance (direct)	3,647,291	946,744	722,957	5,316,992
Operations and maintenance (general and administrative)	-	96,314	62,319	158,633
Fringe benefits	498,385	92,640	56,505	647,530
Headquarters overhead	(629,000)	542,000	87,000	-
Depreciation	2,832,558	1,863,253	-	4,695,811
Total operating expenses	<u>12,446,640</u>	<u>4,483,930</u>	<u>1,773,206</u>	<u>18,703,776</u>
Income from operations	<u>10,243,266</u>	<u>2,926,809</u>	<u>835,906</u>	<u>14,005,981</u>
Non-operating revenue:				
State of New Jersey - Grant Programs	218,765	-	-	218,765
Investment income	130,369	33,207	5,493	169,069
Rental income	65,489	-	-	65,489
Other income	1,997	4,951	-	6,948
Total non-operating revenue	<u>416,620</u>	<u>38,158</u>	<u>5,493</u>	<u>460,271</u>
Non-operating expenses:				
Interest component of debt service to the State of New Jersey	502,759	(130,690)	-	372,069
Recovery of deferred inflows of resources	(835,209)	1,629,146	841,399	1,635,336
Total non-operating expenses	<u>(332,450)</u>	<u>1,498,456</u>	<u>841,399</u>	<u>2,007,405</u>
Changes in net position	10,992,336	1,466,511	-	12,458,847
Net position, beginning of year	<u>84,967,250</u>	<u>24,587,216</u>	<u>-</u>	<u>109,554,466</u>
Net position, end of year	<u>\$ 95,959,586</u>	<u>\$ 26,053,727</u>	<u>\$ -</u>	<u>\$ 122,013,313</u>

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM
YEAR ENDED JUNE 30, 2021**

	Operating Fund										Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Depreciation Reserve	Pumping Reserve	Capital Improvements Investments II	Source Water Protection Fund	
Cash and investments - July 1, 2020	\$ 1,851,056	\$ 743,668	\$ 177,816	\$ 3,102,918	\$ 3,588,459	\$ 930,664	\$ 4,824,733	\$ 1,731,467	\$ 1,328,524	\$ 4,385,743	\$ 22,665,048
Cash receipts:											
Water sales operations and maintenance	12,691,898	38,592	-	-	-	-	-	-	-	-	12,730,490
Water sales debt service and NJEIFP	6,153,822	-	-	-	-	-	-	-	-	-	6,153,822
Water sales capital fund	2,227,049	-	-	-	-	-	-	-	-	-	2,227,049
Water sales source water protection fund	1,619,496	-	-	-	-	-	-	-	-	-	1,619,496
Water sales overdrafts	244,175	-	-	-	-	-	-	-	-	-	244,175
Rental income	88,380	-	-	-	-	-	-	-	-	-	88,380
Manasquan reservoir support	63,466	-	-	-	-	-	-	-	-	-	63,466
Headquarters overhead	-	-	-	635,500	-	-	-	-	-	-	635,500
Disposition of property	-	-	-	-	-	-	-	-	-	-	-
Recycling revenue	739	-	-	-	-	-	-	-	-	-	739
Sale of investment securities	2,340,093	-	-	-	92,250	-	-	-	-	-	2,432,343
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-
Insurance reimbursement	136,031	-	-	-	-	-	-	-	-	-	136,031
Miscellaneous expense reimbursement	619,741	-	-	-	-	-	-	-	-	-	619,741
Transfers:											
Contributions from operating fund	85,1650	43,231,356	3,544,194	(61,012,613)	385,000	250,000	1,033,068	150,000	-	523,068	(11,044,277)
Contributions to operating fund	(6,178,540)	-	-	36,904,036	-	-	(137,493)	-	-	(389,241)	30,198,762
Transfers for operations	(21,408,695)	221,380	-	21,187,315	-	-	-	-	-	-	-
Transfers for investments	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	-	2,478,895	-	3,325,167	-	-	(1,475)	-	-	(190,858)	5,611,729
Investment income	645	3,343	-	1,256	7,824	2,771	19,327	3,319	13,821	8,192	60,498
Per resolution, Section 603:											
Investment income, transfer from	43,712	-	-	(1,258)	(10,073)	(2,771)	(12,846)	-	(16,764)	-	-
Investment income, transfer to	(9,358)	-	-	-	9,358	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	9,970	1,111	5,203	-	837	-	17,121
Total cash receipts	(515,696)	45,973,566	3,544,194	1,039,403	494,329	251,111	905,784	153,319	(2,106)	(48,839)	51,795,065
Total available cash and investments	\$ 1,335,360	\$ 46,717,234	\$ 3,722,010	\$ 4,142,321	\$ 4,082,788	\$ 1,181,775	\$ 5,730,517	\$ 1,884,786	\$ 1,326,418	\$ 4,336,904	\$ 74,460,113

**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, 2021**

	Subtotal	Parity SWP Bond Fund	Subordinated SWP Bond Fund	Major Rehabilitation	Capital Improvement Fund	D&R Mitigation Fund	D&R Canal Dredging	Capital Equipment Reserve	Rate Stabilization Fund	Employment Benefit Funds	Totals
Total cash and investments	\$ 22,665,048	\$ 324,255	\$ 617,234	\$ 1,428,879	\$ 15,512,604	\$ 751,887	\$ 19,306,292	\$ 923,891	\$ 87,947	\$ 2,037,038	\$ 63,655,075
Cash receipts:											
Water sales operations and maintenance	12,730,490	-	-	-	-	-	-	-	-	-	12,730,490
Water sales debt service and NJEIFP	6,153,822	-	-	-	-	-	-	-	-	-	6,153,822
Water sales capital fund	2,227,049	-	-	-	-	-	-	-	-	-	2,227,049
Water sales source water protection fund	1,619,496	-	-	-	-	-	-	-	-	-	1,619,496
Water sales overdrafts	244,175	-	-	-	-	-	-	-	-	-	244,175
Rental income	88,380	-	-	-	-	-	-	-	-	-	88,380
Manasquan reservoir support	63,466	-	-	-	-	-	-	-	-	-	63,466
Headquarters overhead	635,500	-	-	-	-	-	-	-	-	-	635,500
Disposition of property	-	-	-	-	-	-	-	-	-	-	-
Recycling revenue	739	-	-	-	-	-	-	-	-	-	739
Sale of investment securities	2,432,343	-	-	-	-	-	-	-	-	-	2,432,343
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-
Insurance reimbursement	136,031	-	-	-	-	-	-	-	-	-	136,031
Miscellaneous expense reimbursement	619,741	-	-	-	33,852,028	-	-	-	-	-	34,471,769
Transfers:											
Contributions from operating fund	(11,044,277)	368,232	705,984	-	3,196,273	-	5,657,067	150,000	-	966,721	-
Contributions to operating fund	30,198,762	-	-	-	(29,307,686)	-	-	-	-	(891,076)	-
Transfers for operations	-	-	-	-	-	-	-	-	-	-	-
Transfers for investments	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	5,611,729	-	-	-	(5,574,487)	-	-	-	-	(37,242)	-
Investment income	60,498	193	522	2,630	26,972	1,337	40,965	1,776	69	3,717	138,679
Per resolution, Section 603:											
Investment income, transfer from	-	-	-	-	-	-	-	-	-	-	-
Investment income, transfer to	-	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	17,121	-	-	-	-	-	-	-	-	-	17,121
Total cash receipts	51,795,065	368,425	706,506	2,630	2,193,100	1,337	5,698,032	151,776	69	42,120	60,959,060
Total available cash and investments	\$ 74,460,113	\$ 692,680	\$ 1,323,740	\$ 1,431,509	\$ 17,705,704	\$ 753,224	\$ 25,004,324	\$ 1,075,667	\$ 88,016	\$ 2,079,158	\$ 124,614,135

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2021**

	Operating Fund										
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Depreciation Reserve	Pumping Reserve	Capital Improvements Investments II	Source Water Protection Fund	Subtotal
Total available cash and investments	\$ 1,335,360	\$ 46,717,234	\$ 3,722,010	\$ 4,142,321	\$ 4,082,788	\$ 1,181,775	\$ 5,730,517	\$ 1,884,786	\$ 1,326,418	\$ 4,336,904	\$ 74,460,113
Cash disbursements:											
Payroll	-	-	3,544,194	-	-	-	-	-	-	-	3,544,194
Fringe benefits	-	31,908	-	1,577,172	-	-	-	-	-	-	1,609,080
Employee deferred compensation and credit union	-	1,823,853	-	(721,845)	-	-	-	-	-	-	1,102,008
Operations and maintenance	-	43,002,343	-	-	-	-	-	-	-	-	43,002,343
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous disbursements	-	-	-	-	-	-	-	-	-	-	-
Watershed Management Fund	-	-	-	-	-	-	-	-	-	-	-
Capital improvements:											
Capital assets	-	-	-	-	-	-	-	-	-	-	-
New five year construction project	-	-	-	-	-	-	-	-	-	-	-
Purchase/Sale of investments securities	-	-	-	-	437,615	250,093	750,000	-	1,000,000	-	2,437,708
Principal on NJEIT bonds	-	-	-	-	-	-	-	-	-	-	-
Interest on NJEIT revenue bonds	-	-	-	-	-	-	-	-	-	-	-
Bonds Fees/Earnings Credit	-	-	-	-	-	-	-	-	-	-	-
Total cash disbursements	-	44,858,104	3,544,194	855,327	437,615	250,093	750,000	-	1,000,000	-	51,695,333
Cash and investments - June 30, 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
Summary of cash and investments:											
Cash	\$ 1,335,360	\$ 1,859,130	\$ 177,816	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,372,306
Short-term investments	-	-	-	3,286,994	3,645,173	931,682	4,980,517	1,884,786	76,154	4,336,904	19,142,210
Long-term investments	-	-	-	-	-	-	-	-	250,264	-	250,264
Restricted Investments (current)	-	-	-	-	-	-	-	-	-	-	-
Restricted Investments (long-term)	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - RARITAN BASIN SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2021**

	Subtotal	Parity SWP Bond Fund	Subordinated SWP Bond Fund	Major Rehabilitation	Capital Improvement Fund	D&R Mitigation Fund	D&R Canal Dredging	Capital Equipment Reserve	Rate Stabilization Fund	Employment Benefit Funds	Totals
Total available cash and investments	\$ 74,460,113	\$ 692,680	\$ 1,323,740	\$ 1,431,509	\$ 17,705,704	\$ 753,224	\$ 25,004,324	\$ 1,075,667	\$ 88,016	\$ 2,079,158	\$ 124,614,135
Cash disbursements:											
Payroll	3,544,194	-	-	-	-	-	-	-	-	-	3,544,194
Fringe benefits	1,609,080	-	-	-	-	-	-	-	-	-	1,609,080
Employee deferred compensation and credit union	1,102,008	-	-	-	-	-	-	-	-	-	1,102,008
Operations and maintenance	43,002,343	-	-	-	-	-	-	-	-	-	43,002,343
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous disbursements	-	-	-	-	-	-	-	-	-	45,078	45,078
Watershed Management Fund	-	-	-	-	-	-	-	-	-	-	-
Capital improvements:											
Capital assets	-	-	-	-	-	-	-	-	-	-	-
New five year construction project	-	-	-	-	-	-	-	-	-	-	-
Purchase/Sale of investments securities	2,437,708	-	-	-	-	-	-	-	-	-	2,437,708
Principal on NJEIT bonds	-	333,558	579,943	-	-	-	-	-	-	-	913,501
Interest on NJEIT revenue bonds	-	25,425	100,788	-	-	-	-	-	-	-	126,213
Bonds Fees/Earnings Credit	-	648	-	-	-	-	-	-	-	-	-
Total cash disbursements	51,695,333	359,631	680,731	-	-	-	-	-	-	45,078	52,780,125
Cash and investments - June 30, 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	\$ 71,834,010
Summary of cash and investments:											
Cash	\$ 3,372,306	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 52,104	\$ 3,424,410
Short-term investments	19,142,210	333,049	643,009	1,431,509	17,705,704	753,224	25,004,324	1,075,667	88,016	1,981,976	68,158,688
Long-term investments	250,264	-	-	-	-	-	-	-	-	-	250,264
Restricted Investments (current)	-	-	-	-	-	-	-	-	-	-	-
Restricted Investments (long-term)	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM
YEAR ENDED JUNE 30, 2021**

	Operating Fund													Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Renewal and Replacement Account	Water Reuse & Recycling	Source Water Protection	Depreciation Reserve	Pumping Reserve	Capital Improvement Fund	Sediment Reserve	
Cash and investments - July 1, 2020	\$ 309,736	\$ 480,451	\$ 55,872	\$ 6,473,462	\$ 1,604,939	\$ 217,693	\$ 4,169,211	\$ 30,386	\$ 1,490,356	\$ 616,584	\$ 154,652	\$ -	\$ 286,297	\$ 15,889,639
Cash receipts:														
Water sales operations and maintenance	3,161,344	-	-	-	-	-	-	-	-	-	-	-	-	3,161,344
Water sales capital fund	2,568,953	-	-	-	-	-	-	-	-	-	-	-	-	2,568,953
Water sales debt service	1,421,045	-	-	-	-	-	-	-	-	-	-	-	-	1,421,045
Source water protection	107,015	-	-	-	-	-	-	-	-	-	-	-	-	107,015
Water sales debt service NJE IT	177,860	-	-	-	-	-	-	-	-	-	-	-	-	177,860
Water sales overdrafts	50,057	-	-	-	-	-	-	-	-	-	-	-	-	50,057
NJ-American pumping costs	175,909	-	-	-	-	-	-	-	-	-	-	-	-	175,909
Headquarters overhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reimbursement of WTP capital expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposition of assets	2,369	-	-	-	-	-	-	-	-	-	-	-	-	2,369
Reimbursement from/(to) Raritan Basin	18,585	-	-	-	-	-	-	-	-	-	-	-	-	18,585
Sale of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous reimbursement	16,913	-	-	-	-	-	-	-	-	-	-	-	-	16,913
Transfers:														
Contributions from operating fund	2,806	4,738,041	1,088,192	(9,144,383)	-	272	120,000	-	106,524	96	146	2,399,748	30,000	(658,558)
Contributions to operating fund	(160,710)	(270)	-	1,394,540	-	-	(133,563)	-	(110,441)	(14,977)	-	-	-	974,579
Transfers for operations	(9,365,600)	-	-	9,367,487	-	-	(1,887)	-	-	-	-	-	-	-
Distribution from reserves to operations	223,490	11,065	-	-	-	-	-	-	-	-	-	-	-	234,555
Investment income	216	501	-	14,009	2,965	317	7,870	-	2,763	1,064	197	1,484	474	31,840
Per resolution, Section 603:														
Investment income, transfer from	15,154	-	-	(11,202)	(2,965)	(317)	-	-	-	-	(196)	-	(474)	-
Investment income, transfer to	(17,960)	-	-	17,960	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash receipts	(1,602,554)	4,749,337	1,088,192	1,638,411	-	272	(7,580)	-	(1,154)	(13,817)	147	2,401,212	30,000	8,282,466
Total cash and investments	\$ (1,292,818)	\$ 5,229,788	\$ 1,144,064	\$ 8,111,873	\$ 1,604,939	\$ 217,965	\$ 4,161,631	\$ 30,386	\$ 1,489,202	\$ 602,767	\$ 154,799	\$ 2,401,212	\$ 316,297	\$ 24,172,105

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2021**

	Water Treatment Plant/Transmission System													Totals
	Subtotal	Operating Account	Operating Fund	Residuals Reserve	Carbon Filter Reserve	Self-Insurance Reserve	Capital Improvement Reserve	NJ EIT Debt Service	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund	General Reserve Fund	Employment Benefit Funds	
Cash and investments - July 1, 2020	\$ 15,889,639	\$ 97,859	\$ 2,591,299	\$ 9,480	\$ 98,640	\$ 253,860	\$ 43,039	\$ 151,137	\$ 3,397,921	\$ 1,746,553	\$ 250,216	\$ 41,197	\$ 580,986	\$ 25,151,826
Cash receipts:														
Water sales operations and maintenance	3,161,344	-	-	-	-	-	-	-	-	-	-	-	-	3,161,344
Water sales capital fund	2,568,953	-	-	-	-	-	-	-	-	-	-	-	-	2,568,953
Water sales debt service	1,421,045	-	-	-	-	-	-	-	-	-	-	-	-	1,421,045
Source water protection	107,015	-	-	-	-	-	-	-	-	-	-	-	-	107,015
Water sales debt service NJEIT	177,880	-	-	-	-	-	-	-	-	-	-	-	-	177,880
Water sales overdrafts	50,057	-	-	-	-	-	-	-	-	-	-	-	-	50,057
NJ-American pumping costs	175,909	-	-	-	-	-	-	-	-	-	-	-	-	175,909
Headquarters overhead	-	-	2,609,112	-	-	-	-	-	-	-	-	-	-	2,609,112
Reimbursement of WTP capital expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Disposition of assets	2,369	-	-	-	-	-	-	-	-	-	-	-	-	2,369
Reimbursement from/to Raritan Basin	18,585	-	-	-	-	-	-	-	-	-	-	-	-	18,585
Sale of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous reimbursement	16,913	9,165	-	-	-	-	-	-	-	-	-	-	-	26,078
Transfers:														
Contributions from operating fund	(658,558)	700,000	(1,636,418)	-	-	-	339,252	177,042	592,088	-	-	223,490	263,104	-
Contributions to operating fund	974,579	150,000	(865,298)	-	-	-	(259,281)	-	-	-	-	-	-	-
Transfers for operations	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Distribution from reserves to operations	234,555	-	11,013	-	-	-	(11,013)	-	-	-	-	(223,490)	(11,065)	-
Investment income	31,840	61	4,939	-	89	384	20	116	-	-	378	-	875	38,702
Per resolution, Section 603:														
Investment income, transfer from	-	-	1,349	-	(294)	(1,055)	-	-	-	-	-	-	-	-
Investment income, transfer to	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unrealized gain/(loss) on fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash receipts	8,282,466	859,226	124,697	-	(205)	(671)	68,978	177,158	592,088	-	378	-	252,914	10,357,029
Total cash and investments	\$ 24,172,105	\$ 957,085	\$ 2,715,996	\$ 9,480	\$ 98,435	\$ 253,189	\$ 112,017	\$ 328,295	\$ 3,990,009	\$ 1,746,553	\$ 250,594	\$ 41,197	\$ 833,900	\$ 35,508,855

**NEW JERSEY WATER SUPPLY AUTHORITY
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**SCHEDULE OF CHANGES IN CASH AND INVESTMENTS - MANASQUAN WATER SUPPLY SYSTEM (CONTINUED)
YEAR ENDED JUNE 30, 2021**

	Operating Fund													Subtotal
	Revenue Account	Operating Account	Payroll Account	Operating Fund	Reserve for O&M	Self-Insurance Reserve	Renewal and Replacement Account	Water Reuse & Recycling	Source Water Protection	Depreciation Reserve	Pumping Reserve	Capital Improvement Fund	Sediment Reserve	
Total available cash and investments	\$ (1,292,818)	\$ 5,229,788	\$ 1,144,064	\$ 8,111,873	\$ 1,604,939	\$ 217,965	\$ 4,161,631	\$ 30,386	\$ 1,489,202	\$ 602,767	\$ 154,799	\$ 2,401,212	\$ 316,297	\$ 24,172,105
Cash disbursements:														
Payroll	-	-	1,088,192	-	-	-	-	-	-	-	-	-	-	1,088,192
Fringe benefits	-	-	-	232,318	-	-	-	-	-	-	-	-	-	232,318
Employee deferred compensation and credit union	-	2,024,596	-	(1,577,173)	-	-	-	-	-	-	-	-	-	447,423
Operations and maintenance	(1,292,820)	2,828,190	-	732,610	-	-	-	-	-	-	-	-	-	2,267,980
NJ-American pumping costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headquarters overhead	-	-	-	548,500	-	-	-	-	-	-	-	-	-	548,500
Capital assets reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvement program (reservoir)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal on bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest on bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bonds Fees/Earnings Credit	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash disbursements	(1,292,820)	4,852,786	1,088,192	(63,745)	-	-	-	-	-	-	-	-	-	4,584,413
Cash and investments - June 30, 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
Summary of cash and investments:														
Cash (Manasquan)	\$ 2	\$ 377,002	\$ 55,872	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 432,876
Cash (Water Treatment Plant/TS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term investments	-	-	-	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	19,154,816
Short-term investments (Water Treatment Plant/TS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Long-term investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (current)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

**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, 2021**

	Water Treatment Plant/Transmission System													Totals
	Subtotal	Operating Account	Operating Fund	Residuals Reserve	Carbon Filter Reserve	Self-Insurance Reserve	Capital Improvement Reserve	NJEIT Debt Service	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund	General Reserve Fund	Employment Benefit Funds	
Total available cash and investments	\$ 24,172,105	\$ 957,085	\$ 2,715,996	\$ 9,480	\$ 98,435	\$ 253,189	\$ 112,017	\$ 328,295	\$ 3,990,009	\$ 1,746,553	\$ 250,594	\$ 41,197	\$ 833,900	\$ 35,508,855
Cash disbursements:														
Payroll	1,088,192	-	-	-	-	-	-	-	-	-	-	-	-	1,088,192
Fringe benefits	232,318	-	-	-	-	-	-	-	-	-	-	-	263,483	495,801
Employee deferred compensation and credit union	447,423	-	-	-	-	-	-	-	-	-	-	-	-	447,423
Operations and maintenance	2,267,980	645,116	(160,975)	-	-	-	-	-	-	-	-	-	-	2,752,121
NJ-American pumping costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Headquarters overhead	548,500	139,977	87,000	-	-	-	-	-	-	-	-	-	-	775,477
Capital assets reservoir	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital improvement program (reservoir)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of investments securities	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Principal on bonds	-	-	-	-	-	-	-	138,966	3,170,000	-	-	-	-	3,308,966
Interest on bonds	-	-	-	-	-	-	-	23,625	276,338	-	-	-	-	299,963
Bonds Fees/Earnings Credit	-	-	-	-	-	-	-	1,072	-	-	-	-	-	1,072
Total cash disbursements	4,584,413	785,093	(73,975)	-	-	-	-	163,663	3,446,338	-	-	-	263,483	9,169,035
Cash and investments - June 30, 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
Summary of cash and investments:														
Cash (Manasquan)	\$ 432,876	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 432,876
Cash (Water Treatment Plant/TS)	-	171,992	-	-	-	-	-	-	-	-	-	-	-	171,992
Short-term investments	19,154,816	-	-	-	-	-	-	-	-	-	-	41,197	570,417	19,766,430
Short-term investments (Water Treatment Plant/TS)	-	-	2,789,971	9,480	98,435	253,189	112,017	-	-	-	-	-	-	3,263,092
Long-term investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Restricted investments (current)	-	-	-	-	-	-	-	164,612	543,671	1,746,553	250,594	-	-	2,705,430
Restricted investments (long-term)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total cash and investments	\$ 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

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Statistical Section

FINANCIAL TREND DATA

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

Summary of Financial Information.....	2012 - 2021
Summary of Raritan Basin System Water Use Contracts	2012 - 2021
Summary of Manasquan Water Supply System Water Use Contracts	2012 - 2021

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	2012 - 2021
Manasquan System Revenue Bond Coverage	2012 - 2021

REVENUE CAPACITY DATA

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

Raritan Basin System Water Charges	2012 - 2021
Manasquan Water Supply System Water Charges	2012 - 2021

OPERATING INFORMATION

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

Spruce Run Rain Gauge	2012 - 2021
West Windsor Rain Gauge	2012 - 2021
Spruce Run Reservoir Storage	2012 - 2021
Round Valley Reservoir Storage	2012 - 2021
Manasquan System Rainfall	2012 - 2021
Manasquan Reservoir Storage Data.....	2012 - 2021

DEBT, ECONOMIC AND DEMOGRAPHIC INFORMATION

Bonds, Notes and Loans Payable	2012 - 2021
Ten Largest State of New Jersey Employers	2010 - 2019
State of New Jersey Population and Employment Trends	2010 - 2019

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

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
REVENUE AND EXPENSES				
Water sales	\$23,513,508	\$23,430,025	\$23,240,511	\$24,168,432
Reimbursement of operating exp	<u>\$2,434,806</u>	<u>\$2,495,982</u>	<u>\$2,600,238</u>	<u>\$2,642,400</u>
Total operating revenues	25,948,314	25,926,007	25,840,749	26,810,832
Operating expense	<u>23,918,001</u>	<u>21,792,193</u>	<u>20,750,987</u>	<u>21,449,303</u>
Income from operations	2,030,313	4,133,814	5,089,762	5,361,529
Non-operating revenues	2,884,459	7,283,979	603,011	531,655
Non-operating expenses	<u>4,698,000</u>	<u>4,592,986</u>	<u>4,680,739</u>	<u>2,140,777</u>
Change in net position	216,772	6,824,807	1,012,034	3,752,407
GASB 75 adjustment				
Net position, beginning of year	<u>114,032,341</u>	<u>113,845,395</u>	<u>120,670,202</u>	<u>104,343,335</u>
Net position, end of year	114,249,113	120,670,202	121,682,236	108,095,742
ASSETS				
Current assets, unrestricted	43,454,301	45,087,108	41,600,989	42,450,358
Current assets, restricted		14,671,723	12,336,186	12,339,659
Non-current assets	<u>166,188,362</u>	<u>149,151,534</u>	<u>153,571,758</u>	<u>153,061,564</u>
Total assets	209,642,663	208,910,365	207,508,933	207,851,581
Deferred outflows of resources				1,280,619
LIABILITIES				
Current liabilities	9,817,272	11,411,225	10,041,207	9,039,888
Non-current liabilities	<u>85,576,278</u>	<u>79,269,979</u>	<u>75,345,060</u>	<u>89,372,731</u>
Total liabilities	95,393,550	90,681,204	85,386,267	98,412,619
Deferred Inflows of Resources		(2,441,041)	440,430	2,623,839
NET POSITION				
Net investment in capital assets	78,090,867	83,560,654	87,589,285	91,638,454
Restricted for repayment debt principal and interest	11,924,238	12,126,909	9,084,491	9,229,092
Unrestricted	<u>24,234,008</u>	<u>24,982,639</u>	<u>25,008,460</u>	<u>7,228,196</u>
Total net position	\$114,249,113	\$120,670,202	\$121,682,236	\$108,095,742

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

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

<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019*</u>	<u>2020</u>	<u>2021</u>
\$25,199,424	\$25,394,799	\$30,030,868	\$30,060,964	\$30,230,221	\$30,100,645
<u>\$2,642,400</u>	<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>
27,841,824	28,037,199	32,673,268	32,703,364	32,870,533	32,709,757
<u>21,413,585</u>	<u>24,686,037</u>	<u>25,036,260</u>	<u>22,836,854</u>	<u>21,685,312</u>	<u>18,703,776</u>
6,428,239	3,351,162	7,637,008	9,866,510	11,185,221	14,005,981
1,186,165	2,906	559,918	1,281,332	1,668,682	460,271
<u>2,101,399</u>	<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>
5,513,005	5,379,447	7,179,148	9,830,013	11,301,196	12,458,847
	(37,744,085)				
<u>108,095,742</u>	<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>
113,608,747	81,244,109	88,423,257	98,253,270	109,554,466	122,013,313
46,612,558	49,025,001	100,119,822	103,682,146	91,018,051	110,844,492
7,032,591	9,427,648	15,609,357	23,143,255	29,004,232	31,950,166
<u>151,909,258</u>	<u>150,570,753</u>	<u>155,152,378</u>	<u>164,010,183</u>	<u>181,337,043</u>	<u>207,980,922</u>
205,554,407	209,023,402	270,881,557	290,835,584	301,359,326	350,775,580
3,646,920	9,612,405	7,402,086	6,967,231	5,787,217	14,418,801
6,027,320	8,585,118	16,190,347	15,069,049	19,623,499	15,808,252
<u>86,489,391</u>	<u>128,466,486</u>	<u>162,703,934</u>	<u>163,293,861</u>	<u>152,932,482</u>	<u>203,683,067</u>
92,516,711	137,051,604	178,894,281	178,362,910	172,555,981	219,491,319
3,075,869	340,094	10,966,105	21,186,635	25,036,096	23,689,749
98,890,303	61,887,512	59,275,272	58,476,549	87,368,795	73,660,681
3,876,937	7,262,065	13,434,461	19,997,698	24,965,590	27,135,716
<u>10,841,507</u>	<u>12,094,532</u>	<u>15,713,524</u>	<u>19,779,023</u>	<u>(2,779,919)</u>	<u>21,216,916</u>
\$113,608,747	\$81,244,109	\$88,423,257	\$98,253,270	\$109,554,466	\$122,013,313

**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>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
UNITED WATER LAMBERTVILLE, INC	0.490	0.490	0.490	0.490	0.490
MERCER COUNTY PARK - GOLF	0.132	0.132	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	0.075	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	0.074	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	0.080	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	0.025	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
VILLAGE GRANDE @ BEAR CREEK			0.074	0.074	0.074
EASTERN CONCRETE MATERIALS				0.023	0.023
HUNTERDON MEDICAL CENTER					0.031
PRINCETON UNIVERSITY OPERATIONS					0.027
RENAISSANCE AT MONROE CONDOMINIUM ASSOCIATION					
SYSTEM TOTAL	<u>182.176</u>	<u>182.347</u>	<u>182.281</u>	<u>182.271</u>	<u>182.339</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>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</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 ASSOCIATION	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>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
WALL TOWNSHIP	2.275	2.275	2.275	2.275	2.00
BOROUGH OF AVON	0.142	0.142	0.142	0.142	0.126
SHORELANDS WATER COMPANY	1.928	1.928	1.928	1.928	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	0.778	0.548
BOROUGH OF SEA GIRT	0.075	0.075	0.075	0.075	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	0.425	0.386
BOROUGH OF BELMAR	0.65	0.65	0.65	0.65	0.288
BOROUGH OF BRIELLE	0.45	0.45	0.45	0.45	0.45
BOROUGH OF KEYPORT	0.458	0.458	0.458	0.458	0.356
BOROUGH OF MATAWAN	0.469	0.469	0.469	0.469	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>20.560</u>	<u>19.443</u>
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</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
2021			\$0	\$3,446,338	0.000
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**

EFFECTIVE DATE	7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
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RATE PER MGD	\$231.00	\$231.00	\$246.00	\$253.00	\$253.00
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EFFECTIVE DATE	7/1/2017	7/1/2018	7/1/19	7/1/2020	7/1/21
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RATE PER MGD	\$336.00	\$336.00	\$336.00	\$336.00	\$336.00
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**New Jersey Water Supply Authority
Manasquan Water Supply System
Water Charges Per Million Gallons of Raw Water Daily**

EFFECTIVE DATE	7/01/2012	7/01/2013	7/01/2014	7/01/2015	7/01/2016
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RATE PER MGD	\$1,015.90	\$1,015.90	\$1,015.90	\$1,057.40	\$1,104.58
(Delayed Contracts)	\$1,168.49	\$1,168.49	\$1,168.49	\$1,190.86	\$1,238.04

EFFECTIVE DATE	7/01/2017	7/01/2018	7/01/2019	7/01/2020	7/01/2021
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RATE PER MGD	\$1,043.35	\$1,043.35	\$1,043.35	\$1,010.75	\$1,010.75
(Delayed Contracts)	\$1,137.76	\$1,137.76	\$1,137.76	\$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
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
2012	2.99	0.94	0.84	2.86	3.67	3.88	1.78	2.80	4.34	2.68	0.73	4.58	32.09
2011	0.87	2.93	6.97	6.48	4.38	2.62	4.19	14.21	13.49	1.63	4.90	4.09	66.76
TOTAL	29.52	32.24	39.31	42.72	51.29	48.21	61.01	61.58	54.59	38.17	40.58	44.13	543.35
AVERAGE	2.68	2.93	3.57	3.88	4.66	4.38	5.55	5.60	4.96	3.47	3.69	4.01	49.40
MAXIMUM	5.27	6.64	6.97	7.35	10.29	10.40	9.47	14.21	13.49	6.99	12.77	8.58	83.68
MINIMUM	0.87	0.86	0.84	1.66	2.38	1.77	1.78	0.78	1.23	0.53	0.73	1.44	32.09

**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
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
2012	3.51	1.73	1.58	2.94	5.58	3.82	4.94	4.93	2.36	5.30	1.42	4.99	43.10
2011	1.06	2.88	5.93	6.87	5.14	3.42	4.56	17.31	9.11	1.00	3.49	4.22	64.99
TOTAL	31.28	36.77	42.91	44.33	49.33	47.62	65.98	61.44	47.74	43.36	37.87	46.29	554.92
AVERAGE	2.84	3.34	3.90	4.03	4.48	4.33	6.00	5.59	4.34	3.94	3.44	4.21	50.45
MAXIMUM	4.35	7.05	5.93	7.36	7.57	10.78	9.42	17.31	9.99	6.46	8.88	6.56	66.04
MINIMUM	1.06	1.38	1.58	1.49	1.38	1.82	2.79	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
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
2012	9.9	10.2	10.1	10.5	11.0	11.0	10.9	9.2	8.0	6.4	6.3	6.4
AVERAGE	7.9	8.3	8.9	9.7	10.4	10.6	10.4	9.9	9.3	8.0	7.4	7.5
MAXIMUM	11.2	11.1	11.1	11.1	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	6.2	4.9	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
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
2012	52.6	52.7	52.7	52.7	52.8	53.1	52.9	51.5	51.6	51.5	51.7	51.3
AVERAGE	44.83	44.90	45.06	45.32	45.83	46.40	46.22	45.76	45.32	44.17	43.46	43.10
MAXIMUM	52.6	52.7	53.1	53.3	53.9	53.7	52.9	53.1	53.2	53.0	52.6	52.5
MINIMUM	36.2	36.3	36.6	36.4	36.3	36.4	36.3	36.3	36.2	36.2	36.3	35.9

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
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
2012	2.48	1.45	1.48	2.87	4.30	5.03	3.21	5.75	5.79	5.01	1.87	4.51
TOTAL	32.57	34.54	42.66	36.58	46.65	42.89	53.48	43.75	33.69	50.45	35.16	46.46
AVERAGE	3.26	3.45	4.27	3.66	4.67	4.29	5.35	4.38	3.37	5.05	3.52	4.65
MAXIMUM	5.20	7.63	7.68	6.95	10.34	9.29	8.32	7.02	8.00	7.16	9.30	7.71
MINIMUM	2.15	1.22	1.48	2.15	1.14	1.54	3.01	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
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	4.49	4.56	4.57	4.58	4.58	4.49	4.29	4.17	3.81	3.65	3.79	4.16
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	4.48	4.50	4.52	4.52	4.35	4.02	3.71	3.19	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
2021	\$5,936,022	\$33,566,892	\$119,872,023	\$159,374,937	0.084%	\$64.96
2020	\$9,355,100	\$33,566,892	\$73,907,816	\$116,829,808	0.061%	\$47.62
2019	\$12,619,179	\$33,566,892	\$74,976,680	\$121,162,751	0.064%	\$49.15
2018	\$15,748,257	\$33,566,892	\$60,811,617	\$110,126,766	0.060%	\$44.16
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
2012	\$40,607,618	\$33,654,736	\$17,198,649	\$91,461,003	0.063%	\$37.30
2011	\$45,524,920	\$33,657,001	\$12,822,647	\$92,004,568	0.065%	\$37.69
2010	\$50,234,457	\$33,659,135	\$11,442,033	\$95,335,625	0.071%	\$39.21

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: March 2020-- new statistics for 2019; estimates for 2020, 2021

Note 2. Population estimates for the service area of Hunterdon, Middlesex, Somerset, Union and Monmouth Counties using New Jersey Department of Labor and Workforce Development Estimates of County Population April 1, 2010 to July 1, 2018 Source: U.S. Census Bureau, Population Division, April 18, 2019

**State of New Jersey Ten Largest Employers
2019 as Compared To 2010**

2019* RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	64,204	1.5%
2	Wakefern Food Corporation (ShopRite)	40,200	0.9%
3	Wal-Mart Stores, Inc.	21,848	0.5%
4	United Parcel Service (UPS)	19,447	0.4%
5	Amazon	17,000	0.4%
6	Verizon Communications	15,168	0.3%
7	Johnson & Johnson	13,996	0.3%
8	The Home Depot	13,936	0.3%
9	United Airlines	13,348	0.3%
10	Bank of America	11,000	0.3%
		230,147	5.2%

2010 RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	72,228	1.8%
2	Wakefern Food Corporation (ShopRite)	34,654	0.8%
3	Wal-Mart Stores, Inc.	17,270	0.4%
4	The Great Atlantic and Pacific Tea Company (A&P)	15,899	0.4%
5	Verizon Communications	15,168	0.4%
6	United Parcel Service (UPS)	14,961	0.4%
7	United Continental Holdings (formerly Continental Airlines)	14,000	0.3%
8	Johnson & Johnson	14,000	0.3%
9	Caesars Entertainment (formerly Harrah's Entertainment, LLC)	13,933	0.3%
10	Merck & Company, Inc.	12,000	0.3%
		224,113	5.4%

Notes:

Aggregate New Jersey resident employment for Calendar Years 2019 and 2010 totaled 4.4 million and 4.1 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. (2020, August). "Employment Equation, Top 25 NJ Employers." *New Jersey Business*, 66(8), 21-38.

Saliba, G.N. (2011, August). "39th Annual Top 100 employers." *New Jersey Business*, 57(8), 23-31.

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

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

* Most recent available data.

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

YEAR	NEW JERSEY POPULATION	CIVILIAN LABOR FORCE ¹	RESIDENT EMPLOYMENT ¹	RESIDENT UNEMPLOYMENT ¹	NEW JERSEY UNEMPLOYMENT RATE (%) ²	UNITED STATES UNEMPLOYMENT RATE (%) ²
2010	8,803	4,553	4,123	430	9.4	9.6
2011	8,830	4,584	4,165	419	9.1	8.9
2012	8,846	4,590	4,178	412	9.0	8.1
2013	8,858	4,490	4,168	322	7.2	7.4
2014	8,865	4,541	4,256	285	6.3	6.2
2015	8,868	4,568	4,333	235	5.1	5.3
2016	8,873	4,538	4,323	215	4.7	4.9
2017	8,885	4,490	4,266	224	5.0	4.4
2018	8,885	4,501	4,323	178	4.0	3.9
2019	8,882	4,555	4,394	161	3.5	3.7

Notes:

¹ New Jersey Population data for 2010, 2011 and 2014 through 2018 has been revised to reflect seasonally adjusted data.

² Civilian Labor Force, Resident Employment and Unemployment data for 2010 through 2018 has been revised to reflect seasonally adjusted data.

Sources:

United States Department of Labor, Bureau of Labor Statistics.

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

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

YEAR	NEW JERSEY POPULATION (Thousands) ¹	ASSESSED VALUATION OF PROPERTY (\$)	TRUE VALUATION OF PROPERTY (\$)	PERSONAL INCOME(\$) ²	PER CAPITA INCOME (\$Thousands) ³
2010	8,803	959,282	1,331,604	452,466	51.4
2011	8,830	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	8,865	971,600	1,158,322	520,079	58.7
2015	8,868	983,032	1,164,399	542,097	61.1
2016	8,873	981,731	1,183,048	556,440	62.7
2017	8,885	1,000,760	1,207,591	577,081	65.0
2018	8,885	1,017,307	1,238,936	607,885	68.4
2019	8,882	1,063,181	1,281,169	630,450	71.0

Notes:

¹ New Jersey Population data for 2010, 2011 and 2014 through 2018 has been revised.

² Personal Income data for 2010 through 2018 has been revised.

³ Per Capita Income equals Personal Income divided by New Jersey Population. Data for 2014 and 2016 through 2018 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, 2021, and the related notes to financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated April 18, 2022.

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) to determine the 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 may exist that have not been 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)

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 other matters, 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*.

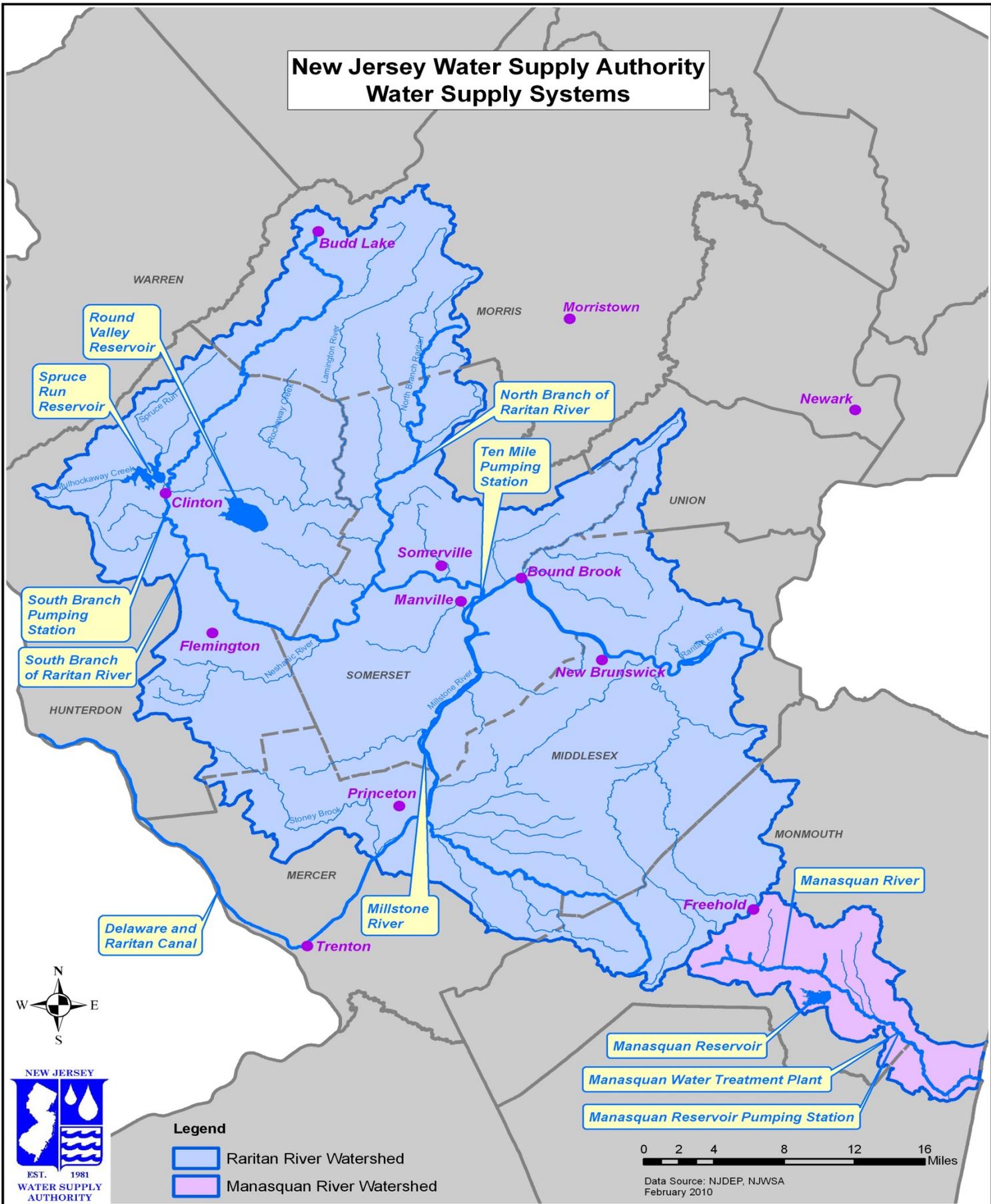
Purpose of this Report

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.

Mercadien, P.C.
Certified Public Accountants

April 18, 2022

New Jersey Water Supply Authority Water Supply Systems



0 2 4 8 12 16 Miles

Data Source: NJDEP, NJWSA
February 2010

New Jersey Water Supply Authority
1851 Highway 31
PO Box 5196
Clinton, NJ 08809