NEW JERSEY WATER SUPPLY AUTHORITY



2016 ANNUAL REPORT

AND THE

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED JUNE 30, 2016



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

New Jersey Water Supply Authority

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2015

Executive Director/CEO

NEW JERSEY WATER SUPPLY AUTHORITY

2016 ANNUAL REPORT

AND THE

COMPREHENSIVE ANNUAL FINANCIAL REPORT

A COMPONENT UNIT OF THE STATE OF NEW JERSEY



FOR THE FISCAL YEARS ENDED JUNE 30, 2016 AND 2015

Prepared by: Finance and Accounting Staff

Henry S. Patterson Executive Director

2016 Annual Report

Governor Chris Christie



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Staff

Henry S. Patterson Executive Director

Helene P. Chudzik, Esq. Sr. Deputy Attorney General

2017 Monthly Meetings

The 2017 Monthly Meetings of the New Jersey Water Supply Authority are scheduled to be held in the Conference Room of the Authority's Clinton Administration Building, 1851 Highway 31, Clinton, New Jersey, unless otherwise indicated, beginning at 2:00 p.m. on the following Mondays:

January 9, 2017

February 6, 2017

March 6, 2017

April 3, 2017

May 1, 2017

June 5, 2017 (Canal Office)

July 3, 2017 (Canal Office)

August 7, 2017 (Manasquan Office)

September 11, 2017

October 2, 2017

November 6, 2017

December 4, 2017

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 Julie Shelley.

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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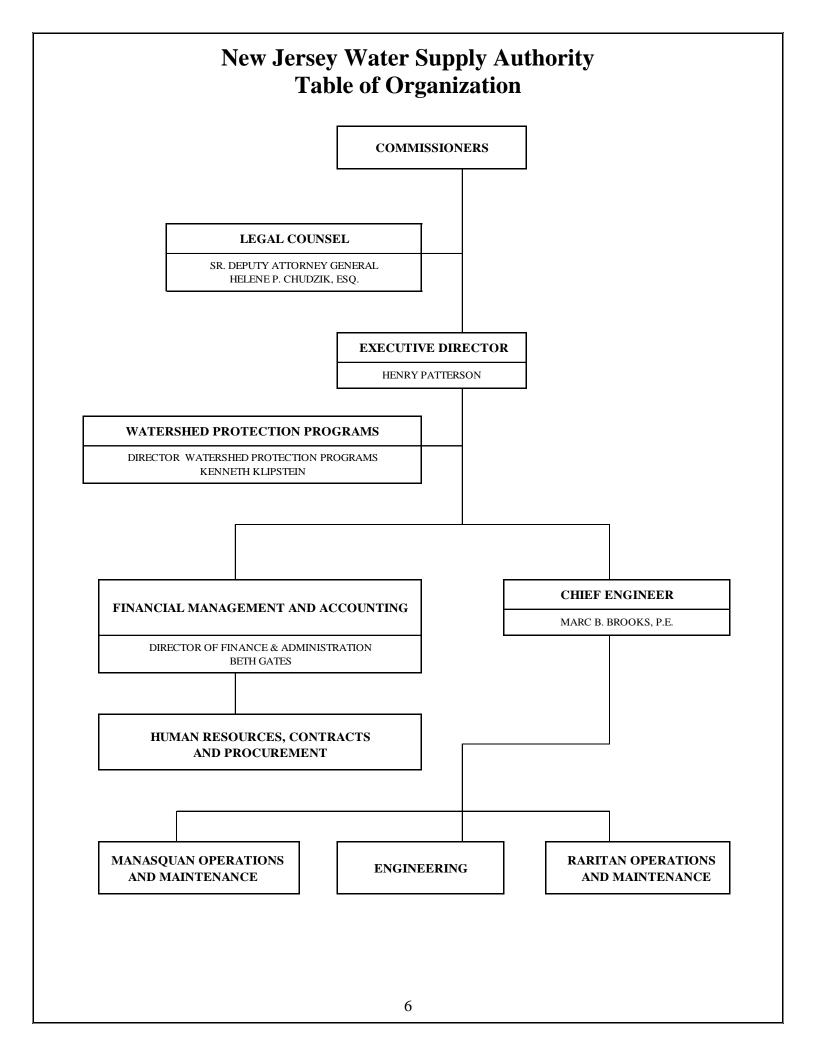
Letter to Governor and Legislature

Operations – Raritan System

Operations – Manasquan System

Watershed Protection Programs Unit

Letter of Transmittal - Controller



Letter to Governor and Legislature

NEW JERSEY WATER SUPPLY AUTHORITY



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December 2016

To the Honorable Chris Christie, Governor and Members of the New Jersey Legislature

I am pleased to submit the 35th 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 of the State of New Jersey. The "New Jersey Water Supply Authority Act," under N.J.S.A. 58:1 B-20, calls for the Authority to publish an Annual Report of its finances on or before the last day of February for the preceding calendar year. This report contains the Authority's Independent Auditors' Report, and all required reporting to be in compliance with Executive Order No. 37 (2006), for FY2016.

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 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 Spruce Run dam was constructed on a limestone foundation, which necessitates special treatment during construction and regular, continuous monitoring. Two previous TRBs were convened in the 1980s to evaluate the conditions at the Spruce Run dam. No previous TRBs had evaluated the embankments at Round Valley Reservoir.

The 2014 TRB recommended the installation of additional instrumentation at the Spruce Run and Round Valley facilities to monitor the phreatic (saturation) line through the embankments, and evaluation of the materials and methods used to construct the embankments. Installation of the additional piezometers, which measure water pressure, began in early September 2014. Once the additional instruments were installed and the initial data obtained and evaluated, the TRB was reconvened to perform an evaluation referred to as a Potential Failure Mode Analysis ("PFMA"). A PFMA is a common analysis in the dam safety community and analyzes construction and performance records of an embankment. The PFMA was conducted in early July 2015. The 2015 TRB and PFMA resulted in a recommendation that "the Authority begin budgeting, engineering, and planning for the required modifications to the Round Valley Embankments." In 2016 Authority staff began the process to procure the engineer of record for modifications to all three of the Round Valley Embankments to extend their operating life and increase their durability and resilience. It is anticipated that the engineer of record procurement will conclude in the fall of 2016.

Typically, New Jersey Dam Safety Regulations require Formal Dam Inspections be performed every three years with 2016 falling on the three-year cycle. New Jersey Dam Safety allowed that Regular Inspections in lieu of Formal Inspections be performed in 2016 due to the detailed studies, investigations, and evaluations conducted during 2014-2015. Regular Inspections,

performed by Authority Staff, of the Round Valley and Spruce Run Dams will take place in the fall of 2016.

Efforts are continuing to develop a plan for dredging the 10.5-mile reach of the Canal between Lincoln Highway (Route 27) and Amwell Road in Franklin Township, Somerset County. Bathymetric (underwater) surveys of the area show that approximately 7,300 tons of debris and 16,400 tons of submerged aquatic vegetation will need to be removed prior to the Canal dredging of approximately 240,000 yards of sediment. Sediment will be removed through hydraulic dredging and pumped to a staging area before it is hauled to a beneficial reuse facility. The dredging project is scheduled to start in the fall of 2017 with actual dredging starting in 2018 and extending for three seasons between July and December.

The Authority was presented with the "Certificate of Achievement for Excellence in Financial Reporting Award" from the Government Finance Officers Association for FY2015, our 24th consecutive award.

Sincerely,

Henry S. Patterson Executive Director

Operations - Raritan System

Operation and maintenance activities at all Authority facilities have been typical. Calendar year 2016 has had precipitation below normal levels for January, March, April, June, August, and September. A drought watch was issued for New Jersey's Northeast, Northwest and Central water supply regions by the New Jersey Department of Environmental Protection ("NJDEP") in late July 2016. On October 21, 2016, the Commissioner of the NJDEP issued a drought warning for 14 New Jersey counties, including those in the Raritan Basin and Manasquan Reservoir Systems. The order modifies passing flow requirements and allows for the transfer of water among basins.

Dam Inspections

As part of the recommendations from the 2013 dam inspections, the Authority convened a Technical Review Board ("TRB") in 2014 to discuss the conditions of the Spruce Run and Round Valley embankments. Two previous TRBs were convened in the 1980s to evaluate the conditions at the Spruce Run dam, but similar TRBs had never been used to evaluate the embankments at Round Valley Reservoir. The 2014 TRB recommended several steps to further document the conditions of the embankments including the following:

- Installation of additional instrumentation at both facilities to monitor the phreatic line through the embankments and evaluation of the materials and methods used to construct the embankments.
- Side Scan Sonar Surveys at Spruce Run aimed at locating sinkholes on the upstream side of the dam.
- Visual camera inspections of the drain pipes at Round Valley and Spruce Run.



Drill rig installing instrumentation on embankments (2015)

- Perform a thorough review of existing records including, but not limited to, preconstruction reports, construction records (1960s), and subsequent construction records (1981 to present).
- Reconvene the TRB to perform a Potential Failure Mode Analysis ("PFMA") for the Spruce Run Dam and all Round Valley embankments.

All recommended studies were performed in 2014-2016. The TRB reconvened in July 2015 to perform a PFMA on the three Round Valley Embankments. A PFMA is a common analysis in the dam safety community and consists of a robust study of the construction and past performance records of the embankments.

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."

In 2016 Authority staff began the process to procure the engineer of record for modifications to all three of the Round Valley Embankments. It is anticipated that the engineer of record procurement will conclude in the fall of 2016.

Authority staff conducted the 2015 Regular Inspection of the Round Valley and Spruce Run Dams on September 17, 2015 in conformance with New Jersey Dam Safety regulations. The 2016 Regular Inspections will take place in the fall of 2016.

Pinhole Leak in Spruce Run Release Piping

On September 14, 2015, a pinhole leak was discovered on the release pipes in the Spruce Run Vault. At that time, Authority staff shut down that half (west side) of the release at Spruce Run.



Pinhole leak in Spruce Run Release works, September 2015.

Since there is a statutory requirement to release 5 MGD from the Spruce Run Vault every day, the Authority could not take the vault completely out of service, nor could the pressure be completely removed from the compromised piping. For that reason, Authority staff, at the direction of the Executive Director, procured engineering services and the construction contractor on an emergency basis.

A schematic design report was prepared by the consultant along with a computational fluid dynamics model which suggested that the erosion was based on cavitation. Cavitation is a condition that occurs in pipes when significant changes in velocity can cause vapor cavities to form and explode on the pipe's internal surface.

The chosen repair changed the 48" X 12" tee to a 48" X 20" tee followed by a reducer to return the discharge to the existing 12" size where it goes through the concrete wall of the vault. The chosen repair will reduce the potential for erosion damage and slightly increase the release capacity at the Spruce Run Vault. The existing 12" valves just downstream of each of the 48" X 12" tees, which had reached the end of their useful life, were replaced with new gate valves. Additionally, new electronic operators were added to each of the valves. The repair was completed in July of 2016.



Repaired piping and valve in in Spruce Run Release.

Emergency Grouting on existing Spruce Run Dam Piezometers

During normal maintenance operations, Authority maintenance staff had to remove a casing from the top of a piezometer on the Spruce Run Dam. Once the casing was removed, a void, visible from the surface was observed adjacent to the existing piezometer.

Maintenance staff immediately notified Authority engineering staff which followed up with a more detailed evaluation. Following evaluation and consultation with an engineering consultant and the New Jersey State Bureau of Dam Safety and Flood Control, repairs were made by Authority staff. In this case, the void, adjacent to a piezometer referred to as Rockwell 27 was filled with C-33 concrete sand, using water as a consolidating agent. The decision to use C-33 concrete sand was made because of the presence of moving water that was witnessed in the void.



Note void directly adjacent to piezometer. Tape measure shows void to be over 18 feet deep.

Following this repair, Authority staff investigated all of the instruments on the embankment that were installed during the same construction contract. Two other instruments showed similar conditions. Based on the conditions at those two instruments, Rockwell 25 and Rockwell 26, the retained engineering consultant and the New Jersey Bureau of Dam Safety and Flood Control recommended that the voids be filled in a timely manner. Our consultant recommended that the voids should be filled with bentonite and/or cement grout.

Authority staff contacted a local specialty grouting contractor who has worked on similar projects. The contractor mobilized to Spruce Run Dam and successfully completed the work within five days.



Grout injection process adjacent to piezometer.

Dredging the Intake Pond and rehabilitation of the ice deflectors at the South Branch Pumping Station

The intake pond at the South Branch Pumping Station ("SBPS") was designed with a capacity of 21,000,000 gallons during low flow pumping periods. Sediment has accumulated in the pond reducing its capacity, thereby reducing the efficiency of the pumping operation. Sediment was last removed from the pond in 1986 when it was removed in the dry and stockpiled in a temporary site at the station where it was used as needed throughout Authority properties. The intent of this project will be to dredge the intake pond to return it to its original design depth and capacity.

Also at the SBPS, there are twelve steel wide flange beams set in a concrete bed that function as an ice deflector at the release works of the channel of the South Branch Raritan River adjacent to the pond. The ice deflectors protect the structure from damage from ice and trees floating down the river. They are deteriorating and need to be replaced. The ice deflectors are intended to be repaired as part of the pond dredging project.

Improvements at the D&R Canal Field Office

The Canal Office was constructed in 1992 in Ewing Township, Mercer County. It was identified that this facility required rehabilitation of the roofing system, the access driveway and parking areas and the fuel dispensing system. The roofing system had developed numerous leaks that had been patched but a reroofing project was warranted to address the compounding problems.



Partial roof replacement at D&R Canal Field Office, July 2016.

The asphalt driveway and parking area had settled in many places and drainage was a problem. The fuel dispensing system was deteriorated and needed to be replaced. The tanks for the diesel and unleaded gas storage were not affected by this situation, only the gas dispensing island and equipment.



Newly installed fuel dispensers.



Paving Canal Field Office Parking Lot, November 2016.

South Branch Pumping Station Pump Rehabilitation

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 350 million gallons per day to the reservoir through a 3.2 mile long, 108-inch diameter force main.

A program is underway to refurbish the main pumps and motors including replacement of the baseplates. The grout beneath the baseplates had failed and the units are vibrating to the extent that alignment between the pumps and motors could not be maintained.

Refurbishment of Units #1 and #6 has been completed with the units were successfully tested and placed back into service in the spring 2016.

Additional pump and motor units and their baseplates will be refurbished in 2017.

Dredging of the D & R Canal

Flow in the 10.5-mile section of the Canal in Franklin Township, Somerset County between Route 27 and Amwell Road, near

Millstone Borough, is being impeded by sediment accumulation. This is 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 is developing a program to remove up to an estimated 240,000 cubic yards of sediment from the Canal. Development of the program included a proactive public participation element including meetings with stakeholders along the Canal and a website to keep the public informed about the status of the project. The website can be accessed at http://www.njwsa.org/html/canal_dredging.html.

The Consultant considered four alternatives for the proposed dredging project; mechanical excavation (in dry), mechanical dredging (in wet), hydraulic dredging with Geobags, and hydraulic dredging with mechanical dewatering. After reviewing the alternatives, hydraulic dredging with either method of dewatering the sediment was selected as the preferred alternative. The Authority is working to reach an amicable agreement for beneficial reuse of the sediment. The preferred site must receive NJDEP and EPA approvals before it can accept the material.

A Level Two Environmental Impact Document was prepared and the required Public Hearing was held on May 13, 2013. With the uncertainty on the beneficial reuse site and the outstanding permit issues, construction has been pushed back. The anticipated start to construction will be in the fall of 2017 with actual dredging expected to start in July of 2018.

This project also includes disposal of up to 53,000 cubic yards of sediment from the US Route 202 temporary stockpile site being used to temporarily stockpile material removed from the Canal as part of the Maintenance Dredging program of the Canal.

Sediment Removal in the Trenton Conduits

Another flow bottleneck is the sediment accumulation in the conduit under the US Route 1 Highway, commonly referred to as the Trenton Freeway. The Authority is working with the NJDOT to develop a program to remove this accumulation.

Weed Raking in the D&R Canal

The Authority retained the services of a contractor to perform weed raking activities in the Canal.



Weed raking in the D&R Canal, July 2016.

The weed raking had a significant positive effect on the flows through the Canal. During the work, the contractor identified an invasive species in the Canal.

Hydrilla, or "water thyme", is an aquatic plant from Asia that is one of the most difficult aquatic invasive species to control and eradicate in the United States. It is a disruptive type of submerged aquatic vegetation ("SAV"). Infestations can have significant negative impacts on aquatic ecosystems.

Authority staff has already engaged the services of a firm experienced in SAV to perform a mapping of the Canal. The mapping has identified the extent of the Hydrilla and is helping to provide a path forward for control of other types of SAV in the Canal.

As a next step, Authority staff will engage

other stakeholders, including but not limited to water purveyors, D&R Canal Commission, NJDEP Divisions of Land Use, Fish & Wildlife, Parks and Forestry and Water Supply and Geoscience, Rutgers University, NJ Invasive Species Strike Team and interested Canal user groups. This task force will work cooperatively to develop a weed control strategy where mechanical, chemical, biological and physical control methods will all be considered.

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

The western embankment makes up the western bank of the Canal that extends one mile from the Prallsville Lock to an abandoned railroad crossing. The embankment has been affected by numerous flooding events in the past decade that caused two full breaches of the embankment in 2005 and 2006, and nearly breached again in 2011 following Tropical Storms Irene and Lee. Both 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 considered. The following two photographs are indicative of the repairs conducted in 2011. Dense graded aggregate ("DGA") was placed by conveyor belt across the Canal since it was unsafe to work from the embankment immediately after the event.



D&R Canal embankment in Stockton Borough in 2011.

The preceding photograph illustrates the partial failure of the western embankment in Stockton Borough, Hunterdon County following Tropical Storms Irene and Lee in 2011. Note level of the Delaware River relative the crest of the embankment and the seepage through the embankment. At the peak elevation, the river was only about six inches from overtopping certain sections of the embankment.



Placement of DGA by conveyor across the Canal.

Pictured above is the placement of the DGA by conveyor across the Canal. The DGA was used to restore the embankment to prevent a breach. The DGA was compacted as conditions permitted.

Failures of an earth embankment are caused by a variety of reasons including overtopping and seepage through the embankment. The Authority has retained both an engineering and a cultural resources consultant to work together to develop a long-term solution to the embankment problems that will be constructible and acceptable to the numerous regulating bodies and permitting agencies.

Rehabilitation of the Cherry Tree Lane Spillway

The Cherry Tree Lane Spillway is located at Station 1269+65 of the D&R Canal, approximately 650 feet upstream of the intersection of Whitehead Road and the Canal in Lawrence Township. The spillway

structure is located along the Canal right bank and discharges to a concrete apron that conveys the flow to an arched culvert under the Route 1 Highway (Trenton Freeway Section).

The crest was eroded, spalling and crumbling. The downstream concrete outlet apron had large voids, was cracked, and showed exposed rebar and concrete aggregate. In 2013, Canal maintenance crews backfilled a large scour hole downstream of the spillway. It was suspected that the foundation material under the spillway structure and the outlet apron was largely undermined. Water from the Canal was leaking at a steadily increasing rate.



Cherry Tree Lane Spillway, before construction

The Authority is working with both an engineering and cultural resource consultant to investigate and design a rehabilitation of the structure. During the engineer's initial investigatory work, they observed a scour hole that required an emergency repair on December 23, 2014 to prevent complete breach.

Selection of contractors for full reconstruction of the spillway followed standard design, permitting and bidding procedures, and construction began in the summer of 2016. The work is expected to be complete in fall 2016.



Demolition work at Cherry Tree Lane Spillway.



Reinforcing steel before concrete pour at Cherry Tree Lane Spillway

Rehabilitation of the Upper Canal Embankment

The right bank of the D&R 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 crest 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 frequently from the river side, 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, they 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 of this section of the embankment. After these storms, Authority staff made temporary emergency repairs to some sections of the embankment to stabilize and to prevent complete breach. It was intended to make final repairs in accordance with approved plans as soon as practicable. The embankment was primarily repaired by installing rip-rap and cement bags to protect the embankment from further deterioration. In some locations, slopes were protected by reinstalling the missing stone with mortar patches and some locations were not repaired. 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. Construction is anticipated to initiate in 2017 or 2018.

Operations - Manasquan System

Raw water contracts were renegotiated and signed with 12 of the 13 customer entities in 2016 adjusting the wholesale contracts to a new total of 19.443 MGD. Significantly dry weather in August and most of September brought the reservoir to its second lowest level historically for the end of September in any year since the Authority started operations. However, customer contracts were met without interruption and the largest customer made above-contract purchases during two of the summer months.

No electrical, mechanical or weather events interrupted operations in 2016. A concrete wall with embedded motorized sluice gates was installed inside the raw water

distribution tank in April that allows better control of the raw water sources reaching the water treatment plant. The wall serves to mitigate problems treating highly turbid and colored water at the water treatment plant during storm events.

Reservoir water quality was good during most months of the year. However there was one significant blue-green algae bloom at the end of August that subsided without the use of Algaecide.

Security improvements suggested by NJ Dam Safety and our insurance carrier were completed at the water treatment plant and started at the reservoir. As part of our asset management program, the five mile 66-inch diameter pipeline from the reservoir to the pump station was inspected internally during the spring and found to be in good condition.

Further Asset Management plan work included design and ordering of a replacement 900-horse power VFD and the repair and rebuild of a large automated flow control valve. Also, a 200KW towable generator and transfer switch were purchased and installed to allow continuous operation of the reservoir intake tower and dam monitoring equipment during a power outage.

In accordance with New Jersey State Dam Safety regulations, Authority staff conducted a Formal Dam Inspection at the Manasquan Reservoir in January of 2016. A Regular Inspection was performed in September 2016. Work has begun to fill 2000 square feet of voids that developed under the embankment runoff control concrete gutters. This is not considered to present a hazard to the integrity of the dam.

Operations - Manasquan Water Treatment Plant ("MWTP")

The treatment plant provided water that met all NJDEP standards throughout 2016. Below average rainfall and the new distribution tank separation wall, allowed for

more practical treatment of the discolored Manasquan River water during the summer.

In July the filter media support and water conveyance underdrain system on one of the three main filtration units broke apart. The unit had to be taken out of service for several months. A new system of improved design will be installed in this filter and the other filters in the fall/winter of 2016. While the filter was out of service, during high volume summer season a portable membrane filtration unit was leased to provide reliability of water service to our customers.

Improvements at the MWTP

The Authority developed an asset management plan for the MWTP in 2008. The asset management plan development included a thorough evaluation of the condition of the existing equipment and an analysis of proposed legislation or changes in regulations that could have an impact on plant operations. For 2016, the asset management plan identified the need to replace SCADA servers, water quality monitoring instrumentation, install an additional fire hydrant and improvements to the motor speed control on one of the distributive water pumps. These projects were completed or are scheduled for the near future.

Watershed Protection Programs Unit

Watershed protection is defined as a means of protecting a waterbody by managing the entire watershed that drains into it. There are 780 square miles of watershed land to protect in the Raritan River Basin and 67 square miles in the Manasquan River Basin. The core programs that the Watershed Protection Unit relies on to safeguard these watersheds include: a suite of River Friendly Certification Programs that focus on implementing water

resource related best practices on the larger land uses such as schools, corporate campuses, golf courses and farms; implementation of watershed scale restoration and protection plans including New Jersey Department of Environmental Protection approved plans for the D&R Canal, the Cedar Grove Brook, the Lockatong Creek and the Wickecheoke Creek, the Neshanic River and the Mulhockaway Creek; stewardship of critical water resource land; and urban stormwater disconnection through community supported actions. Highlights for each core program are summarized below.

River-Friendly Programs – In 2016, the Authority expanded the capacity of the programs through enhanced collaboration with the Raritan Headwaters Association and the Stony-Brook Millstone Watershed Association. The updated and rebranded programs have received positive reviews and increased participation. At this time, there are 39 active businesses, golf courses, and schools participating in the River-Friendly Programs in the Raritan River Watershed. The River Friendly Program of the Raritan Basin has been selected as a winner of the 2016 Governor's Environmental Excellence Award in the Water Resources category.

Watershed Scale Implementation - In 2016, the Authority continued efforts to work with NJDEP to support the implementation of the total nutrient TMDL for the Raritan Basin. In the D&R Canal watersheds, the Authority developed conceptual designs for four stormwater basin retrofit projects in Franklin Township, Somerset County. These projects will be designed and constructed in 2017.

The Authority continued to enhance its capacity to assist agricultural landowners in the Upper Raritan in 2016, by collaborating with the US Department of Agriculture - Natural Resources Conservation Service ("USDA-NRCS") through the Regional

Conservation Partnership Program. The project "Raritan Basin Partners for Source Water Protection" will bring \$700,000 in USDA-NRCS funding to the South Branch Raritan River, Lockatong Creek and Wickecheoke Creek watersheds for conservation practice implementation and easement acquisition.



Union Road, Kingwood Township

In 2016 roadside drainage improvement projects were completed in Kingwood Township and Raritan Township. Many of the roadside channels within the Lockatong and Wickecheoke watersheds are eroded and unstable from the combination of annual maintenance cleaning and increased runoff volumes. The NRCS has estimated that 4,000 tons of sediment from eroded roadside drainage ravines and deicing materials are washed into the Lockatong and Wickecheoke creeks, and ultimately into the Delaware and Raritan Canal, each year. The Authority will monitor the effectiveness of these best management practices ("BMPs") beginning in the Spring of 2017.



Oak Grove Road, Raritan Township

Stewardship of Critical Water Resource Land – On an ongoing basis, stewardship of watershed lands requires us to monitor for and manage emergent invasive species. In 2016, the Authority confirmed the presence of hydrilla, an emergent and highly invasive aquatic plant, in the Delaware and Raritan Canal. To date, submerged vegetation surveys have confirmed hydrilla populations in more than 13 miles of the Canal. Efforts are underway to develop a comprehensive management plan in time for the 2017 growing season.

Urban Stormwater disconnection through community supported actions (Rain Barrel & Rain Garden Projects) - 2016 was the fourth year of the New Jersey Rain Garden Rebate Program, the first program of its type in the State. Since the program's inception, more than 150 participants have attended the informational workshops. The Rain Garden Rebate Program expanded to include Hillsborough Township this year. Rain gardens installed through this novel "Green Infrastructure" Program provide stormwater offsets from more than 26,000 square feet of impervious surfaces. The Authority also continued to champion a Rain Barrel Rebate Program in the Somerset Regional Center communities of Bridgewater Township, and Raritan and Somerville Boroughs. Rain barrels installed through our rebate program in addition to the rain barrels distributed through NJWSA sponsored workshops in these three communities and in similar communities in Hunterdon and Somerset Counties have the potential to collect and store more than 22,000 gallons per rain event.



Kingwood Township Volunteers

With the assistance of over 50 community volunteers, the Authority planted 1,500 live willow and dogwood stakes to reduce erosion and stabilize streambanks along Peters Brook in Somerville Borough, Lockatong Creek in Kingwood Township and Cedar Grove Brook in Franklin Township (Somerset County).



Franklin Township Volunteers



Somerville Volunteers

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 \$15,224,781 since 2003 to purchase and preserve along with its partners, 3,954 acres within the Raritan and Manasquan Basins. The Authority also continues to contribute soft costs and

stewardship expenses in order to assist project partners in closing open space parcels within the basin.

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

During 2016, 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, and through continuous maintenance and dredging of the Delaware and Raritan Canal to assure 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 2016, the Authority undertook several steps to implement cost savings and other measures totaling approximately \$3,000,000. 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 2016, the Authority made certain that personnel were promoted, or hired from outside the Authority into salaries which were lower

than the departing incumbent. During FY2016, the Authority filled 21 vacancies and saved \$115,546 through exercising this diligence. Over the past 10 years, the Authority has saved approximately \$450,000 in starting salaries exercising this type of diligence when filling vacancies. A review of the general operations and maintenance budget revealed significant savings, mainly in the areas of electric expense (\$130,000), reflecting lower costs (10% savings vs. market rates) resulting from the Authority's participation in the statewide power purchasing program, heating fuel and other fuel categories (\$157,000), reflecting the market reduction in fuel prices for the period, and a reduction in maintenance supply expense (\$58,500). In Fiscal year 2016, the Authority undertook a refunding of its 2005 Manasquan Reservoir System Water Supply System Revenue Bonds, resulting in a gain on refunding, and debt service savings, of \$823,712. Finally, the Authority deferred a major dredging capital project and used \$1.6 million in resources for operations, further stabilizing the rate in FY2016.

Letter of Transmittal - Controller

NEW JERSEY WATER SUPPLY AUTHORITY



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

October 3, 2016

Formal Transmittal of the CAFR

To the Commissioners of the New Jersey Water Supply Authority

The Comprehensive Annual Financial Report of the New Jersey Water Supply Authority ("Authority") for the year ended June 30, 2016 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 126 employees, consisting of 99 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, 2016 were \$205,554,407 a decrease of 1.11% percent over the previous year's total of \$207,851,581. Net capital assets decreased by \$855,308, or .61 percent, from \$141,237,393 to \$140,382,085.

The total of cash, cash equivalents and investments for the Authority decreased \$1,634,626, or .27 percent, from \$61,338,813 to \$59,704,187. The decrease in this category of asset is associated with normal fluctuations in cash balances and market value adjustments in investments. Current liabilities decreased \$3,012,568, or 33.33 percent, from \$9,039,888 to \$6,027,320 due primarily to a decrease in the current portion of bonds, notes, and loans payable. Total non-current liabilities decreased from \$89,372,731 to \$86,489,391 or 3.23 percent. The decrease is primarily due to a decrease in the non-current portion of bonds, notes and loans payable. Total Net Position of the Authority increased \$5,513,005, or 5.10% percent, from \$108,095,742 to \$113,608,747.

Total Operating Revenues increased by \$1,030,992 or 3.85 percent, from \$26,810,832 to \$27,841,824 due to an increase in the rate in the Raritan Basin System from \$246 per million gallons to \$253 per million gallons and an increase in the initial contract rate in the Manasquan

Reservoir Water Supply System from \$1,015.90 per million gallons to \$1,057.40 per million gallons, as well as an increase in overdraft revenues. Total Operating Expenses decreased \$35,718, or .17 percent, from \$21,449,303 to \$21,413,585, because of decreases in operations and maintenance costs. Non-operating Revenues increased \$654,510 or 123.11 percent, from \$531,655 to \$1,186,165 reflecting decreases in investment income. Non-operating expenses decreased \$39,378, or 1.84 percent, from \$2,140,777 to \$2,101,399 due to a decrease in the interest component of debt service.

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. CliftonLarsonAllen was retained to perform an audit of the 2016 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. CliftonLarsonAllen reports directly to the Audit Committee of the Board of Commissioners.

CliftonLarsonAllen 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

<u>Certificate of Achievement for Excellence</u> <u>in Financial Reporting</u>

The Government Finance Officers
Association of the United States and Canada (GFOA) awarded a Certificate of
Achievement for Excellence in Financial
Reporting to the New Jersey Water Supply
Authority for its Comprehensive Annual
Financial Report for the fiscal year ended
June 30, 2015. This was the 24th
consecutive year that the Authority has
achieved this prestigious award.

In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized Comprehensive Annual 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. We believe that our current Comprehensive Annual Financial Report continues to meet the Certificate of Achievement Program's requirements and are submitting it to the GFOA to determine its eligibility for another certificate.

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 2016, 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 86 percent of total Manasquan System operating revenues.

The total sales base for the Raritan Basin System increased slightly to 182.339 million gallons per day for fiscal year 2016, and the total sales base for the Manasquan Reservoir System was decreased to 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.

Henry S. Patterson Executive Director

Beth Gates

Director, Finance and Administration

John Yates

Susan Bucklez

Susan Buckley 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

CliftonLarsonAllen LLP CLAconnect.com

INDEPENDENT AUDITORS' REPORT

Board of Commissioners New Jersey Water Supply Authority Clinton, New Jersey

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the New Jersey Water Supply Authority (the "Authority"), a component unit of the State of New Jersey, as of and for the year ended June 30, 2016 and 2015, and the related notes to the financial statements, which collectively comprise the entity'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 entity'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.



Opinion

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, 2016 and 2015, and the changes in financial position and cash flows thereof for the year 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 on pages 29-35 and the Schedule of Proportionate Share of PERS Net Pension Liability and PERS Schedule of Contributions on page 64 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 audit was conducted for the purpose of forming an opinion on the 2016 financial statements as a whole. The other accompanying 2016 supplementary information which consists of the combining schedule of net position, combining schedule of revenue, expenses and changes in net position, the schedule of changes in cash and investments – Raritan Basin System, the schedule of changes in cash and investments – Manasquan Water Supply System on pages 65-83, the information presented in the Introductory Section pages 5-24, and the information presented in the Statistical Section on pages 87-100 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Board of Commissioners New Jersey Water Supply Authority

The combining schedule of net position, combining schedule of revenue, expenses and changes in net position, the schedule of changes in cash and investments – Raritan Basin System, the schedule of changes in cash and investments – Manasquan Water Supply System on pages 65-83 are 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 combining schedule of net position, combining schedule of revenue, expenses and changes in net position, the schedule of changes in cash and investments – Raritan Basin System and the schedule of changes in cash and investments – Manasquan Water Supply System are fairly stated, in all material respects, in relation to the 2016 basic financial statements as a whole.

The information presented in the Introductory Section on pages 5-24, and the information presented in the Statistical Section on pages 87-100 have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on this information.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our reports dated October 3, 2016 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, and grant agreements and other matters. The purpose of these reports are to describe the scope of our testing of internal control over financial reporting and compliance and the result of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. These reports are 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.

CliftonLarsonAllen LLP

Plymouth Meeting, Pennsylvania December 5, 2016

Clifton Larson Allen LLP

Year Ended June 30, 2016

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 year ended June 30, 2016. Please read it in conjunction with the Authority's basic financial statements and accompanying notes.

FINANCIAL HIGHLIGHTS

- Operating revenue for fiscal year 2016 was \$27.8 million, an increase over fiscal year 2015, which was the result of a 6.16% increase in Raritan, and a .34% increase in Manasquan sales. In the Raritan Basin System, there was an increase in the rate from \$246.00 per million gallons to \$253.00 per million gallons, and the sales base increased .04%, from 182.271 million gallons per day ("mgd") to 182.339mgd. In the Manasquan Reservoir System, there was an increase in the rate from \$1,015.90 per million gallons to \$1,057.40 per million gallons. The fiscal year 2016 sales base decreased 5.43% from 20.560mgd to 19.443mgd.
- Unrestricted cash and cash equivalents for fiscal year 2016 were \$41.1 million, an increase of 10.68% from fiscal year 2015. Income from operations increased for the Raritan System 59.35% and increased 2.32% for the Manasquan System.
- Total liabilities for fiscal year 2016 were \$92.5 million. This is a decrease of 5.99% from fiscal year 2015 and reflects the recognition of the Authority's portion of the State of New Jersey's net unfunded pension liability as required by GASB 68, which is effective for fiscal years beginning after June 15, 2014. The Authority continues to pay down long-term debt in both systems and completed a current refunding of the 2005 Manasquan Water Supply System Revenue Bonds in FY2016.
- Total operating expenses for fiscal year 2016 decreased to \$21.4 million, which represents a .17% decrease from fiscal year 2015. Payroll increased 2.03% because of step increments awarded to union employees and the filling of funded vacancies. Direct operations and maintenance expenses decreased 14.06% to \$5.0 million because there were no extraordinary storm related expenses incurred in the fiscal year as there were in fiscal year 2015.
- Other changes for fiscal year 2016 include the following: non-operating revenue increased 123.11% to \$1.2 million; investment income increased 476.4% because of the net impact of adjustments of securities to fair market value and recognizing the balance of bond premiums. The receipt of grant program reimbursement increased 5.6% from the previous year, and other income decreased because of a one-time reimbursement from other state agencies which shared capital project costs in the prior fiscal year.

Year Ended June 30, 2016

• Non-operating expenses for fiscal year 2016 decreased 1.84% to \$2.1 million. The interest component of debt service decreased 11.26% with the refunding of the 2005 Manasquan Water Supply System Revenue Bonds and the continued pay-down of the system debt. There was a decrease 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 2 to the basic financial statements.

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 \$113.6 million as of June 30, 2016. In fiscal year 2016, total assets and deferred outflows increased .03% to \$209.2 million, primarily due to an increase in pension related deferred outflow of resources offset by a decrease in capital assets and a decrease in restricted asset investments. Total liabilities decreased 5.99% to \$92.5 million, due to an increase in the Authority's portion of the State of New Jersey's net unfunded pension liability as required by GASB 68, offset by a decrease in the current and non-current portion of bonds, loans and notes payable. Total net position as of June 30, 2015, was approximately \$108.1 million. Total assets at June 30, 2015 increased .78% to \$209.1 million, and total liabilities increased 15.26% to \$98.4 million. Total net position as of June 30, 2014, was \$121.7 million. Changes in assets, liabilities and net position at June 30, 2016, 2015 and 2014, are summarized in the following table:

Year Ended June 30, 2016

	2016	2015	2014*	Percentage Change 2016-2015	Percentage Change 2015-2014
Current assets	\$53,645,149	\$54,790,017	\$53,937,175	(2.09) %	1.58 %
Capital assets, net	140,382,085	141,237,393	141,155,089	(0.61)	0.06
Other non-current assets	11,527,173	11,824,171	12,416,669	(2.51)	(4.77)
Total assets	205,554,407	207,851,581	207,508,933	(1.11)	0.17
Deferred outflows of resources	3,646,920	1,280,619		184.78	
Total assets and deferred outflows of resources	209,201,327	209,132,200	207,508,933	0.03	0.78
Current liabilities	6,027,320	9,039,888	10,041,207	(33.33)	(9.97)
Non-current liabilities	21,534,789	18,141,342		18.71	
Non-current portion of bonds,					
notes and loans payable	64,954,602	71,231,389	75,345,060	(8.81)	(5.46)
Total liabilities	92,516,711	98,412,619	85,386,267	(5.99)	15.26
Deferred inflows of resources	3,075,869	2,623,839	440,430	17.23	495.74
Net investment in capital assets	98,890,303	91,638,454	87,589,285	7.91	4.62
Restricted for cash, investments					
and unearned revenue	3,876,937	9,229,092	9,084,491	(57.99)	1.59
Unrestricted	10,841,507	7,228,196	25,008,460	49.99	(71.10)
Total net position	\$113,608,747	\$108,095,742	\$121,682,236	5.10	(11.17)
Total liabilities, deferred inflows of resources, and net position	\$209,201,327	\$209,132,200	\$207,508,933	0.78	0.78

^{*} Certain balances have been reclassified to conform to current year presentation

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.

Year Ended June 30, 2016

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 June 2016 Authority meeting, respectively, based on anticipated operating expenses:

	Rate	Rate	Percent
	<u>7/01/2016</u>	<u>7/01/2015</u>	<u>Change</u>
Raritan Basin System Manasquan Water Supply System	\$ 253.00/mg	\$ 253.00/mg	0.00%
Initial users Delayed water users	\$1,104.58/mg	\$1,057.40/mg	4.46%
	\$1,238.04/mg	\$1,190.86/mg	3.96%

The Authority's total operating revenue for fiscal year 2016 was \$27.8 million, an increase of 3.85% from fiscal year 2015, due to a 6.16% increase in Raritan and a .34% increase in Manasquan water sales. The Authority's total operating expenses for fiscal year 2016 were \$21.4 million, a decrease of .17% from fiscal year 2015, because of a decrease in Raritan direct O&M expenses and a decrease in Manasquan direct O&M expenses and headquarters overhead. The Authority's total operating revenue for fiscal year 2015 was \$26.8 million, an increase of 3.75% from fiscal year 2014. The Authority's total operating expenses for fiscal year 2015 were \$21.4 million, an increase of 3.37% from fiscal year 2014. The following table summarizes the changes in revenue, expenses and net position between fiscal years 2016, 2015 and 2014:

Year Ended June 30, 2016

	2016	2015	2014	Percentage Change 2016-2015	Percentage Change 2015-2014
Operating revenue:					
Water sales	\$25,199,424	\$24,168,432	\$23,240,511	4.27 %	3.99 %
Reimbursement of operating expenses	2,642,400	2,642,400	2,600,238	-	1.62
Total operating revenue	27,841,824	26,810,832	25,840,749	3.85	3.75
Non-operating revenue:					
State of New Jersey - Grant Programs	62,375	59,083	129,293	5.57	(54.30)
Investment income	975,579	169,265	366,678	476.36	(53.84)
Rental income	58,467	58,244	59,251	0.38	(1.70)
Other income	89,744	245,063	47,789	(63.38)	412.80
Total non-operating revenue	1,186,165	531,655	603,011	123.11	(11.83)
Total revenue	29,027,989	27,342,487	26,443,760	6.16	3.40
Operating expenses:					
Payroll	7,225,026	7,081,593	7,062,893	2.03	0.26
Operations and maintenance	4,991,547	5,808,377	5,132,956	(14.06)	13.16
Fringe benefits	4,755,520	4,190,610	4,212,357	13.48	(0.52)
Depreciation	4,441,492	4,368,723	4,342,781	1.67	0.60
Total operating expenses	21,413,585	21,449,303	20,750,987	(0.17)	3.37
Non-operating expenses: Interest component of debt service to the					
State of New Jersey	1,226,563	1,382,205	1,569,126	(11.26)	(11.91)
Bond discount/insurance premium expense	158,053	28,343	28,343	457.64	-
Recovery of deferred inflows of resources	716,783	730,229	3,083,270		
Total non-operating expenses	2,101,399	2,140,777	4,680,739	(1.84)	(54.26)
Total Expenses	23,514,984	23,590,080	25,431,726	(0.32)	(7.24)
Change in net position	5,513,005	3,752,407	1,012,034	46.92	270.78
Net position, beginning of year, as previously reported GASB 68 adjustment	108,095,742	121,682,236 (17,338,901)	120,670,202	(11.17) (100.00)	0.84
Net position, beginning of year, as restated	108,095,742	104,343,335	120,670,202	3.60	(13.53)
Net position, end of year	\$113,608,747	\$108,095,742	\$121,682,236	5.10	(11.17)

See accompanying notes.

CAPITAL ASSETS AND DEBT ADMINISTRATION

At June 30, 2016, the Authority had a total of \$140,382,085 invested in the Systems that it operates: \$83,080,156 invested in the Raritan Basin System, and \$57,301,929 invested in the Manasquan System. This total amount represents a .61% decrease from last year. At June 30, 2015, the Authority had a total of \$141,237,393 invested in the Systems that it operates: \$83,240,516 invested in the Raritan Basin System, and \$57,996,877 invested in the Manasquan System. This total amount represents a .06% increase from the prior year.

Year Ended June 30, 2016

The following table summarizes the changes in capital assets, net of depreciation, between fiscal years 2016, 2015 and 2014:

				Percentage	Percentage
				Change	Change
_	2016	2015	2014	2016-2015	2015-2014
Land and land rights	\$26,444,952	\$25,566,853	\$25,566,853	3.43 %	0.00 %
Dams	48,205,015	49,003,010	49,801,005	(1.63)	(1.60)
Building, structures and improvements	51,714,341	55,038,675	54,900,182	(6.04)	0.25
Machinery and equipment	1,303,991	1,183,611	1,108,356	10.17	6.79
Construction work in progress	12,713,786	10,445,244	9,778,693	21.72	6.82
Total net investment in capital assets	\$140,382,085	\$141,237,393	\$141,155,089	(0.61)	0.06

More detailed information about the Authority's capital assets is presented in Note 3 to the basic financial statements.

The following table summarizes the changes in capital debt between fiscal years 2016, 2015 and 2014:

				Percentage Change	Percentage Change
	2016	2015	2014	2016-2015	2015-2014
Bonds payable	\$19,281,414	\$27,135,913	\$30,058,221	(28.95) %	(9.72) %
Notes payable	33,566,892	33,647,103	33,649,796	(0.24)	(0.01)
Loans payable	13,382,948	14,379,107	15,420,971	(6.93)	(6.76)
Total bonds, notes and loans					
payable	\$66,231,254	\$75,162,123	\$79,128,988	(11.88)	(5.01)

At year-end, the Authority had \$66,231,254 in bonds, notes and loans principal outstanding, compared to \$75,162,123 at June 30, 2015. This change represents a decrease of 11.88%. The change in bonds, notes and loans principal outstanding at June 30, 2015, compared to the total of \$79,128,988 at June 30, 2014, represents a decrease of 5.01%, as shown in the above table.

More detailed information about the Authority's long-term debt is presented in Note 5 to the basic financial statements.

CURRENT AND NEW BUSINESS

During fiscal year 2016, 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

MANAGEMENT'S DISCUSSION AND ANALYSIS

Year Ended June 30, 2016

System operating revenue. There is no expected change the sales base of the Raritan Basin System of 182.339mgd in fiscal year 2017. In addition, during fiscal year 2016, 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. Three customers accounted for approximately 86% of total Manasquan System operating revenue. Effective July 1, 2016, the total sales base for the Manasquan Reservoir System decreased to 19.443mgd from 20.560mgd.

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. 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.

New Jersey Water Supply Authority A Component Unit of the State of New Jersey Statement of Net Position

	June 30,		
_	2016	2015	
Assets			
Current assets:			
Unrestricted assets:			
Cash and cash equivalents	\$41,144,423	\$37,174,983	
Unbilled sales	1,082,506	1,097,005	
Accounts receivable, less allowance for doubtful accounts of \$1,000			
at June 30, 2016 and 2015	3,101,106	2,908,472	
Interest receivable	272,443	243,335	
Prepaid expenses and other current assets	1,012,080	1,026,563	
Total unrestricted current assets	46,612,558	42,450,358	
Restricted assets:	_		
Cash equivalents	4,541,572	4,499,245	
Investments	2,491,019	7,840,414	
Total restricted current assets	7,032,591	12,339,659	
Total current assets	53,645,149	54,790,017	
Non-current assets:			
Investments	11,527,173	11,824,171	
Capital assets, net	140,382,085	141,237,393	
Total non-current assets	151,909,258	153,061,564	
Deferred outflows of resources - pension related	3,646,920	1,280,619	
Total assets and deferred outflows of resources	\$209,201,327	\$209,132,200	
Liabilities Current liabilities: Current portion of bonds, notes and loans payable Accounts payable Accrued liabilities Unearned revenue Total current liabilities Non-current liabilities: Non-current portion of bonds, notes and loans payable Net pension liability	\$1,276,652 445,212 1,149,802 3,155,654 6,027,320 64,954,602 21,534,789	\$3,930,734 656,022 1,342,565 3,110,567 9,039,888 71,231,389 18,141,342	
Total non-current liabilities	86,489,391	89,372,731	
Deferred inflows of resources:			
Cost recovery	1,231,135	890,268	
Pension related	1,021,022	1,733,571	
Gain on refunding	823,712		
Total deferred inflows of resources	3,075,869	2,623,839	
Net Position			
Net investment in capital assets	98,890,303	91,638,454	
Restricted for debt service	3,876,937	9,229,092	
Unrestricted	10,841,507	7,228,196	
Total net position	113,608,747	108,095,742	
Total liabilities, deferred inflows of resources, and net position	\$209,201,327	\$209,132,200	

New Jersey Water Supply Authority A Component Unit of the State of New Jersey Statement of Revenue, Expenses and Changes in Net Position

	Year Ended June 30,		
	2016	2015	
Operating revenue:			
Water sales	\$25,199,424	\$24,168,432	
Reimbursement of operating expenses	2,642,400	2,642,400	
Total operating revenue	27,841,824	26,810,832	
Operating expenses:			
Payroll	7,225,026	7,081,593	
Operations and maintenance	4,991,547	5,808,377	
Fringe benefits	4,755,520	4,190,610	
Depreciation	4,441,492	4,368,723	
Total operating expenses	21,413,585	21,449,303	
Income from operations	6,428,239	5,361,529	
Non-operating revenue:			
State of New Jersey - Grant Programs	62,375	59,083	
Investment income	975,579	169,265	
Rental income	58,467	58,244	
Other income	89,744	245,063	
Total non-operating revenue	1,186,165	531,655	
Non-operating expenses:			
Interest component of debt service to the State of New Jersey	1,226,563	1,382,205	
Bond discount/insurance premium expense	158,053	28,343	
Recovery of deferred inflows of resources	716,783	730,229	
Total non-operating expenses	2,101,399	2,140,777	
Total holf-operating expenses	2,101,377	2,140,777	
Change in net position	5,513,005	3,752,407	
Net position, beginning of year	108,095,742	104,343,335	
Net position, end of year	\$ 113,608,747	\$ 108,095,742	

See accompanying notes.

New Jersey Water Supply Authority A Component Unit of the State of New Jersey Statement of Cash Flows

Year Ended June 30	Year	Ended	June	30
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	2016	2015
Cash flows from operating activities		***
Cash received from water sales	\$25,038,797	\$23,068,531
Cash received from reimbursable expenses	2,648,442	2,669,816
Cash received from rental income Cash paid to or on behalf of employees	35,673	28,022
Cash paid to or on benail of employees Cash paid to suppliers	(11,642,062)	(10,900,075)
Net cash provided by operating activities	(5,064,598) 11,016,252	(5,779,801) 9,086,493
Cash flows from noncapital financing activities		
Cash received for grant programs	62,375	59,083
Net cash provided by non-capital financing activities	62,375	59,083
Cash flows from capital and related financing activities		
Proceeds from borrowing	23,596,826	-
Gain on refunding	823,712	
Principal paid on bonds, notes and loans	(26,653,829)	(4,444,935)
Interest paid on bonds, notes and loans	(1,646,829)	(1,445,299)
Acquisition and construction of capital assets	(3,729,938)	(4,249,403)
Proceeds from sale of capital assets	(7.522.808)	85,033
Net cash used in capital and related financing activities	(7,522,898)	(10,054,604)
Cash flows from investing activities Sale of investment securities	2 005 509	4,345,501
Purchase of investment securities	3,005,598	
Interest received on investments	(3,624,715) 946,471	(3,834,027) 194,265
Premium on matured investments	128,684	194,203
Net cash provided by investing activities	456,038	705,739
Net increase in cash and cash equivalents	4,011,767	(203,289)
Cash and cash equivalents, beginning of year	41,674,228	41,877,517
Cash and cash equivalents, end of year	\$45,685,995	\$41,674,228
Reconciliation of income from operations to net cash provided by operating activities:		
Income from operations	6,428,239	5,361,529
Adjustments to reconcile income from operations to net cash provided by operating activities:		
Non-cash items expensed to operations and maintenance	58,467	58,244
Cash received for operating activity included in other income	2,584	160,030
Depreciation	4,441,492	4,368,723
Increase (decrease) in cash from:		
Unbilled sales	14,499	(123,052)
Accounts receivable	(219,644)	(965,304)
Prepaid expenses and other current assets	14,483	33,199
Accounts payable	(40,046)	(938)
Accrued liabilities	31,644	(432)
Accrued payroll and taxes	(30,063)	194,494
Net pension liability Net cash provided by operating activities	314,597 \$11,016,252	\$9,086,493
	φ11,010,232	Ψ2,000,423
Non-cash investing activities Decrease in fair value of investments	(\$277.520)	(\$592,498)
Decrease in the value of hivesulking	(\$277,520)	(\$J72,476)

See accompanying notes.

1. 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.

2. 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").

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.

Revenue

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.

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. At June 30, 2016 and 2015, accounts receivable included amounts due from the New Jersey Environmental Infrastructure Financing Program ("NJEIFP") for \$0 and \$757, respectively.

During fiscal year 2016 two customers accounted for approximately 87% of total Raritan Basin System accounts receivable and five customers accounted for approximately 87% of total Manasquan System accounts receivable. During fiscal year 2015, two customers accounted for approximately 84% of total Raritan Basin System accounts receivable, and five customers accounted for approximately 88% 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.

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 Net Position 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 amount for the years ended June 30, 2016 and 2015, were determined as follows:

Raritan Basin System	2016	2015
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	27,016	(27,721)
Accrued sick pay	186,576	
	1,048,801	807,488
Cost included in rate model:		
Debt principal repayment	-	-
	1,048,801	807,488
Manas quan 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	(2,006)	(487)
Accrued sick pay	 14,337	
	1,553,185	1,540,367
Cost included in rate model:		
Debt principal repayment	 (2,942,853)	(2,797,693)
	(1,389,668)	(1,257,326)
Total Raritan Basin and Manasquan	(340,867)	(449,838)
Balance, beginning of year	(890,268)	(440,430)
Balance, end of year	\$ (1,231,135)	\$ (890,268)

As shown in the statements of revenue, expenses and changes in net position for the years ended June 30, 2016 and 2015, respectively, deferred inflow of resources of \$716,783 and \$730,229 includes a debit balance \$149,993, and a debit balance of \$308,599 of Manasquan Water Treatment Plant deferred revenue, which is not part of the rate model, and does not include a credit balance of \$225,923 of accrued vacation and accrued sick pay and a debit balance of \$28,208 of accrued vacation.

Deferred Inflows/Outflow of Resource – 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/Outflow of Resources - Pensions

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 pension plan investments, changes in the State's proportion of expenses and liabilities to the pension as a whole, differences between the Authority's pension 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 statement of net position. These excess costs or billings will be recovered or recognized in future periods. As of June 30, 2016 and 2015, unearned revenue amounting to \$2,047,595 and \$1,897,602, respectively, was determined as follows:

	2016	2015
Reimbursement of operating expenses	\$2,646,563	\$2,646,219
Operating expenses	2,496,570	2,337,620
Unearned revenue	149,993	308,599
Balance, beginning of year	1,897,602	1,589,003
Balance, end of year	\$2,047,595	\$1,897,602

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, 2016 and 2015, the amount included in unearned revenue was \$1,108,059, and \$1,212,965, respectively.

Accounting for Watershed Protection Program

For the fiscal years ended June 30, 2016 and 2015, the Authority received \$113,483 and \$40,204, respectively, from the NJDEP 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 NJDEP 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, 2016, all the funds received had been recognized as revenue.

Other Post-Employment Benefits ("OPEB") Other than Pensions

On July 1, 2007, the Authority implemented Government Standards Board Statement ("GASB") Number 45, which covers accounting and financial reporting requirements for government employers that provide post-employment benefits other than pensions. Since the Authority participates in the State's multiple-employer cost-sharing plan (Public Employees' Retirement System "PERS"), the Authority's portion of this liability and cost is calculated and recorded at the State level and included in the State's Comprehensive Annual Financial Report. The Authority records OPEB expense based on billings from the State PERS. Required financial statement disclosures are included in Note 6 of these financial statements.

3. Capital Assets

Capital assets activity for the years ended June 30, 2016 and 2015, was as follows:

	2016 Beginning Balance		Additions	D o-	tirements	2016 Ending Balance
Capital assets not being depreciated:	Dalance		Auditoris	ΝC	urchichts	Dalance
Land	\$ 25,566,853	\$	878,099	\$	_	\$ 26,444,952
Construction work in progress	10,445,244	Ψ	2,268,542	Ψ	_	12,713,786
Total capital assets not being depreciated	36,012,097		3,146,641		-	39,158,738
Capital assets being depreciated:						
Dams	77,369,160		_		-	77,369,160
Building, structures and improvements	133,475,474		_		-	133,475,474
D & R canal dredging	21,160,274		-		-	21,160,274
Machinery and equipment	6,320,308		439,543		(367,977)	6,391,874
Total capital assets being depreciated	238,325,216		439,543		(367,977)	238,396,782
Less accumulated depreciation for:						
Dams	(28,366,150)		(797,995)		-	(29,164,145)
Building, structures and improvements	(78,436,800)		(3,324,334)		-	(81,761,134)
D & R canal dredging	(21,160,273)		-		-	(21,160,273)
Machinery and equipment	(5,136,697)		(319,163)		367,977	(5,087,883)
Total accumulated depreciation	(133,099,920)		(4,441,492)		367,977	(137,173,435)
Total capital assets, being depreciated, net	105,225,296		(4,001,949)			101,223,347
Total net investment in capital assets	\$141,237,393	\$	(855,308)	\$	-	\$140,382,085

	2015			2015
	Beginning			Ending
	Balance	Additions	Retirements	Balance
Capital assets not being depreciated:				_
Land	\$ 25,566,853	\$ -	\$ -	\$ 25,566,853
Construction work in progress	9,778,693	4,037,997	(3,371,446)	10,445,244
Total capital assets not being depreciated	35,345,546	4,037,997	(3,371,446)	36,012,097
Capital assets being depreciated:				
Dams	77,369,160	-	-	77,369,160
Building, structures and improvements	130,095,629	3,379,845	-	133,475,474
D & R canal dredging	21,160,274	-	-	21,160,274
Machinery and equipment	6,564,082	425,196	(668,970)	6,320,308
Total capital assets being depreciated	235,189,145	3,805,041	(668,970)	238,325,216
Less accumulated depreciation for:				
Dams	(27,568,155)	(797,995)	-	(28,366,150)
Building, structures and improvements	(75,195,448)	(3,241,352)	-	(78,436,800)
D & R canal dredging	(21,160,273)	-	-	(21,160,273)
Machinery and equipment	(5,455,726)	(329,376)	648,405	(5,136,697)
Total accumulated depreciation	(129,379,602)	(4,368,723)	648,405	(133,099,920)
Total capital assets, being depreciated, net	105,809,543	(563,682)	(20,565)	105,225,296
Total net investment in capital assets	\$141,155,089	\$ 3,474,315	\$ (3,392,011)	\$141,237,393

4. 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.

a. <u>Cash</u>

As of June 30, 2016 and 2015, the Authority's bank balance was \$4,038,014 and \$2,275,529, respectively, of which \$250,000 was covered through the FDIC. The remaining balance of \$3,788,014 and \$2,025,529 as of June 30, 2016 and 2015, respectively, was collateralized, and the cash balance per the statement of net position is shown exclusive of outstanding checks totaling \$159,916 and \$36,108,

respectively. The statement of net position amount includes petty cash totaling \$300, respectively as of June 30, 2016 and 2015.

b. <u>Custodial Credit Risk – Deposits</u>

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 \$4,038,014 and \$2,275,529 as of June 30, 2016 and 2015, respectively, was exposed to custodial credit risk as follows:

c. <u>Investments and Cash Equivalents</u>

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.

As of June 30, 2016, the Authority had the following recurring fair value measurements using quoted market prices for U.S. Treasuries (Level 1 inputs) and 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 Maturities (In Years)		
Investment and Cash Equivalent Type	Valuation Inputs Level	Fair Value	Less than 1	1-5	
U.S. Treasuries	Level 1	\$44,298,616	\$44,298,616	\$ -	
NJ G/O Bonds	Level 2	11,799,616	4,001,505	7,798,111	
Total		\$56,098,232	\$48,300,121	\$7,798,111	

As of June 30, 2015, the Authority had the following recurring fair value measurements using quoted market prices for U.S. Treasuries (Level 1 inputs) and 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 Maturities (In Year		
Investment and Cash Equivalent Type	Valuation Inputs Level	Fair Value	Less than 1	1-5	
U.S. Treasuries	Level 1	\$47,274,921	\$47,274,921	\$ -	
NJ G/O Bonds	Level 2	12,067,506	-	12,067,506	
Total		\$59,342,427	\$47,274,921	\$12,067,506	

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 polices 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 PNC Bank and 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, 2016, all deposits were collateralized.

d. Investment Income

The following comprises investment income for the years ended June 30, 2016 and 2015, respectively:

	2016	2015
Interest earned on bank accounts and certificates of deposit	\$661,886	\$179,377
Interest earned on securities	591,213	582,386
Decrease in fair value of securities	(277,520)	(592,498)
	975,579	169,265

5. Bonds, Notes and Loans Payable

Manasquan System

A. <u>Notes due to State of New Jersey</u>

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 5.93% and 6.24%, 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.

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, 2016 and 2015.

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, 2016 and 2015, the State Loan Notes and Completion Notes are summarized as follows:

State Loan Notes	2016	2015
Current Notes	\$ -	\$72,505
Deferred Notes	30,365,115	30,365,115
Completion Notes		
Current Notes	-	7,706
Deferred Notes	3,201,777	3,201,777
	\$33,566,892	\$33,647,103

B. 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 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, 2016 and 2015, the debt service component of the rate generated \$4,746,838 and \$4,898,761, respectively.

The Revenue Bonds, Series 2005, had a principal balance 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.

For the years ended June 30, 2016 and 2015, interest expense on the 2005 Bonds amounted to \$1,029,827 and \$1,375,125, respectively, and the related interest income earned on the restricted investments amounted to \$246 and \$269, respectively.

C. 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 Notes.

The Refunding Bonds, Series 2016, have a principal balance of \$17,460,000 at June 30, 2016, carry a bond yield of 1.59%, and mature in incremental annual principal amounts through 2031. Principal maturities for the year ending June 30, 2017 are \$230,000.

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. For the years ended June 30, 2016 and 2015, the debt service component of the rate generated \$4,746,838 and \$4,898,761, respectively.

For the years ended June 30, 2016 and 2015, interest expense on the 2016 Bonds amounted to \$123,390 and \$0, 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.

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

The New Jersey Water Supply Authority, a Component Unit of the State of New Jersey, 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, 2016:

		State						
		Revolving						
		Fund		Trust		Blended		
NJEIFP	Date of	Original		Original		Interest	Outstanding	
Series	Issuance	Principal	Percent	Principal	Percent	Rate	Principal	Maturity
2012B	05/03/2012	\$2,312,250	76%	\$715,000	24%	.80%	\$2,434,613	08/01/2031

Raritan System

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

The New Jersey Water Supply Authority, a Component Unit of the State of New Jersey, obtained loans from the New Jersey Environmental Infrastructure Trust (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.

The following table summarizes the NJEIFP loans outstanding for the Raritan Basin System, as of June 30, 2016:

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%	\$381,622	8/1/2023
2004A	11/4/2004	1,030,000	75%	350,000	25%	1.31%	674,314	8/1/2024
2005A	11/10/2005	2,940,974	75%	1,050,000	25%	1.25%	1,662,499	8/1/2025
2006A	11/9/2006	2,099,363	75%	745,000	25%	1.26%	1,620,715	8/1/2026
2007A	11/8/2007	1,740,563	75%	620,000	25%	1.06%	1,507,104	8/1/2027
2008A	11/6/2008	1,152,000	64%	660,000	36%	1.74%	1,280,099	8/1/2028
2010A	3/10/2010	300,493	51%	290,000	49%	1.69%	437,244	8/1/2029
2010B	12/2/2010	1,064,338	52%	990,000	48%	1.87%	1,642,786	8/1/2030
2012A	5/3/2012	1,501,455	76%	465,000	24%	0.65%	1,616,074	8/1/2031
Total		\$12,456,205		\$5,405,000			\$10,822,457	

The following table summarizes the changes in bonds, notes and loans payable between fiscal years 2016, 2015 and 2014:

		Less Payments,			
	Fiscal Year	Net of		Fiscal Year	Due Within
	2015	Amortization	Debt Issued	2016	One Year
Bonds payable	\$27,135,913	\$25,314,499	\$17,460,000	\$19,281,414	\$230,000
Notes payable	33,647,103	80,211	0	33,566,892	0
Loans payable	14,379,107	996,159	0	13,382,948	1,046,652
Total	\$75,162,123	\$26,390,869	\$17,460,000	\$66,231,254	\$1,276,652

		Less Payments,			
	Fiscal Year	Net of		Fiscal Year	Due Within
	2014	Amortization	Debt Issued	2015	One Year
Bonds payable	\$30,058,222	\$2,922,309	\$0	\$27,135,913	\$2,940,000
Notes payable	33,649,796	2,693	0	33,647,103	2,853
Loans payable	15,420,970	1,041,863	0	14,379,107	987,881
Total	\$79,128,988	\$3,966,865	\$0	\$75,162,123	\$3,930,734

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
Tear Ending June 30,	System	System	System	Selies 2010	Totals
2017	1,076,449	176,422	-	718,532	1,971,403
2018	1,064,348	175,372	-	3,454,588	4,694,308
2019	1,056,425	174,172	-	3,443,937	4,674,534
2020	1,052,871	172,822	-	3,445,962	4,671,655
2021	1,070,857	176,197	-	3,446,338	4,693,392
2022-2026	4,617,244	868,610	-	2,898,562	8,384,416
2027-2031	2,050,785	867,185	-	2,865,369	5,783,339
2032-2036	86,466	87,133	-	568,400	741,999
Deferred Portion	-	-	33,566,892	-	33,566,892
Subtotal	12,075,445	2,697,913	33,566,892	20,841,688	69,181,938
Less amounts					
representing interest	1,252,988	263,300	-	3,381,688	4,897,976
Plus unamortized					
bond premium	81,721	44,157	-	1,821,414	1,947,292
Subtotal	10,904,178	2,478,770	33,566,892	19,281,414	66,231,254
Less:					
Current principal					
portion	899,080	147,572	-	230,000	1,276,652
Total	\$10,005,098	\$2,331,198	\$33,566,892	\$19,051,414	\$64,954,602

6. 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 Public Employees' Retirement System (PERS). For additional information about PERS, please refer to the Division's Comprehensive Annual Financial Report (CAFR) which can be found www.state.nj.us/treasury/pensions/annrprts.shtml.

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, 2015.

Net Pension Liabilities	\$21,534,789
Deferred Outflow of Resources	3,646,920
Deferred Inflow of Resources	1,021,022
Pension Expense	1,138,400
Contributions Made	823,798

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.

Tier 1, 2 or 3: Annual Benefit = 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). Tier 4 or Tier 5: Annual Benefit = Years of Service Credit, divided by 60, times Final Average Salary (average salary of the last five years of credited service or the highest five fiscal years of credited service, whichever provides the higher benefit). Pension benefits fully vest on reaching 10 years of service. Vested employees who were enrolled prior to July 1, 2007, and who have established 25 years or more of creditable service may retire without penalty at or

after age 55 and receive full retirement benefits. PERS also provides death and disability benefits. Benefits are established by State statute.

Contributions

Employee contribution rates to PERS governed by P.L. 2011, C. 78, effective June 28, 2011, were increased from 5.5% of salary to 6.5% of salary, and a phase-in to 7.5% of salary over a seven year period. Covered Authority employees are required by PERS to contribute 7.2% 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 www.state.nj.us/treasury/pensions/annrprts.shtml.

The payroll for employees covered by PERS for the years ended June 30, 2016, 2015 and 2014, was \$6,949,632, \$6,808,193 and \$6,781,700, respectively. The Authority's total payroll for the years ended June 30, 2016, 2015, and 2014 was \$7,225,026, \$7,081,593 and \$7,062,893, respectively. The actuarial contribution requirements and the contributions made for the years ended June 30, 2016, 2015 and 2014, were \$1,312,670, \$1,270,306, and \$1,217,153 respectively, which consisted of \$823,798, \$798,757 and \$758,938 from the Authority, and \$488,872, \$471,549 and \$458,215 from the employees, respectively. As required by PERS, the employer and employee contributions represented 11.85% and 7.06% of covered payroll for the year ended June 30, 2015, and 11.20% and 6.78% of covered payroll for the year ended June 30, 2014, respectively. Contributions were made in accordance with the actuarial funding requirement.

Assumptions

The total pension liability for June 30, 2015 measurement date was determined by an actuarial valuation as of July 1, 2014. The pension liability was rolled forward to June 30, 2015. The actuarial valuation used an inflation rate of 3.04%, projected salary increases from 2012 to 2021 of 2.15% to 4.40% based on age and thereafter 3.15% to 5.40% based on age and an investment rate of return of 7.90%.

The discount rate used to measure the total pension liability was 4.90% and 5.39% as of June 30, 2015 and 2014 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 will be made based on the average

of the last five years of contributions made in relation to the last five years of recommended contributions. Based on those assumptions, the plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through 2033. Therefore, the long-term expected rate of return on plan investments was applied to projected benefit payments through 2033, and the municipal bond rate was applied to projected benefit payments after that date in determining the total pension liability. More information on mortality rates and other assumptions, and investment policies, can be found at www.state.nj.us/treasury/pensions/annrprts.shtml.

The following presents the Authority's proportionate share of the PERS net pension liability calculated using the discount rate of 4.90% and 5.39% as of June 30, 2015 and 2014, respectively, as well as what the PERS net pension liability would be if it were 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 (3.90%)	At current discount rate (4.90%)	At 1% increase (5.90%)
2015	\$26,733,985	\$21,534,789	\$17,129,785
	At 1% decrease (4.39%)	At current discount rate (5.39%)	At 1% increase (6.39%)
2014	\$22,823,669	\$18,141,342	\$14,211,197

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 actuarial determine 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.

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 allocations are applied to amounts presented in the schedules of pension amount by employer. The allocation percentages for each group as of June 30, 2015 and 2014 are based on the ratio of each employer's contributions to total employer contributions of the group for the fiscal years ended June 30, 2015 and 2014, respectively.

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 excluding that attributable to employer-paid member contributions. The employer allocation percentages presented in the PERS schedule of employer allocations and applied to amounts presented in the PERS schedule of pension amounts by employer are based on the ratio of the contributions as an individual employer to total contributions to the PERS during the years ended June 30, 2015 and 2014. The Authority's proportionate share of the collective net pension liability as of June 30, 2015 and 2014 was .0958% and .0969% respectively.

At June 30, 2016, the amount recognized as the Authority's proportionate share of the PERS net pension liability was \$21,534,789. For the year ended June 30, 2016 the Authority recognized PERS pension expense of \$1,138,400. At June 30, 2016, deferred outflows of resources and deferred inflows of resources related to the PERS pension are as follows:

	Deferred		Deferred	
	Outflows of		Inflows of	
	R	esources	F	Resources
Net Difference Between Expected and				
Actual Expenses	\$	513,147	\$	-
Change of Assumptions		2,309,975		
Net Difference Between Projected and				
Actual Investment Earnings		-		345,835
Net Change in Proportions		-		675,187
Total Contributions and Proportionate				
Share of Contributions after the				
Measurement Date		823,798		-
	\$	3,646,920	\$	1,021,022
				

The Authority will recognize the \$823,798 reported as deferred outflows of resources resulting from pension contributions after the measurement date as a reduction of the PERS net pension liability in the year ended June 30, 2017. 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
2017	301,194
2018	301,194
2019	301,194
2020	568,478
2021	330,040
Total	\$1,802,100

Post-Retirement Health Care Benefits

The Authority provides continued health care benefits to employees retiring after twenty-five years of service and their eligible dependents. Benefits, contributions, funding and the manner of administration are determined by the State Legislature. The Authority's portion of this liability and cost is included in the State's comprehensive annual financial report on an annual basis. As such, the liability for Authority employees is covered under the State plan. The Division of Pensions within the New Jersey Treasury Department administers the funds. Monthly, the Division of Pensions charges the Authority for its contribution. The total number of employees receiving benefits was 55, 53 and 52 at June 30, 2016, 2015 and 2014, respectively. Total cost for these post-retirement benefits, included in fringe benefits, approximated \$914,743, \$875,644 and \$757,870 for the years ended June 30, 2016, 2015 and 2014, respectively.

7. Major Water Customers

During fiscal years 2016 and 2015, the Authority supplied water to approximately 30 customers of the Raritan Basin System and 13 customers of the Manasquan System.

During fiscal years 2016 and 2015, two customers accounted for approximately 84% of total Raritan Basin System operating revenue. Three customers accounted for approximately 86% of total Manasquan System operating revenue.

8. 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.

9. Recent Accounting Standards

The Authority has adopted GASB Statement No. 72, Fair Value Measurement and Application ("GASB 72"). Statement No. 72 requires the Authority to use a hierarchy of valuations methods and inputs in measuring its investments at fair value, and requires disclosure about the fair value measurements, hierarchy and valuation techniques. Required financial statement disclosures are included in Note 4 of these financial statements.

The Authority has adopted GASB Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not Within the Scope of GASB Statement 68, and amendments to Certain Provisions of GASB Statements 67 and 68 ("GASB 73"). Statement No. 73 requires the Authority to present a 10-year schedule of changes in the total net pension liability. The schedule of changes in the total net pension liability is presented in Required Supplementary Information of these financial statements.

In June 2015, GASB issued Statement No 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans ("GASB 74"). This Statement establishes financial reporting for state and local governmental OPEB plans and defined contribution OPEB plans that are administered through trusts or equivalent arrangements. This Statement also establishes financial reporting standards for governments that hold assets accumulated for purposes of providing OPEB through defined benefit OPEB plans that are not administered trough trust or equivalent arrangements. The provisions of this Statement are effective for financial statements in periods beginning after June 15, 2016. This Statement will become effective for the June 30, 2017 year-end. The Authority has not yet completed the process of evaluating the impact of GASB 74 on its financial statements.

In June 2015, GASB issued Statement No 75, Financial Reporting for Postemployment Benefit Plans Other Than Pensions ("GASB 75"). This Statement establishes standards of accounting and financial reporting for defined benefit OPEB and defined contribution OPEB that are provided to employees of state and local government employers through OPEB plans that are administered through trusts or equivalent arrangements. This Statement also establishes standards of accounting and financial reporting for defined benefit OPEB and defined contribution OPEB that are provided to the employees of state and local governmental employers through OPEB plans that are not administered through trusts or equivalent arrangements. The provisions of this Statement are effective for financial statements in periods beginning after June 15, 2017. This Statement will become effective for the June 30, 2018 year-end. The Authority has not yet completed the process of evaluating the impact of GASB 75 on its financial statements.

The Authority has adopted GASB Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments* ("GASB 76"). This statement establishes the hierarchy of GAAP for state and local governments. The GAAP hierarchy sets forth what constitutes GAAP for all state and local governmental entities and establishes the order of priority of pronouncements and other sources of accounting and financial reporting

guidance that a governmental entity should apply. The Authority has reviewed the provision of this Statement and has determined that no retroactive accounting changes are necessary as a result of implementing this Statement.

In March 2016, GASB issued Statement No. 82, *Pension Issues* ("GASB 82"). This Statement requires the presentation of covered payroll, defined as payroll on which contributions to a pension plan are based, and ratios that use that measure, in schedules of required supplementary information. The Statement also addresses issues regarding the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The provisions of this Statement are effective for financial statements in periods beginning after June 15, 2016. This Statement will become effective for the June 30, 2017 year-end. The Authority has implemented the provisions of GASB 82 with respect to covered payroll in its June 30, 2016 financial statements. The Authority has not yet completed the process of evaluating the remaining impact of GASB 82 on its financial statements.

10. Insurance Reimbursements

There are no insurance or FEMA reimbursements included in "Other income" on the statement of revenues, expenses and changes in net position for the years ended June 30, 2016 and 2015.

11. 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.

12. 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:

Year Ended

	June 30, 2016		June 30, 2015		
	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	\$33,539,086	\$13,242,472	\$30,415,688	\$12,034,670	
Restricted cash	1,872,225	2,669,347	1,771,825	10,567,834	
Other restricted assets	0	2,491,019			
Capital assets	83,080,156	57,301,929	83,240,516	57,996,877	
Other non-current assets	10,615,449	911,724	10,869,351	954,820	
Deferred outflows of resources	2,808,128	838,792	988,207	292,412	
Total assets and deferred outflows of					
resources	\$131,915,044	\$77,455,283	\$127,285,587	\$81,846,613	
Liabilities and deferred inflows of					
resources:					
Current liabilities	\$2,067,051	\$4,129,269	\$1,733,741	\$7,306,147	
Non-current liabilities	26,586,885	59,902,506	25,010,817	64,361,914	
Deferred inflows of resources	14,985,711	(11,909,842)	16,581,842	(13,958,003)	
Total liabilities and deferred inflows of resources	43,639,647	52,121,933	43,326,400	57,710,058	
Net Position:					
Net investment in capital assets	72,175,978	26,714,325	71,485,538	20,152,916	
Restricted for debt service	1,872,225	2,004,712	1,771,825	7,457,267	
Unrestricted	14,227,194	(3,385,687)	10,701,824	(3,473,628)	
Total net position	88,275,397	25,333,350	83,959,187	24,136,555	
Total liabilities, deferred inflows of					
resources, and net position	\$131,915,044	\$77,455,283	\$127,285,587	\$81,846,613	

Year	Fnd	أمما
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	June 30	, 2016	June 30	June 30, 2015		
_	Raritan Basin System	Manasquan Reservoir System	Raritan Basin System	Manasquan Reservoir System		
Condensed statement of revenue,						
expenses and changes in net assets						
Total operating revenue	\$17,298,270	\$7,901,154	\$16,293,863	\$7,874,569		
Operating expenses	11,442,968	3,032,555	11,646,913	3,096,047		
Depreciation	2,758,921	1,682,571	2,703,857	1,664,866		
Operating income	3,096,381	3,186,028	1,943,093	3,113,656		
Non-operating revenues	563,547	618,455	381,291	146,545		
Non-operating expenses (recovery)	(656,282)	2,607,688	(647,080)	2,479,258		
Change in net assets	4,316,210	1,196,795	2,971,464	780,943		
Net position, beginning of the year	83,959,187	24,136,555	80,987,723	23,355,612		
Net position, end of year	\$88,275,397	\$25,333,350	\$83,959,187	\$24,136,555		
Condensed statement of cash flows						
Net cash provided by:						
Operating activities	\$5,988,367	\$5,027,885	\$3,906,867	\$5,179,625		
Non-capital financing activities	62,375	0	59,083	0		
Capital and related financing activities	(3,578,112)	(3,944,786)	(4,519,478)	(5,535,125)		
Investing activities	583,415	(127,377)	601,795	103,944		
Net (decrease) increase in cash and cash	_					
equivalents	3,056,045	955,722	48,267	(251,556)		
Beginning cash and cash equivalent balances	28,915,829	12,758,399	28,867,562	13,009,955		
Ending cash and cash equivalent balances	\$31,971,874	\$13,714,121	\$28,915,829	\$12,758,399		

Required Supplementary Information

Schedule of Proportionate Share of PERS Net Pension Liability (NPL) Determined as of June 30, 2016, 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
2016	0.10%	\$21,534,789	\$6,949,632	310%	47.94%
2015	0.10%	\$18,141,342	\$6,808,193	266%	52.08%

Schedule of Contributions

Fiscal Year	Required Contribution	Contributions Recognized by PERS	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a % of Covered Payroll
2016	\$1,261,241	\$823,798	\$437,443	\$6,949,632	11.90%
2015	\$819,154	\$798,757	\$20,397	\$6,808,193	11.70%

Schedule of Changes in Total 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
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. Additional years' information will be displayed as it becomes available.

Supplementary Information

New Jersey Water Supply Authority A Component Unit of the State of New Jersey Combining Schedule of Net Position

June 30, 2016

	Raritan Basin System	Manasquan Reservoir System	Elimination Entries	Combined Total
Assets				
Current assets:				
Unrestricted assets:				
Cash and cash equivalents	\$30,099,649	\$11,044,774		\$41,144,423
Unbilled sales	1,082,506	011,011,771		1,082,506
Accounts receivable, less allowance for doubtful accounts	1,002,000			1,002,500
of \$1,000 at June 30, 2016	1,308,087	1,962,019	(169,000)	3,101,106
Interest receivable	248,060	24,383	(105,000)	272,443
Prepaid expenses and other current assets	800,784	211,296		1,012,080
Total unrestricted assets	33,539,086	13,242,472	(169,000)	46,612,558
Restricted assets:				
Cash equivalents	1,872,225	2,669,347		4,541,572
Investments	1,0 /2,225	2,491,019		2,491,019
Total restricted assets	1,872,225	5,160,366		7,032,591
Total current assets	35,411,311	18,402,838	(169,000)	53,645,149
Non-current assets:	33,111,311	10,102,030	(105,000)	33,013,113
Investments	10,615,449	911,724		11,527,173
Capital assets net of accumulated depreciation	10,015,115	J11,/21		11,527,175
of \$137,173,435 at June 30, 2016	83,080,156	57,301,929		140,382,085
Total non-current assets	93,695,605	58,213,653		151,909,258
Deferred outflows of resources	2,808,128	838,792		3,646,920
Total assets and deferred outflows of resources	\$131,915,044	\$77,455,283	(\$169,000)	\$209,201,327
Liabilities				
Current liab ilities:				
Current portion of bonds, notes and loans payable	\$899,080	\$377,572		\$1,276,652
Accounts payable	353,493	260,719	(169,000)	445,212
A crued liabilities	814,478	335,324	(200,000)	1,149,802
Unearned revenue	0	3,155,654		3,155,654
Total current liabilities	2,067,051	4,129,269	(169,000)	6,027,320
Non-current liabilities:				
Non-current portion of bonds, notes and loans payable	10,005,098	54,949,504		64,954,602
Net pension liability	16,581,787	4,953,002		21,534,789
Total non-current liabilities	26,586,885	59,902,506		86,489,391
Deferred inflows of resources	20,200,002	57,7°0 2 ,2°0°		00,100,002
Cost recovery	14,199,524	(12,968,389)		1,231,135
Pension related	786,187	234,835		1,021,022
Gain on refunding	· -	823,712		823,712
Total deferred inflow of resources	14,985,711	(11,909,842)		3,075,869
Net position				
Net investment in capital assets	72,175,978	26,714,325		98,890,303
Restricted for cash, investments and unearned revenue	1,872,225	2,004,712		3,876,937
Unrestricted	14,227,194	(3,385,687)		10,841,507
Total net position	88,275,397	25,333,350		113,608,747
Total liabilities, deferred inflows of resources, and net position	\$131,915,044	\$77,455,283	(\$169,000)	\$209,201,327

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, 2016

	Raritan Basin System	Manasquan Reservoir System	Manasquan Water Treatment Plant	Combined Total
Operating revenues:	617 200 270	07.001.154		625 100 424
Water sales	\$17,298,270	\$7,901,154	2.642.400	\$25,199,424
Reimbursement of operating expenses	15.000.050	7.001.154	2,642,400	2,642,400
Total operating revenues	17,298,270	7,901,154	2,642,400	27,841,824
Operating expenses:				
Payroll	5,502,296	810,584	912,146	7,225,026
Operations and maintenance (direct)	3,117,781	957,041	777,344	4,852,166
Operations and maintenance (general and		-		
administrative)		79,330	60,051	139,381
Fringe benefits	3,559,891	545,600	650,029	4,755,520
Headquarters overhead	(737,000)	640,000	97,000	-
Depreciation	2,758,921	1,682,571	-	4,441,492
Total operating expenses	14,201,889	4,715,126	2,496,570	21,413,585
Income from operations	3,096,381	3,186,028	145,830	6,428,239
Non-operating revenues:				
State of New Jersey - Grant Programs	62,375			62,375
Investment income	356,009	615,407	4,163	975,579
Rental income	58,467			58,467
Other income	86,696	3,048		89,744
Total non-operating revenues	563,547	618,455	4,163	1,186,165
Non-operating expenses: Interest component of debt service to the State of				
New Jersey	178,927	1,047,636		1,226,563
Bond discount/insurance premium expense		158,053		158,053
Recovery of deferred inflows of resources	(835,209)	1,401,999	149,993	716,783
Total non-operating expenses	(656,282)	2,607,688	149,993	2,101,399
Changes in net position	4,316,210	1,196,795	-	5,513,005
Net position, beginning of year	83,959,187	24,136,555		108,095,742
Net position, end of year	\$88,275,397	\$25,333,350	-	\$113,608,747

New Jersey Water Supply Authority A Component Unit of the State of New Jersey Schedule of Changes in Cash and Investments, Raritan Basin System

Year Ended June 30, 2016

Operating Fund

	Revenue Fund	Operating Account	Payroll Account	Operating Fund	Reserve for O&M
Cash and investments - July 1, 2015	\$289,108	\$1,187,370	\$30,000	\$972,749	\$3,693,572
Cash receipts:					
Water sales operations and maintenance	11,428,162	-	-	-	-
Water sales debt service	1,674,833		-	-	-
Water sales capital fund	2,180,665	-	-	-	-
Water sales source water protection fund	1,607,659		-	-	-
Water sales overdrafts	371,664	-	-	-	-
Rental income	36,180	-	-	-	-
Manasquan reservoir support	203,038		-	12,316	-
Headquarters overhead	-	-	-	746,000	-
Disposition of property	28,554	-	-	-	-
Recycling revenue		i. 	-	-	-
Sale of investment securities	-	-	-	-	857,582
Nonrefundable bid deposits	-	-	-	-	-
Insurance reimbursement	44,296	-	-	-	-
Miscellaneous expense reimbursement	192,862	8,899	-	-	-
Transfers:					
Contributions from operating fund	-	11,114,342	3,282,076	(21,659,098)	-
Contributions to operating fund	-	-	-	2,371,514	-
Transfers for operations	(17,749,913)	-	-	19,318,355	1,558
Transfers for investments	-	-	-	-	-
Distribution from reserves to operations	-	15,365	-	-	-
Investment income	-	-	-	2,073	82,877
Per resolution, Section 603:					
Investment income, transfer from	537,844	-	-	(2,073)	(82,877)
Investment income, transfer to	(60,398)	-	-	-	8,404
Unrealized gain/(loss) on fair value		-	-	-	(246,266)
Total cash receipts	495,446	11,138,606	3,282,076	789,087	621,278
Total available cash and investments	\$784,554	\$12,325,976	\$3,312,076	\$1,761,836	\$4,314,850

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, 2016

Operating Fund

1			Capital	Source Water	
Self-Insurance Reserve	Depreciation Reserve	Pumping Reserve	Improvements Investments II	Protection Fund	Subtotal
\$1,009,445	\$3,437,514	\$926,772	\$6,677,330	\$2,889,273	\$21,113,133
31,009,445	\$3,437,314	3920,772	30,077,330	\$2,009,273	\$21,113,133
-		-	-		11,428,162
-	-		-	-	1,674,833
-	-	-	-	-	2,180,665
-	-		-	-	1,607,659
-	-		-	-	371,664
-	-	-	-	-	36,180
-	-		-	-	215,354
-	-	-	-	-	746,000
-	-	-	-	-	28,554
-	-		-	-	-
-	442,213	-	-	-	1,299,795
-	-	-	-	-	-
-	-	-	-	-	44,296
-	-	-	-	-	201,761
-	608,252	150,000	-	558,000	(5,946,428)
-	(126,713)	-	-	(37,600)	2,207,201
-	-	-	-	-	1,570,000
-	-	-	-	-	-
-	-	-	-	-	15,365
37,213	106,483	1,868	312,549	6,065	549,128
(37,213)	(103,181)	-	(312,500)	-	-
-	51,994	-		-	-
(30,948)	(29,442)	-	(34,722)	-	(341,378)
(30,948)	949,606	151,868	(34,673)	526,465	17,888,811
\$978,497	\$4,387,120	\$1,078,640	\$6,642,657	\$3,415,738	\$39,001,944

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, 2016

	Subtotal	Parity SWP Bond Fund	Subordinated SWP Bond Fund	Major Rehabilitation	Capital Improvement Fund
Cash and investments - July 1, 2015	\$21,113,133	\$287,978	\$535,658	\$1,375,581	\$13,411,879
Cash receipts:					
Water sales operations and maintenance	11,428,162	-	-	-	
Water sales debt service	1,674,833	1	-	-	(-
Water sales capital fund	2,180,665	-	-	-	
Water sales source water protection fund	1,607,659	-	-	-	S=
Water sales overdrafts	371,664	-		-	5. -
Rental income	36,180	-	-	-	:=
Manasquan reservoir support	215,354	1-	-	-	-
Headquarters overhead	746,000	-	-	-	-
Disposition of property	28,554	-		-	-
Recycling revenue	-	-	-	-	-
Sale of investment securities	1,299,795	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-
Insurance reimbursement	44,296	-	-	-	-
Miscellaneous expense reimbursement	201,761	-	-	-	-
Transfers:					
Contributions from operating fund	(5,946,428)	354,000	690,000	-	2,202,290
Contributions to operating fund	2,207,201	-	-	-	(1,574,652)
Transfers for operations	1,570,000	-	-	-	-
Transfers for investments	-	-	-	-	-
Distribution from reserves to operations	15,365	-	-	-	-
Investment income	549,128	225	506	2,615	26,201
Per resolution, Section 603:					
Investment income, transfer from	-	-	-	-	-
Investment income, transfer to	-	-	-	-	-
Unrealized gain/(loss) on fair value	(341,378)	-			
Total cash receipts	17,888,811	354,225	690,506	2,615	653,839
Total available cash and investments	\$39,001,944	\$642,203	\$1,226,164	\$1,378,196	\$14,065,718

Totals	Employment Benefit Funds	Rate Stabilization Fund	Capital Equipment Reserve	D & R Canal Dredging	D & R Mitigation Fund
8 \$39,785,180	\$1,053,188	\$85,886	\$150,052	\$1,751,704	\$20,121
339,763,160	\$1,055,166	303,000	3130,032	31,731,704	320,121
- 11,428,162	_	_			_
- 1,674,833	_	_	_		2
- 2,180,665		670	-	_	-
- 1,607,659	_	_	-		20
- 371,664	_	-	_	_	_
- 36,180	_	-	_	2	4
- 215,354	-	-	-	_	-
- 746,000	14	-	-	_	-
- 28,554	-	-	-	-	-0
	-	-	-	-	-
- 1,299,795	-	-	-	-	-
	-	-	-	-	-
- 44,296	-	-	-	-	-
201,761	-	-	-	-	-
3 -	881,938	-	150,000	1,668,200	-
	(632,549)	-	-	-	-
· -	-	-	-	(1,570,000)	-
	-	-	-	-	-
5) -	(15,365)	-	-	-	-
2 583,411	2,132	70	335	2,163	36
_	_	_	_	_	_
	-	-		_	_
- (341,378)	-	-		_	_
	236,156	70	150,335	100,363	36
	\$1,289,344	\$85,956	\$300,387	\$1,852,067	\$20,157

Year Ended June 30, 2016

Operating Fund

	Revenue F und	Operating Account	Payroll Account	Operating Fund	Reserve for O&M
Total available cash and investments	\$784,554	\$12,325,976	\$3,312,076	\$1,761,836	\$4,314,850
Cash disbursements:					
Payroll	-	-	3,149,305	-	-
Fringe benefits	-	36,698	-	775,616	÷.
Employee deferred comp. and credit union	-	1,463,065	-	170,157	-
Operations and maintenance	-	8,634,057		-	- :
Prepaid insurance	-	-	:-	-	
Miscellaneous disbursements	-	-	9₩	-	-
Watershed Management Fund	-	-	-	-	-
Capital improvements:					
Capital assets	-	-	-	-	-
New five-year construction project		5. *	RE	-	-
Purchase of investment securities	-			-	713,618
Principal on 1981 bonds	-	-	-	-	-
Interest on 1981 bonds	-	-	-	-	-
Principal on 1998 bonds	-	-	-	-	-
Interest on 1998 revenue bonds	-	-	-	-	-
Principal on NJEIT revenue bonds	-	-	-	-	-
Interest on NJEIT revenue bonds		-	-	-	
Total cash disbursements		10,133,820	3,149,305	945,773	713,618
Cash and investments - June 30, 2015	\$784,554	\$2,192,156	\$162,771	\$816,063	\$3,601,232
Summary of cash and investments:					
Cash	\$784,554	\$2,192,156	\$162,771	-	
Short-term investments	-	-	-	816,063	2,176,177
Long-term investments	-	-	-	•	1,425,055
Restricted investments (current)	-	-	-	-	-
Restricted investments (long term)					
Total cash and investments	\$784,554	\$2,192,156	\$162,771	\$816,063	\$3,601,232

Year Ended June 30, 2016

Operating Fund

150 III			Capital	Source Water	
Self-Insurance		Pumping	Improvements	Protection	
Reserve	Reserve	Reserve	Investments II	Fund	Subtotal
\$978,497	\$4,387,120	\$1,078,640	\$6,642,657	\$3,415,738	\$39,001,944
					2 1 40 205
-	-	-	-	-	3,149,305
-	-	-	-	-	812,314
-	-	-	-	-	1,633,222
-	-	-	-	-	8,634,057
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-	456,674	-	-		1,170,292
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_	456,674		-	-	15,399,190
\$978,497	\$3,930,446	\$1,078,640	\$6,642,657	\$3,415,738	\$23,602,754
.					
-	-	-	-	-	\$3,139,481
296,679	1,989,979	1,078,640	74,548	3,415,738	9,847,824
681,818	1,940,467		6,568,109		10,615,449
,				_	
	2	3E	2	_	2
\$978,497	\$3,930,446	\$1,078,640	6,642,657	\$3,415,738	\$23,602,754
₩7 / U, 47 /	90,000,440	91,070,040	0,042,007	93,713,730	\$25,002,754

	Subtotal	Parity SWP Bond Fund	Subordinated SWP Bond Fund	Major Rehabilitation	Capital Improvement Fund
Total available cash and investments	\$39,001,944	\$642,203	\$1,226,164	\$1,378,196	\$14,065,718
Cash disbursements:					
Payroll	3,149,305	-	-	-	-
Fringe benefits	812,314	-	-	-	-
Employee deferred comp. and credit union	1,633,222	-	-	-	-
Operations and maintenance	8,634,057	-		-	-
Prepaidinsurance	-	-	-	-	
Miscellaneous disbursements	-	-	-	7-	796,833
Watershed Management Fund	-	-	-	75	-
Capital improvements:					
Capital assets	-	.=		-	-
New five-year construction project	- 1	-		-	-0
Purchase of investment securities	1,170,292	-	9.4	-	-0
Principal on 1981 bonds	-	-	-	-	-
Interest on 1981 bonds	-	-	-	-	-
Principal on 1998 bonds	-	-	-	-	-
Interest on 1998 revenue bonds	-	-	-	-	-
Principal on NJEIT revenue bonds	-	308,820	536,488	-	-
Interest on NJEIT revenue bonds		39,552	150,984	-	
Total cash disbursements	15,399,190	348,372	687,472	-	796,833
Cash and investments - June 30, 2015	\$23,602,754	\$293,831	\$538,692	\$1,378,196	\$13,268,885
Summary of cash and investments:					
Cash	\$3,139,481	-	-	-	-
Short-term investments	9,847,824	293,831	538,692	1,378,196	13,268,885
Long-term investments	10,615,449	-	-	-	-
Restricted investments (current)	-	-	-	-	-
Restricted investments (long term)		-	-	-	
Total cash and investments	\$23,602,754	\$293,831	\$538,692	\$1,378,196	\$13,268,885

D & R Mitigation Fund	D & R Canal Dredging	Capital Equipment Reserve	Rate Stabilization Fund	Employment Benefits Fund	Totals
\$20,157	\$1,852,067	\$300,387	\$85,956	\$1,289,344	\$59,862,136
					,
-		-		· ·	3,149,305
-	-	-	-	-	812,314
-	-	-	-	-	1,633,222
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-	:=:	-		42,946	17,274,813
\$20,157	\$1,852,067	\$300,387	\$85,956	\$1,246,398	\$42,587,323
-	-	-	-	\$43,992	\$3,183,473
20,157	1,852,067	300,387	85,956	1,202,406	28,788,401
-	-	-	-	-	10,615,449
	-	÷	-	÷	
-			-	-	
\$20,157	\$1,852,067	\$300,387	\$85,956	\$1,246,398	\$42,587,323

Year Ended June 30, 2016

Operating Fund

	Revenue Fund	Operating Account	Payroll Account	Operating Fund	Reserve for O&M
Cash and investments - July 1, 2015	\$171,096	\$312,936	\$20,000	\$3,610,830	\$1,653,051
Cash receipts:					
Water sales operations and maintenance	2,641,994	-	-	-	-
Water sales debt service	4,633,182	-	-	9-1	-
Source water protection	77,824	-	-	-	-
Water sales debt service NJEIT	172,147	<u> </u>	-	-	-
Water sales overdrafts	160,609	-	-	-	-
NJ-American pumping costs	180,209	-	-	-	-
Headquarters overhead	-	-	-	1-1	-
Reimbursement of WTP capital expenses	12	-	-	-	-
Disposition of assets	1,980	-	-	-	-
Reimbursement from Raritan System	101,121	-	-	-	-
Sale of investment securities	-	-	-	-	-
Nonrefundable bid deposits	-	-	-	-	-
Miscellaneous reimbursement	91,529	-	-	1,096,500	-
Transfers:					
Contributions from operating fund	-	4,526,369	1,067,304	(9,651,645)	-
Contributions to operating fund	-	371	-	2,831,243	-
Transfers for operations	(8,237,615)	-	-	8,237,615	-
Distribution from reserves to operations	(27,310)	196,104	-	27,310	-
Investment income	-	-	-	7,264	23,326
Per resolution, Section 603:					
Investment income, transfer from	60,368	-	-	(7,264)	(23,326)
Investment income, transfer to	(15,985)	-	-	7,773	-
Unrealized (loss)gain on fair value		-	-	-	(18,502)
Total cash receipts	(159,947)	4,722,844	1,067,304	2,548,796	(18,502)
Total cash and investments	\$11,149	\$5,035,780	\$1,087,304	\$6,159,626	\$1,634,549

Self- Insurance Reserve	Renewal and Replacement Account	Water Reuse & Recycling	Source Water Protection	Depreciation Reserve	Pumping Reserve	Sediment Reserve	Subtotal
\$242,339	\$2,300,477	\$30,069	\$1,570,510	\$390,690	\$160,392	\$136,797	\$10,599,187
-	-			-	•	-	2,641,994
-	-	-	-	-	-		4,633,182
-	-	-	-	-	-	-	77,824
-	-	-	-	-	-	-	172,147
-	-	-	<u></u>	· -	-	-	160,609
-	-	-	-			-	180,209
-	-	-	-	· -	-	-	·
-	-	-	-	-	-	-	-
-	-	-	-	:=	-	-	1,980
-	-	-	-	17	-		101,121
-	-	÷	-	. =	-	-	-
-	-	-	-			-	-
-	-	-	-	:-	•	-	1,188,029
	120,000		81,512	226,175	-	29,500	(3,600,785)
-	(844,344)	-	(74,080)	(72,004)	-	-	1,841,186
-	-	-	-	-	-	-	-
	-	-	-	1-	-	-	196,104
11,067	4,038	54	2,828	16,508	2,042	171	67,298
(11,067)	-			(16,425)	(2,042)	(171)	73
	-	-	-	8,212	-	-	-
(9,707)	_		-	(13,337)	(1,549)		(43,095)
(9,707)	(720,306)	54	10,260	149,129	(1,549)	29,500	7,617,876
\$232,632	\$1,580,171	\$30,123	\$1,580,770	\$539,819	\$158,843	\$166,297	\$18,217,063

		Water Treatment Plant/Transmission System						
					Carbon	Self-	Capital	NJE IT
		Operating	Operating	Residuals	Filter	Insurance	Improvement	
	Subtotal	Account	Fund	Reserve	Reserve	Reserve	Reserve	Fund
Cash and investments - July 1, 2015	\$10,599,187	\$185,236	\$1,011,428	\$9,488	\$98,444	\$253,205	\$1,169,619	\$349,508
Cash receipts:								
Water sales operations and maintenance	2,641,994		-		-			-
Water sales debt service	4,633,182	-			-	-		-
Source water protection	77,824	-	-	-		-	-	-
Water sales debt service NJEIT	172,147	-	-	-	-		-	-
Water sales overdrafts	160,609	-			-	-		
NJ-American pumping costs	180,209	-	-	-	-	-	-	
Headquarters overhead		-	2,642,400	-				-
Reimbursement of WTP capital expenses				-	-		12	-
Disposition of assets	1,980	-		-	-			
Reimbursem ent from Raritan System	101,121	-						
Sale of investment securities	-	-			-		-	-
Nonrefundable bid deposits	-	-						
Miscellane ous reim bursement	1,188,029	-	53,107	-	-	-	34,410	
Transfers:								
Contributions from operating fund	(3,600,785)	950,000	(945,986)			-	(10,180)	(21,880)
Contributions to operating fund	1,841,186	-	(1,458,779)		(83)	(347)	(266,977)	-
Transfers for operations	-	-					-	-
Distribution from reserves to operations	196,104	-		-	-			
Investment income	67,298	-	1,750	17	96	401	1,900	493
Per resolution, Section 603:								
Investment income, transfer from	73	-	15	(15)	-	-	-	
Investment income, transfer to		-	-	-			-	2
Unrealized (loss) gain on fair value	(43,095)	-	-	-	-	-	-	-
Total cash receipts	7,617,876	950,000	292,507	2	13	54	(240,847)	(21,387)
Total cash and investments	\$18,217,063	\$1,135,236	\$1,303,935	\$9,490	\$98,457	\$253,259	\$928,772	\$328,121

2005 Debt Service Account	2005 Debt Service Reserve	2006 Debt Service Account	2006 Debt Service Reserve	2016 Costs of Issuance	2016 Bonds Escrow	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund	General Reserve Fund	Employment Benefit Funds	Totals
\$3,709,558	\$3,606,827	\$14,247	\$10,186			-	-	\$150,088	\$41,198	\$345,414	\$21,553,633
-	-	-	-	-	-	-	-	-	-	-	2,641,994
-	-	-	-	-	-	-	-	-	-	-	4,633,182
-	-	-	-	-	-	-	-	-	-	-	77,824
-	-	-	-	-	-	-	-	-	-	-	172,147
-	-	-	-	-	-	-	-	-	-	-	160,609
-	-	-	-	-	-	-	-	-	-	-	180,209
-	-	-	-	-	-	-	-	-	-	-	2,642,400
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	1,980
-	-	-	-	-	-	-	-	-	-	-	101,121
-	-	-		-	-	-	-	-	-	-	-
-			-	-	-		-	-	-	-	-
-	-	-	_	_	19,039,626	-	_	-	_	-	20,315,172
					,,						
461,945	(4,034,058)	(6,700)	(10,187)	180,533	4,631,416	49,838	1,711,765	385,000		259,279	-
	(115,000)		-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	(196,104)	-
247	542,231	1	1	_	3,736		_	197	72	671	619,111
	,										
-	-	-				-	-	-	(73)	-	-
-		-	_	-	-	-	-	-	-	-	-
			_	_	_		_	-	_	-	(43,095)
462,192	(3,606,827)	(6,699)	(10,186)	180,533	23,674,778	49,838	1,711,765	385,197	(1)	63,846	31,502,654
\$4,171,750	-	\$7,548	-	180,533	23,674,778	49,838	1,711,765	\$535,285	\$41,197	\$409,260	\$53,056,287
		0.,0.10		,		,500	-,,-				

Year Ended June 30, 2016

Operating Fund

	Revenue Fund	Operating Account	Payroll Account	Operating Fund	Reserve for O&M
,					
Total available cash and investments	\$11,149	\$5,035,780	\$1,087,304	\$6,159,626	\$1,634,549
Cash disbursements:					
Payroll		-	1,025,459	-	-
Fringe benefits	-	1,796,952	9	(1,557,629)	-
Employee deferred comp. and credit union	-2	224,584	-	223,804	-
Operations and maintenance	-	2,564,747	-	1,702,838	-
NJ-American pumping costs	-	-		-	-
Prepaid insurance	-		-	-	=
Headquarters overhead	-	-	-	649,000	-
Capital assets reservoir	 %	; -		-	-
Capital improvement program (reservoir)	-0	-	-	-	-
Purchase of investment securities	-	-	-	-	-
Principal on bonds	-	-	-	-	-
Interest on bonds	-	-	-	-	
Total cash disbursements	-	4,586,283	1,025,459	1,018,013	
Cash and investments - June 30, 2016	\$11,149	\$449,497	\$61,845	\$5,141,613	\$1,634,549
Summary of cash and investments:					
Cash (Manasquan)	\$11,149	\$449,497	\$61,845	-	-
Cash (Water Treatment Plant/TS)	-	-	-	-	-
Short-term investments	-	-	-	5,141,613	1,244,939
Short-term investments (WTP/TS)	-	-	-	-	-
Long-term investments	-	-	-	-	389,610
Restricted investments (current)	-	-	-	-	-
Restricted investments (long-term)	-	-	-	-	
Total cash and investments	\$11,149	\$449,497	\$61,845	\$5,141,613	\$1,634,549

Self- Insurance Reserve	Renewal and Replacement Account	Water Reuse & Recycling	Source Water Protection	Depreciation Reserve	Pumping Reserve	Sediment Reserve	Subtotal
\$232,632	\$1,580,171	\$30,123	\$1,580,770	\$539,819	\$158,843	\$166,297	\$18,217,063
_	-17	_	2	-	_	_	1,025,459
-	-	-	-		-	-	239,323
-	Ξ.	-	-	-	-	-	448,388
-		-	81,267	-	-	-	4,348,852
-	-:	-	-	-	-	-	-
-	- 8	1=	-	-	-	-	-
-	-	-	-			-	649,000
-	-	-	÷	-	-	-	-
-	9.	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	81,267	-	-	-	6,711,022
\$232,632	\$1,580,171	\$30,123	\$1,499,503	\$539,819	\$158,843	\$166,297	\$11,506,041
-	-	-	-	-	-	-	\$522,491
-	-	-	-	-	-	-	-
37,686	1,580,171	30,123	1,499,503	246,842	124,652	166,297	10,071,826
-	-	-	-	-	-	-	-
194,946	-	-	-	292,977	34,191	-	911,724
•	-		-	-	-		•
6000 600	61.500.151	620.122	61 400 500	6500.010	6150.040	6166307	611.500.041
\$232,632	\$1,580,171	\$30,123	\$1,499,503	\$539,819	\$158,843	\$166,297	\$11,506,041

		Water Treatment Plant/Transmission System								
	Subtotal	Operating Account	Operating Fund	Residuals Reserve	Carbon Filter Reserve	Self- Insurance Reserve	Capital Improvement Reserve	NJEIT Debt Service		
	Subtotal	Account	rund	Keserve	Reserve	Reserve	Reserve	Deut Service		
Total available cash and investments	\$18,217,063	\$1,135,236	\$1,303,935	\$9,490	\$98,457	\$253,259	\$928,772	\$328,121		
Cash disbursements:										
Payroll	1.025.459	-	120	-		-		148		
Fringe benefits	239,323		-		-	2	121	-		
Employee deferred comp. and credit union	448,388	-	-	-			-			
Operations and maintenance	4.348.852	962.802	-	-	-	-	-	-		
NJ-American pumping costs			-	-		-	-			
Prepaid insurance		-	-	-	-	-	-	-		
Headquarters overhead	649,000		97,000		-	_	-			
Capital assets reservoir	-	-	-	-	-		-			
Capital improvement program (reservoir)	-		-	-	-	-	-	-		
Purchase of investment securities	(70	-	-	-				173		
Principal on bonds	-	-	9-9	-	-	-	-	142,572		
Interest on bonds		-	1-9	-	-		-	38,698		
Total cash disbursements	6,711,022	962,802	97,000	-	-		828	181,270		
Cash and investments - June 30, 2016	\$11,506,041	\$172,434	\$1,206,935	\$9,490	\$98,457	\$253,259	\$928,772	\$146,851		
Summary of cash and investments:										
Cash (Manasquan)	\$522,491	-	-	-	-		-	-		
Cash (Water Treatment Plant/TS)	-	172,434	-	-	-	-	-	-		
Short-term investments	10,071,826	2	(4)	_	-	-	_	-		
Short-term investments (WTP/TS)	-	-	1,206,935	9,490	98,457	253,259	928,772	-		
Long-term investments	911,724		-	•	-	-				
Restricted investments (current)		-	-	-			-	146,851		
Restricted investments (long-term)		-	-	-	-		-	-		
Total cash and investments	\$11,506,041	\$172,434	\$1,206,935	\$9,490	\$98,457	\$253,259	\$928,772	\$146,851		

2005 Debt Service Account	2005 Debt Service Reserve	Debt Service Account	Debt Service Reserve	2016 Costs of Issuance	2016 Bonds Escrow	2016 Debt Service Account	2016 Debt Service Reserve	Rebate Fund	G eneral Reserve Fund	Employment Benefit Funds	Totals
\$4,171,750	-	\$7,548	*	\$180,533	\$23,674,778	\$49,838	\$1,711,765	\$535,285	\$41,197	\$409,260	\$53,056,287
2			41		-	-	-	-	-	-	1,025,459
	-		-	-		-	-	-		-	239,323
	-	-	-	-	-	-	-	S-1		-	448,388
	(4)	-		133,253	-	-	-	-			5,444,907
-	_	4	21	-	_		120	_		-	141
	-	-		-	-	-	-	-		-	
-	-	-		17.5	-	-	17.1	170		100	746,000
-	-	-			-	-	:=::	-		· -	
-	-	1=	w)	-	140	-	-	120		-	-
-	-	-	-	-	-	-	-	-		-	-
2,940,000	-	2,853	-	-	23,674,778	-	-	-	-	-	26,760,203
1,231,750	-	4,695	-	-	-	-	-	-	-	-	1,275,143
4,171,750	-	7,548	-	133,253	23,674,778	-	-	-		-	35,939,423
				\$47,280		\$49,838	\$1,711,765	\$535,285	\$41,197	\$409,260	\$17,116,864
											\$522,491
-	-	-	-	-	-	-	-	-	-	-	172,434
-	-	-	-	-	-	-	-	-	41,197	409,260	10,522,283
-		-	-			-	-			-	2,496,913
-	-	-	-			-	-	-		-	911,724
-	-	-	-	47,280		49,838	1,711,765	535,285		-	2,491,019
	-	-	-			-	-	-		-	-
-	-	-	-	47,280	-	49,838	1,711,765	\$535,285	\$41,197	\$409,260	\$17,116,864

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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

Board of Commissioners New Jersey Water Supply Authority Clinton, New Jersey

We have audited, in accordance with the 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 (the "Authority"), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated October 3, 2016.

Internal Control Over Financial Reporting

In planning and performing our audit of the basic 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 opinions 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 entity'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.



Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. 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 result 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.

CliftonLarsonAllen LLP

Plymouth Meeting, Pennsylvania October 3, 2016

Clifton Larson Allen LLP

Statistical Section

FINANCIAL TREND DATA These schedules contain trend information on the Authority's financial performance over time.	
Summary of Financial Information.	2007 - 2016
Summary of Raritan Basin System Water Use Contracts	2007 - 2016
Summary of Manasquan Water Supply System Water Use Contracts	2007 - 2016
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	2007 - 2016
Manasquan System Revenue Bond Coverage	2007 - 2016
REVENUE CAPACITY DATA These schedules contain information on the Authority's most significant revenue source. Raritan Basin System Water Charges	2007 - 2016
Manasquan Water Supply System Water Charges	2007 - 2016
OPERATING INFORMATION These schedules contain operational and infrastructure data in relation to the services the Authority p	rovides.
Spruce Run Rain Gauge	2007 - 2016
West Windsor Rain Gauge	2007 - 2016
Spruce Run Reservoir Storage	2007 - 2016
Round Valley Reservoir Storage	2007 - 2016
Manasquan System Rainfall	2007 - 2016
Manasquan Reservoir Storage Data	2007 - 2016
DEBT, ECONOMIC AND DEMOGRAPHIC INFORMATION	
Bonds, Notes and Loans Payable	2007 - 2016
Ten Largest State of New Jersey Employers	2005 - 2014
State of New Jersey Population and Employment Trends	2005 - 2014

New Jersey Water Supply Authority Summary of Financial Information 2007 – 2016

	2007	2008	2009	2010
REVENUE AND EXPENSES				
Water sales	\$22,508,685	\$23,466,842	\$22,975,438	\$23,031,803
Reimbursement of operating exp	\$2,100,466	\$2,377,166	\$2,512,417	\$2,589,276
Total operating revenues	24,609,151	25,844,008	25,487,855	25,621,079
Operating expense	21,299,226	20,849,880	20,862,953	19,802,840
Income from operations	3,309,925	4,994,128	4,624,902	5,818,239
Non-operating revenues	3,947,914	4,841,828	795,191	681,411
Non-operating expenses	3,692,672	4,562,451	4,568,128	4,796,487
Change in net position	3,565,167	5,273,505	851,965	1,703,163
Net position, beginning of year	100,584,996	104,150,163	109,423,668	110,275,633
Net position, end of year	104,150,163	109,423,668	110,275,633	111,978,796
ASSETS				
Current assets, unrestricted	37,981,903	40,411,128	39,944,371	33,994,171
Current assets, restricted				
Non-current assets	177,020,383	177,459,476	174,633,772	177,515,802
Total assets	215,002,286	217,870,604	214,578,143	211,509,973
Deferred outflows of resources				
LIABILITIES				
Current liabilities	9,613,559	8,881,283	8,818,939	9,381,563
Non-current liabilities	101,238,564	99,565,653	95,483,571	90,149,614
Total liabilities	110,852,123	108,446,936	104,302,510	99,531,177
Deferred Inflows of Resources				
NET ASSETS				
Net investment in capital assets	38,594,390	43,790,111	47,277,890	75,184,140
Restricted for repayment debt principal and interest	12,388,041	12,082,047	12,447,252	12,006,417
Unrestricted	53,167,732	53,551,510	50,550,491	24,788,239
Total net position	\$104,150,163	\$109,423,668	\$110,275,633	\$111,978,796

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

New Jersey Water Supply Authority Summary of Financial Information 2007 – 2016

2011	2012	2013*	2014*	2015	2016
\$24,095,286	\$23,513,508	\$23,430,025	\$23,240,511	\$24,168,432	\$25,199,424
\$2,501,135	\$2,434,806	\$2,495,982	\$2,600,238	\$2,642,400	\$2,642,400
26,596,421	25,948,314	25,926,007	25,840,749	26,810,832	27,841,824
20,649,747	23,918,001	21,792,193	20,750,987	21,449,303	21,413,585
5,946,674	2,030,313	4,133,814	5,089,762	5,361,529	6,428,239
632,306	2,884,459	7,283,979	603,011	531,655	1,186,165
4,525,435	4,698,000	4,592,986	4,680,739	2,140,777	2,101,399
2,053,545	216,772	6,824,807	1,012,034	3,752,407	5,513,005
111,978,796	114,032,341	113,845,395	120,670,202	104,343,335	108,095,742
114,032,341	114,249,113	120,670,202	121,682,236	108,095,742	113,608,747
36,101,110	43,454,301	45,087,108	41,600,989	42,450,358	46,612,558
		14,671,723	12,336,186	12,339,659	7,032,591
174,004,657	166,188,362	149,151,534	153,571,758	153,061,564	151,909,258
210,105,767	209,642,663	208,910,365	207,508,933	207,851,581	205,554,407
				1,280,619	3,646,920
9,510,372	9,817,272	11,411,225	10,041,207	9,039,888	6,027,320
86,563,054	85,576,278	79,269,979	75,345,060	89,372,731	86,489,391
96,073,426	95,393,550	90,681,204	85,386,267	98,412,619	92,516,711
		(2,441,041)	440,430	2,623,839	3,075,869
77,691,938	78,090,867	83,560,654	87,589,285	91,638,454	98,890,303
12,011,721 24,328,682	11,924,238 24,234,008	12,126,909 24,982,639	9,084,491 25,008,460	9,229,092 7,228,196	3,876,937 10,841,507
\$114,032,341	\$114,249,113	\$120,670,202	\$121,682,236	\$108,095,742	\$113,608,747

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

WATER USER	2007	2008	2009	2010	2011
UNITED WATER LAMBERTVILLE, INC	0.490	0.490	0.490	0.490	0.490
MERCER COUNTY PARK - GOLF	0.132	0.132	0.132	0.132	0.132
TRENTON COUNTRY CLUB	0.250	0.250	0.126	0.126	0.126
PRINCETON UNIVERSITY	0.500	0.500	0.150	0.150	0.150
NORTH BRUNSWICK TOWNSHIP	8.000	8.000	8.000	8.000	8.000
SELODY SOD FARMS, INC.	0.025	0.025	0.025		
NEW JERSEY AMERICAN WATER	124.100	124.100	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	0.536	0.536	0.165	0.165	0.165
DUKE FARMS	0.058	0.058	0.058	0.075	0.075
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	0.074	0.074
HUNTERDON COUNTY (HERON GLEN GOLF)	0.261	0.261	0.261	0.261	0.066
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)	0.116	0.116	0.116	0.116	0.142
TRUMP NATIONAL GOLF CLUB	0.080	0.080	0.080	0.080	0.080
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	0.025
ROXITICUS GOLF CLUB	0.046	0.046	0.046	0.046	0.046
HAMILTON GOLF CLUB			0.138	0.138	0.138
SPRINGDALE GOLF CLUB			0.098	0.098	0.098
NJ DEPT OF CORRECTIONS				0.025	
STONEBRIDGE COMMUNITY ASSOC					
VILLAGE GRANDE @ BEAR CREEK					
EASTERN CONCRETE MATERIALS					
HUNTERDON MEDICAL CENTER					
PRINCETON UNIVERSITY OPERATIONS					
SYSTEM TOTAL	180.424	180.424	182.315	182.332	182.138

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

WATER USER	2012	2013	2014	2015	2016
UNITED WATER LAMBERTVILLE, INC	0.490	0.490	0.490	0.490	0.490
MERCER COUNTY PARK COMMISSION	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
SELODY SOD FARMS, INC.					
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	800.0	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 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
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
SYSTEM TOTAL	182.176	182.347	182.281	182.271	182.339

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

	2007	2008	2009	2010	2011
WALL TOWNSHIP	2.275	2.275	2.275	2.275	2.275
BOROUGH OF AVON	0.142	0.142	0.142	0.142	0.142
SHORELANDS WATER COMPANY	1.927	1.928	1.928	1.928	1.928
NEW JERSEY AMERICAN WATER	12.500	12.5	12.5	12.5	12.5
BOROUGH OF RED BANK	0.778	0.778	0.778	0.778	0.778
BOROUGH OF SEA GIRT	0.075	0.075	0.075	0.075	0.075
BOROUGH OF SPRING LAKE	0.310	0.31	0.31	0.31	0.31
BOROUGH OF SPRING LAKE HEIGHTS	0.425	0.425	0.425	0.425	0.425
BOROUGH OF BELMAR	0.650	0.65	0.65	0.65	0.65
BOROUGH OF BRIELLE	0.450	0.45	0.45	0.45	0.45
BOROUGH OF KEYPORT	0.458	0.458	0.458	0.458	0.458
BOROUGH OF MATAWAN	0.469	0.469	0.469	0.469	0.469
BOROUGH OF LAKE COMO	0.100	0.100	0.100	0.100	0.100
	20.559	20.560	20.560	20.560	20.560
	2012	2013	2014	2015	2016
•					
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
	20.560	20.560	20.560	20.560	19.443

NOTE: The Manasquan System started operations July 1,1990.

New Jersey Water Supply Authority Raritan Basin System Series 1988, D&R System Revenue Bond Coverage* 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			
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			
2009	\$17,796,183	\$11,642,975	\$6,153,208	\$2,702,738	2.28			
2008	\$18,213,509	\$11,627,200	\$6,586,309	\$2,711,294	2.43			
2007	\$17,212,347	\$10,645,350	\$6,566,997	\$2,712,575	2.42			
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	3			

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
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
2009	\$7,452,307	\$2,700,800	\$4,751,507	\$3,807,244	1.250
2008	\$7,793,042	\$2,589,700	\$5,203,342	\$4,218,907	1.230
2007	\$7,125,334	\$1,874,412	\$5,250,922	\$4,205,323	1.250

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	7/1/07	7/1/08	7/1/09	7/1/10	7/1/11
RATE PER MGD	\$228.00	\$231.00	\$231.00	\$231.00	\$231.00
EFFECTIVE DATE	7/1/12	7/1/13	7/1/14	7/1/15	7/1/16
<u> </u>	1/1/12	771713	771717	771713	771710
RATE PER MGD	\$231.00	\$231.00	\$246.00	\$253.00	\$253.00
INATE I EIX MOD	Ψ231.00	Ψ231.00	Ψ270.00	Ψ200.00	Ψ233.00

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

EFFECTIVE DATE	7/01/07	7/01/08	7/01/09	7/01/10	7/01/11
RATE PER MGD (Delayed Contracts)	\$846.06 \$1,081.96	\$884.11 \$1,079.80	\$980.05 \$1,175.03	\$980.48 \$1,167.98	\$1,015.90 \$1,168.71
EFFECTIVE DATE	7/01/12	7/01/13	7/01/14	7/01/15	7/01/16
RATE PER MGD (Delayed Contracts)	\$1,015.90 \$1,168.49	\$1,015.90 \$1,168.49	\$1,015.90 \$1,168.49	\$1,057.40 \$1,190.86	\$1,137.76 \$1,240.96

NOTE: The Manasquan System started operations July 1,1990.

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

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	TOTAL
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
2010	2.30	1.90	7.40	3.10	3.60	3.50	8.20	1.30	3.30	4.30	1.94	2.52	43.36
2009	1.93	0.52	1.43	2.70	4.73	6.58	8.69	7.62	2.73	4.66	0.91	5.85	48.35
2008	1.60	4.45	5.97	2.23	3.87	1.93	4.89	2.46	7.94	3.90	2.96	5.54	47.74
2007	3.28	1.03	2.99	9.59	1.57	3.73	6.67	4.56	0.98	7.56	2.84	4.83	49.63
TOTAL	22.61	20.92	35.82	40.16	37.20	45.90	53.25	42.46	42.79	32.62	25.21	41.93	440.87
AVERAGE	2.26	2.09	3.58	4.02	3.72	4.59	5.33	4.25	4.28	3.26	2.52	4.19	44.09
MAXIMUM	3.28	4.60	7.40	9.59	6.27	10.40	8.69	14.21	13.49	7.56	4.90	5.85	66.76
MINIMUM	0.87	0.52	0.84	1.66	1.57	1.93	1.78	0.78	0.98	0.53	0.73	2.52	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
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
2010	2.70	2.90	10.30	3.20	3.00	2.20	2.70	2.60	2.90	4.80	2.31	2.97	42.58
2009	2.57	0.50	1.25	3.17	6.58	8.09	7.46	8.90	2.10	5.76	1.60	6.21	54.19
2008	2.59	5.95	5.20	2.58	4.76	2.65	5.38	2.04	8.85	4.02	3.62	6.17	53.81
2007	3.24	2.02	4.24	11.56	2.60	4.64	4.17	3.84	1.50	5.58	2.45	5.84	51.68
TOTAL	26.80	29.78	43.97	44.11	39.40	47.04	54.73	50.12	35.61	39.20	29.48	48.21	488.45
AVERAGE	2.68	2.98	4.40	4.41	3.94	4.70	5.47	5.01	3.56	3.92	2.95	4.82	48.85
MAXIMUM	3.51	5.95	10.30	11.56	6.58	10.78	9.42	17.31	9.11	5.76	5.00	6.21	64.99
MINIMUM	1.06	0.50	1.25	1.49	1.38	1.82	2.70	1.11	1.05	0.87	1.42	2.97	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
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
2011	8.2	8.3	9.9	10.8	11.0	11.0	11.0	10.0	11.0	11.2	9.9	10.8
2010	10.7	10.5	10.7	11.2	11.0	11.0	10.5	9.3	7.9	6.1	7.1	7.4
2009	9.5	10.1	10.0	10.6	10.7	11.1	11.1	11.1	10.7	10.4	10.8	10.7
2008	9.7	10.0	10.6	10.3	11.0	11.0	10.6	9.2	7.6	6.7	6.4	7.1
2007	11.1	11.0	10.1	11.0	11.0	11.0	10.6	10.0	9.6	7.2	7.2	7.9
AVERAGE	8.6	9.0	9.4	10.2	10.7	10.7	10.5	9.7	8.7	7.3	6.9	7.2
MAXIMUM MINIMUM	11.1 5.3	11.0 6.0	10.7 6.3	11.2 8.8	11.4 9.3	11.1 9.8	11.1 7.8	11.1 7.0	11.0 6.2	11.2 4.9	10.8 3.7	10.8 3.7
IVIII VIIVIOIVI	5.5	0.0	0.5	0.0	5.5	5.0	7.0	7.0	0.2	7.5	5.1	5.7

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
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
2011	48.1	48.2	48.4	48.9	51.2	52.0	52.0	51.0	51.6	52.1	52.1	52.3
2010	54.7	54.8	55.0	55.1	54.8	55.1	54.6	53.4	50.5	48.4	48.2	48.2
2009	51.3	51.3	51.3	51.5	52.8	53.8	54.1	54.4	54.6	54.5	54.5	54.4
2008	53.4	53.4	53.9	54.4	54.5	54.6	54.5	53.5	51.1	51.1	51.0	51.1
2007	53.1	53.2	53.1	53.5	54.3	54.3	54.4	54.5	54.2	53.5	53.2	53.1
AVERAGE	51.02	51.12	51.28	51.53	52.03	52.35	52.17	51.48	50.74	49.77	49.30	49.15
MAXIMUM	54.7	54.8	55.0	55.1	54.8	55.1	54.6	54.5	54.6	54.5	54.5	54.4
MINIMUM	44.3	44.5	44.9	45.0	45.0	45.7	45.6	44.3	43.4	39.4	37.0	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
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
2011	4.26	2.39	5.00	5.13	3.38	2.71	3.71	17.87	5.62	4.51	3.33	4.75
2010	2.52	3.85	10.47	2.51	3.58	1.17	5.88	0.97	3.99	4.23	1.98	10.47
2009	4.00	0.47	2.13	6.04	3.48	6.83	5.42	3.67	5.89	4.83	2.51	6.91
2008	2.31	4.30	3.55	2.46	4.54	4.37	3.77	1.79	6.93	1.81	5.08	5.91
2007	3.37	2.17	4.12	9.60	1.39	5.91	5.69	2.96	0.38	4.20	2.01	2.21
TOTAL	31.26	27.12	39.19	42.17	32.39	45.75	49.01	45.28	38.89	39.12	30.07	56.40
AVERAGE	3.13	2.71	3.92	4.22	3.24	4.58	4.90	4.53	3.89	3.91	3.01	5.64
MAXIMUM	5.20	4.30	10.47	9.60	4.54	9.29	7.59	17.87	6.93	5.07	5.33	10.47
MINIMUM	2.15	0.47	1.48	2.15	1.14	1.17	3.01	0.58	0.38	1.06	1.87	2.21

NOTE: The Manasquan System started operations July 1, 1990

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

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
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
2011	4.26	4.37	4.48	4.56	4.56	4.49	4.32	4.15	3.98	3.95	4.39	4.13
2010	4.60	4.58	4.64	4.60	4.58	4.32	3.92	3.52	3.03	3.18	3.23	3.48
2009	4.60	4.63	4.61	4.63	4.62	4.59	4.51	4.42	4.26	4.44	4.47	4.65
2008	4.24	4.55	4.58	4.61	4.60	4.49	4.19	3.84	3.49	3.42	3.43	3.90
2007	4.57	4.45	4.55	4.61	4.44	4.19	4.12	4.04	3.81	3.43	3.26	3.49
AVERAGE	4.50	4.55	4.57	4.59	4.57	4.43	4.21	4.05	3.63	3.52	3.62	4.00
MAXIMUM	4.60	4.63	4.64	4.63	4.62	4.59	4.51	4.85	4.26	4.44	4.47	4.65
MINIMUM	4.24	4.37	4.48	4.52	4.44	4.19	3.92	3.52	3.03	3.02	3.01	3.48

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
2016	\$19,281,414	\$33,566,892	\$13,382,948	\$66,231,254	0.040%	\$26.66
2015	\$27,135,913	\$33,647,103	\$14,379,107	\$75,162,123	0.047%	\$30.25
2014	\$30,058,222	\$33,649,796	\$15,420,970	\$79,128,988	0.051%	\$31.93
2013	\$35,456,893	\$33,652,337	\$16,393,574	\$85,502,804	0.058%	\$34.66
2012	\$40,607,618	\$33,654,736	\$17,198,649	\$91,461,003	0.063%	\$37.27
2011	\$45,524,920	\$33,657,001	\$12,822,647	\$92,004,568	0.065%	\$37.68
2010	\$50,234,457	\$33,659,135	\$11,442,033	\$95,335,625	0.071%	\$39.21
2009	\$54,751,978	\$33,661,151	\$12,053,299	\$100,466,428	0.077%	\$41.68
2008	\$59,088,203	\$33,663,054	\$11,547,400	\$104,298,657	0.076%	\$43.34
2007	\$63,248,673	\$33,664,850	\$8,751,093	\$105,664,616	0.080%	\$44.22

Note 1. Total personal income for the service area of Hunterdon, Middlesex, Somerset, Union and Monmouth Counties using New Jersey Department of Labor and Workforce Development Total Personal Income for all New Jersey Counties: 1969 to 2014 and Bureau of Economic Analysis, U.S. Department of Commerce Personal Income Growth 2015 and estimates for 2016 first and second quarters.

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 by Age, Race, Sex and Hispanic Origin: April 1, 2010 to July 1, 2015 and Intercensal July 1, 2000 to July 1, 2009

State of New Jersey Ten Largest Employers 2014 as Compared To 2005

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2014* RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	66,018	1.6%
2	Wakefern Food Corporation (ShopRite)	40,000	0.9
3	Wal-Mart Stores, Inc.	18,593	0.4
4	Verizon Communications	15,400	0.4
5	United Parcel Service (UPS)	15,000	0.4
6	Johnson & Johnson	14,500	0.3
7	United Continental Holdings	13,600	0.3
8	The Home Depot	12,100	0.3
9	Bank of America	11,000	0.3
10	Public Service Electric and Gas Company	8,944	0.2
		215,155	5.1%

2005 RANK	EMPLOYER	NEW JERSEY EMPLOYEES	PERCENTAGE OF TOTAL NEW JERSEY EMPLOYMENT
1	New Jersey State Government	80,185	1.9%
2	Wakefern Food Corporation (ShopRite)	31,279	0.7
3	United Parcel Service (UPS)	16,290	0.4
4	Verizon Communications	16,200	0.4
5	Caesars Entertainment Corporation (formerly Harrah's Entertainment, L.L.C.)	15,763	0.4
6	Home Depot	13,910	0.3
7	Wal-Mart Stores, Inc.	13,120	0.3
8	Continental Airlines	11,898	0.3
9	Federated Department Stores, Inc.	11,555	0.3
10	Pathmark Stores, Inc.	11,200	0.3
		221,400	5.3%

Notes:

Aggregate New Jersey resident employment for Calendar Years 2014 and 2005 totaled 4.218 million and 4.195 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.

Sources

Bucci, A. (2015, August). 43rd annual top 100 employers. New Jersey Business. 61(8), 24-32. Saliba, G.N. (2006, May). 34th annual top 100 employers. New Jersey Business, 52(5), 24-31. Data reprinted with permission from the New Jersey Business and Industry Association.

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	CIVILIAN	RESIDENT	RESIDENT	NEW JERSEY UNEMPLOYMENT	UNITED STATES UNEMPLOYMENT
	POPULATION ¹	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT ²	RATE ³	RATE
2005	8,652	4,392	4,195	196	4.5%	5.1%
2006	8,662	4,443	4,233	210	4.7	4.6
2007	8,678	4,441	4,249	192	4.3	4.6
2008	8,711	4,498	4,254	244	5.4	5.8
2009	8,756	4,549	4,135	415	9.1	9.3
2010	8,804	4,551	4,118	432	9.5	9.6
2011	8,843	4,568	4,144	424	9.3	8.9
2012	8,876	4,590	4,167	422	9.2	8.1
2013	8,912	4,534	4,171	364	8.0	7.4
2014	8,938	4,515	4,218	297	6.6	6.2

United States Census Bureau, Population Division.

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 Thousands Except as Indicated)

YEAR	NEW JERSEY POPULATION ¹	ASSESSED VALUATION OF PROPERTY ¹	TRUE VALUATION OF PROPERTY ¹	PERSONAL INCOME (MILLION) ²	PER CAPITA INCOME ²
2005	8,652	608,225,244	936,643,256	387,157	44.7
2006	8,662	665,682,726	1,079,838,476	416,264	48.1
2007	8,678	744,898,624	1,235,285,606	439,061	50.6
2008	8,711	834,781,642	1,326,296,736	451,184	51.8
2009	8,756	893,342,423	1,355,003,641	440,110	50.3
2010	8,804	959,281,558	1,331,603,905	448,422	50.9
2011	8,843	983,962,996	1,278,578,128	471,193	53.3
2012	8,876	988,355,702	1,235,474,241	487,127	54.9
2013	8,912	990,696,982	1,183,032,331	492,897	55.3
2014	8,938	971,600,408	1,158,321,555	507,749	56.8

United States Census Bureau, Population Division.

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

Notes:
Data for 2010 through 2013 has been revised to use the intercensal population calculation.

² Resident Employment, Resident Unemployment and Civilian Labor Force data for 2005 through 2013 has been revised.

³ New Jersey Unemployment Rate data for 2006, 2008, 2009, 2010, 2012 and 2013 has been revised.

Notes: 1 Data for 2010 through 2013 has been revised to use the intercensal population calculation.

² Data for 2005 through 2013 has been revised.

