

NEW JERSEY WATER SUPPLY AUTHORITY

BASIS AND BACKGROUND STATEMENT

PROPOSED AMENDMENTS TO N.J.A.C. 7:11-4.1, ET SEQ. IN THE SCHEDULE OF RATES, CHARGES AND DEBT SERVICE ASSESSMENTS FOR THE SALE OF WATER FROM THE MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

ADJUSTMENT OF OPERATIONS AND MAINTENANCE EXPENSE COMPONENT TO REFLECT NO CHANGE IN THE OPERATIONS AND MAINTENANCE COMPONENT RATE FOR FISCAL YEAR 2024

ADJUSTMENT OF SOURCE WATER PROTECTION FUND COMPONENT TO REFLECT NO CHANGE IN COMPONENT RATE FOR FISCAL YEAR 2024

ADJUSTMENT OF DEBT SERVICE COST COMPONENTS TO REFLECT BOND YEAR PAYMENTS DUE AND REQUIRED FOR FISCAL YEAR 2024

ADJUSTMENT OF NEW JERSEY ENVIRONMENTAL INFRASTRUCTURE FINANCING PROGRAM DEBT COMPONENT TO REFLECT BOND YEAR PAYMENTS DUE AND REQUIRED FOR FISCAL YEAR 2024

ADJUSTMENT OF CAPITAL FUND COMPONENT RATE FOR INITIAL AND DELAYED WATER PURCHASE CONTRACT CUSTOMERS TO REFLECT NO CHANGE FOR FISCAL YEAR 2024

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PART I – EXPLANATION OF PROPOSED REVISED RATE STRUCTURE

Overview of Rate Proposal for Fiscal Year 2024

(July 1, 2023 - June 30, 2024)

The New Jersey Water Supply Authority (Authority) is proposing to adjust its Schedule of Rates, Charges and Debt Service Assessments for the sale of water from the Manasquan Reservoir Water Supply System (System), to cover expenses for the Fiscal Year (FY) starting on July 1, 2023.

The Authority operates and maintains the System including the Intake Facilities located in Wall Township adjacent to Hospital Road, the Manasquan Reservoir located in Howell Township and 5 1/4 miles of 66-inch diameter pipeline which connects the Intake Facilities to the Reservoir. The Authority also operates and maintains a water treatment plant located on the same site as the Reservoir Intake Facilities and approximately 39,000 feet of transmission piping. This treatment plant/transmission system was constructed and is being operated by the Authority for the Southeast Monmouth Municipal Utilities Authority (SMMUA) on behalf of the Boroughs of Brielle, Spring Lake, Spring Lake Heights, Sea Girt and Wall Township, which have entered into agreements with SMMUA for the treatment/transmission of their portion of the supply from the System.

Summary of Proposed Adjustments

Initial Water Purchase Contracts of 15.008mgd (15.695mgd at July 1, 1990 and 14.980mgd at July 1, 2015) and Shorelands (.028mgd) delayed water contract effective July 1, 2006:

Component	Current (FY2023) Rates Per MG 7/1/2022 – 6/30/2023	Proposed (FY2024) Rates Per MG 7/1/2023 – 6/30/2024
Operations & Maintenance Component	\$445.82	\$445.82
Source Water Protection Fund Component	15.00	15.00
NJEIFP Debt Component	24.93	24.93
Capital Fund Component	525.00	525.00
TOTAL RATE	\$1,010.75/mg	\$1,010.75/mg

New Jersey American Water Delayed Water Purchase Contracts Effective July 1, 2001, October 1, 2002 and January 1, 2005 (4.435 mgd):

Component	Current (FY2023) Rates Per MG 7/1/2022 – 6/30/2023	Proposed (FY2024) Rates Per MG 7/1/2023 – 6/30/2024
Operations & Maintenance Component	\$445.82	\$445.82
Source Water Protection Fund Component	15.00	15.00
Debt Service Cost Component	438.92	438.92
NJEIFP Debt Component	24.93	24.93
Capital Fund Component	200.00	200.00
TOTAL RATE	\$1,124.67/mg	\$1,124.67/mg

The General Rate Schedule for Operations and Maintenance (O&M) was last adjusted effective July 1, 2022 to cover the operating expenses of the System for FY2023. The FY2023 sales base was 19.443 million gallons per day (mgd). The Authority anticipates that the applicable raw water O&M sales base for FY2024 will remain the same at 19.443 mgd. The initial sales base will remain the same at 15.008 mgd and the delayed sales base will remain at 4.435 mgd.

After the allocation of appropriate Headquarters General and Administrative costs to the System, the Authority anticipates \$3,161,689 in O&M component revenue required during FY2024 with an O&M rate component of \$445.82 per million gallons, no change from FY2023, starting on July 1, 2023 (Schedule 20, page 41). The proposed operating expense budget for FY2024 is \$48,464 higher than FY2023 and the proposed Capital Equipment Budget, net of depreciation reserve, is \$14,200 more than FY2023. In FY2024 there will be a \$10,000 contribution to the Sediment Reserve Fund, a \$120,000 contribution to the Renewal and Replacement Fund, a \$5,000 contribution to the Formal Dam Inspection Reserve, and a \$15,000 contribution to the High Voltage Testing Reserve Fund, the same as in FY2023. In FY2024 there will be no contribution to the Other Post-Employment Benefits Reserve and no Supplemental Renewal and Replacement Fund contribution. The OPEB Reserve is fully funded. See Budget Summary on page 19.

The Manasquan Reservoir system owes \$19,615 to the SMMUA Water Treatment Plant and Transmission System for actual FY2022 salary and fringe expenses. This amount will be applied to the CY2023 SMMUA budget (Schedule 15, pages 34-36).

Miscellaneous revenue and interest income in FY2024 is projected to increase by \$66,650 relative to FY2023, reflecting an increase in the use of year end surplus available from FY2022 (Schedule 17, page 38), as well as higher interest earnings (Schedule 16, page 37). Overdraft revenue of \$6,230 is available from 2023.

The System was financed with loans from the State of New Jersey and a Debt Service

Assessment for contracts, effective as of July 1, 1990, was established to cover debt service payments on the initial loan of \$63,600,000 at a set interest rate of 7.15 percent and payment of the interim completion loan of \$7,416,000 at an interest rate of 7.16 percent. During FY1992 the State of New Jersey reduced the interest rate on the completion loan to 6.24 percent. During FY1997, the Authority negotiated an agreement with the State of New Jersey, which reduced the interest rate on the \$63,600,000 original State Loan Notes from 7.15 percent to 5.93 percent effective for the payments due on or after August 1998. The Debt Service component of the rate has been adjusted in the past to reflect the revised debt service schedules.

In August of 2005, the Authority refunded the current portion of the State Loan Notes and the Completion Notes at an average coupon of 4.83 percent and net present value savings of \$6.187 million. The terms of the bonds were 15 and 25 years respectively. The bond proceeds also fully funded the Debt Service Reserve Account.

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, 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 carry a bond yield of 1.59 percent, and mature in incremental annual principal amounts through 2031. The debt service component of the rate represents 120 percent of the principal and interest requirements and debt service coverage must remain at 120 percent through the life of the bonds.

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 on the refunding bonds was \$1,821,414. The economic gain was a net present value debt savings of \$2,999,861.

The Debt Service component of the rate for the Delayed Water Purchase Contracts (DWP) will be \$438.92 per million gallons, no change from FY2023. The portion of debt related to Initial Water Purchase Contracts was retired effective August 1, 2020, and the associated Debt Service component was eliminated in FY2021.

The Authority established a Source Water Protection Fund Component in FY2004 dedicating \$15.00 per million gallons to protect the quality and quantity of water in the Manasquan Water Supply System. The Authority decreased the rate component by \$5.00 per million gallons from \$15.00 to \$10.00 for this fund in FY2016. In order to cover program needs the Authority increased the rate by \$5.00 per million gallons to restore the rate to \$15.00 per million gallons in FY2018. The Authority recommends no change to the rate of \$15.00 per million gallons in FY2024.

The Authority closed on a loan to the New Jersey Environmental Infrastructure Financing Program (NJEIFP) on May 3, 2012 to finance the construction of a building structure over the Intake Pump Station and traveling water screens to protect the infrastructure from degradation by the elements. The final interest on the loan is based on 75 percent at zero interest and 25 percent market rate with coupons up to 5 percent for an effective interest rate of .8 percent over the twenty-year life of the loans. The rate component of \$24.93 per million gallons in FY2024 is required to cover debt service payments in accordance with the schedule and is no change from the FY2023 rate.

A capital fund rate component was established in the Manasquan System for Initial Water

Purchase Contracts (\$525.00/mg) and Delayed Water Purchase Contracts (\$200.00/mg) in FY2021 to provide for long-term capital needs that will allow for the proper maintenance, rehabilitation and/or replacement of the system facilities. As critical structures, including dams, continue to age in the thirty-year old Manasquan System, the Authority believes it is prudent to maintain a rate component that would fund related capital needs. The Authority recommends no change to the rate of \$525.00 per million gallons for Initial Water Purchase Contract customers and \$200.00 per million gallons for Delayed Water Purchase Contract customers in FY2024.

For Initial Water Purchase Contract customers in FY2024, the base contract O&M Rate (\$445.82), Source Water Protection Program Rate (\$15.00), NJEIFP Debt Rate (\$24.93) and Capital Fund Component (\$525.00) comprise the total base contract rate for raw water of \$1,010.75 per million gallons and represent no increase in the rate relative to FY2023. This base contract rate is charged to all uninterruptible service contracts executed prior to July 1, 1990 (and renewed at July 1, 2015), the commencement date of Manasquan Reservoir System operations, and one Delayed Water Purchase contract with Shorelands Water Company (subsequently acquired by New Jersey American) executed on July 1, 2006. In order for its customers to be assessed the base contract rate on the .028mgd delayed contract, Shorelands Water Company prepaid the net present value of the difference between the initial water purchase contracts debt service schedule and the delayed water purchase contracts debt service schedule.

The total rate for Delayed Water Purchase Contract customers in FY2024 is \$1,124.67 per million gallons, representing no change relative to the FY2023 delayed water purchase rate. The O&M Component (\$445.82), the Source Water Protection Fund Component (\$15.00), the Debt Service Rate Component (\$438.92), the NJEIFP Debt Rate (\$24.93) and the Capital Fund Component (\$200.00) comprise the total rate.

Table 1 (page 15) contains a summary of the proposed base contract rate and delayed water purchase contract rate components. The proposed rates shown in Table 1 are effective July 1, 2023 through June 30, 2024. These rates are based upon the projected operating costs and reflect an estimated contracted sales base of 19.443mgd.

Table 2 (page 16) is a twenty-year history of the total initial water purchase contract annual water rate.

Table 3 (page 17) is a fifteen-year history of the combined delayed water purchase contract annual water rates.

Water use payments are to be made quarterly with due dates of October 10, 2023, January 10, 2024, April 10, 2024 and July 10, 2024.

The balance of this document contains a further discussion of the individual rate components, a Schedule of Events and detailed supporting information for the proposed rate adjustment.

Schedule of Events

A pre-public hearing on the proposed rate adjustment is scheduled at 11:00 a.m. on Thursday, January 5, 2023.

A public hearing on the proposed rate adjustment is scheduled at 11:00 a.m. on Thursday, February 2, 2024. The public hearing record is estimated to close on March 13, 2022.

Further information regarding the dial-in information or location for the pre-public hearing meeting and for the public hearing will be posted on the Authority's website at <https://www.njwsa.org/public-notices.html> at least 15 days prior to the date of the meeting/hearing.

The Authority will take final action on the proposed rate adjustment at its May 1, 2023 meeting at the Authority's Administration Building in Clinton, New Jersey.

Distribution of Headquarters General and Administrative Costs and Insurance Costs to all Operating Systems

On July 1, 1990 the Authority placed the Manasquan Reservoir Water Supply System in operation to provide an untreated water supply for use throughout Monmouth County. In addition to this major System, the Authority also began operation of the Water Treatment Plant and Transmission System for the Monmouth County Improvement Authority (MCIA) on July 1, 1990. The Boroughs of Brielle, Spring Lake, Spring Lake Heights, Sea Girt and Wall Township entered into agreements with the MCIA for this treatment/transmission system, which treats and conveys their portion of the supply from the Manasquan Reservoir Water Supply System. In December 2008, the five member communities created the Southeast Monmouth Municipal Utilities Authority and in September 2009 purchased the Water Treatment Plant from the MCIA; the Authority continues to operate the Water Treatment Plant. The Authority also operates the Spruce Run/Round Valley Reservoirs Complex and the Delaware and Raritan Canal Water Supply Transmission Complex comprising the Raritan Basin System, headquartered in Clinton, New Jersey. As a result, the Authority is operating, maintaining and managing three distinct Systems each with its own budget, cost accountability and revenue stream.

The Authority's headquarters staff located in Clinton provides general and administrative support services for all three Systems. These services include, but are not limited to, Financial Management, Payroll, Human Resources, Purchasing, Contract Administration, Risk Management, and overall management.

In order to equitably assess the customers of each of the three Systems, the Authority previously retained the services of an auditing firm to develop a methodology for the allocation of the Headquarters General and Administrative costs to all three operating Systems. After the close of each fiscal year, the Authority's current Auditors provide the Authority with their findings as to the adjustment, if any, of the allocation factors and the actual audited expenditures for the fiscal year.

The audit report for the immediately preceding fiscal year ending June 30 is available during November. Each September the Authority formulates the proposed budgets for the upcoming fiscal year starting on the following July 1. The adjusted allocation factors, if any, and the audited expenditures for the previous fiscal year are used to establish a debit or credit for each of the three operating Systems. This debit or credit is applied to the budgets being prepared each September for the upcoming fiscal year starting on July 1.

An independent auditor performed the Authority's FY2022 audit. The audit included a review of the allocation factors, as well as the actual audited expenditures. The appropriate adjustments have been made to the FY2024 budget based on the FY2022 audit. A copy of the Auditor's report on the allocation of the Headquarters General and Administrative costs is included in the Appendices to the rate proposal package for each System.

Insurance costs are also allocated to each System based upon the recommendations of the Authority's Risk Management Consultant. See the rate proposal package for additional information.

Distribution of Costs Between the Manasquan Reservoir System and the Treatment Plant/Transmission System

A common staff operates the System and the Treatment Plant/Transmission System. Salaries are allocated between the two Systems based upon time records that were kept during the fiscal year ending on June 30, 2022. The percentages used to provide the basis for the salary allocation for FY2024 were established from historical time records and estimated future workload relative to both Systems. A listing of all positions and the percentage of each position's time assigned to each of the two Systems appear on Schedule 2 (page 21).

Detailed budgets have been prepared for the Manasquan Reservoir System and the Treatment Plant/Transmission System. Each System's budget has three main categories of annual operational expenses in addition to the allocation of headquarters overhead. The three categories include (a) salaries and fringes (b) direct operation and maintenance expenses and (c) general and administrative expenses. Part 2 of this document provides more information on both Systems including detailed summaries of the projected line item budget figures for General and Administrative expenses and Operations and Maintenance expenses for FY2024.

Analysis of Significant Changes in Operations and Maintenance Expenses and Sales Base - Manasquan Reservoir System

Overview of Sales Base

On July 1, 1990 the Authority placed the Manasquan Reservoir Water Supply System in operation to provide an untreated water supply for use throughout Monmouth County. Twelve of the 13 original water purchase contracts were renewed effective July 1, 2015 and expire June 30, 2040. The final customer contract, New Jersey American, consolidated the initial water purchase and delayed water purchases for a total of 12.5 mgd and has an expiration date of June 30, 2031. Of the 13 contracts, six are two-party contracts with the New Jersey Water Supply Authority. These are the five treated water customers (Wall Township and the Boroughs of Brielle, Sea Girt, Spring Lake and Spring Lake Heights) of the Southeast Monmouth Municipal Utilities Authority's water treatment plant operated by the New Jersey Water Supply Authority and the New Jersey American Contract. One is a three-party contract (Keyport Borough) among the Authority, the customer and Shorelands Water Company (subsequently acquired by New Jersey American) for the delivery of water through Shorelands' distribution system. Six contracts (the Boroughs of Avon, Belmar, Matawan, Red Bank and Lake Como, and Shorelands (recently acquired by New Jersey American)) are three-party contracts among the Authority, the customers and New Jersey American for the provision of treated water from New Jersey American. The total sales base dropped from 20.560mgd to 19.443mgd

effective July 1, 2015 and remain at 19.443mgd for FY2024.

Overview of Projected Operational Expenses

The Authority's proposed FY2024 Manasquan Reservoir Total Expense budget is \$172,464 more than the current FY2024 budget. The allocation of Authority Headquarters General and Administrative Expenses in FY2024 increases \$124,000 versus FY2023. Capital Equipment budget for FY2024 is \$14,200 more than FY2023. There will be no FY2024 contribution to the Depreciation Reserve account, Insurance Reserve, or Pumping Reserve. There will be a \$10,000 contribution to the Sediment Reserve, a \$5,000 contribution to the Formal Dam Inspection Reserve, and a \$15,000 contribution to the Reserve for High Voltage Testing. Formal Dam Inspections and High Voltage Testing are performed every three years and rather than raising the entire amount every third year, budget stability is created by raising one third of the cost every year. There will be a normal contribution to the Renewal and Replacement Fund of \$120,000. There will be no contribution to the reserve for other post-employment benefits (accrued sick leave payments for retirees) which was created in FY2017. Miscellaneous revenue and interest income increases by \$66,650. These factors contribute to a flat FY2024 O&M Component requirement relative to FY2023 (\$3,161,689 vs. 3,161,711) (Budget Summary on page 19).

Total O&M Direct Expenses are increasing by \$22,336 from FY2023, largely due to increases in insurance expenses. General and Administrative Expenses allocated to the Reservoir System are increasing by \$27,987 as compared to FY2023, driven mostly by projected increases in fuel costs.

Salaries, Overtime and Benefits

Authority employees within the Communications Workers of America (CWA), the International Federation of Professional Technical Engineers (IFPTE) and the International Brotherhood of Electrical Workers (IBEW) are currently operating under a contract that expires on June 30, 2023. The FY2024 budget incorporates all union negotiated step increases in the current union contracts and assumes a 2% cost of living increase. The IFPTE/AFL-CIO represents the Authority's Maintenance, Craft and Security Units and the CWA represents the Authority's Administrative and Clerical, Primary Level and Higher Level Supervisors Units. The IBEW represents one management employee. Also included is a 2% cost of living increases for the one member of Authority management who is not represented by a union. The Authority is budgeting 59 percent of the Salary budget for fringe benefits in FY2024, exclusive of retiree medical.

Pension expense payable to the state of New Jersey on April 1, 2023 is anticipated to be approximately \$260,000 for the Manasquan System. The Authority has budgeted \$278,100 for this line item in FY2024. Although increases have stabilized in the last three years, there is still a level of uncertainty in this expense item because the pension system remains significantly underfunded.

Total salary and fringe is increasing by approximately \$143,000 in FY2024 as compared to FY2023, and the portion allocated to the Reservoir System is decreasing by approximately \$2,000, based on estimated work effort on each system for all positions. In FY2024, 46 percent of total salary and fringe is allocated to the Reservoir System and 54 percent to the Treatment Plant. The number of budgeted positions in FY2024 is 27, which is the same as FY2023 (Schedule 2, page 21).

Active and Retiree Health Benefits

Employees who retired with a minimum of 25 years of service prior to July 1, 1997 are entitled to paid health benefits. Those who attain 25 years on or after July 1, 1997 share some portion of post-retirement health benefit costs with the employer as determined by union contract or bargaining unit agreement. The Authority is budgeting one additional retiree in FY2024. Indications from state level negotiations point to significant increases in health care premiums in calendar year 2023 (24 percent for active employee medical, and 12 percent for retiree medical). Centers for Medicare and Medicaid Services (CMS) estimates that national health care spending will increase at an annual rate of 5.1 percent from 2021-2030. Starting with actual 2022 premiums, the Authority budgeted a 24 percent medical premium increase for active employees and a 12 percent medical premium increase for retirees for CY2023. For CY2024, a 5.1 percent increase was assumed for both categories.

Insurance Program

The Authority is recommending a \$38,547 increase in insurance expenses for FY2024, reflecting general market conditions as assessed by the Authority's insurance broker/ risk consultant, and based on a recent recalculation of relative asset values. Broker services are remarketed every three years and the insurance program is renewed annually on March 1.

Allocation of the Primary, Umbrella and Public Officials Liability insurance costs between the three Systems is based upon proportionate water sales. The Automobile Liability cost is allocated based upon the assignment of vehicular equipment to each System. The cost of the Business Property coverage is allocated on the basis of insured values for each System and the Workers Compensation premiums are allocated on the basis of salaries for each System.

Headquarters General and Administrative Expenses

Budgeted Headquarters General and Administrative Expenses in FY2024 total \$893,000, of which \$770,000 is charged to the Manasquan Reservoir System and \$124,000 is charged to the Manasquan Water Treatment Plant (Schedule 13, page 32). The FY2024 budget also includes the reconciliation of the FY2022 actual to budget variance in this category. Headquarters charges are driven primarily by salary and fringe.

Interest Income and Miscellaneous Revenue

The projected interest earnings on reserve funds for FY2024 are \$90,200. This reflects an increase of \$63,600 relative to FY2023 and is based upon an interest rate of 1.0 percent for short-term investments (See Schedule 16, page 37).

Reserve Contributions

Consistent with FY2023, there will be no FY2024 contribution to the Insurance Reserve or the Pumping Reserve. During FY2024, the Authority will make no contributions from rate component sources to the Depreciation Reserve. Interest earnings from long-term investment

accounts have historically been applied to the Depreciation Reserve and are serving to keep this reserve fully funded. There will be a \$10,000 contribution to the Sediment Reserve. There will be a regular \$120,000 contribution to the Renewal and Replacement Fund, a \$5,000 contribution to the Reserve for Formal Dam Inspections and a \$15,000 contribution to the Reserve for High Voltage Testing. Formal Dam Inspections and High Voltage Testing are performed every three years and rather than raising the entire amount every third year, budget stability is created by raising one third of the cost every year. There were two new reserve fund contributions in FY2017 which will not be funded in FY2024. There was a supplemental contribution of \$350,000 to the Renewal and Replacement Fund in FY2017 that is not required in FY2024. The Authority requires a minimum balance of \$2 million in the fund to cover dam emergencies, and pipeline and pump emergent repairs. Because the system is aging, there are normal maintenance expenditures included in the five-year plan that would have drawn the fund down below the \$2 million requirement without the supplemental deposit. Finally, the Authority funded a reserve for other post-employment benefits (accrued sick leave) in FY2017 to ensure that sufficient funds are available to pay out sick benefits as this number is not regularly budgeted in salary and fringe.

Review of Reserve Accounts

Depreciation Reserve Account

This reserve is intended to provide for the replacement of Authority machinery and equipment with a value of \$1,000 or more and a useful life in a range from three to ten years and to cushion the impact of replacement equipment purchases in order to provide more stable rates. Depreciation Reserve should equal accumulated depreciation for this class of assets. Long term investment earnings have been utilized to fund the Depreciation Reserve.

Self Insurance Reserve

The Self Insurance Fund was established for the System to allow the Authority to make choices between underwritten risk and self-insurance risk in the face of increased prices in the insurance market. No contribution is being made to the fund in FY2024.

Reserve for Operations and Maintenance

A working cash reserve must be maintained at a level which reflects the amount of the regular annual operating costs plus an allowance for possible extraordinary requirements. The level of this reserve must equal 25 percent of the Annual O&M Budget. An initial contribution of \$125,000 was budgeted in FY1991. A contribution of \$125,000 was budgeted in FY1992. The contribution for FY1993 was \$50,000 because of the availability of additional revenue from FY1991.

An additional \$100,000 was added during FY1993 from the receipt of delinquent revenue and resulted in full funding of this reserve. The Reserve for Operations and Maintenance Fund was fully funded as of June 30, 2016 and as a result, no contribution will be needed in FY2024.

Renewal & Replacement Reserve

The Renewal & Replacement Reserve is to be used for costs of capital improvements including repairs to facilities not covered by insurance and payment of extraordinary O&M costs. As per the terms of the project financing, this Reserve is to be funded by the excess debt service coverage revenue after the Debt Service Reserve requirement has been accumulated. An initial deposit of \$24,287 had been made into this account from overdue revenue received during FY1993. Excess annual debt service coverage amounts were later transferred into this fund. The balance in the fund as of June 30, 2022 was approximately \$4,100,000. Excess interest earnings on the Debt Service Reserve and Debt Service Funds and excess debt service coverage revenue as well as a direct deposit of \$120,000 provide the source of funds for this reserve account.

Source Water Protection Fund Rate Component

The Authority established its Watershed Protection Unit in 1999 to implement a watershed management program for the Raritan River Basin pursuant to a Memorandum of Agreement with the New Jersey Department of Environmental Protection. Primary functions of the Unit are planning for watershed protection and development and implementation of projects that improve protection of water supply.

As an extension of that program during the period of FY2004, the Authority began the Manasquan Watershed Protection Initiative, and established the Source Water Protection Fund for the purpose of protecting the quality and quantity of water in the Manasquan Reservoir Water Supply System. The fund is used for three purposes in cooperation with State, local and nonprofit partners: (1) administrative assistance in the preservation of those properties in the Manasquan River Basin that are critical to the long-term protection of water quality and quantity in the Manasquan Reservoir Water Supply System as they may affect Authority customers; (2) improved management of land development by municipal, county, and State government to protect both water quality and flow to and within Authority facilities; and (3) remedial projects to improve water quality from existing conditions.

Whenever possible, the Authority will seek to obtain funding from other sources to augment or match its expenditures from the Source Water Protection Fund. The balance in the Source Water Protection Fund at June 30, 2022 was approximately \$1,500,000. Because of overall rate considerations in prior years, the Authority reduced the Source Water Protection Fund Component from \$15.00 per million gallons to \$10.00 per million gallons in FY2016 and FY2017 and reinstated the rate to \$15.00 per million gallons in FY2018 to ensure adequate funding for these initiatives. The Authority proposes no change to the rate in FY2024.

Optional Water Use Schedule

The Authority continues allowing the use of an Optional Water Use Schedule. When the total of all uninterruptible supply contract diversions is equal to or less than 25mgd, the Purchaser may operate pursuant to an optional water use schedule wherein the Purchaser may divert up to 20 percent in excess of the total contracted amount for any given month.

Overdraft Service

The Authority continues to charge an Overdraft Service Rate by recognizing that daily overdraft service rates apply to all uninterruptible service contract customers, and by recognizing that the daily overdraft service rate is a multiple of the initial water purchase rate.

Other Rule Amendments

There are no other rule amendments for FY2024.

PART II – DETAILED SUPPORTING INFORMATION

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Table 1 - Summary of Proposed Fiscal Year 2024 Adjustments

BASED ON PRESENT USAGE

The rates, charges and debt service assessments listed below shall be paid for raw water allocated by contract from the Manasquan Reservoir System for the **base contracts effective as of July 1, 2015 (14.980mgd), and Shorelands (.028mgd) delayed water contract effective July 1, 2006:**

I. July 1, 2023 to June 30, 2024

Rate Component	Current	Original Proposal 11/07/22	Difference	Percentage Increase (Decrease)
Operations & Maintenance Expense Component	\$445.82	\$445.82	\$0.00	0.00%
Source Water Protection Fund Component	\$15.00	\$15.00	\$0.00	0.00%
NJEIFP Debt Component	\$24.93	\$24.93	\$0.00	0.00%
Capital Fund Component	\$525.00	\$525.00	\$0.00	0.00%
Total Rate	\$1,010.75/mg	\$1,010.75/mg	\$0.00/mg	0.00%

The rates, charges and debt service assessments listed below shall be paid for raw water allocated by contract from the Manasquan Reservoir System for all **New Jersey American Water delayed water purchase contracts effective: July 1, 2001 (1mgd), October 1, 2002 (1.935mgd), January 1, 2005 (1.500mgd):**

II. July 1, 2023 to June 30, 2024

Rate Component	Current	Original Proposal 11/07/22	Difference	Percentage Increase (Decrease)
Operations & Maintenance Expense Component	\$445.82	\$445.82	\$0.00	0.00%
Source Water Protection Fund Component	\$15.00	\$15.00	\$0.00	0.00%
Debt Service Cost Component	\$438.92	\$438.92	\$0.00	0.00%
NJEIFP Debt Component	\$24.93	\$24.93	\$0.00	0.00%
Capital Fund Component	\$200.00	\$200.00	\$0.00	0.00%
Total Rate	\$1,124.67/mg	\$1,124.67/mg	\$0.00/mg	0.00%

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

**Table 2 - Rate History of Water Charges per Million Gallons of Raw Water - Initial
FY2005-FY2024**

Initial Water Purchaser 14.980 mgd July 1, 2015
Shorelands .028 mgd July 1, 2006

<u>Effective Date</u>	<u>O&M Charge</u>	<u>Source Water Protection</u>	<u>Debt Repayment 2/1/91-8/01/20</u>	<u>NJEIFP Debt Component</u>	<u>Capital Fund Component</u>	<u>Total Charge per MG</u>	<u>Percent Increase (Decrease)</u>
July 1, 2004	321.69	15	584.95			\$921.64	15.93%
July 1, 2005	295.41	15	584.6			\$895.01	-2.89%
July 1, 2006	295.41	15	522.86			\$833.27	-6.90%
July 1, 2007	302.52	15	528.54			\$846.06	1.53%
July 1, 2008	302.52	15	566.59			\$884.11	4.50%
July 1, 2009	396.79	15	568.26			\$980.05	10.85%
July 1, 2010	396.79	15	568.69			\$980.48	0.04%
July 1, 2011	347.39	15	618.09	35.42		\$1,015.90	3.61%
July 1, 2012	345.95	15	619.53	35.42		\$1,015.90	0.00%
July 1, 2013	356.61	15	619.87	24.42		\$1,015.90	0.00%
July 1, 2014	356.61	15	619.87	24.42		\$1,015.90	0.00%
July 1, 2015	386.00	10.00	636.61	24.79		\$1,057.40	4.09%
July 1, 2016	432.87	10.00	636.61	25.10		\$1,104.58	4.46%
July 1, 2017	432.87	15.00	570.55	24.93		\$1,043.35	-5.54%
July 1, 2018	432.87	15.00	570.55	24.93		\$1,043.35	0.00%
July 1, 2019	432.87	15.00	570.55	24.93		\$1,043.35	0.00%
July 1, 2020	445.82	15.00	0.00	24.93	525.00	\$1,010.75	-3.12%
July 1, 2021	445.82	15.00	0.00	24.93	525.00	\$1,010.75	0.00%
July 1, 2022	445.82	15.00	0.00	24.93	525.00	\$1,010.75	0.00%
July 1, 2023	445.82	15.00	0.00	24.93	525.00	\$1,010.75	0.00%

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Table 3 - Rate History of Water Charges per Million Gallons of Raw Water - Delayed
FY2010-FY2024

Delayed Water Purchaser NJ-American 1 mgd July 1, 2001
1.935 mgd October 1, 2002
1.500 mgd January 1, 2005

<u>Effective Date</u>	<u>O&M Charge</u>	<u>Source Water Protection</u>	<u>Debt Repayment 2/1/02-8/01/31</u>	<u>NJEIFP Debt Component</u>	<u>Capital Fund Component</u>	<u>Total Charge per MG</u>	<u>Percent Increase (Decrease)</u>
July 1, 2009	396.79	15.00	763.24			\$1,175.03	8.82%
July 1, 2010	396.79	15.00	756.19			\$1,167.98	-0.60%
July 1, 2011	347.39	15.00	770.90	35.42		\$1,168.71	0.06%
July 1, 2012	345.95	15.00	772.12	35.42		\$1,168.49	-0.02%
July 1, 2013	356.61	15.00	772.46	24.42		\$1,168.49	0.00%
July 1, 2014	356.61	15.00	772.46	24.42		\$1,168.49	0.00%
July 1, 2015	386.00	10.00	770.07	24.79		\$1,190.86	1.91%
July 1, 2016	432.87	10.00	770.07	25.10		\$1,238.04	3.96%
July 1, 2017	432.87	15.00	664.96	24.93		\$1,137.76	-8.10%
July 1, 2018	432.87	15.00	664.96	24.93		\$1,137.76	0.00%
July 1, 2019	432.87	15.00	664.96	24.93		\$1,137.76	0.00%
July 1, 2020	445.82	15.00	438.92	24.93	200.00	\$1,124.67	-1.15%
July 1, 2021	445.82	15.00	438.92	24.93	200.00	\$1,124.67	0.00%
July 1, 2022	445.82	15.00	438.92	24.93	200.00	\$1,124.67	0.00%
July 1, 2023	445.82	15.00	438.92	24.93	200.00	\$1,124.67	0.00%

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule of Events

(N.J.A.C. 7:11-4.1 et.seq.)

To become effective July 1, 2022

2022

- | | | |
|-----------|----|---|
| SEPTEMBER | 27 | Advise Water Users of informal meeting. |
| OCTOBER | 27 | Informal meeting with Water Users – 11:00 AM. |
| NOVEMBER | 7 | Board reviews and approves proposed Rates. |
| DECEMBER | 18 | Mail Official Notice to water customers, Rate Payer Advocate, interested parties and advertise in newspapers. |

2023

- | | | |
|----------|----|---|
| JANUARY | 3 | Publication in the New Jersey Register. |
| | 5 | Pre-Public Hearing – 11:00 AM (within 45 days of Official Notice).
Deadline for responses to inquires received prior to pre-public hearing. |
| | 30 | Deadline for receipt of comments to be addressed at Public Hearing
(15 days after pre-public hearing). |
| FEBRUARY | 2 | Public Hearing Meeting. (Manasquan Administration Building) – 11:00
AM Deadline for responses to inquires received between pre-public and
public hearing. |
| | 16 | Written responses to questions raised at Hearing (within 10
business days of the public hearing). |
| MARCH | 4 | NJ Register Comment Period Ends. |
| | 13 | Public Hearing record closes (25 business days after
Public Hearing). |
| MAY | 1 | Board approval of FY 2024 Rates & Budget |
| JULY | 1 | Effective date. |

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Proposed Fiscal Year 2024 Budget Summary

(07/01/23-06/30/24)

	ADOPTED F/Y2023 <u>Reservoir Budget</u>	PROPOSED F/Y2024 <u>Reservoir Budget</u>
Proposed Operating Expense Budget (Schedule 1)	\$ 2,818,990	\$2,867,454
Allocation of Headquarters General & Administrative Expenses to the Manasquan Reservoir System (Schedule 13)	\$ 646,000	\$ 770,000
Proposed Total Expense Budget	\$ 3,464,990	\$ 3,637,454
Proposed Capital Equipment Budget (Schedule 14)	\$ 17,800	\$ 32,000
Contribution to Reserve Funds		
- Sediment Reserve	\$ 10,000	\$ 10,000
- Formal Dam Inspection Reserve	\$ 5,000	\$ 5,000
- Renewal & Replacement Fund	\$ 120,000	\$ 120,000
- High Voltage Testing Reserve	\$ 15,000	\$ 15,000
- Other Post Employment Benefits Reserve	\$ -	\$ -
- Supplemental Renewal & Replacement	\$ -	\$ -
Adjustment for F/Y22 Salary and Fringe Expenses to be paid (from)/to WTP/TS Account (Schedule 15)	\$ 139,651	\$ 19,615
Adjustment for F/Y21 Salary and Fringe Expenses to be paid (from)/to WTP/TS Account	<u> </u>	<u>\$ -</u>
Total Budget Requirements	<u>\$ 3,772,441</u>	<u>\$ 3,839,069</u>
Interest Earnings on Funds (Except Renewal and Replacement and Depreciation Reserve Fund) (Schedule 16)	\$ (26,600)	\$ (90,200)
Unanticipated Revenue (Schedule 17)	<u>\$ (584,130)</u>	<u>\$ (587,180)</u>
Total Miscellaneous Revenue & Interest Income	<u>\$ (610,730)</u>	<u>\$ (677,380)</u>
Net Amount to be paid for O & M Component	<u>\$ 3,161,711</u>	<u>\$ 3,161,689</u>

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 1 - Total Operations & Maintenance Budget

Fiscal Year 2024

	F/Y2022 Reservoir Actual	F/Y2023 Reservoir Adopted	F/Y2024 Reservoir Proposed
Salaries & Fringe Benefits (Schedule 2)	1,431,579	1,520,516	\$1,518,655
O & M Direct Expense (Schedule 3)	1,015,532	1,157,613	1,179,949
G&A Expenses (Schedule 5)	<u>96,876</u>	<u>140,864</u>	<u>168,851</u>
Total Operations & Maintenance Budget	\$2,543,988	\$2,818,993	\$2,867,454

	F/Y2021 Actual		F/Y2022 Actual		F/Y2023 Adopted		F/Y 2024 Proposed	
	Reservoir	WTP/TS	Reservoir	WTP/TS	Reservoir	WTP/TS	Reservoir	WTP/TS
Salaries/Fringe*	\$1,432,540	\$1,309,324	1,431,579	1,424,501	1,520,516	1,623,354	\$1,518,655	\$1,768,221
O & M Direct Expense	846,229	722,957	1,015,532	896,933	1,157,613	891,139	1,179,949	978,080
G & A Expense	<u>96,524</u>	<u>62,108</u>	<u>96,876</u>	<u>67,166</u>	<u>140,864</u>	<u>93,438</u>	<u>168,851</u>	<u>106,701</u>
Total	\$2,375,293	\$2,094,389	2,543,988	2,388,599	2,818,993	2,607,931	\$2,867,454	\$2,853,002

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 2 - Labor Projection
Fiscal Year 2024 (7/01/22-6/30/23)

TITLES	SALARY	FRINGE BENEFITS	OVERTIME	CLOTHING ALLOWANCE	SHIFT DIFFERENTIAL	TOTAL	ALLOCATION	ALLOCATION	AMOUNT WTP/TS	AMOUNT WTP/TS
							RESERVOIR %	RESERVOIR %		
Director	147,400	98,710	-			246,110	50%	123,054	50%	123,056
Project Engineer II	102,500	68,641	-			171,141	70%	119,798	30%	51,343
Water Supply Tech.	69,800	47,111	-	550		117,461	62%	72,825	38%	44,636
Administrative Assistant	73,000	48,886	-			121,886	40%	48,753	60%	73,133
Supervisor Technical Facilities Maint	91,900	63,957	3,055	550		159,462	47%	74,910	53%	84,597
Sr. Water Supply Tech.	80,000	54,252	463	550		135,265	35%	47,380	65%	87,922
Maintenance Worker I	49,900	33,785	-	550		84,235	93%	78,338	7%	5,897
Supervisor Operations	103,200	69,110	-			172,310	25%	43,077	75%	129,234
Equipment Operator	52,300	35,392	-	550		88,242	94%	82,947	6%	5,296
Foreman Bldg & Grounds Maint	80,000	54,252	463	550		135,265	80%	108,241	20%	27,061
Foreman Facilities Maintenance	78,400	55,845	4,441	550		139,236	40%	55,717	60%	83,478
Facilities Mechanic (3 Positions)	183,300	126,023	3,236	1,650		314,209	40%	125,688	60%	188,485
Supervisor Plant Operator	64,000	46,173	4,398	550		115,121	37%	42,566	63%	72,556
Maintenance Worker I Operations	41,700	28,109	-	275		70,084	92%	64,477	8%	5,608
Reservoir Sys Oper./Asst RSO (5 Positions)	245,600	188,691	31,516	2,750	1,900	470,457	90%	423,446	10%	46,995
Plant Operator (6 Positions)	391,300	299,362	52,428	3,300		746,390	1%	7,439	99%	738,924
TOTAL: (rounded)	1,854,300	1,318,300	100,000	12,375	1,900	3,286,875		1,518,655		1,768,221

TOTAL = 27 Positions

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 3 - Reservoir System Operations and Maintenance Direct Expense Budget
Proposed F/Y 2024, Adopted F/Y 2023, and Actual F/Y 2019-2022

Cost Center: Reservoir Direct
(40)

MANASQUAN WATER SUPPLY SYSTEM
RESERVOIR SYSTEM
O & M DIRECT EXPENSE BUDGET

CODE	ACCOUNT	FY '19 ACTUAL	FY '20 ACTUAL	FY '21 ACTUAL	FY '22 ACTUAL	FY '23 ADOPTED	FY '24 PROPOSED
5110	Regular Salaries & Wages						
5120	Overtime-Salaries & Wages						
5130	New positions-Salaries & Wages						
5140	Seasonal Help-Salaries & Wages						
5150	Fringe Benefits						
5160	Retiree Health Benefits						
	Total Salary, Wages & Fringe						
5200	Residences						
5210	Heating Fuel		399	805	0	800	1,600
5220	Utilities -Electrical Service	74,899	70,058	76,270	80,402	85,000	86,725
5230	-Gas Service	6,451	6,415	7,664	10,528	9,800	11,700
5240	-Propane						
5250	Electricity for Pumping Station	171,380	206,599	239,940	250,569	305,000	305,000
5260	Fuel - Vehicular						
5270	Oil & Grease						
5280	Tires						
5290	Maintenance Supplies	5,615	9,671	9,198	13,306	10,000	14,700
5300	Maint. Supplies - Vehicular						
5310	Major Vehicle Service & Repair						
5320	Agricultural Supplies						
5330	Maintenance Equipment	55,396	42,721	40,500	41,535	51,500	51,500
5340	Serv. & Maintenance Contracts	56,735	39,953	5,742	27,789	46,650	46,650
5350	Equipment Rental	2,340	11,105	8,970	2,514	10,000	10,000
5360	Household - Safety Supplies	766	2,518	3,373	2,441	1,000	1,000
5370	Uniforms						
5380	Special & Professional Services	72,226	68,971	80,245	119,466	138,686	112,850
5390	Protective Services	242,258	259,993	292,378	319,005	342,869	381,416
5400	Telephone	8,157	9,285	10,244	12,270	9,008	9,008
5410	Postage & Freight Out						
5420	Data Processing						
5430	Printing & Office Supplies	966	714	566	1,232	1,500	2,000
5440	Scientific & Photographic	751	2,524	781	3,028	5,500	5,500
5450	Dues & Subscriptions						
5460	Advertising & Promotional			704	442	2,000	2,000
5470	Travel & Subsistence				59		
5480	Staff Training & Tuition Aid			255			
5490	Fees & Permits	31,510	31,680	31,840	33,260	38,000	38,000
5500	In - Lieu Taxes	36,896	36,756	36,756	36,756	38,300	38,300
5510	Sediment Removal		59,961		60,932	62,000	62,000
5520	Chemicals						
5525	Carbon Filter Replacement						
	Total Other Expenses	\$766,347	\$859,321	\$846,229	\$1,015,532	\$1,157,613	\$1,179,949
	Total Operating Expenses	\$766,347	\$859,321	\$846,229	\$1,015,532	\$1,157,613	\$1,179,949
	ANNUAL BUDGET	\$1,019,652	\$1,008,584	\$1,005,936	\$1,116,400	\$1,157,613	\$1,179,949

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

**Schedule 4 - Treatment Plant/Transmission System Operations and Maintenance Direct
Expense Budget**

Proposed F/Y 2024, Adopted F/Y 2023, and Actual F/Y 2019-2022

Cost Center: Treat/Trans Direct
(50)

MANASQUAN WATER SUPPLY SYSTEM
WATER TREATMENT PLANT/TRANSMISSION SYSTEM
O & M DIRECT EXPENSE BUDGET

CODE	ACCOUNT	FY '19 ACTUAL	FY '20 ACTUAL	FY '21 ACTUAL	FY '22 ACTUAL	FY '23 ADOPTED	FY '24 PROPOSED
5110	Regular Salaries & Wages						
5120	Overtime-Salaries & Wages						
5130	New positions-Salaries & Wages						
5140	Seasonal Help-Salaries & Wages						
5150	Fringe Benefits						
5160	Retiree Health Benefits						
	Total Salary, Wages & Fringe						
5200	Residences						
5210	Heating Fuel	0	2,043	6,691	3,868	6,000	9,000
5220	Utilities -Electrical Service	251,242	255,320	260,159	301,059	292,500	306,800
5230	-Gas Service	26,630	24,720	24,304	37,514	35,000	38,000
5240	-Propane						
5250	Electricity for Pumping Station						
5260	Fuel - Vehicular						
5270	Oil & Grease	1,220	1,317	0	0	3,000	3,000
5280	Tires						
5290	Maintenance Supplies	6,603	6,983	10,506	8,054	7,100	7,100
5300	Maint. Supplies - Vehicular						
5310	Major Vehicle Service & Repair						
5320	Agricultural Supplies				723		
5330	Maintenance Equipment	91,668	32,057	49,941	100,640	80,000	105,500
5340	Serv. & Maintenance Contracts	26,485	35,593	18,958	43,963	45,000	57,938
5350	Equipment Rental	5,542	763	1,417	1,409	3,200	3,200
5360	Household - Safety Supplies	688	1,260	3,925	1,948	2,000	2,000
5370	Uniforms						
5380	Special & Professional Services	28,904	23,710	28,170	22,713	34,800	34,800
5390	Protective Services	80,035	80,832	93,722	108,664	114,339	125,042
5400	Telephone	516	539	511	505	1,200	1,200
5410	Postage & Freight Out	1,652		103		300	300
5420	Data Processing						
5430	Printing & Office Supplies	8,266	2,343	4,964	3,973	9,800	9,800
5440	Scientific & Photographic	11,998	10,663	9,491	13,741	13,800	15,000
5450	Dues & Subscriptions						
5460	Advertising & Promotional	287	260	1,038	319	1,000	1,000
5470	Travel & Subsistence	59	12		70		
5480	Staff Training & Tuition Aid	1,843	0	355	621	6,700	1,320
5490	Fees & Permits	9,262	6,141	5,390	6,240	9,000	9,000
5500	In - Lieu Taxes	0	140	140	140	400	400
5510	Residual Removal	4,500	0	0	46,157	16,000	16,000
5520	Water Treatment Chemicals	134,833	132,813	143,893	123,107	150,000	166,680
5525	GAC Replacement	42,000		50,000	65,962	60,000	65,000
5528	Reimb of O&M Capital Expenditures	12,546	1,138	9,279	5,544		
	Total Other Expenses	\$746,777	\$618,647	\$722,957	\$896,933	\$891,139	\$978,080
	Total Operating Expenses	\$746,777	\$618,647	\$722,957	\$896,933	\$891,139	\$978,080
	ANNUAL BUDGET	\$929,660	\$855,400	\$864,000	\$909,916	\$891,139	\$978,080

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 5 - Reservoir System General and Administrative Operations and Maintenance

Direct Expense Budget

Proposed F/Y 2024, Adopted F/Y 2023, and Actual F/Y 2019-2022

Cost Center: G & A
(60)

MANASQUAN WATER SUPPLY SYSTEM
GENERAL & ADMINISTRATIVE
EXPENSE BUDGET

CODE	ACCOUNT	FY '19 ACTUAL	FY '20 ACTUAL	FY '21 ACTUAL	FY '22 ACTUAL	FY '23 ADOPTED	FY '24 PROPOSED
5110	Regular Salaries & Wages	\$1,747,505	\$1,744,737	\$1,699,456	\$1,715,778	\$1,904,950	\$1,868,575
5120	Overtime-Salaries & Wages	80,779	71,499	64,694	85,409	112,800	100,000
5130	New positions-Salaries & Wages						
5140	Seasonal Help-Salaries & Wages						
5150	Fringe Benefits	996,747	554,954	250,181	879,808	907,700	1,094,500
5160	Retiree Health Benefits	(149,260)	(184,085)	(106,171)	174,262	213,600	218,800
5168	Workers Comp. (Self-Insured)	1,453	701	0	823	5,000	5,000
	Total Salary, Wages & Fringe	\$2,677,224	\$2,187,807	\$1,908,160	\$2,856,080	\$3,144,050	\$3,286,875
	Budget - salary and fringe						
5200	Residences						
5210	Heating Fuel						
5220	Utilities -Electrical Service						
5230	-Gas Service						
5240	-Propane						
5250	Electricity for Pumping Station						
5260	Fuel - Vehicular	22,463	13,896	15,990	29,005	22,750	46,800
5270	Oil & Grease	6,797	3,628	1,596	8,207	5,700	8,300
5280	Tires	5,740	8,905	3,233	4,962	7,000	12,000
5290	Maintenance Supplies	8,457	7,890	10,186	12,697	15,000	15,000
5300	Maint. Supplies - Vehicular	8,656	9,703	16,194	9,124	20,000	20,000
5310	Major Vehicle Service & Repair	22,121	18,290	45,738	20,267	52,000	52,000
5320	Agricultural Supplies	5,219	1,787	6,161	3,999	9,100	9,100
5330	Maintenance Equipment	5,574	2,734	3,641	5,383	12,000	12,000
5340	Serv. & Maintenance Contracts	11,723	18,620	16,414	25,296	25,852	25,852
5350	Equipment Rental	2,307	2,411	2,365	2,550	4,300	4,300
5360	Household - Safety Supplies	5,655	11,830	9,399	12,394	7,500	13,700
5370	Uniforms						
5380	Special & Professional Services	7,469	7,395	8,361	7,138	7,700	12,900
5390	Protective Services						
5400	Telephone	6,008	5,714	6,152	6,116	7,000	7,200
5410	Postage & Freight Out	1,166	1,078	685	1,435	1,200	1,200
5420	Data Processing	3,558	2,427	2,575	3,099	5,000	5,000
5430	Printing & Office Supplies	3,659	2,528	2,380	4,717	5,800	7,400
5440	Scientific & Photographic	0	0	0	0	300	300
5450	Dues & Subscriptions	1,215	1,197	504	302	3,000	3,000
5460	Advertising & Promotional	1,214	459	74	697	2,000	2,000
5470	Travel & Subsistence	306	470	336	152	1,000	1,000
5480	Staff Training & Tuition Aid	4,251	2,512	3,559	4,260	12,400	10,000
5490	Fees & Permits	5,211	3,265	3,089	2,241	7,700	6,500
5500	In - Lieu Taxes						
5510	Residual Removal						
5520	Water Treatment Chemicals						
5525	GAC Replacement						
	Total Other Expenses	\$138,769	\$126,739	\$158,632	\$164,042	\$234,302	\$275,552
	Total Operating Expenses	\$2,815,993	\$2,314,546	\$2,066,792	\$3,020,122	\$3,378,352	\$3,562,427
	Budget- other expenses						
	TOTAL ANNUAL BUDGET						
	Reservoir System	\$71,761	\$65,013	\$96,524	\$96,876	\$140,864	\$168,851
	Treatment/Transmission System	\$67,008	\$61,726	\$62,108	\$67,166	\$93,438	\$106,701
		\$138,769	\$126,739	\$158,632	\$164,042	\$234,302	\$275,552

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 6 - List of Category 5340 Items Recommended Service & Maintenance Contracts

For Reservoir (40)

Fiscal Year 2024

		<u>Adopted F/Y23</u>	<u>Proposed F/Y24</u>
1	HVAC/Dehumidifier Service	\$ 500	\$ 500
2	Instrumentation & Control System Service/Upgrade	3,000	3,000
3	Electrical Upgrade & Repair	14,000	14,000
4	Overhead Crane Service & Inspection	3,000	3,000
5	Fire & Intrusion Alarm Service	1,500	1,500
6	Potable Well/Septic Service	1,500	1,500
7	Fertilization-Dam Dike	3,750	3,750
8	Underground Fuel Tank Testing & Repair	2,000	2,000
9	Roadway Crack Sealing	3,000	3,000
10	Wood Debris Removal	2,500	2,500
11	Access Roadway Repairs	2,500	2,500
12	Roofing System Maintenance & Repair	4,000	4,000
13	Reservoir Transmission Line Clearing	3,000	3,000
14	Fios Fiber Optic for Security Cameras	2,400	2,400
	Total Service & Maintenance Contracts	<u>\$ 46,650</u>	<u>\$ 46,650</u>

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 7 - List of Category 5340 Items Recommended Service & Maintenance Contracts

For WTP/TS (50)

Fiscal Year 2024

		Adopted F/Y23	Proposed F/Y24
1	HVAC Service	\$ 1,500	\$ -
2	Electrical Service Contract	1,000	2,400
3	Instrumentation & Control System Service & Upgrade	8,000	8,000
4	Electrical Upgrade & Repair	4,000	4,000
5	Overhead Crane Service	2,500	2,500
6	Building Cleaning Service and Supplies	-	3,600
7	UST Monitors Service and Upgrade	1,652	-
8	Fire & Intrusion Alarm Service	3,100	3,100
9	Air Compressor Service	500	500
10	Boiler Service	1,008	1,200
11	Auxiliary Generator Service	3,000	3,000
12	Lab Equipment Service	2,500	2,500
13	Backflow Preventor Service	500	500
14	UPS Battery PM Service and Batteries	3,340	6,000
15	Four Year Electrical Switchgear Testing Service	7,000	10,438
16	Internet Service	5,400	10,200
	Total Service & Maintenance Contracts	\$ 45,000	\$ 57,938

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 8 - List of Category 5340 Items Recommended Service & Maintenance Contracts

For G & A (60)
Fiscal Year 2024

		<u>Adopted</u> F/Y23	<u>Proposed</u> F/Y24
1	Refuse & Waste Disposal	\$ 2,000	\$ 2,000
2	Office Equipment/Computers	1,800	1,800
3	Waste Oil Disposal	300	300
4	Fire Extinguisher Service	1,100	1,100
5	UST Monitor Service	1,752	1,752
6	Building Maintenance	6,000	6,000
7	Internet Service	2,000	2,000
8	Janitorial Service	8,000	8,000
9	Vehicle Lift Inspection	500	500
12	Underground Fuel Storage Tank Service	<u>2,400</u>	<u>2,400</u>
	Total Service & Maintenance Contracts	<u>\$ 25,852</u>	<u>\$ 25,852</u>

NEW JERSEY WATER SUPPLY AUTHORITY
 MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 9 - List of Category 5380 Items Recommended Special & Professional Service For

Reservoir (40)

Fiscal Year 2024

		Adopted F/Y23	Proposed F/Y24
		<u> </u>	<u> </u>
1	Laboratory Services - Water Quality Sampling	\$ 10,000	\$ 10,000
3	Services-USGS Cooperative Agreement	34,000	34,000
4	Annual Trustee Fund	9,500	9,500
5	Dam Management-Surveying	2,500	2,500
6	Wetland Monitoring Management	8,000	8,000
7	Hydrilla Treatment and Water Quality Study	25,000	15,000
8	Lake Management Consultants	10,000	-
9	Engineering Services	4,000	4,000
10	Financial Advisory Services	4,850	4,850
11	USGS Gaging Station Squankum	30,836	25,000
		<u> </u>	<u> </u>
	Total Special & Professional Services	<u>\$ 138,686</u>	<u>\$ 112,850</u>

NEW JERSEY WATER SUPPLY AUTHORITY
 MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 10 - List of Category 5380 Items Recommended Special & Professional Services

For WTP/TS (50)

Fiscal Year 2024

		<u>Adopted F/Y23</u>	<u>Proposed F/Y24</u>
1	Water Quality Sampling	\$ 17,200	\$ 17,200
2	Residual Quality Analysis	800	800
3	Consultant Services	4,000	4,000
4	USGA Allenwood Gage-Parameters	11,000	11,000
5	Underground Markout Service	<u>1,800</u>	<u>1,800</u>
	Total Special & Professional Services	<u><u>\$ 34,800</u></u>	<u><u>\$ 34,800</u></u>

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 11 - List of Category 5380 Items Recommended Special & Professional Services

For G & A (60)
Fiscal Year 2024

	<u>Adopted</u> <u>F/Y23</u>	<u>Proposed</u> <u>F/Y24</u>
1 Pulmonary Testing	\$ 1,500	\$ 1,500
2 CDL Medical Testing	1,000	1,000
3 EAS Service	4,000	4,000
4 The Bank ofNJ - Melon	-	5,200
5 Pre-Employment Physicals	<u>1,200</u>	<u>1,200</u>
Total Special & Professional Services	<u>\$ 7,700</u>	<u>\$ 12,900</u>

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 12 - Projected FY 2024 New Jersey Water Supply Authority Insurance Program

<u>Policy</u>	<u>Raritan Basin System</u>	<u>Manasquan Reservoir System</u>	<u>Manasquan Water Treatment Plant and Transmission System</u>	<u>Total Premium</u>
Property Limit \$150 million, Limit \$25m BI Deduct: \$100k all perils \$250k Deduct dams, dikes / \$1m Deduct Canal flood Earthen Dam:Builders Risk	\$680,659	\$297,032	\$87,346	\$1,065,037
General/Products Liability Limit \$1 million Deduct: \$150k	\$159,096	\$14,874	\$3,088	\$177,058
Environmental Impairment Liability Limit \$10 million Deduct: \$100k	\$26,125	\$2,443	\$507	\$29,075
Workers' Compensation Limit \$1 million	\$121,925	\$17,972	\$19,469	\$159,366
Employer Liability Limit \$1 million	Included in Workers' Comp	Included in Workers' Comp	Included in Workers' Comp	Included in Workers' Comp
Umbrella Liability Limit \$23 million	\$402,471	\$37,628	\$7,813	\$447,912
Business Automobile Limit: \$1 million G/L, \$0 pd Deduct: \$50k, G/L	\$35,064	\$4,709	\$1,571	\$41,344
Management Liability Public Officials Liability Cyber Risk Fidelity & Crime Limit \$5 million/\$1million/\$1 million Deduct: \$100k/\$10k/\$50k	\$46,856 \$24,686 <hr/> \$71,542	\$4,380 \$2,308 <hr/> \$6,688	\$910 \$478 <hr/> \$3,844 \$5,232	\$52,146 \$27,472 <hr/> \$3,844 \$83,462
Travel Accident Limit \$2 million	\$742	\$69	\$14	\$825
Drone Coverage	\$1,188			\$1,188
UST	\$4,858			\$4,858
TOTAL:	<hr/> \$1,503,670	<hr/> \$381,415	<hr/> \$125,040	<hr/> \$2,010,125

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

**Schedule 13 - Recap of Allocation of Headquarters General and Administrative Expenses
Charged to the Manasquan Reservoir Water Supply System**
Fiscal Year 2024 (7/1/23-6/30/24)

	Total Headquarters Charge	Manasquan Reservoir System	Manasquan WTP/TS
Budgeted-Appendix I, amount to be charged to Manasquan System for FY24 (7/1/23-6/30/24)	\$810,833	\$699,506	\$111,327
F/Y22 Adjustment as per audited Expenditures:			
Budgeted as per rate schedule for F/Y22 (7/1/21-6/30/22). Amounts paid during F/Y21 to Raritan Basin System.	\$675,000	\$583,000	\$92,000
Actual allocation based upon audited expenditures F/Y22 (7/1/21-6/30/22) - Appendix II	<u>\$757,050</u>	<u>\$653,089</u>	<u>\$103,961</u>
Adjustments F/Y22	<u>\$82,050</u>	<u>\$70,089</u>	<u>\$11,961</u>
Net Allocation for F/Y2024 Budget	<u>\$892,883</u>	<u>\$769,595</u>	<u>\$123,288</u>

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 14 - Proposed Capital Equipment Budget
Fiscal Year 2024

Description	(A) Addition (R) Replacement	Year of Purchase Vehicle/Equipment	Dollar Value	%	Manasquan Reservoir	Manasquan WTP/TS	Reservoir	WTP/TS
							Depreciation Reserve	Depreciation Reserve
Ford Escape or equivalent	R (556)		35,000	50/50	17,500	17,500	15,225	801
Skid steer Forestry Disc Mulcher Attachment	A		25,000	91/9	22,750	2,250		
Ford 250 Pickup	R(530)		65,000	45/55	29,250	35,750	29,499	1,553
ZTR MOWER Toro Ground master 328 D	R(471)		25,000	84/16	21,000	4,000	13,803	
TOTAL			150,000		90,500	59,500	58,527	2,354

*Per Resolution #861, dated 7/12/93 Asset Definition minimum is \$1,000.	0
Less Amount charged to Reservoir Depreciation Reserve	58,527
Less Amount charged to WTP/TS Depreciation Reserve	2,354

Total 31,973 57,146

Additional Depreciation Reserve 0

Estimate \$32,000 \$57,146

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 15 - July, 2021 – June, 2022 Fiscal Year 2022 G&A Expenses Split

EMPLOYEE NAME	TOTAL	BUDGETED %		ACTUAL % (Timesheets)		VARIANCE UNDER (OVER)		
		(40)	(50)	(40)	(50)	(40)	(50)	
		RESERVOIR	WTP/TS	RESERVOIR	WTP/TS	RESERVOIR	WTP/TS	
			0%	100%	0%	100%		
PLANT OPERATOR								
TIME SPLIT								
REGULAR	72,478.80	0.00	72,478.80	0.00	72,478.80	0.00	0.00	
CLOTH.	550.00	0.00	550.00	0.00	550.00	0.00	0.00	
O.T.	6,879.07	0.00	6,879.07	0.00	6,879.07	0.00	0.00	
FRINGE	46,897.46	0.00	46,897.46	0.00	46,897.46	0.00	(0.00)	
			4%	96%	4%	96%		
PLANT OPERATOR								
TIME SPLIT								
REGULAR	56,713.12	2,268.52	54,444.60	2,268.52	54,444.60	0.00	(0.00)	
CLOTH.	550.00	22.00	528.00	22.00	528.00	0.00	0.00	
O.T.	5,478.95	219.16	5,259.79	219.16	5,259.79	(0.00)	0.00	
FRINGE	36,216.90	1,448.68	34,768.22	1,448.68	34,768.22	(0.00)	0.00	
			0%	100%	0%	100%		
PLANT OPERATOR								
TIME SPLIT								
REGULAR	68,356.40	0.00	68,356.40	-	68,356.40	0.00	0.00	
CLOTH.	550.00	0.00	550.00	-	550.00	0.00	0.00	
O.T.	10,246.48	0.00	10,246.48	-	10,246.48	0.00	0.00	
FRINGE	46,285.97	0.00	46,285.97	-	46,285.97	0.00	0.00	
			48%	52%	45%	55%		
FAC. MECHANIC - WSA								
TIME SPLIT								
REGULAR	68,567.14	32,912.22	35,654.92	30,855.21	37,711.93	2,057.01	(2,057.01)	
CLOTH.	550.00	264.00	286.00	247.50	302.50	16.50	(16.50)	
O.T.	793.97	381.11	412.86	357.29	436.68	23.82	(23.82)	
FRINGE	41,074.09	19,715.55	21,358.54	18,483.34	22,590.75	1,232.21	(1,232.21)	
			97%	3%	100%	0%		
SYSTEM OPERATOR								
TIME SPLIT								
REGULAR	47,545.28	46,118.92	1,426.36	47,545.28	0.00	(1,426.36)	1,426.36	
CLOTH.	550.00	533.50	16.50	550.00	0.00	(16.50)	16.50	
O.T.	10,804.02	10,479.90	324.12	10,804.02	0.00	(324.12)	324.12	
FRINGE	34,494.88	33,460.04	1,034.84	34,494.88	0.00	(1,034.84)	1,034.84	
			51%	49%	45%	55%		
PROJECT ENGINEER 11								
TIME SPLIT								
REGULAR	82,917.88	42,288.13	40,629.75	37,313.05	45,604.83	4,975.08	(4,975.08)	
CLOTH.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
O.T.	-	-	-	0.00	0.00	0.00	0.00	
FRINGE	48,102.14	24,532.08	23,570.06	21,645.96	26,456.18	2,886.12	(2,886.12)	
			48%	52%	99%	1%		
FAC. MECHANIC - WSA								
TIME SPLIT								
REGULAR	60,933.46	29,248.06	31,685.40	60,324.13	609.33	(31,076.07)	31,076.07	
CLOTH.	550.00	264.00	286.00	544.50	5.50	(280.50)	280.50	
O.T.	832.28	399.49	432.79	823.96	8.32	(424.47)	424.47	
FRINGE	37,126.93	17,820.92	19,306.01	36,755.66	371.27	(18,934.74)	18,934.74	
			94%	6%	88%	12%		
FOREMAN BUILDING & GROUNDS MAINT - WSA								
TIME SPLIT								
REGULAR	77,256.64	72,621.25	4,635.39	67,985.84	9,270.80	4,635.41	(4,635.41)	
CLOTH.	550.00	517.00	33.00	484.00	66.00	33.00	(33.00)	
O.T.	1,404.11	1,319.86	84.25	1,235.62	168.49	84.24	(84.24)	
FRINGE	46,675.68	43,875.14	2,800.54	41,074.60	5,601.08	2,800.54	(2,800.54)	
			97%	3%	91%	9%		
ASST. RESERVOIR SYS OPERATOR								
TIME SPLIT								
REGULAR	35,467.61	34,403.57	1,064.04	32,275.53	3,192.08	2,128.04	(2,128.04)	
CLOTH.	275.00	266.75	8.25	250.25	24.75	16.50	(16.50)	
O.T.	2,918.21	2,830.66	87.55	2,655.57	262.64	175.09	(175.09)	
FRINGE	22,250.57	21,583.05	667.52	20,248.01	2,002.56	1,335.04	(1,335.04)	

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 15 (Continued) July, 2021 – June, 2022 Fiscal Year 2022 G&A Expenses Split

EMPLOYEE NAME	TOTAL	BUDGETED %		ACTUAL % (Timesheets)		VARIANCE UNDER (OVER)		
		(40) RESERVOIR	(50) WTP/TS	(40) RESERVOIR	(50) WTP/TS	(40) RESERVOIR	(50) WTP/TS	
			47%	53%	45%	55%		
FOREMAN FACILITIES MAINT.								
TIME SPLIT								
REGULAR	83,138.73	39,075.20	44,063.53	37,412.43	45,726.30	1,662.77	(1,662.77)	
CLOTH.	550.00	258.50	291.50	247.50	302.50	11.00	(11.00)	
O.T.	2,917.40	1,371.18	1,546.22	1,312.83	1,604.57	58.35	(58.35)	
FRINGE	49,690.08	23,354.34	26,335.74	22,360.54	27,329.54	993.80	(993.80)	
			43%	57%	48%	52%		
SR. WATER SUPPLY TECH. -WSA								
TIME SPLIT								
REGULAR	77,112.20	33,158.25	43,953.95	37,013.86	40,098.34	(3,855.61)	3,855.61	
CLOTH.	550.00	236.50	313.50	264.00	286.00	(27.50)	27.50	
O.T.	384.14	165.19	218.95	184.39	199.75	(19.20)	19.20	
FRINGE	45,916.05	19,743.91	26,172.14	22,039.70	23,876.35	(2,295.79)	2,295.79	
			5%	95%	5%	95%		
PLANT OPERATOR								
TIME SPLIT								
REGULAR	52,755.60	2,637.78	50,117.82	2,637.78	50,117.82	0.00	0.00	
CLOTH.	275.00	13.75	261.25	13.75	261.25	0.00	0.00	
O.T.	9,529.61	476.48	9,053.13	476.48	9,053.13	0.00	0.00	
FRINGE	36,678.17	1,833.93	34,844.24	1,833.91	34,844.26	0.02	(0.02)	
			93%	7%	93%	7%		
MAINT. WORKER 1								
TIME SPLIT								
REGULAR	48,592.88	45,191.37	3,401.51	45,191.38	3,401.50	(0.01)	0.01	
CLOTH.	550.00	511.50	38.50	511.50	38.50	0.00	0.00	
O.T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FRINGE	28,954.95	26,928.10	2,026.85	26,928.10	2,026.85	(0.00)	0.00	
			47%	53%	51%	49%		
SUPERVISOR TECH. ASST. & FAC. MAINT.								
TIME SPLIT								
REGULAR	88,586.64	41,635.73	46,950.91	45,179.19	43,407.45	(3,543.46)	3,543.46	
CLOTH.	550.00	258.50	291.50	280.50	269.50	(22.00)	22.00	
O.T.	2,528.33	1,188.32	1,340.01	1,289.45	1,238.88	(101.13)	101.13	
FRINGE	53,935.64	25,349.75	28,585.89	27,507.17	26,428.47	(2,157.42)	2,157.42	
			97%	3%	98%	2%		
ASST. RESERVOIR SYSTEM OPERATOR								
TIME SPLIT								
REGULAR	36,068.60	34,986.54	1,082.06	35,347.23	721.37	(360.69)	360.69	
CLOTH.	275.00	266.75	8.25	269.50	5.50	(2.75)	2.75	
O.T.	2,317.04	2,247.53	69.51	2,270.70	46.34	(23.17)	23.17	
FRINGE	23,256.73	22,559.05	697.68	22,791.59	465.14	(232.54)	232.54	
			97%	3%	99%	1%		
RESERVOIR SYS OPERATOR								
TIME SPLIT								
REGULAR	45,499.16	44,134.18	1,364.98	45,044.17	454.99	(909.99)	909.99	
CLOTH.	550.00	533.50	16.50	544.50	5.50	(11.00)	11.00	
O.T.	7,983.13	7,743.64	239.49	7,903.30	79.83	(159.66)	159.66	
FRINGE	31,362.93	30,422.05	940.88	31,049.30	313.63	(627.25)	627.25	
			50%	50%	36%	64%		
DIR. MWS/D&R CANAL OPERATIONS								
TIME SPLIT								
REGULAR	135,442.03	67,721.02	67,721.01	48,759.13	86,682.90	18,961.89	(18,961.89)	
CLOTH.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
O.T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FRINGE	79,517.34	39,758.67	39,758.67	28,626.24	50,891.10	11,132.43	(11,132.43)	
			50%	50%	36%	64%		
ADMIN. ASSISTANT								
TIME SPLIT								
REGULAR	70,555.04	35,277.52	35,277.52	25,399.81	45,155.23	9,877.71	(9,877.71)	
CLOTH.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
O.T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
FRINGE	41,500.04	20,750.02	20,750.02	14,940.01	26,560.03	5,810.01	(5,810.01)	

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 15 (Continued) July, 2021 – June, 2022 Fiscal Year 2022 G&A Expenses Split

EMPLOYEE NAME		BUDGETED %			ACTUAL % (Timesheets)		VARIANCE UNDER (OVER)	
		TOTAL	(40)	(50)	(40)	(50)	(40)	(50)
			RESERVOIR	WTP/TS	RESERVOIR	WTP/TS	RESERVOIR	WTP/TS
	TIME SPLIT		25%	75%	25%	75%		
SUPERVISOR	REGULAR	84,537.16	21,134.29	63,402.87	21,134.29	63,402.87	0.00	0.00
OPERATIONS MWSS-	CLOTH.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WSA	O.T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRINGE	48,207.10	12,051.77	36,155.33	12,051.77	36,155.33	0.00	0.00
	TIME SPLIT		37%	63%	36%	64%		
SUPERVISING PLANT	REGULAR	64,078.32	23,708.98	40,369.34	23,068.20	41,010.12	640.78	(640.78)
OPERATOR	CLOTH.	550.00	203.50	346.50	198.00	352.00	5.50	(5.50)
	O.T.	3,300.64	1,221.24	2,079.40	1,188.23	2,112.41	33.01	(33.01)
	FRINGE	39,756.30	14,709.84	25,046.46	14,312.27	25,444.03	397.57	(397.57)
	TIME SPLIT		15%	85%	15%	85%		
PLANT OPERATOR	REGULAR	51,242.08	7,686.31	43,555.77	7,686.31	43,555.77	0.00	(0.00)
	CLOTH.	275.00	41.25	233.75	41.25	233.75	0.00	0.00
	O.T.	4,071.38	610.71	3,460.67	610.71	3,460.67	(0.00)	0.00
	FRINGE	32,390.21	4,858.53	27,531.68	4,858.53	27,531.68	0.00	(0.00)
	TIME SPLIT		92%	8%	93%	7%		
MAINT WORKER I	REGULAR	48,592.88	44,705.46	3,887.42	45,191.38	3,401.50	(485.92)	485.92
	CLOTH.	550.00	506.00	44.00	511.50	38.50	(5.50)	5.50
	O.T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRINGE	28,954.95	26,638.55	2,316.40	26,928.11	2,026.84	(289.56)	289.56
	TIME SPLIT		6%	94%	6%	94%		
PLANT OPERATOR	REGULAR	52,931.04	3,175.86	49,755.18	3,175.86	49,755.18	0.00	(0.00)
	CLOTH.	550.00	33.00	517.00	33.00	517.00	0.00	0.00
	O.T.	7,037.21	422.23	6,614.98	422.23	6,614.98	0.00	(0.00)
	FRINGE	35,766.18	2,145.97	33,620.21	2,145.97	33,620.21	0.00	0.00
	TIME SPLIT		97%	3%	93%	7%		
ASST. RESERVOIR	REGULAR	40,432.12	39,219.16	1,212.96	37,601.87	2,830.25	1,617.29	(1,617.29)
SYSTEM OPER-WSA	CLOTH.	275.00	266.75	8.25	255.75	19.25	11.00	(11.00)
	O.T.	4,688.67	4,548.00	140.67	4,360.46	328.21	187.54	(187.54)
	FRINGE	26,406.67	25,614.47	792.20	24,558.20	1,848.47	1,056.27	(1,056.27)
	TIME SPLIT		94%	6%	93%	7%		
EQUIPMENT	REGULAR	44,390.24	41,726.83	2,663.41	41,282.92	3,107.32	443.91	(443.91)
OPERATOR	CLOTH.	550.00	517.00	33.00	511.50	38.50	5.50	(5.50)
	O.T.	871.79	819.48	52.31	810.76	61.03	8.72	(8.72)
	FRINGE	27,015.67	25,394.73	1,620.94	25,124.57	1,891.10	270.16	(270.16)
	TIME SPLIT		62%	38%	85%	15%		
WATER SUPPLY	REGULAR	66,313.88	41,114.61	25,199.27	56,366.80	9,947.08	(15,252.19)	15,252.19
TECH - WSA	CLOTH.	550.00	341.00	209.00	467.50	82.50	(126.50)	126.50
	O.T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FRINGE	39,145.78	24,270.39	14,875.39	33,273.91	5,871.87	(9,003.52)	9,003.52
	TIME SPLIT		48%	52%	51%	49%		
FAC. MECHANIC-WSA	REGULAR	43,997.60	21,118.86	22,878.74	22,438.78	21,558.82	(1,319.92)	1,319.92
	CLOTH.	550.00	264.00	286.00	280.50	269.50	(16.50)	16.50
	O.T.	422.99	203.03	219.96	215.72	207.27	(12.69)	12.69
	FRINGE	27,313.64	13,110.54	14,203.10	13,929.96	13,383.68	(819.42)	819.42
		(60)	(40)	(50)	(40)	(50)	(40)	(50)
	REGULAR	1,704,502.53	847,268.63	857,233.90	858,498.95	846,003.58	(11,230.32)	11,230.32
	CLOTH.	11,275.00	6,118.75	5,156.25	6,528.50	4,746.50	(409.75)	409.75
	O.T.	85,409.42	36,647.21	48,762.21	37,140.88	48,268.54	(493.67)	493.67
	FRINGE	1,054,893.04	521,930.04	532,963.00	529,410.98	525,482.06	(7,480.94)	7,480.93
	GRAND TOTAL	2,856,079.99	1,411,964.63	1,444,115.36	1,431,579.31	1,424,500.68	(19,614.68)	19,614.68

NEW JERSEY WATER SUPPLY AUTHORITY
 MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 16 - Estimate of Interest Income

Fiscal Year 2024 Budget

Fund/Reserve	TD Bank Funds	
Operating	\$6,650,000	
Reserve for O & M	1,605,000	
General Reserve (Rate Stabilization Fund)	41,000	
Pumping Reserve	155,000	
Self-Insurance Reserve	218,000	
Sediment Reserve	346,000	
Estimated Total	\$9,015,000	
	\$9,015,000 x1.0% =	\$90,150
	Total	\$90,150
	Estimate	\$90,200

Note: Long-term investment earnings are being used to fund depreciation reserve.

NEW JERSEY WATER SUPPLY AUTHORITY
 MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 17 - Unanticipated Revenue

Funds to be Appropriated into Rate Stabilization fund for Fiscal Year 2024

	Amount												
F/Y2022 Net Year-End Balance	\$ 464,950												
Excess D/S Coverage FY2024	\$ 116,000												
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Overdraft</th> <th style="text-align: left; border-bottom: 1px solid black;">Invoice No.</th> <th style="text-align: left; border-bottom: 1px solid black;">Inv. Date</th> <th style="text-align: right; border-bottom: 1px solid black;">Amount</th> </tr> </thead> <tbody> <tr> <td>NJ American</td> <td>MM-409</td> <td>Jun-22</td> <td style="text-align: right;">\$ 2,947</td> </tr> <tr> <td></td> <td>MM-390</td> <td>Jul-21</td> <td style="text-align: right;">\$ 3,286</td> </tr> </tbody> </table>	Overdraft	Invoice No.	Inv. Date	Amount	NJ American	MM-409	Jun-22	\$ 2,947		MM-390	Jul-21	\$ 3,286	
Overdraft	Invoice No.	Inv. Date	Amount										
NJ American	MM-409	Jun-22	\$ 2,947										
	MM-390	Jul-21	\$ 3,286										
Available for use in FY24	\$ 6,233												

Additional Sources

Total Available	\$ 587,183
Estimate for FY24	\$ 587,180
Available for Future Years	\$ -

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 18 - Fund Balances as of 6/30/22

Final

	REVENUE FUND	OPERATING ACCOUNT	OPERATING FUND	O & M RESERVE	LONG TERM INVESTMENTS O & M RESERVE	TOTAL
BALANCE 6/30/22						
(Does not include Debt Service payment)	\$ 2	\$ 338,394	\$ 7,764,044	\$ 1,604,939	\$ -	\$ 9,707,379
Add: NJ-American, JCP&L expenses for June 2022			\$ 31,112			31,112
Deduct: Accrued expenses to be paid as of 6/30/22			(59,494)			(59,494)
Deduct: June 10th billing, received			(325,761)			(325,761)
Adjusted Balances 6/30/22	\$ 2	\$ 338,394	\$ 7,409,901	\$ 1,604,939	\$ -	\$ 9,353,236
INCOME						
Operating Transfer	(310,000)		310,000			-
Receipt of WTP/TS G&A expenses for the month of June 2022, estimated 7/31/22 billing			300,000			300,000
EXPENSES						
O & M Expenses - (A/P-6/30/22) includes accrued payroll thru 6/30/22			(173,617)			(173,617)
Capital items to be purchased by 6/30/22			(17,841)			(17,841)
Payment of Headquarters overhead expenses - to be paid 7/01			(135,500)			(135,500)
Contributions to Various Reserves- 7/22			(37,500)			(37,500)
ADJUSTED BALANCE AT 6/30/22	\$ (309,998)	\$ 338,394	\$ 7,655,443	\$ 1,604,939	\$ -	\$ 9,288,778
Less: O & M Reserve Balance (Goal is 3 months O & M Expenses as dictated by Bond Resolution)						(870,698)
Balance of projected funds available						\$ 8,418,080
Use of Available Funds						
Unanticipated revenues (overdrafts in FY22 to be available to the General Fund for FY24) NJ American Water						\$ (6,233)
Appropriate FY23 net fund balance into the General Fund (Rate Stabilization) to be used for rate stabilization						(584,130)
Balance of funds to be used for future years						\$ 7,827,717

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 19 - Operations & Maintenance Expense Component and Debt Service Cost
Component Sales Base
Projected Fiscal Year 2024

USER	ALLOCATION (mgd)
Avon, Borough of	0.126
Belmar, Borough of	0.288
Brielle, Borough of	0.450
Keyport, Borough of	0.356
Matawan, Borough of	0.332
New Jersey American Water	12.500
Red Bank, Borough of	0.548
Sea Girt, Borough of	0.040
Shorelands Water Company (acquired by NJ American)	2.007
Lake Como, Borough of	0.100
Spring Lake, Borough of	0.310
Spring Lake Heights, Borough of	0.386
Wall Township	2.000
OPERATIONS & MAINTENANCE/DEBT SERVICE SALES BASE	19.443 mgd

NEW JERSEY WATER SUPPLY AUTHORITY
 MANASQUAN RESERVOIR WATER SUPPLY AUTHORITY

Schedule 20 - Operations and Maintenance Rate Component (19.443mgd)
 Fiscal Year 2024

Funds Required for F/Y2024 Budget

Total Budget Requirements	\$	3,839,069
Miscellaneous Revenues	\$	(677,380)
Net Budget Requirement	\$	3,161,689
Less - Quarterly O&M payment on July 10, 2023 (cash received in July for water used in April, May and June of 2023 based on \$445.82/mg)	\$	(788,795)
Additional Revenue required from last three (3) Quarterly payments in F/Y2024 to cover Operations & Maintenance expenses through 6/30/24	\$	2,372,894

Computation of Operations & Maintenance Rate for Fiscal Year 2024

Required Operations & Maintenance Rate F/Y2023	$\frac{\$2,372,894}{5,322.52^*}$	=	\$	445.82/mg
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* Four (4) Quarters Sales =

	19.443 mgd x 365	=		7,096.70mg/yr
--	------------------	---	--	---------------

Rate Calculation for Required revenues due for payment on
 10/10/23, 1/10/24 and 4/10/24:

Sales Base =	7,096.70 x 3/4	=		5,322.52/mg
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NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 21 - Computation of Delayed Water Purchase Debt Service Rates

NJAW – 1.000MGD CONTRACT - 07/01/01
1.935MGD CONTRACT – 10/01/02
1.500MGD CONTRACT – 01/01/05

Delayed Debt Service

Debt Service for Fiscal Year 2024 \$ 580,713

Debt Service Fund Interest Income and Other
Available Resources \$ -

Net Debt Service Obligation \$ 580,713

Coverage Requirement = Net Debt Service
Obligation x 20% \$ 116,143

Total to be Recovered by Rates \$ 696,855

Debt Service Rate Effective 7/01/23 \$ 696,855 = \$ 430.48mg
365 x 4.435/mgd = 1,618.78mg 1,618.78mg

Equalization Factor 8.44
\$ 438.92mg

NEW JERSEY WATER SUPPLY AUTHORITY
 MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

Schedule 22 - Computation of Base Debt Service Rates

INTAKE PUMP STATION BUILDING

Initial Water Purchasers (14.980 MGD) – 7/01/15
 Shorelands Delayed Purchase Contract (.028MGD) – 7/01/06
 NJ American Delayed Purchase Contract (4.435MGD)*

NJEIFP Debt Service for Fiscal Year 2024	\$	176,967
Rate Equalization Adjustment		
Debt Service Rate Effective 7/01/2023	<u>\$ 176,967</u>	= \$ 24.94/mg
365 x 19.443/mgd =7,096.70mg	7,096.70mg	
Equalization Factor	(\$0.01)	
		\$ 24.93/mg

*Delayed Water Purchase Contracts
 NJ American 1.000mgd 07/01/01
 1.935mgd 10/01/02
 1.500mgd 01/01/05

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR SYSTEM

Schedule 23 - Bond Debt Service Coverage

Fiscal Year 2024
(7/1/23-6/30/24)

DEBT SERVICE COVERAGE	Budgeted F/Y2024
<u>Revenues</u>	
Uninterruptible Water Sales	\$ 7,357,375
Interest Income	\$ 90,200
Total Revenues	<u>\$ 7,447,575</u>
 <u>Expenses</u>	
O&M Costs	\$ 2,867,454
Overhead Allocation	\$ 770,000
Total O&M	<u>\$ 3,637,454</u>
Cash Available for Debt Service - A	\$ 3,810,121
Net Debt Service Expense	\$ 580,713
Debt Service Coverage Calculation - A/B	6.56
Cash After Debt Service A-B	\$ 3,229,409

NEW JERSEY WATER SUPPLY AUTHORITY
MANASQUAN RESERVOIR SYSTEM

Schedule 24 - Rehabilitation Reserve and Capital Improvement Program

Manasquan Reservoir Project Description	Renewal & Repl. Reserve	FY23	FY24	FY25	FY26	FY27+
Dam Emergency Contingency	\$ 400,000					
Pipeline Replacement Under I-195	\$1,500,000					
Pumping Equipment Replacement	\$650,000					
Replace Control Panel at Reservoir IO Building			\$55,000			
Paving Intake Parking Lot and Administration Parking Area		\$100,000				
Rehabilitation Pump and Motors at Reservoir & Intake Pumping Stations			\$40,000	\$40,000		
Traveling Water Screen Repair #1 & #8			\$150,000			
Security System Camera and DVR replacement				\$45,000		
Replace two Underground Fuel Storage Tanks with above ground			\$230,000			
Drill 8 Piezometer Wells Manasquan Dam		\$150,000	\$60,000			
Replace Septic System			\$125,000			
Reservoir Algae Control			\$250,000	\$50,000		
Rehabilitation of T2 Transformer and Oil Change				\$40,000		
Replace Pumps (#1,2,3,5)		\$200,000		\$150,000	\$200,000	
Vapor Recovery System for Gasoline Storage Tank		\$25,000				
Replace 2 % KVA Breakers in Substation				\$45,000		
Replace Balance of Metal Roof on Admin Portion of RPS Building			\$130,000			
Total*	\$2,550,000	\$475,000	\$1,040,000	\$370,000	\$200,000	\$0
Renewal and Replacement Balance June 30, 2022	\$4,064,000					
Projected Balance End of Fiscal Year with annual regular deposit		\$3,709,000	\$2,789,000	\$2,539,000	\$2,459,000	\$2,459,000
*Minimum Balance Required		\$2,550,000	\$2,550,000	\$2,550,000	\$2,550,000	\$2,550,000
Revised Balance		\$1,159,000	\$239,000	-\$11,000	-\$91,000	-\$91,000
Additional Deposit Requirements		\$0	\$0	\$0	\$0	\$0

**New Jersey Water Supply Authority
Manasquan Water Supply System**

Update of the Renewal and Replacement Reserve and Capital Improvement Program

Prepared by

**Paul McKeon, P.E., Director, Manasquan Water Supply System and
Delaware & Raritan Canal Operations**

**MANASQUAN WATER SUPPLY SYSTEM
RENEWAL/REPLACEMENT RESERVE & CAPITAL IMPROVEMENT PROGRAM
Fiscal Years 2023-2027
Updated August 2022**

Introduction

The New Jersey Water Supply Authority (Authority) operates and maintains the Manasquan Water Supply System including the Intake Facilities located in Wall Township, the Manasquan Reservoir located in Howell Township and 5-1/4 miles of 66-inch diameter pipeline which connects the Intake Facilities to the Reservoir. The Manasquan Water Supply System was constructed between 1987-1990 and commenced operation on July 1, 1990.

Construction of this system was financed by the issuance of Bonds under the authorization of Authority Bond Resolution No. 295 dated April 16, 1987. The Bond Resolution provides for rates for water use to include an excess payment of 20% (effective February 1, 1994) of the annual debt service, identified as 120% debt service coverage. During the initial years, this excess payment flowed into the debt service reserve account until an amount equal to 50% of the annual debt service had been accumulated. Thereafter, the 20% excess debt service is to be used to establish a Renewal & Replacement Reserve and to fund a Capital Improvement Program (CIP) for the facilities.

A Capital Improvement Program funded by the Renewal and Replacement Reserve was first recommended in September 1996. This is an update of the CIP.

The Renewal and Replacement Reserve for Extraordinary Operations and Maintenance Costs is fully funded as recommended.

Renewal and Replacement Reserve for Extraordinary Operations and Maintenance Costs

Problems with the Earthen Dam Embankments

The Manasquan Reservoir dam and dikes are inspected by the Authority's operations and engineering staff to provide early detection of situations which, if uncorrected, could lead to serious problems. There are no indications of problems with any of the embankments at the present time. It is unlikely that a major catastrophic dam failure will occur as a result of the weather. A more common occurrence would be surface erosion especially in areas where good turf is not established. The periodic inspection of the embankments shows good establishment of turf. On-site maintenance staff has implemented various measures to improve the grass cover on the dams. Continued long-term success of these measures is dependent on continued maintenance and weather.

The Reserve includes funds that can be used to repair any surface erosion that cannot be repaired by Authority maintenance forces.

Replacement of Pipe under Interstate Route 195

The Manasquan Reservoir pipeline is a 5-1/4 mile long, 66-inch diameter pre-stressed concrete cylinder pipeline (PCCP) constructed in the 1980s. A 380-foot long section of 72-inch diameter PCCP was installed beneath Interstate Route 195 during its construction for use in connection with the pipeline between the reservoir pumping station and the reservoir. This section of pipe was manufactured by Interpace Co. in the late 1970's. This vintage PCCP is suspect because of the type of pre-stressing wire used in its manufacture and the "inadequate" quality control used in the

application of the mortar coating.

A rupture of this section of pipe could be catastrophic and result in major disruptions to Route 195. Repair costs could easily amount to several million dollars. Therefore, the section of pipe under Route 195 is dewatered and inspected tri-annually to monitor its condition. It was last inspected by two of the Authorities staff engineers in April of 2021 and found to be in satisfactory condition and with no change from 2016.

The entire length of the pipeline was inspected in December of 2021. The interior concrete lining was sounded with a 57-inch piece of black iron pipe with caps welded to the ends. The lining was continuously sounded for hollow regions that may be indicative of a loss of prestress and therefore exterior pipe distress. Sounding was carried out on both sides of the pipe approximately in the 2-4 o'clock range and the 8-10 o'clock range at approximately 6 to 12-inch intervals. Other features such as spalled concrete linings were noted throughout the inspection. The Manasquan Reservoir 66-inch pipeline is in good condition. The items noted during the internal inspection were minor in nature and are not indicative of pipeline distress.

\$1,500,000 is included in the Renewal and Replacement Reserve to insert a 66" diameter steel pipe into the PCCP under Route 195 or to replace other sections of pipe as needed.

Replacement of Pumps or Equipment

Five (5) 600-horsepower pumps are used at the Intake Pumping Station to pump water from the Manasquan River to the pre-sedimentation pond at the Reservoir Pumping Station. Five (5) 900-horsepower pumps are used at the Reservoir Pumping Station to pump water from the pre-sedimentation pond to the Reservoir. The estimated replacement cost for each unit, including a variable frequency drive, is \$750,000. Replacement costs for the units would be dependent on the problem but would be limited to the cost of replacement.

All pumps and motors have been physically inspected, vibration-tested and pump-efficiency-tested in 2013 with retesting of some units in 2016 through 2021. The reservoir pumps typically operate only 100 hours per year and at an average speed of only 630 rpm. Therefore, wear on these units is minimal. Additionally, only two of the five river intake pumps have significant hours of use each year. However, it is appropriate to include funds in a Renewal & Replacement Reserve to rehabilitate or replace a single unit in case of an unforeseen failure or damage from lightning.

Furthermore, these funds could be used to rehabilitate or replace other major equipment such as a large 6000 KVA electrical transformer as well. The combined construction cost for the Intake Pumping Station and the Reservoir Pumping Station was approximately \$30,000,000 (1990 dollars). The recommended reserve of \$650,000 represents 2% of the total construction cost.

Planned Capital Improvements - Fiscal Years 2023-2027

Paving Intake Parking Lot, Reservoir Turn around, Administration Parking Area

These parking and access areas are breaking apart and need to be milled and repaved. There have

been cracks filled in these surfaces for years in the past.

Rehabilitation of large Motors

The motors have been in service for many years and develop oil leaks and problems needing attention.

Security System Replacement at the Reservoir

In response to the Public Health Security and Bioterrorism Response Act of 2002 and an Executive Order issued on July 18, 2002 by the State of New Jersey identifying critical facilities that require vulnerability assessments, the Authority contracted with a consultant to develop a comprehensive security vulnerability assessment (VA) and implement recommendations of the VA. Recommendations were provided for changes in security policies and procedures, minimum and additional upgrades to the physical protection systems (PPS) and processes. Estimates of probable capital costs were developed for the minimum and additional PPS for system facilities.

A web-based, seven camera system and DVR was installed for the reservoir embankment and IO tower area in FY2017. This system will need to be replaced with similar cameras and a new DVR and software by 2024. The system at the Administration building will also need to be replaced at that time.

Vapor Recovery System for Gasoline Storage Tank

Regulations going into effect in 2024, requiring improved vapor recovery of gasoline transferred or pumped, are necessitating the need for this project.

Manasquan Reservoir Algae Management System

Favorable financing and a push to better manage harmful algae blooms in the summer has resulted in this project being designed for construction in 2024. Loan Principal forgiveness is making this project financially feasible. Additionally, it will allow water stored in the lowest depths of the reservoir to be treatable into drinking water in the summer months, whereas without some type of aeration this volume of water is unusable.

Drill 8 Piezometer Wells Manasquan Dam

A Consultant in 2018 reported four points of failure and poor monitoring of the existing embankment monitoring system on the downstream slope of the Manasquan Dam. Eight new wells are recommended by the consultant to rectify the monitoring deficiencies that have occurred over the 30 years since the original system was installed. In 2020 it was found that eight of the 35 piezometers measuring water depth in the dam and dike embankments are no longer functioning. Given that the eight are buried, they cannot be replaced. Eight new wells are needed to be drilled at various depths to handle one piezometer each.

A Consultant's design, construction drawings and specifications for locating and installing eight

piezometer wells was completed in 2022. Included in this project was supervision of the well driller on a limited basis.

This includes proper sealing of the eight existing wells that have been abandoned.

Replace eight piezometers to the reservoir embankment continuous monitoring system

This project is to install and set up solar powered wireless communications from the eight replacement piezometers to the existing ADAS computer system. It will also integrate the readings of the piezometers into the ADAS, scale the inputs and add the results to the existing trends.

Replace two underground fuel storage tanks with above ground steel tanks

The existing underground storage tanks are over 33 years old and it is difficult to find an insurer for buried tanks of this age. The tanks and associated leak alarms should be replaced.

Replace Control Panel at Reservoir IO Building

The control panel at the reservoir IO tower is 30 years old and only the reservoir dam indicators report automatically. The system should be upgraded to maintain reliability of control from the central location at the top level of the IO tower. Also, by replacing the panel with a PLC staff will be able to combine all of the valve position information and operations onto one LCD display and relay this information back to the office in Wall using the FIOS service that is now installed in the building. Presently only one of the eight electric valves can be controlled from the office in Wall Township.

Rehabilitation of T2 transformer and Oil Change

The transformer oil was replaced in one of the two 15 KVA breakers in 2020. The oil in the other transformer should be replaced in 2024

Replacement of Pump #1 Reservoir Pumping Station

There are five vertical turbine pumps with 600-hp motors at the Intake Pumping Station (IPS). There are five vertical turbine pumps with 900-hp motors at the Reservoir Pumping Station (RPS).

The Authority has undertaken a multi-faceted, multi-year program to service all ten pumps and motors at the intake and reservoir pump stations. The first phase, which began in 2003, includes the servicing of a pump at the RPS and a motor at the IPS each year. All pumps and motors were physically inspected; vibration tested and pump efficiency tested once per year. In 2016 through 2021, all but one were within acceptable performance tolerances. Based on the condition of the other pumps this pump will need replacement.

Refurbish Intake Pump #2

Intake pump #2 will be in service for 35 years and will be in need of refurbishment as indicated by

the condition of pump #3 in 2021.

Refurbish RPS Pump #3

This pump has the most running hours of all the RPS pumps. The condition of the IPS pumps recently refurbished indicate that although this pump is pumping at rated capacity and does not have excessive vibration, it likely has deteriorating lineshaft bearings, bolt connections, and shaft bearings.

Refurbish Intake Pump #5

Intake pump #5 will be in service for 35 years and will be in need of refurbishment as indicated by the condition of pump #3 in 2021.

Replace the balance of metal roof on the Administrative portion of RPS building

Two thirds of the metal roof is original to the building in 1990. This portion of the roof needs to be replaced as there are several leaks during driving rains.

Replace two 5 KVA breaker in substation

Two of the breakers have to be replaced due to age and leaking contactor vacuum bottles.

Renovation of Traveling Water Screens

The eight traveling water screens at the Intake Pumping Station are in need of service over time. A 2015 inspection found all units to be in good condition except one, which was refurbished in 2016. In FY 2021 units #3 and #4 were rebuilt with new chains and sprocket teeth for just under \$50,000.00. Units #5 and #6 are slated for rebuild in FY 2023. It was determined that #1 and #8 will be in need of similar repairs and some additional underwater repair. Thus, funding is included to rehabilitate two more of the remaining seven units in 2024.

Replace the entire septic system for the Administration /RPS building

The tank and field are over 30 years old which is the expected life of a septic system. Additionally, the 1000-gallon tank is too small for the number of people using the system.

PART III – PROPOSED RULE AMENDMENTS

NEW JERSEY WATER SUPPLY AUTHORITY
AMENDMENTS TO THE SCHEDULE OF RATES, CHARGES AND
DEBT SERVICE ASSESSMENTS FOR THE SALE OF WATER FROM THE
MANASQUAN RESERVOIR WATER SUPPLY SYSTEM

To Become Effective July 1, 2023

The following rules and regulations can be found in the New Jersey Administrative Code under N.J.A.C. 7:11-4.1, et seq. Full text of the proposal follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

7:11-4.3 Operations and Maintenance Expense Component

(a) – (b) (No change.)

(c) Operations and Maintenance Expense Component:

<u>Effective Date</u>	<u>Rate/Million Gallons</u> (based upon a 19.443 per day sales base)
July 1, [2022] 2023	\$445.82

7:11-4.4 Debt Service Cost Component

(a) (No change.)

(b) A delayed water purchase surcharge will be assessed to all water purchasers who entered into a water purchase contract for an uninterruptible service commencing subsequent to the system operation date (delayed water purchase contract). This includes a purchaser under an Initial water purchase contract, which provides for an increase in the amount of Uninterruptible service

effective subsequent to the system operation date.

1. The following debt service rate based on a sales base of 4.435 million gallons per day, applies to the delayed water purchase contract commencing July 1, 2001, October 1, 2002, and January 1, 2005. [in lieu of the debt service rate set forth in (b) above.]

<u>Period</u>	<u>Rate/Million Gallons</u>
7/1/ [2022] 2023 to	(Coverage 120%)
6/30/[2023] 2024	\$438.92

(c) (No change.)

7:11-4.5 Capital Fund Component

(a) (No change.)

(b) (No change.)

(c) Capital Fund Assessment – initial water purchase contract customers

<u>Period</u>	<u>Rate/Million Gallons</u>
7/1/[2022] 2023 to	\$525.00
6/30/[2023] 2024	

(d) (No change.)

(e) Capital Fund Assessment – delayed water purchase contract customers

<u>Period</u>	<u>Rate/Million Gallons</u>
7/1/[2022]2023 to	\$200.00
6/30/[2023]2024	

7:11-4.6 Source water protection fund component

(a) (No change.)

(b) The source water protection fund component is as follows:

<u>Period</u>	<u>Rate/Million Gallons</u>
7/1/[2022]2023 to	
6/30/[2023]2024	\$15.00

7:11-4.7 New Jersey Environmental Infrastructure Financing Program debt component

(a) (No change.)

(b) The New Jersey Environmental Infrastructure Financing Program debt component is as follows:

<u>Period</u>	<u>Rate/Million Gallons</u>
7/1/[2022]2023 to	
6/30/[2023]2024	\$24.93

Appendix I. Report of Mercadien PC – Allocation of Headquarters General and Administrative Expenses – FY 2024

**NEW JERSEY WATER SUPPLY AUTHORITY
(A COMPONENT UNIT OF THE STATE OF NEW JERSEY)
AGREED-UPON PROCEDURES REPORT**

FORECASTED COST ALLOCATION SCHEDULES

YEAR ENDING JUNE 30, 2024

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

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INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

To the Commissioners of
New Jersey Water Supply Authority

We have performed the procedures enumerated below on the financial schedules for the fiscal year ending June 30, 2024. The procedures were agreed to by the New Jersey Water Supply Authority (a component unit of the State of New Jersey and responsible party) (the "Authority") solely to assist the Authority in evaluating the financial schedules in connection with setting of water rates for each of the three operating systems (Raritan, Manasquan Reservoir and Manasquan Treatment Plant/Transmission). The Authority's management is responsible for preparing and presenting the financial schedules in accordance with the guidelines for the presentation of schedules established by the American Institute of Certified Public Accountants.

An agreed-upon procedures engagement involves the practitioner performing specific procedures and reporting on findings based on the procedures performed. The Authority has agreed to and acknowledged that the procedures performed are appropriate to meet the intended purpose of the engagement, which is to assist the Authority with evaluating the underlying supporting documentation to determine the accuracy of the financial schedules in connection with setting water rates for each of the three operating systems. This report may not be suitable for any other purpose. The procedures performed may not address all the items of interest to a user of this report and may not meet the needs of all users of this report and, as such, users are responsible for determining whether the procedures performed are appropriate for their purposes.

The procedures and associated results are as follows:

1. We were provided with the fiscal year 2024 budgeted expenses for each of the three operating systems by the Authority's Director of Finance and Administration, who advised us that the fiscal year 2024 budgeted expenses are based upon preliminary budgets that are subject to approval by the Authority's Commissioners. We performed no procedures in regard to the fiscal year 2024 budgeted expenses.
2. We recalculated the allocated costs on the forecasted cost allocation schedules. We found no exceptions as a result of these procedures.
3. We compared the methodologies used for cost allocation on the forecasted cost allocation schedules to the methodologies used in the Authority's cost allocation schedules for the year ended June 30, 2022, and found them to be consistent.

We were engaged by the Authority to perform this agreed-upon procedures engagement and conducted our engagement in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review of the subject matter, the objective of which would be the expression of an opinion or conclusion, respectively, about whether the forecasted cost allocation schedules are presenting the schedules in accordance with the guidelines for the presentation of schedules established by the American Institute of Certified Public Accountants. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

**INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES
(CONTINUED)**

There will usually be differences between the forecasted and actual results because events and circumstances frequently do not occur as expected, and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our agreed-upon procedures engagement.

This report is intended solely for the information and use of the Commissioners and management of the Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

Mercadion, P.C.
Certified Public Accountants

Hamilton, New Jersey

February 10, 2023

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

**SCHEDULE OF FORECASTED COST CENTER EXPENSE RECLASSIFICATION
YEAR ENDING JUNE 30, 2024**

DEPT. #	DEPT./COST CENTER	COST CENTER COSTS	RECLASSIFICATIONS									REVISED COST CENTER COSTS
			1 HEATING/ ELECTRIC	2 VEHICULAR FUEL	3 PROFESSIONAL FEES	4 INSURANCE	5 TELEPHONE	6 PERMITS	7 WORKERS' COMPENSATION	8 IN LIEU TAXES	9 CHIEF ENGINEER SALARY & FRINGE	
	BUILDING HQ	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
	TELEPHONE HQ	-	-	-	-	40,000	-	-	-	-	-	40,000
36	SAFETY	223,690	-	-	(5,000)	-	-	-	-	-	-	218,690
37	SECURITY	1,100,550	-	-	-	-	-	-	-	-	-	1,100,550
14	HUMAN RESOURCES	483,798	-	-	(5,100)	-	-	-	(10,000)	-	-	468,698
16	PURCHASING	589,143	-	(222,000)	-	-	(40,000)	(18,000)	-	-	-	309,143
17	INFORMATION SYSTEMS	233,670	-	-	-	-	-	-	-	-	-	233,670
15	CONTRACTS & RISK MGMT.	2,019,172	-	-	(45,000)	(1,503,671)	-	(97,761)	-	(18,700)	-	354,040
13	FINANCIAL MGMT.	1,108,830	-	-	(2,730)	-	-	-	-	-	-	1,106,100
34	AUTO SHOP	288,600	-	222,000	-	-	-	18,000	-	-	-	528,600
35	AUTO SHOP-CANAL	250,760	-	-	-	-	-	-	-	-	-	250,760
10	EXEC. OFFICE	278,400	4,673	-	-	-	-	-	-	-	-	283,073
20, 30, 31-33	WATERSHED, ENGINEERING & O&M (RARITAN SYSTEM)	9,392,100	(104,673)	-	57,830	1,503,671	-	97,761	10,000	18,700	(14,074)	10,961,315
		15,968,713	-	-	-	-	-	-	-	-	(14,074)	15,954,639
40-60	MANASQUAN SYSTEM	5,720,456	-	-	-	-	-	-	-	-	14,074	5,734,530
		<u>\$ 21,689,169</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 21,689,169</u>

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

**SCHEDULE OF FORECASTED SYSTEM-WIDE ALLOCATED COSTS
YEAR ENDING JUNE 30, 2024**

DEPT. #	DEPT./COST CENTER	REVISED COST CENTER COSTS	ALLOCATION BASIS											ALLOCATED COST CENTER COSTS		
			# OF SQ. FT.	# OF TELEPHONES	# OF EMPLOYEES	100 % RARITAN O&M	# OF EMPLOYEES	# OF P.O.s	# OF COMPUTERS	MGD CONTRACTS	O&M BUDGET	# OF VEHICLES	# OF VEHICLES		TIME ESTIMATE	
	BUILDING HQ	\$ 100,000	<u>\$ (100,000)</u>													
	TELEPHONE HQ	40,000	-	<u>\$ (40,000)</u>												
36	SAFETY	218,690	672	435	<u>\$ (219,797)</u>											
37	SECURITY	1,100,550	3,781	1,739	17,053	<u>\$ (1,123,123)</u>										
14	HUMAN RESOURCES	468,698	4,473	1,739	5,684	-	<u>\$ (480,594)</u>									
16	PURCHASING	309,143	5,554	1,304	3,790	-	9,242	<u>\$ (329,033)</u>								
17	INFORMATION SYSTEMS	233,670	1,001	435	1,895	-	4,621	11,858	<u>\$ (253,480)</u>							
15	CONTRACTS & RISK MGMT.	354,040	3,271	870	3,790	-	9,242	9,640	8,593	<u>\$ (389,446)</u>						
13	FINANCIAL MGMT.	1,106,100	9,544	2,609	11,369	-	27,727	6,313	25,778	-	<u>\$ (1,189,440)</u>					
34	AUTO SHOP	528,600	15,031	870	3,790	-	9,242	14,332	4,296	-	35,405	<u>\$ (611,566)</u>				
35	AUTO SHOP-CANAL	250,760	-	870	1,895	-	4,621	11,602	8,593	-	16,796	-	<u>\$ (295,137)</u>			
10	EXEC. OFFICE	283,073	13,207	3,478	1,895	-	4,621	1,962	4,296	-	18,960	-	-	<u>\$ (331,492)</u>		
20, 30, 31-33	WATERSHED, ENGINEERING & O&M (RARITAN SYSTEM)	10,961,315	43,466	25,651	117,476	1,123,123	286,508	156,795	137,480	351,920	734,183	611,566	295,137	313,260	\$ 15,157,880	
40-60	MANASQUAN SYSTEM	5,734,530	-	-	51,160	-	124,770	116,531	64,444	37,526	384,096	-	-	18,232	6,531,289	
		<u>\$ 21,689,169</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 21,689,169</u>	

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

**SCHEDULE OF FORECASTED COST ALLOCATION FACTORS
YEAR ENDING JUNE 30, 2024**

ALLOCATION OF:		BUILDING HQ	TELEPHONES	SAFETY	HUMAN RESOURCES	PURCHASING	INFORMATION SYSTEMS	CONTRACTS & RISK MGMT.	FINANCE O&M FUNCTIONAL COST	AUTO SHOP	AUTO SHOP CANAL	EXEC. OFF
ALLOCATION BASIS:		# OF SQ. FT.	# OF TELEPHONES	# OF EMPLOYEES	# OF EMPLOYEES	# OF P.O.'S	# OF COMPUTERS	MGD CONTRACTS		# OF VEHICLES	# OF VEHICLES	TIME ESTIMATE
DEPT. #	DEPT./COST CENTER											
	BUILDING HQ											
	TELEPHONE HQ											
36	SAFETY	100	1									
37	SECURITY	563	4	9								
14	HUMAN RESOURCES	666	4	3								
16	PURCHASING	827	3	2	2							
17	INFORMATION SYSTEMS	149	1	1	1	139						
15	CONTRACTS & RISK MGMT.	487	2	2	2	113	2					
13	FINANCIAL MGMT.	1,421	6	6	6	74	6	-				
34	AUTO SHOP	2,238	2	2	2	168	1	-	\$528,600			
35	AUTO SHOP-CANAL	-	2	1	1	136	2	-	250,760			
10	EXEC OFFICE	1,967	8	1	1	23	1	-	283,073	-	-	-
20, 30, 31-33	WATERSHED, ENGINEERING & O&M (RARITAN SYSTEM)	6,472	59	62	62	1,838	32	182	10,961,315	44	44	94.50
40-60	MANASQUAN SYSTEM	-	-	27	27	1,366	15	19	5,734,530	-	-	5.50
		<u>14,890</u>	<u>92</u>	<u>116</u>	<u>104</u>	<u>3,857</u>	<u>59</u>	<u>202</u>	<u>\$17,758,278</u>	<u>44</u>	<u>44</u>	<u>100.00 %</u>

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

**SCHEDULE OF FORECASTED MANASQUAN SYSTEM ALLOCATED COSTS
YEAR ENDING JUNE 30, 2024**

	<u>COSTS</u>	ALLOCATION BASIS					<u>ALLOCATED COSTS</u>
		<u>1</u> TIME STUDY	<u>2</u> \$ VALUE OF VEHICLES	<u>3</u> \$ VALUE OF EQUIPMENT	<u>4</u> TIME STUDY	<u>5</u> \$ VALUE OF WATER CONTRACTS	
<u>GENERAL & ADMINISTRATIVE</u>							
SALARIES & FRINGES	\$ 3,286,875	<u>\$ (3,286,875)</u>					
VEHICLE RELATED	139,100	-	<u>\$ (139,100)</u>				
MAINT. SUPPLIES & RELATED	79,952	-	-	<u>\$ (79,952)</u>			
OFFICE & MISC.	56,500	-	-	-	<u>\$ (56,500)</u>		
H.Q. OVERHEAD	810,833	-	-	-	-	<u>\$ (810,833)</u>	
RESERVOIR (40)	1,179,949	1,517,626	101,946	39,712	26,087	699,506	\$ 3,564,826
TREAT./TRANS. (50)	978,080	1,769,249	37,154	40,240	30,413	111,327	2,966,463
	<u>\$ 6,531,289</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 6,531,289</u>

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

**NOTES TO FINANCIAL SCHEDULES
YEAR ENDING JUNE 30, 2024**

NOTE 1 GENERAL

The New Jersey Water Supply Authority, as part of its annual budget and rate making process, performs a two-step cost allocation calculation. During the first step, the Authority forecasts its actual expenses by Cost Center. For purposes of this calculation the Authority uses the following Cost Centers:

Raritan System

- Building Headquarters
- Telephone Headquarters
- Safety
- Security
- Human Resources
- Purchasing
- Information Systems
- Contracts & Risk Management
- Financial Management
- Auto Shop
- Auto Shop - Canal
- Executive Office
- Engineering, Watershed Management, Operations and Maintenance (Raritan System)
- Manasquan System

In deriving expenses by Cost Center several expense reclassifications are made on the Schedule of Forecasted Cost Center Expense Reclassification as follows:

1. Heating and electricity expenses related to Building Headquarters ("HQ") and Executive Office are reclassified from Engineering and Operations & Maintenance ("O & M").
2. Vehicular fuel expense related to Auto Shop is reclassified from Purchasing.
3. Professional fees related to O & M are reclassified from the various departments to which they have been charged.
4. Insurance premium expense related to the Raritan System is reclassified from Contracts and Risk Management.
5. Telephone expense is reclassified from Purchasing to a separate Telephone HQ Cost Center.
6. Permit expense related to the Raritan System is reclassified from Contracts and Risk Management and Purchasing.
7. Workers' compensation expense related to the Raritan System is reclassified from Contracts and Risk Management.
8. In-lieu taxes related to the Raritan System are reclassified from Contracts and Risk Management.
9. Chief Engineer Salary & Fringe Expenses related to the Manasquan System are reclassified from the Engineering Department.

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

**NOTES TO FINANCIAL SCHEDULES
YEAR ENDING JUNE 30, 2024**

NOTE 1 GENERAL (CONTINUED)

The second step entails a step-down allocation of eleven of the Authority's Cost Centers to the Raritan and Manasquan System Cost Centers. In making this step-down allocation the Authority allocates costs as follows:

1. Building HQ is allocated to each of the Cost Centers based on the amount of space utilized.
2. Telephone HQ is allocated to each of the Cost Centers based on the number of telephones utilized.
3. Safety is allocated to each of the Cost Centers based on the number of employees.
4. Security is allocated entirely to the Raritan System.
5. Human Resources is allocated to each of the Cost Centers based on the number of employees.
6. Purchasing is allocated to each of the respective Cost Centers based on the number of purchase orders issued.
7. Information Systems is allocated to each of the Cost Centers based on the number of computers.
8. Contracts and Risk Management is allocated to each of the Cost Centers based on the number of employees.
9. Financial Management is allocated based on a percentage of the four remaining Cost Centers' budgets.
10. Auto Shop and Auto Shop-Canal are allocated based on the number of vehicles used.
11. Executive Office is allocated based on the amount of executive time utilized in managing each of the Systems.

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

**NOTES TO FINANCIAL SCHEDULES
YEAR ENDING JUNE 30, 2024**

NOTE 2 MANASQUAN SYSTEM ALLOCATED COST

The Manasquan Water Supply System's direct and allocated costs are then allocated between the Reservoir System and the Water Treatment Plant/Transmission System. In making this allocation the Authority adds to each System's direct expenses, the indirect costs allocated as follows:

1. Salaries and Fringe Benefits are allocated based on actual time studies performed by each employee throughout Fiscal Year 2022.
2. Vehicle related expenses are allocated based on the dollar value of vehicles held by each System.
3. Maintenance Supplies and related expenses are allocated based on the dollar value of capital equipment held by each System.
4. Office and miscellaneous expenses are allocated based on the time studies performed by each employee throughout Fiscal Year 2022.
5. Headquarters Overhead expenses are allocated based on the value of water contracts for each System.

Appendix II. Report of Mercadien PC – Allocation of Headquarters General and Administrative Expenses – Audited FY 2022 Expenditures

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

EXAMINATION REPORT AND FINANCIAL SCHEDULES

June 30, 2022

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

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INDEPENDENT ACCOUNTANTS' REPORT

To the Commissioners of
New Jersey Water Supply Authority

We have examined the conformity of the financial schedules with the cost allocation criteria set forth in Notes 1 and 2 to Financial Schedules ("Notes 1 and 2"), of the New Jersey Water Supply Authority (a component unit of the State of New Jersey and responsible party) (the "Authority"), for the year ended June 30, 2022, listed in the foregoing table of contents. The Authority's management is responsible for conformity of the financial schedules in accordance with the criteria set forth in Notes 1 and 2. Our responsibility is to express an opinion on the conformity of the financial schedules with the cost allocation criteria set forth in Notes 1 and 2, based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants, and, accordingly, included procedures we considered necessary in the circumstances. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the financial schedules are in conformity with the cost allocation criteria set forth in Notes 1 and 2, in all material respects. An examination involves performing procedures to obtain evidence about the conformity of the financial schedules with the cost allocation criteria set forth in Notes 1 and 2. The nature, timing and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement on the conformity of the financial schedules with the cost allocation criteria set forth in Notes 1 and 2, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements related to our examination agreement.

In our opinion, the financial schedules present the Authority's allocation of costs to the Raritan and Manasquan Systems in accordance with the cost allocation criteria set forth in Notes 1 and 2, in all material respects.

This report is intended for the information and use of the Commissioners and management of the Authority, and is not intended to be, and should not be, used by anyone other than these specified parties.

Mercadien, P.C.
Certified Public Accountants

Hamilton, New Jersey

February 10, 2023

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

**SCHEDULE OF COST CENTER EXPENSE RECLASSIFICATION
YEAR ENDED JUNE 30, 2022**

DEPT. #	DEPT./COST CENTER	COST CENTER COSTS	RECLASSIFICATIONS									REVISED COST CENTER COSTS	
			1 HEATING/ ELECTRIC	2 VEHICULAR FUEL	3 PROFESSIONAL FEES	4 INSURANCE	5 TELEPHONE	6 PERMITS	7 WORKERS' COMP.	8 IN LIEU TAXES	9 CHIEF ENGINEER SALARY & FRINGE		
	BUILDING HQ	\$ -	\$ 69,651	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,651
	TELEPHONE HQ	-	-	-	-	-	-	48,836	-	-	-	-	48,836
36	SAFETY	250,916	-	-	-	-	-	-	-	-	-	-	250,916
37	SECURITY	1,034,734	-	-	-	-	-	-	-	-	-	-	1,034,734
14	HUMAN RESOURCES	353,235	-	-	(\$3,616)	-	-	-	-	(\$2,956)	-	-	346,663
16	PURCHASING	495,676	-	(\$156,251)	-	-	-	(48,836)	(\$18,085)	-	-	-	272,504
17	INFORMATION SYSTEMS	219,169	-	-	-	-	-	-	-	-	-	-	219,169
15	CONTRACTS & RISK MGMT.	1,806,694	-	-	(40,529)	(\$1,264,101)	-	-	(92,335)	-	(\$18,689)	-	391,040
13	FINANCIAL MGMT	977,606	-	-	(2,446)	-	-	-	-	-	-	-	975,160
34	AUTO SHOP	199,239	-	156,251	-	-	-	-	18,085	-	-	-	373,575
35	AUTO SHOP-CANAL	191,765	-	-	-	-	-	-	-	-	-	-	191,765
10	EXEC OFFICE	267,338	7,158	-	-	-	-	-	-	-	-	-	274,496
20, 30, 31, 32, 33	WATERSHED, ENGINEERING & O&M (RARITAN SYSTEM)	7,365,392	(76,809)	-	46,591	1,264,101	-	-	92,335	2,956	18,689	(13,079)	8,700,176
		13,161,764	-	-	-	-	-	-	-	-	-	(13,079)	13,148,685
40-60	MANASQUAN SYSTEM	4,921,329	-	-	-	-	-	-	-	-	-	13,079	4,934,408
		<u>\$ 18,083,093</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 18,083,093</u>

See Independent Accountants' Report.

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

**SCHEDULE OF SYSTEM-WIDE ALLOCATED COSTS
YEAR ENDED JUNE 30, 2022**

DEPT. #	DEPT./COST CENTER	REVISED COST CENTER COSTS	ALLOCATION BASIS											ALLOCATED COST CENTER COSTS		
			# SQ. FT.	# OF TELEPHONES	# OF EMPLOYEES	100 % RARITAN O&M	# OF EMPLOYEES	# OF P.O.s	# OF COMPUTERS	MGD CONTRACTS	O&M BUDGET	# OF VEHICLES	# OF VEHICLES		TIME ESTIMATE	
	BUILDING HQ	\$ 69,651	\$ (69,651)													
	TELEPHONE HQ	48,836	-	\$ (48,836)												
36	SAFETY	250,916	468	531	\$ (251,915)											
37	SECURITY	1,034,734	2,634	2,123	19,545	\$ (1,059,036)										
14	HUMAN RESOURCES	346,663	3,115	2,123	6,515	-	\$ (358,416)									
16	PURCHASING	272,504	3,869	1,592	4,343	-	6,893	\$ (289,201)								
17	INFORMATION SYSTEMS	219,169	697	531	2,172	-	3,446	10,422	\$ (236,437)							
15	CONTRACTS & RISK MGMT.	391,040	2,278	1,062	4,343	-	6,893	8,473	8,015	\$ (422,104)						
13	FINANCIAL MGMT	975,160	6,647	3,185	13,030	-	20,678	5,549	24,044	-	\$ (1,048,293)					
34	AUTO SHOP	373,575	10,469	1,062	4,343	-	6,893	12,597	4,007	-	27,056	\$ (440,002)				
35	AUTO SHOP-CANAL	191,765	-	1,062	2,172	-	3,446	10,197	8,015	-	13,888	-	\$ (230,545)			
10	EXEC OFFICE	274,496	9,199	4,247	2,172	-	3,446	1,725	4,007	-	19,880	-	-	\$ (319,172)		
20, 30, 31, 32, 33	WATERSHED, ENGINEERING & O&M (RARITAN SYSTEM)	8,700,176	30,275	31,318	134,645	1,059,036	213,671	137,814	128,238	381,432	630,100	440,002	230,545	301,618	\$ 12,418,870	
40-60	MANASQUAN SYSTEM	4,934,408	-	-	58,635	-	93,050	102,424	60,111	40,672	357,369	-	-	17,554	5,664,223	
		\$ 18,083,093	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,083,093	

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

**SCHEDULE OF COST ALLOCATION FACTORS
YEAR ENDED JUNE 30, 2022**

ALLOCATION OF: ALLOCATION BASIS:		REQUIRED STATISTICS										
		BUILDING HQ	TELEPHONES	SAFETY	HUMAN RESOURCES	PURCHASING	INFORMATION SYSTEMS	RISK MGMT.	FINANCE O&M	AUTO SHOP	AUTO SHOP CANAL	EXEC. OFF
DEPT. #	DEPT./COST CENTER	SQ. FT. #	# OF TELEPHONES	# OF EMPLOYEES	# OF EMPLOYEES	# OF P.O.'S	# OF COMPUTERS	MGD CONTRACTS	FUNCTIONAL COST	# OF VEHICLES	# OF VEHICLES	TIME ESTIMATE
	BUILDING HQ											
	TELEPHONE HQ											
36	SAFETY	100	1									
37	SECURITY	563	4	9								
14	HUMAN RESOURCES	666	4	3								
16	PURCHASING	827	3	2	2							
17	INFORMATION SYSTEMS	149	1	1	1	139						
15	CONTRACTS & RISK MGMT.	487	2	2	2	113	2					
13	FINANCIAL MGMT	1,421	6	6	6	74	6	-				
34	AUTO SHOP	2,238	2	2	2	168	1	-	\$373,575			
35	AUTO SHOP-CANAL	-	2	1	1	136	2	-	191,765			
10	EXEC OFFICE	1,967	8	1	1	23	1	-	274,496			
20, 30, 31, 32, 33	WATERSHED, ENGINEERING & O&M (RARITAN SYSTEM)	6,472	59	62	62	1,838	32	182	8,700,176	44	44	94.50
40-60	MANASQUAN SYSTEM	-	-	27	27	1,366	15	19	4,934,408	-	-	5.50
		<u>14,890</u>	<u>92</u>	<u>116</u>	<u>104</u>	<u>3,857</u>	<u>59</u>	<u>202</u>	<u>\$14,474,420</u>	<u>44</u>	<u>44</u>	<u>100 %</u>

See Independent Accountants' Report.

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

**SCHEDULE OF MANASQUAN SYSTEM ALLOCATED COSTS
YEAR ENDED JUNE 30, 2022**

	COSTS	ALLOCATION BASIS					ALLOCATED COSTS
		1 TIME STUDY	2 \$ VALUE OF VEHICLES	3 \$ VALUE OF EQUIPMENT	4 TIME STUDY	5 \$ VALUE OF WATER CONTRACTS	
<u>GENERAL & ADMINISTRATIVE</u>							
SALARIES & FRINGES	\$ 2,844,823	\$ (2,844,823)					
VEHICLE RELATED	71,565	-	\$ (71,565)				
MAINT. SUPPLIES & RELATED	62,319	-	-	\$ (62,319)			
OFFICE & MISC.	30,157	-	-	-	\$ (30,157)		
H.Q. OVERHEAD	742,894	-	-	-	-	\$ (742,894)	
RESERVOIR	1,015,532	1,431,579	52,450	30,954	15,176	640,877	\$ 3,186,568
TREAT./TRANS.	896,933	1,413,244	19,115	31,365	14,981	102,017	2,477,655
	<u>\$ 5,664,223</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 5,664,223</u>

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

**NOTES TO FINANCIAL SCHEDULES
YEAR ENDED JUNE 30, 2022**

NOTE 1 GENERAL

The New Jersey Water Supply Authority, as part of its annual budget and rate making process, performs a two-step cost allocation calculation. During the first step, the Authority forecasts its actual expenses by Cost Center. For purposes of this calculation the Authority uses the following Cost Centers:

Raritan System

- Building Headquarters
- Telephone Headquarters
- Safety
- Security
- Human Resources
- Purchasing
- Information Systems
- Contracts & Risk Management
- Financial Management
- Auto Shop
- Auto Shop - Canal
- Executive Office
- Engineering, Watershed Management, Operations and Maintenance (Raritan System)
- Manasquan System

In deriving expenses by Cost Center several expense reclassifications are made on the Schedule of Forecasted Cost Center Expense Reclassification as follows:

1. Heating and electricity expenses related to Building Headquarters ("HQ") and Executive Office are reclassified from Engineering and Operations & Maintenance ("O & M").
2. Vehicular fuel expense related to Auto Shop is reclassified from Purchasing.
3. Professional fees related to O & M are reclassified from the various departments to which they have been charged.
4. Insurance premium expense related to the Raritan System is reclassified from Contracts and Risk Management.
5. Telephone expense is reclassified from Purchasing to a separate Telephone HQ Cost Center.
6. Permit expense related to the Raritan System is reclassified from Contracts and Risk Management and Purchasing.

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

NOTES TO FINANCIAL SCHEDULES
YEAR ENDED JUNE 30, 2022

NOTE 1 GENERAL (CONTINUED)

7. Workers' compensation expense related to the Raritan System is reclassified from Contracts and Risk Management.
8. In-lieu taxes related to the Raritan System are reclassified from Contracts and Risk Management.
9. Chief Engineer Salary & Fringe Expenses related to the Manasquan System are reclassified from the Engineering Department.

The second step entails a step-down allocation of eleven of the Authority's Cost Centers to the Raritan and Manasquan System Cost Centers. In making this step-down allocation the Authority allocates cost as follows:

1. Building HQ is allocated to each of the Cost Centers based on the amount of space utilized.
2. Telephone HQ is allocated to each of the Cost Centers based on the number of telephones utilized.
3. Safety is allocated to each of the Cost Centers based on the number of employees.
4. Security is allocated entirely to the Raritan System.
5. Human Resources is allocated to each of the Cost Centers based on the number of employees.
6. Purchasing is allocated to each of the respective Cost Centers based on the number of purchase orders issued.
7. Information Systems is allocated to each of the Cost Centers based on the number of computers.
8. Contracts and Risk Management is allocated to each of the Cost Centers based on the number of employees.
9. Financial Management is allocated based on a percentage of the four remaining Cost Centers'
10. Auto Shop and Auto Shop-Canal are allocated based on the number of vehicles used.
11. Executive Office is allocated based on the amount of executive time utilized in managing each of the Systems.

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

**NOTES TO FINANCIAL SCHEDULES
YEAR ENDED JUNE 30, 2022**

NOTE 2 MANASQUAN SYSTEM ALLOCATED COST

The Manasquan Water Supply System's direct and allocated costs are then allocated between the Reservoir System and the Water Treatment Plant/Transmission System. In making this allocation the Authority adds to each System's direct expenses, the indirect costs allocated as follows:

1. Salaries and Fringe Benefits are allocated based on actual time studies performed by each employee throughout Fiscal Year 2022.
2. Vehicle related expenses are allocated based on the dollar value of vehicles held by each System.
3. Maintenance Supplies and related expenses are allocated based on the dollar value of capital equipment held by each System.
4. Office and miscellaneous expenses are allocated based on the time studies performed by each employee throughout Fiscal Year 2022.
5. Headquarters Overhead expenses are allocated based on the value of water contracts for each System.