NEW JERSEY WATER SUPPLY AUTHORITY

BASIS AND BACKGROUND STATEMENT

PROPOSED AMENDMENTS TO N.J.A.C. 7:11-2.1 et seq.
IN THE SCHEDULE OF RATES, CHARGES AND DEBT SERVICE ASSESSMENTS
FOR THE SALE OF WATER FROM THE RARITAN BASIN SYSTEM

ADJUSTMENT OF GENERAL RATE SCHEDULE FOR
OPERATIONS AND MAINTENANCE COMPONENT
FOR FISCAL YEAR 2028

ADJUSTMENT OF DEBT SERVICE ASSESSMENT FOR
FOR FISCAL YEAR 2028

ADJUSTMENT OF GENERAL RATE SCHEDULE FOR
CAPITAL FUND COMPONENT FOR FISCAL YEAR 2028

ADJUSTMENT OF SOURCE WATER PROTECTION FUND
COMPONENT FOR FISCAL YEAR 2028

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Effective Date: July 1, 2027

Approved:

NEW JERSEY WATER SUPPLY AUTHORITY
PROPOSED RATE ADJUSTMENTS FOR FISCAL YEAR 2028
RARITAN BASIN SYSTEM

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PART I - EXPLANATION OF PROPOSED REVISED RATE STRUCTURE

Overview of Rate Proposal for Fiscal Year 2028 (July 1, 2027 - June 30, 2028)

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 Raritan Basin System, to cover expenses for the Fiscal Year (FY) starting on July 1, 2027.

Summary of Proposed Adjustments

Component	Current (FY2027) Rates Per MG 7/1/2026 - 6/30/2027	Proposed (FY2028) Rates Per MG 7/1/2027 - 6/30/2028
Operations & Maintenance Assessment	$203.00	$271.00
Debt Service Assessment Dredging/ RV Structure Refurbishment/Spruce Run	$109.00	$109.00
Capital Fund Component	$33.00	$55.00
Source Water Protection Fund Component	$20.00	$20.00
Total Rate	$365.00 /mg	$455.00 /mg

The General Rate Schedule for Operations and Maintenance (O&M) was last adjusted effective July 1, 2026 to cover the operating expenses of the System for FY2027. The FY2028 O&M sales base of will remain at 182.308 million gallons per day (mgd). The O&M Component is projected to increase from $203.00 to $271.00 per million gallons for FY2028.

With the allocation of appropriate Headquarters expenses and insurance costs to the Manasquan Reservoir Water Supply System, the projected operating costs for FY2028 require that an O&M Component of $271.00 per million gallons be charged starting on July 1, 2027.

In recent fiscal years, actual O&M Component adjustments have been minimized because of credits for receipts of unanticipated revenues from the sale of water in excess of contractual amounts, positive budget variances during the preceding fiscal years or from uses of other one-time sources of revenue. These credits have the effect of obscuring the full O&M Component adjustment needed and as a result Raritan Basin System rates do not represent full cost pricing. The amount available for the Rate Stabilization Fund was $4,852,970 in FY2027, and the amount available in FY2028 will be $3,448,250. Overdraft sales decreased from $1,752,975 in FY2025 to $1,248,247 in FY2026. An additional $2,200,000 in prior year positive budget variance and source water protection fund transfers are being used in FY2028 to offset the O&M component. These credits will provide for the full funding of anticipated Operations and Maintenance costs.

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The Authority established the Source Water Protection Fund Component in FY2003 to protect the quality and quantity of waters in the Raritan Basin System. The Authority is proposing no change for this rate component of $20.00 per million gallons, which was decreased in FY2024 as an anticipated temporary reduction to ease the overall rate impact given increases in other rate components during that year. This rate component supports debt service on acquired critical watershed parcels and matching dollars for watershed protection projects, and the Authority projects that there will be sufficient funds raised to service outstanding debt and fund other source water protection projects in FY2028.

The Authority has issued final bonds through the New Jersey Infrastructure Bank (NJIB) to finance the dredging of a 10.5-mile segment of the Delaware and Raritan Canal (D&R Canal) between Kingston at Lincoln Highway and Amwell Road in Franklin Township, Somerset County, New Jersey. This project has been completed. The Authority has completed final financing for the refurbishment of structures within the Round Valley Reservoir complex. Additionally, the Authority has begun embankment improvements at the Spruce Run Reservoir and has submitted applications with the NJIB for financing of this project. (See Schedule 12 and following explanations for further details on these projects.) The Authority proposes no change to the NJIB rate component of $109.00 per million gallons to fund the debt service in FY2028.

Finally, the Authority established a "Capital Fund Component" of the rate commencing July 1, 1994. This Component is used to fund the Authority's current Capital Improvement Program without incurring long-term debt. The Capital Fund Component was increased in FY2008 from $21.00 to $33.00 per million gallons, funded from the 1981 Bond Act debt service savings. The rate component was reduced to $30.00 per million gallons in FY2012 to accommodate pressure on the O&M Component in order to keep the overall rate at $231.00 per million gallons. The Authority restored this component of the rate from $30.00 to $33.00 per million gallons in FY2016 and proposes an increase of $22.00 per million gallons for this rate component, bringing the total rate to $55.00 per million gallons for FY2028.

Table 1 shows each of the rate components and reflects a total rate of $455.00 per million gallons for FY2028.

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 adjustments.

A pre-public hearing on the proposed rate adjustments is scheduled at 10:00 a.m. on Friday, January 8, 2027.

A public hearing on the proposed rate adjustments is scheduled at 10:00 a.m. on Friday, February 5, 2027.

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

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meeting/hearing.

The New Jersey Register Comment Period is scheduled to close on or around March 5, 2027 and the public hearing record on the proposed rate adjustments is scheduled to close on or around March 15, 2027.

Final action on the rate adjustment is anticipated for the Authority's April 5, 2027 meeting. The FY2028 rate will take effect on July 1, 2027.

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 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 and the Authority continues to operate the Water Treatment Plant. 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 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 auditors provide the Authority with their findings as to the adjustment, if any, to 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 accounting firm performed the Authority's FY2026 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 FY2028 budget based on the FY2026 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.

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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 more information on insurance charges.

Analysis of Significant Changes in Operations and Maintenance Expenses Raritan Basin System

Overview of Projected Operational Expenses

The Authority's proposed FY2028 Raritan Basin System Operating Expense Budget is increasing by $2,509,945 from FY2027. The Total Budget Requirement, which is net of the allocation of appropriate Headquarters General and Administrative expenses to the Manasquan Water Supply System, and includes capital equipment and contribution to reserves, is $21,186,220. This is $2,385,945 more than the FY2027 budget of $18,800,275. The Capital Equipment budget of $0 (after reserves are applied) is unchanged from the FY2027 budget and utilizes the Authority's capital equipment reserve as a funding source. The proposed contributions to the Reserve for Formal Dam Inspections ($10,000), Capital Equipment Reserve ($150,000) and the Pumping Reserve ($150,000) remain at FY2027 levels. There are no contributions scheduled for the Depreciation Reserve and the Self-Insurance Reserve in FY2028. These Reserves last received a $100,000 and $150,000 contribution in FY2011, respectively, but are sufficiently funded at the present time. There are no proposed contributions to the Operations and Maintenance Reserve, Major Rehabilitation Reserve or the Pension Reserve. The reserve for capital equipment purchases established in FY2015 requires an additional year of funding with a simultaneous direct expenditure for capital equipment because six years of stable rates from FY2009 through FY2014 caused deferral of equipment purchases. It is still the Authority's intention to fund the reserve at an annual level of $150,000 to eliminate rate fluctuations associated with the annual change in level of capital equipment purchases once the reserve is adequately funded. In FY2017 for the first time, the Authority funded a reserve for other post-employment benefits (accumulated sick leave payout for retirees) of $181,000. The Authority will continue to analyze this liability and fund the account accordingly. All of these modifications result in a total FY2028 budget requirement of $21,186,220 which is an increase of 12.7 percent relative to FY2027 (see Proposed Budget Summary).

Sixteen of the thirty-one FY2028 direct operating expense accounts are projected to increase, nine of which are increasing by $5,000 or more relative to FY2027. The remainder of the operating expense accounts are projected to be level or decrease relative to FY2027. The most significant projected increases in the budget occur in the Special and Professional, Printing and Office, and Heating Fuel categories, while the most significant projected decreases in the budget occur in the Maintenance Supplies and Insurance categories.

Salaries and Benefits

Authority employees within the Communications Workers of America (CWA), the International Federation of Professional Technical Engineers (IFPTE) and the International

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Brotherhood of Electrical Workers (IBEW) are currently operating under a contract that expires on June 30, 2027. The FY2028 budget incorporates all union negotiated step increases in the current union contracts and includes a 3.5% cost of living increases for FY27 and 3.0% for FY28. 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 several management employees. Also included is a 3.0% annual cost of living increase for the five members of Authority management who are not represented by a union. The Authority is budgeting 71 percent of the salary budget for fringe benefits in FY2028, exclusive of retiree medical.

Pension expense payable to the state of New Jersey on April 1, 2027 is expected to be approximately $1,634,700 for the Raritan System. The Authority has budgeted $1,854,500 for this line item in FY2028, calculated at 17.5% of the salary line. Although increases in this category have stabilized in the past several years, there is still a level of uncertainty in this expense item because the pension system remains significantly underfunded.

Regular salary is increasing by $336,750, reflecting the impact of cost of living and salary step increases. Salaries and benefits constitute approximately 73 percent of the Authority's operating budget, and are increasing approximately 17.4 percent relative to FY2027. Total salary and fringe is increasing by approximately $2,372,020 in FY2028 as compared to FY2027.

Overtime Salaries and Wages

The Authority's overtime expenses are projected to increase by approximately $29,150 in FY2028. Overtime expenses are incurred mainly within Security and O&M Facilities and Canal Operations (those areas operating within a crew or shift structure).

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 for four additional retirees in FY2028. For the 2026 plan year, the Authority, as a local government employer participating in the New Jersey State Health Benefits Program (SHBP), experienced significant, double-digit health insurance premium increases for active employees and retirees. The rate hikes were caused by several factors, including high utilization and prescription costs, plan debt repayment, anti-selection risk, and reserve funding requirements. The Authority has included an approximately 17% increase in health care premiums for CY28 based on early projections released by the state of NJ. The budget contains sufficient funds for 66 retired employees.

Insurance Program

The Authority is recommending a decrease of $68,880 in insurance expense for FY2028, 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

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remarketed every three years and the insurance program is renewed annually on March 1. In its 2026 renewal, the Authority realized premium savings in the property line, mainly attributed to a softening market and increased loyalty credits issued by AEGIS for incumbent customers, and in workers comp, due to the Authority's favorable loss history which resulted in a lower Experience Modification Rate.

Allocation of the Primary, Umbrella and Public Officials Liability insurance costs among 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.

Interest Income

The projected interest earnings for FY2028 are $383,800 based upon a rate of 3.0 percent for short-term investments. This represents an increase of $32,900 as compared to FY2027 (Schedule 7).

Reserve Contributions

During FY2028, 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.

The Authority will contribute $150,000 to the pumping reserve, and will do so every year, as this will be the primary funding mechanism for pump exercises and reservoir refilling requirements. The Self Insurance Reserve fund will receive no funding in FY2027. The Authority will continue funding for the Reserve for Formal Dam Inspections at $10,000 in order to avoid future swings in the professional services accounts for expenses associated with this three-year cycle. The Authority will contribute $150,000 to the Capital Equipment Reserve, and will do so every year, as this will be the primary funding mechanism for capital equipment purchases. When the reserve reaches the appropriate level, while equipment purchases will continue to be identified in the Basis and Background Document and approved by the Board, the direct line item will be removed from the rate and replaced by the annual appropriation.

Debt Service Assessments

New Jersey Environmental Infrastructure Financing Program Debt Service Assessment – D&R Canal Dredging, Round Valley Structure Refurbishment – Rehabilitation and Preservation Project – Spruce Run Grouting and Spillway Improvements

The Authority has issued permanent financing through the New Jersey Infrastructure Bank (NJIB) loan program for the dredging of a 10.5-mile segment of the Delaware and Raritan Canal (D&R Canal) between Kingston at Lincoln Highway to Amwell Road in Franklin Township, Somerset County, New Jersey. This project was originally authorized for $45,000,000; the final loan amount was approximately $36,000,000 because the actual project total cost was lower than

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anticipated. Funding through the NJIB allowed a portion of the loan to be at zero interest and a portion of the loan to be at market rate with the blended rate at favorable terms. The Authority has also issued $75,000,000 in permanent financing through the NJIB for the refurbishment of structures at the Round Valley Reservoir complex in Clinton Township, Hunterdon County, New Jersey. Funding through the NJIB allowed a portion of the loan to be at zero interest and a portion of the loan to be at market rate with the blended rate at favorable terms. Additionally, the Authority has begun an embankment improvement project at the Spruce Run Reservoir and has completed a construction loan with the NJIB for this project. The Authority proposes no change to the rate component of $109.00 per million gallons in FY2028 to ensure that sufficient funds are available to make debt service payments for these projects. The total rate component will be adjusted after the bonds for all projects are issued in accordance with final debt service schedules.

Capital Fund Component for Current Financing of Capital Improvement Program

During the period from 1982-1993 the Authority had invested $62,000,000 in the Capital Improvement Program for the Raritan Basin System. Much of this effort was the direct result of inadequate investments in the facilities during the years preceding the creation of the Authority. These Capital Improvement Programs were financed through the issuance of two long-term debt obligations, the 1981 Water Supply Bond Funds and 1988 Water System Revenue Bonds.

In 1995, the Authority began preparing a rolling five-year Capital Improvement Program, which required the investment of approximately $1,500,000 per year. Current estimates place the necessary annual investment between $2,500,000 and $5,500,000. In evaluating options for financing this program (and subsequent five-year CIP's) the Authority looked at (1) the continuation of the practice of incurring long-term debt through the issuance of Revenue Bonds and (2) the possibility of current financing through the assessment of annual charges as part of our rate structures. The Authority concluded at the time that financing of such a small annual Capital Improvement Program based upon the issuance of long-term debt was fiscally imprudent. The Authority reevaluates this financing methodology on an annual basis.

The Authority's financial plan was predicated upon the establishment of a Capital Fund Component of $10 per mg starting on July 1, 1994 with subsequent increases in this component of the total rate structure to $15 per mg effective July 1, 1995 and to $20 per mg effective July 1, 1996 and to $25 per mg effective on July 1, 1998. Since then, the annual rate component has fluctuated between $20 and $35.

This level of current financing for reinvestments in plant and equipment is somewhat lower than the booked depreciation of the plant and equipment for the Raritan Basin System facilities (without the depreciation of the dams), which amounts to about $3,000,000 per year. The Authority is also using interest earnings from the depreciation reserve to fund reinvestments. Any future unplanned or unanticipated major capital investment may require the issuance of long-term debt.

For FY2028, the Authority continues to believe the use of internally generated funds for such capital improvements is the least cost method of financing. In recent years, there has been an acceleration of routine capital projects due to normal aging of the Authority’s infrastructure, coupled with high inflation, especially for construction projects. After analysis of current reserves

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and the cost of projects planned for the next several years, an increase in the Capital Fund Component of $22.00 per million gallons is being recommended. This would result in a Capital Fund Component of $55.00 per million gallons and would be the first net increase in that component in over 20 years. The Authority has determined that a Capital Fund Component of $55.00 per million gallons, a $22.00 per million gallon increase versus FY2027, should be assessed for FY2028 to generate approximately $3,659,833. The Authority deems these revenues sufficient to meet its capital needs for FY2028 in light of existing capital reserves and project scheduling, and to ensure that sufficient funds are committed to the continuing rehabilitation of Authority assets.

Source Water Protection Fund Component for the Protection of Water Quality

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 a component of the Authority's watershed protection initiative, the Authority established the Source Water Protection Fund in August of 2001 for the purpose of protecting the quality and quantity of waters in the Raritan Basin System. The first $5.00 per million gallons of the component is used for three purposes in cooperation with federal, State, local and nonprofit partners: (1) administrative actions associated with the acquisition of critical watershed parcels in the Raritan Highlands; (2) planning assistance to improve management of land development by municipal, county and state government to protect both water quality and flows to and within Authority facilities; and (3) water quality characterization and associated remedial projects to preserve and enhance water quality.

In light of the rapid decline in available watershed parcels, and the critical value of these parcels to the sustained supply of water in the Raritan Basin System, the Authority increased the Source Water Protection Fund by $5.00 per million gallons in FY2004 and again by $3.00 per million gallons in FY2006, to acquire fee and other interests in critical watershed parcels in the System and rehabilitate properties to maximize benefit to water quality and quantity. To date, more than 3,954 acres of property have been preserved by the Authority and its partners. Some of the watershed and water quality projects include a tributary and storm water assessment of the D&R Canal to determine sediment loading, followed by an implementation project; the development of storm water management plans for a variety of tributaries in the Basin; a stream restoration project of a reach of the Mulhockaway which feeds into Spruce Run, and implementation of improved land management practices within the agricultural community. The Authority increased the Source Water Protection Rate from $13.00 per million gallons to $15.00 per million gallons in FY2008 to further support direct watershed protection and restoration projects. The Authority increased the Source Water Protection Rate from $15.00 per million gallons to $24.00 per million gallons in FY2014 to support debt service on previously acquired critical watershed parcels. The Authority decreased the Source Water Protection Rate by $4.00

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per million gallons for FY2024 to mitigate an overall rate increase. The Authority is proposing no change to the rate of $20.00 per million gallons for FY2028. The retirement of debt issued to fund the land acquisition programs began in 2023; the first land parcel was acquired in 2003 and was financed by a twenty-year bond. In combination with the balance in the Source Water Protection fund, the Authority is confident that there will be sufficient reserves in 2028 to fund the various Source Water Protection initiatives. The Authority anticipates that the reduction in the Source Water Protection rate will be a temporary one, and will continue to evaluate this rate component to ensure adequate funding of these important source water protection measures.

Other Rule Amendments

There are no other rule amendments. The language supporting the overall proposal is contained in Part III of this document.

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PART II – DETAILED SUPPORTING INFORMATION

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Table 1 - Summary Of Proposed Fiscal Year 2028 Adjustments Based On Present Usage

The rates, charges and debt service assessments listed below shall be paid for raw water diverted, withdrawn or allocated from the Raritan Basin System:

RATE COMPONENT	CURRENT	ORIGINAL PROPOSAL 11/02/26	DIFFERENCE	PERCENTAGE INCREASE (DECREASE)
O & M Assessment	$203.00	$271.00	$68.00	33.5%
Debt Service Assessment Dredging/ RV Structure Refurbishment/Spruce Run	$109.00	$109.00	$0.00	0.0%
Capital Fund Component	$33.00	$55.00	$22.00	66.7%
Source Water Protection Component	$20.00	$20.00	$0.00	0.0%
Total Rate	$365.00/mg	$455.00/mg	$90.00/mg	24.7%

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NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Table 2 - Rate History of Water Charges per Million Gallons of Raw Water Daily

Fiscal Year 2008 – Fiscal Year 2028

Effective Date	O&M Charge	1958 Bond Charge 7/1/83-6/30/88	1981 Bond Charge 7/1/86-10/30/06	Debt Rate Stabilization Fund	1998 Bond Charge 8/1/98-11/1/13	NJEIFP/NJIB Debt Component	Capital Fund Component	Source Water Protection Component	Total Charge per MG	Percent Increase -Decrease
July 1, 2007	138.71				41.29		33.00	15.00	228.00	0.0%
July 1, 2008	142.34				40.66		33.00	15.00	231.00	1.3%
July 1, 2009	142.39				40.61		33.00	15.00	231.00	0.0%
July 1, 2010	142.55				40.45		33.00	15.00	231.00	0.0%
July 1, 2011	145.66				40.34		30.00	15.00	231.00	0.0%
July 1, 2012	145.84				40.16		30.00	15.00	231.00	0.0%
July 1, 2013	152.00					25.00	30.00	24.00	231.00	0.0%
July 1, 2014	167.00					25.00	30.00	24.00	246.00	6.5%
July 1, 2015	171.00					25.00	33.00	24.00	253.00	2.8%
July 1, 2016	171.00					25.00	33.00	24.00	253.00	0.0%
July 1, 2017	194.00					85.00	33.00	24.00	336.00	32.8%
July 1, 2018	194.00					85.00	33.00	24.00	336.00	0.0%
July 1, 2019	194.00					85.00	33.00	24.00	336.00	0.0%
July 1, 2020	194.00					85.00	33.00	24.00	336.00	0.0%
July 1, 2021	194.00					85.00	33.00	24.00	336.00	0.0%
July 1, 2022	194.00					85.00	33.00	24.00	336.00	0.0%
July 1, 2023	203.00					109.00	33.00	20.00	365.00	8.6%
July 1, 2024	203.00					109.00	33.00	20.00	365.00	0.0%
July 1, 2025	203.00					109.00	33.00	20.00	365.00	0.0%
July 1, 2026	203.00					109.00	33.00	20.00	365.00	0.0%
July 1, 2027	271.00					109.00	55.00	20.00	455.00	24.7%

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYTEM

Proposed Schedule of Events
(NJAC 7:11-2.1 et. seq.)
To become effective July 1, 2027

2026

SEPTEMBER	30	Advise Water Users of informal meeting.
OCTOBER	22	Informal meeting with Water Users
NOVEMBER	2	Board reviews and approves proposed Rates.
DECEMBER	16	Mail Official Notice to water customers, Rate Payer Advocate, interested parties and advertise in newspapers.

2027

JANUARY	4	Publication in the New Jersey Register.
	8	Pre-Public Hearing (within 45 days of Official Notice). Deadline for responses to inquiries received prior to pre-public hearing..
FEBRUARY	1	Deadline for receipt of comments to be addressed at Public Hearing (15 days after pre-public hearing)
	5	Public Hearing (Microsoft Teams) Deadline for responses to inquiries received between pre-public and public hearing.
	22	Written responses to questions raised at Hearing (within 10 business days of the public hearing).
MARCH	5	NJ Register Comment Period Ends.
	15	Public Hearing record closes (25 business days after Public Hearing).
APRIL	5	Board approval of FY2028 Rates & Budgets
JULY	1	Effective date.

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Proposed

Fiscal Year 2028 Budget Summary
(7/1/27 - 6/30/28)

	ADOPTED FY27	PROPOSED FY28
Proposed Operating Expense Budget (Schedule 1)	$19,321,275	$21,831,220
Net Allocation of Headquarters General and Administrative Expenses to the Manasquan Water Supply System - (Schedule 5)	$ (831,000)	$ (955,000)
Proposed Total Expense Budget	$ 18,490,275	$ 20,876,220
Proposed Capital Equipment Budget (Schedule 6)	$ -	$ (0)
Total Operating Expense & Capital Equipment Budgets	$ 18,490,275	$ 20,876,220
Contribution to Reserve Funds		
- Other Post Employment Benefits Reserve	$ -	$ -
- Reserve for Formal Dam Inspection	$ 10,000	$ 10,000
- Pumping Reserve	$ 150,000	$ 150,000
- Capital Equipment Reserve	$ 150,000	$ 150,000
Total Budget Requirements	$ 18,800,275	$ 21,186,220
MISCELLANEOUS REVENUES:		
Employee Housing/Land Rental	$ (47,200)	$ (47,200)
Interest	$ (350,900)	$ (383,800)
	$ (398,100)	$ (431,000)
OTHER AVAILABLE FUNDS:		
Unanticipated Revenue (Schedule 8)	$ (4,852,970)	$ (3,448,250)
Total Other Available Funds	$ (4,852,970)	$ (3,448,250)
Net Amount to be paid for O & M Component	$ 13,549,205	$ 17,306,970

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 1 - Proposed Operating Expenses Budget – Fiscal Year 2028 Distributed by Cost Center

Fiscal Year 2028

CODE	ACCOUNT	OFFICE EXECUTIVE DIRECTOR	FINANCIAL MANAGEMENT & ACCOUNTING	WATERSHED PROTECTION PROGRAMS	OPERATIONS MAINTENANCE & ENGINEERING	PROPOSED BUDGET FOR FY28
5110	Regular Salaries & Wages	$200,700	$2,316,050	$897,200	$4,964,600	$8,378,550
5120	Overtime-Salaries & Wages	$0	$156,000	$0	$236,600	392,600
5130	New Positions-Salaries & Wages	$0	$0	$0	$0	0
5140	Seasonal Help-Salaries & Wages	$0	$0	$0	$0	0
5150	Fringe Benefits	$60,500	$1,458,440	$511,170	$3,933,070	5,963,180
5167	Retiree Health Benefits	$44,700	$404,310	$31,890	$797,970	1,278,870
5168	Workers Compensation (Self-Insured)	$0	$10,000	$0	$0	10,000
	Total Salary & Fringe Benefits	$305,900	$4,344,800	$1,440,260	$9,932,240	$16,023,200
5200	On-Site Residences	$0	$0	$0	$26,100	$26,100
5210	Heating Fuel	$0	$0	$0	$103,500	103,500
5220	Utilities -Electrical Service	$0	$0	$0	$149,700	149,700
5230	" -Gas Service & Water	$0	$0	$0	$21,800	21,800
5240	" -Propane	$0	$0	$0	$1,700	1,700
5250	Electricity for Pumping	$0	$0	$0	$85,000	85,000
5260	Vehicular Fuel	$0	$141,200	$0	$0	141,200
5270	Oil & Grease	$0	$0	$0	$19,100	19,100
5280	Tires	$0	$0	$0	$28,000	28,000
5290	Maintenance Supplies	$0	$7,245	$0	$283,620	290,865
5300	Maint. Supplies - Vehicular Equipment	$0	$1,000	$0	$102,000	103,000
5310	Major Special Vehicle Service & Repair	$0	$0	$0	$90,000	90,000
5320	Agricultural Supplies	$0	$575	$500	$12,500	13,575
5330	Maintenance of Equipment	$0	$7,885	$12,200	$60,200	80,285
5340	Service & Maintenance Contracts	$0	$160,280	$9,000	$354,050	523,330
5350	Equipment Rental	$0	$10,805	$0	$34,000	44,805
5360	Household-Safety & Protective Supplies	$100	$32,344	$1,700	$42,500	76,644
5370	Uniforms	$0	$6,000	$0	$5,480	11,480
5380	Special & Professional Services	$25,000	$510,039	$397,600	$56,000	988,639
5390	Protective Services	$0	$2,493,480	$0	$0	2,493,480
5400	Telephone	$0	$16,000	$0	$3,600	19,600
5410	Postage & Freight	$0	$19,550	$0	$120	19,670
5420	Data Processing	$0	$36,000	$0	$0	36,000
5430	Printing & Office Supplies	$500	$76,000	$2,000	$10,800	89,300
5440	Scientific & Photographic	$0	$0	$15,000	$2,000	17,000
5450	Dues & Subscriptions	$16,300	$10,397	$1,100	$13,800	41,597
5460	Advertising	$0	$7,500	$4,500	$200	12,200
5470	Travel & Subsistence	$600	$3,200	$1,500	$1,700	7,000
5480	Staff Training & Tuition Aid	$400	$16,950	$20,000	$43,400	80,750
5490	Fees & Permits	$0	$20,000	$2,600	$151,400	174,000
5500	In-Lieu Taxes	$0	$18,700	$0	$0	18,700
	Total Operating Expenses	$42,900	$3,595,150	$467,700	$1,702,270	$5,808,020
	GRAND TOTAL	$348,800	$7,939,950	$1,907,960	$11,634,510	**$21,831,220**

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 1A - Comparative Statement

Fiscal Year 2028

CODE	ACCOUNT		FY24 ACTUAL	FY25 ACTUAL	FY26 ACTUAL	FY27 ADOPTED	FY28 PROPOSED
5110	Regular Salaries & Wages		$6,499,177	$6,545,706	$6,969,044	$8,041,800	$8,378,550
5120	Overtime-Salaries & Wages		260,798	222,218	$299,814	$363,450	$392,600
5130	New positions-Salaries & Wages		0	0	$0	$0	$0
5162	Retiree Unused Sick & Vacation		0	0	$0	$0	$0
5150	Fringe Benefits*		3,487,936	3,546,937	$4,309,278	$4,123,630	$5,963,180
5167	Retiree Health Benefits		856,842	1,141,583	$1,002,860	$1,112,300	$1,278,870
5168	Workers Comp. (Self Insured)		1,018	0	$0	$10,000	$10,000
	Total Salary & Fringe		11,105,771	11,456,444	12,580,996	13,651,180	16,023,200
	Budget Salary & Fringe						
5200	Residences		$22,277	$19,486	17,339	26,100	$26,100
5210	Heating Fuel		82,406	$63,989	89,390	79,500	$103,500
5220	Utilities -Electrical Service		130,244	$129,066	141,616	135,000	$149,700
5230	-Gas Service		4,968	$5,411	5,600	23,700	$21,800
5240	-Propane		503	$597	547	900	$1,700
5250	Electricity for Pumping Station		1,445,731	$459,541	534,691	85,000	$85,000
5260	Fuel - Vehicular		110,722	$114,551	119,013	147,550	$141,200
5270	Oil & Grease		16,638	$15,959	14,391	19,400	$19,100
5280	Tires		19,952	$19,670	21,163	28,000	$28,000
5290	Maintenance Supplies		216,548	$219,445	178,941	302,965	$290,865
5300	Maint. Supplies - Vehicular		99,997	$101,565	79,772	111,000	$103,000
5310	Major Vehicle Service & Repair		51,976	$59,267	62,049	84,000	$90,000
5320	Agricultural Supplies		4,487	$4,326	23,253	9,475	$13,575
5330	Maintenance Equipment		36,066	$62,580	47,784	74,385	$80,285
5340	Serv. & Maintenance Contracts		361,524	$343,104	326,743	515,620	$523,330
5350	Equipment Rental		18,245	$19,347	22,973	49,950	$44,805
5360	Household - Safety Supplies		45,351	$51,546	105,088	71,244	$76,644
5370	Uniforms		8,453	$6,031	8,899	11,280	$11,480
5380	Special & Professional Services		673,577	$1,102,260	1,111,679	882,500	$988,639
5390	Protective Services		1,767,940	$1,991,031	2,085,665	2,562,360	$2,493,480
5400	Telephone		43,722	$44,496	54,496	19,600	$19,600
5410	Postage & Freight Out		13,526	$20,412	16,676	19,670	$19,670
5420	Data Processing		29,347	$30,086	31,057	32,000	$36,000
5430	Printing & Office Supplies		34,413	$35,898	35,177	52,710	$89,300
5440	Scientific & Photographic		8,352	$7,746	29,480	18,600	$17,000
5450	Dues & Subscriptions		32,787	$32,160	28,108	40,796	$41,597
5460	Advertising & Promotional		10,549	$5,668	6,688	12,200	$12,200
5470	Travel & Subsistence		2,363	$2,673	1,665	6,240	$7,000
5480	Staff Training & Tuition Aid		20,384	$25,768	35,976	57,750	$80,750
5490	Fees & Permits		134,245	$145,090	152,192	171,900	$174,000
5500	In - Lieu Taxes		18,689	$18,689	18,689	18,700	$18,700
	Total Other Expenses		$5,465,982	$5,157,459	$5,406,797	$5,670,095	$5,808,020
	Total Operating Expenses		$16,571,753	$16,613,903	$17,987,793	$19,321,275	$21,831,220
	Annual Increase (Decrease)		13.85%	0.25%	8.27%	7.41%	12.99%
	Budget -other expenses		4,194,063	4,588,584	5,046,267	5,670,095	5,808,020
	ANNUAL BUDGET		$15,968,713	$17,286,974	$17,894,687	$19,321,275	$21,831,220

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 2 - List of Category 5340 Items Recommended Service & Maintenance Contracts

Fiscal Year 2028

		ADOPTED FY27	PROPOSED FY28
1.	Postage/Fax/ Misc. Machines (Dept. 16)	$ 1,800	$ 1,800
2.	Stewart Business (Dept. 17)	1,200	1,500
3.	SHPERA-Safety Software (Dept. 17)	2,700	2,900
4.	WMWARE (Dept. 17)	1,000	1,000
5.	Sage Clients First MAS 100 (Dept. 17)	8,200	8,200
6.	Property Fax - Parcel Maps (Dept. 17)	1,400	1,400
7.	Sage Fixed Asset (Dept. 17)	4,800	4,800
8.	Digicert Certificate (Dept. 17)	950	1,000
9.	People Trak (Dept. 17)	2,800	2,700
10.	COMCAST - Cable Internet (Dept. 17)	24,000	16,000
11.	Dendroyka - Landscape Software (Dept. 17)	2,400	2,400
12.	Weebly (Web Hosting at Clinton) (Dept. 17)	500	500
13.	Square Space (Web Hosting Watershed) (Dept. 17)	500	500
14.	Symantec Anti-Virus Maintenance-Clinton (Dept. 17)	1,500	1,500
15.	Sonic Wall Software (Dept. 17)	1,500	1,500
16.	ESRI ArcView Maintenance-Watershed (Dept. 17)	7,000	7,000
17.	KNOWBE4 Internet Security (Dept. 17)	1,800	2,000
18.	Proofpoint Antispam (Dept. 17)	2,000	2,000
19.	Fleet Maintenance (Dept. 17)	1,000	1,000
20.	DLT Solutions Autocad (Dept. 17)	3,000	3,000
21.	ESRI ArcView Maintenance-Clinton (Dept. 17)	700	700
22.	Keystone Precision-GPS Software Maint. (Dept. 17)	600	600
23.	DATTO SAAS Protection (Dept. 17)	6,000	
24.	Clients First-Vipre Antivirus/Antispam (Dept. 17)	600	
25.	Clients First - Server Software (Dept. 17)	1,000	1,000
26.	Docusign (Dept. 17)	500	500
27.	Microsoft 365 (Dept. 17)	17,200	18,500
28.	Backup Service (Dept. 17)	15,000	15,000
29.	MFA Service (Dept. 17)	3,900	3,900
30.	Drivestrike Laptop Protection (Dept. 17)	1,000	1,000
31.	Webtitan Laptop Software (Dept. 17)	800	800
32.	Shiny Web Application (Dept. 17)	150	200
33.	ManageEngine (Dept. 17)	600	600
34.	Zoho Assist (Dept. 17)	150	200
35.	Purehost - NJWSA Domain (Dept. 17)	100	100
36.	Zentra = SR Monitoring (Dept. 17)	300	300
37.	Server Cyber Protection (Covering #23, 24,& 38 from FY27) (Dept. 17)		18,000
38.	Clients First Bitdefender - (Dept. 17)	500	
39.	Microscope Service (Dept. 20)	1,000	1,000
40.	CAAS Cube Maintenance Contract (Dept. 20)	7,500	4,000
41.	Hazardous Waste Disposal (Dept. 20)	7,500	4,000
42.	Trimble Catalyst for GPS (Dept. 30)	500	500
43.	Sensimetrics for Dams (Dept. 30)	40,000	80,000
44.	Refuse Collection (Dept. 31)	6,500	6,500
45.	Janitorial Service (Dept. 31)	47,500	30,000

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 2 (Cont.) - List of Category 5340 Items Recommended Service & Maintenance Contracts

Fiscal Year 2028

		ADOPTED FY27	PROPOSED FY28
46.	HVAC Service (Dept. 31)	$ 1,000	$ 1,000
47.	Entry Rugs (Dept. 31)	7,500	7,500
48.	Carpet Cleaning (Dept. 31)	10,000	10,000
49.	Generator Service-Administration Building (Dept. 31)	1,200	1,200
50.	Underground Plant Location Service Notifications (Dept. 31)	1,500	1,500
51.	Pest Control (Dept. 31)	1,000	1,000
52.	UST Testing and Inspections (Dept. 31)	13,200	13,200
53.	Bottled Water (Dept 31)	4,000	4,000
54.	Miscellaneous (Dept. 31)	10,000	10,000
55.	Janitorial Service (Dept. 32)	8,400	8,400
56.	Dumpster Service Canal Office (Dept. 32)	48,000	43,000
57.	Dumpster Service Route 1 (Dept. 32)	72,000	62,340
58.	CFO Building		
59.	Instrumentation Service (Dept. 32)		
60.	One Call Concepts (Dept. 32)	2,400	2,400
61.	ATS Annual & Triennial Testng		1,500
62.	ATS Environmental (Dept. 32)	4,200	4,200
63.	HVAC (Dept. 32)	4,000	4,000
64.	Wood Disposal Fees (Dept. 32)	3,600	3,600
65.	Generator Service-Scudders & Perdicaris (Dept. 32)	1,000	1,000
66.	Viking Pest (Dept. 32)	1,200	1,200
67.	Portable Restroom	2,400	2,400
68.	Pest Control (Dept. 32)	540	960
69.	Welco Gas (Dept. 33)	1,000	1,000
70.	Tree Stump Recycling (Dept. 33)	5,000	5,000
71.	Miscellaneous Recycling (Dept. 33)	1,500	1,500
72.	Parts Washer & Hazardous Removal (Dept. 34)	1,000	1,000
73.	Lift Related (Dept. 34)	2,150	2,150
74.	Recycle Used Vehicle Fluids (Dept. 35)	400	400
75.	Fire Extinguisher Maintenance (Dept. 36)	12,800	12,800
76.	Hazardous Waste Control (Dept. 36)	1,500	1,500
77.	Fire Alarm Testing (Dept. 36)	10,380	10,380
78.	Vehicle Lifts Annual Testing (Dept. 36)	1,500	1,500
79.	Delaware Electric Cellular Service (Dept. 37)	2,000	2,000
80.	Emergency Notification System (Dept. 37)	3,200	3,200
81.	GPS Tracking (Dept. 37)	2,400	2,400
82.	Covert Wireless (Dept. 37)	2,400	2,400
83.	Refuse Collection (Dept. 38)	3,000	3,000
84.	HVAC Services (Dept. 38)	5,000	5,000
85.	Electrical Plumbing Services (Dept. 38)	$5,000	5,000
86.	Instrumentation Services (Dept. 38)	$4,500	4,500
87.	Pest Control (Dept. 38)	$600	600
88.	Entry Rugs (Dept. 38)	$500	500
89.	Crane Service and Inspection (Dept. 38)	$ 5,000	5,000
90.	Elevator Service- (Dept. 38)	$3,000	3,000
91.	UST Testing and Inspections	$ 10,000	10,000
92.	Misc (Dept. 38)	5,000	5,000
		$ 515,620	$ 523,330

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 3 - List of Category 5380 Items Recommended Professional Services

Fiscal Year 2028

		ADOPTED FY27	PROPOSED FY28
1.	Services-Governor's Authorities Unit (Dept. 10)	$ 25,000	$ 25,000
2.	Consultant-C.P.A. to Conduct Annual Audit (Dept. 13)	66,500	68,000
3.	125 Plan-Family security Insurance Agency (Dept. 13)	2,725	2,000
4.	Archiving (Dept. 13)	6,000	4,000
5.	NJEIT Fee (Dept. 13)	152,475	203,475
6.	Services-Pre-Employment Exams & Tests (Dept. 14)	2,250	1,800
7.	Fidelifax-Background Checks (Dept. 14)	1,800	1,200
8.	Medical CDL Drug Testing (Dept. 14)	1,800	1,800
9.	Employee Advisory Service (Dept. 14)	2,150	2,800
10.	Substance Abuse Professional (Dept. 14)	1,200	1,200
11.	ACA 1095 filing/printing and mailing (Dept 14)	2,700	2,800
12.	Consultant-Risk Management - to provide assistance to the Authority in the review of insurance coverage and continuation of a Comprehensive Coordinated Risk Management Program (Dept. 15)	35,000	36,750
13.	Insurance Broker-HRH (Dept. 15)	45,000	47,250
14.	GL Administrator (ESIS) (Dept. 15)	30,241	15,120
15.	Services-Attorney General's Office - Assistance of Deputy Attorney General concerning a wide range of legal matters (Dept. 15)	44,759	66,844
	Server Upgrade, configuration and installation		30,000
	Sage Upgrades		5,000
16.	MP Water Monitoring Costs - USGS SR @ Glen Gardner (Dept. 20)	17,600	18,500
17.	MP Water Monitoring Costs - USGS SB Raritan @ Stanton (Dept. 20)	17,200	18,000
18.	MP Water Monitoring Costs - USGS Landing Lane (Dept. 20)	53,600	52,500
19.	MP Water Monitoring Costs - USGS Raritan River @ Manville (Dept. 20)	66,000	67,500
20.	Continuous Record Gaging - USGS @ Washington Crossing (Dept. 20)	-	-
21.	Water Quality Monitoring - USGS @ Washington Crossing (Dept. 20)	5,600	5,600
22.	Water Monitoring Costs ASWQMN- USGS D&R Canal @ Landing Lane (Dept. 20)	23,000	24,000
23.	USGS Cooperative Agreement River Gaging - Maintenance of Raritan Basin Stream Gaging Stations and the Delaware & Raritan Canal Gauging at Kingston per USGS/DWR/NJWSA Agreement (Dept. 20)	80,800	82,500
24.	Millstone River at Blackwells Mills continuous WQ (Dept 20)	40,000	40,000
25.	USGS Spruce Run Gage at Glen Gardner (Dept. 20)	12,500	20,000
26.	USGS Clinton Rain Gage (Dept. 20)	3,000	4,000
27.	USGS Washington Crossing Rain Gage (Dept. 20)	4,300	4,000
28.	USGS Millstone River at Millstone Discharge (Dept. 20)	$ 9,100	10,000
29.	Support for Community Monitoring Programs (Dept.20)	5,000	-
30.	General Lab Analysis (Dept. 20)	18,000	18,000
31.	Maintenance of USGS Gauges at Washington Crossing and 10-mile and others (Dept. 20)	31,200	33,000
32.	Services-Emergency Engineering Services (Dept 30)	22,000	22,000
33.	Water Testing and Sampling to comply with the Safe Water Drinking Act (Dept. 31)	5,000	5,000
34.	Water Sampling and Testing as per NJDWR Requirements - RT 202 Stockpile Site (Dept 32)	20,000	20,000
35.	Vac Truck Service - IFW, 10 Mile PS (Dept. 32)	8,000	8,000
36.	Safety Suggestion Program, Poster and Promotional Materials, Safety Incentive Program (Dept. 36)	10,700	10,700
37.	Pulmonary Testing and Physicals (Dept. 36)	5,000	5,000
38.	Annual Contributions to Fire Companies and Rescue Squads (Dept. 36)	500	500
39.	Hepatitis Vaccinations (Dept. 36)	800	800
40.	Calibration for the Pota-Count Respirator (Dept. 36)	3,000	3,000
41.	Water Testing (Dept. 38)	1,000	1,000
	TOTAL	$ 882,500	$ 988,639

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 4 – Projected FY 2028 Insurance Program

Fiscal Year 2028 (7/1/27-6/30/28)

Policy	Raritan Basin System	Manasquan Reservoir System	Manasquan Water Treatment Plant and Transmission System	Total Premium
PROPERTY/MOBILE EQUIPMENT	1,303,721	$446,200	$133,000	$1,882,921
GENERAL/AUTO LIABILITY	325,384	$34,800	$5,600	$365,784
POLLUTION LIABILITY	26,734	$2,400	$500	$29,634
WORKERS COMPENSATION	121,148	$16,800	$18,100	$156,048
EXCESS LIABILITY	632,813	$67,500	$10,800	$711,113
MANAGEMENT LIABILITY				
:PUBLIC OFFICIALS	55,165	$5,900	$1,000	$62,065
:CYBER RISK	26,352	$2,900	$500	$29,752
:FIDELITY & CRIME			5100	$5,100
TRAVEL ACCIDENT	805	$72	$50	$927
DRONE	1,358			$1,358
TOTAL:	$2,493,480	$576,572	$174,650	$3,244,702

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 5 - Recap Of Allocation Of Headquarters General And Administrative Expenses Charged To The Manasquan Water Supply System
Fiscal Year 2028 (7/1/27-6/30/28)

	Total Headquarters Charge	Manasquan Reservoir System	Manasquan WTP/TS
Budgeted-Appendix I, amount to be charged to Manasquan System for FY28 (7/1/27-6/30/28)	$845,881	$729,742	$116,139
FY26 Adjustment as per audited Expenditures:			
Budgeted as per rate schedule for FY26 (7/1/25-6/30/26). Amounts paid during F/Y26 to Raritan Basin System.	$891,000	$770,000	$121,000
Actual allocation based upon audited expenditures FY26 (7/1/25-6/30/26) - Appendix II	$1,000,103	$862,765	$137,338
Adjustments FY26	$109,103	$92,765	$16,338
Net Allocation for FY28 Budget	$954,984	$822,507	$132,477
Estimate	$955,000	$823,000	$132,000

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 6 - Proposed Capital Equipment Budget

Fiscal Year 2028

	Description	Replacement (R) Addition (A)	Year of Purchase	Dollar Value
GROUNDS	3pt Rear Finish Mower	A		$ 9,000
	Landscape/Mower Trailers (2)	R (2092/2093)	2008	$ 15,000
	Skid Steer Mulcher Attachement	A		$ 50,000
	25 Ton Equipment Trailer	R (2276)	2016	$ 60,000
	Backhole Side Dump Bucket Attachement	A		$ 19,000
	7 Ton Equipment Trailer	A		$ 11,000
	Utility Body Pick up Truck	A		$ 70,000
	Vubratirt Roller	A		$ 40,000
CANAL	NJWA 35 (F-150) w/cap	R (NJWA35 #2415)	2021	$ 73,000
	Bobcat winch	A		$ 15,000
	Tractor w/arm mower	R (1067)	2009	$ 220,000
	36" Walk Behind Mower	A		$ 10,000
	NJWA 41 (F-250) w/plow	R (2258)	2015	$ 80,000
AUTO SHOP	F550 Service Truck with Boom	A		$ 200,000
IT/HR/WATERSHED	Dell Server	R (2228)	2014	$ 27,000
	Automatic Refrigerated Stormwater Samplers (2)	R (2188)	2011	$ 30,000
SECURITY	Security Vehicle	R (NJWA 70 #2525)	2024	$ 65,000
			TOTAL COST	$ 994,000
	LESS AMOUNT CHARGED TO DEPRECIATION RESERVE			(277,220)
	LESS CAP EQUIP RESERVE			
	LESS TRANSFER FROM CAP EQUIP RESERVE			(716,780)
			NET TOTAL	$ (0)

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 7 - Estimate Of Interest Income For Fiscal Year 2028 Budget

Fund/Reserve	TD Bank Funds
Operating	$ 2,554,816
Reserve for O & M	4,166,612
Pumping Reserve	99,260
Self-Insurance Reserve	946,201
Rate Stabilization Fund	5,025,981
Estimated Total	$ 12,792,870

$12,792,870 @	3.0%	$ 383,786
	Total	$ 383,786
	Estimate	$ 383,800

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 8 - Unanticipated Revenue

Funds to be appropriated Into the Rate Stabilization Fund for Fiscal Year 2028

			Amount
FY26 Net Year-End Balance			$2,000,000
Transfer from SWP fund			$200,000
Overdrafts	Billed	Amount	
Greenbriar	Jul-25	$320	
Greenbriar	Aug-25	$728	
Greenbriar	Sep-25	$710	
Morris Cty MUA	Aug-25	$443	
NJ American	Jun-25	$11,423	
NJ American	Jul-25	$134,317	
NJ American	Aug-25	$186,689	
NJ American	Sep-25	$82,103	
NJ American	Feb-26	$827,865	
Princeton Ops	Jul-25	$279	
Princeton Ops	Aug-25	$310	
RVCC	Aug-25	$697	
Roxiticus	Jul-25	$83	
Roxiticus	Aug-25	$951	
Somerset Cty Golf	Aug-25	$821	
Trump National GC	Aug-25	$508	
Total			$1,248,247
Other Sources of Funds			
	Grand Total		$3,448,247
			$3,448,250

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 9 - Fund Balances as of June 2026

	REVENUE FUND	OPERATING ACCOUNT	OPERATING FUND	O & M RESERVE	LONG-TERM INVESTMENTS O & M RESERVE	TOTAL
BALANCE 6/30/26	$ 93,382	$ 1,019,958	$ 2,554,816	$ 1,546,619	$ 2,619,993	$ 7,834,768
Add - Reimbursement from CIP for June outlays			$ 5,133,729			$ 5,133,729
Deduct: Accrued expenses to be paid as of 6/30/26			(308,567)			(308,567)
Deduct: May 1st billing, received			(1,934,444)			(1,934,444)
Adjusted Balances 6/30/26	$ 93,382	$ 1,019,958	$ 5,445,534	$ 1,546,619	$ 2,619,993	$ 10,725,486
INCOME						
Reimbursement Manasquan Receipt of Headquarters Overhead Expenses for 7/10/26			222,750			222,750
EXPENSES						
O & M Expenses - (A/P 6/30/26) Includes accrued Payroll thru 6/30/26			(427,211)			(427,211)
Capital items to be purchased by 6/30/26 - estimated			(150,000)			(150,000)
Various Reserve contributions (one month)			-			-
PROJECTED BALANCE AT 6/30/26	$ 93,382	$ 1,019,958	$ 5,091,073	$ 1,546,619	$ 2,619,993	$ 10,371,025
Less: O & M reserve balance (3 mos required by resolution)						(5,219,055)
Adjusted balance of funds available June 2026						5,151,970
Use of Available Funds						
Unanticipated revenues (overdrafts in FY26 to be available for appropriation to Rate Stabilization Fund for FY28)						(1,248,247)
Projected Net Balance						**$ 3,903,723**

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 10 - Projected Fiscal Year 2028 Operations & Maintenance Component and Debt Service Assessment Sales Base

USER	DAILY ALLOCATION (MGD)	DAYS PER YEAR	TOTAL MG/YR	ANNUALIZED SALES BASE (MGD)
East Brunswick Twp	8.000	365	2,920.000	8.000
NJ American Water Company	126.600	365	46,209.000	126.600
Mercer County Park Commission – Golf	0.132	184	24.300	0.067
Middlesex Water Co.	27.000	365	9,855.000	27.000
New Brunswick, City of	10.500	365	3,832.500	10.500
North Brunswick Twp.	8.000	365	2,920.000	8.000
Princeton University PPL	0.150	365	54.750	0.150
Trenton Country Club	0.126	365	46.000	0.126
Suez Water Lambertville	0.490	365	178.850	0.490
Ridge at Back Brook	0.111	365	40.510	0.111
Roxbury Water Company	0.041	365	15.000	0.041
Royce Brook Golf Club	0.165	365	60.230	0.165
Hunterdon County Golf (Heron Glen)	0.079	365	28.800	0.079
Raritan Valley Country Club	0.012	365	4.380	0.012
East Windsor Municipal Utilities Authority	0.011	365	4.000	0.011
Somerset County Park Commission (Neshanic Valley Golf Club)	0.142	365	51.750	0.142
Lamington Farms LLC (Trump National Golf Club)	0.170	365	62.100	0.170
Morris County Municipal Utilities Authority	0.079	365	28.830	0.079
Mt. Olive Township	0.010	365	3.554	0.010
Washington Township Municipal Utilities Authority	0.035	365	12.775	0.035
Borough of Glen Gardner	0.008	365	2.775	0.008
Roxiticus Golf Club	0.046	365	16.790	0.046
Hamilton Farm Golf Club	0.138	365	50.400	0.138
Springdale Golf Club	0.098	365	35.640	0.098
NJ Department of Corrections	0.025	365	9.250	0.025
Stonebridge Community Assoc.	0.081	365	29.565	0.081
Village Grande @ Bear Creek	0.074	365	27.010	0.074
US Concrete	0.023	365	8.500	0.023
Princeton University Operations	0.027	365	9.855	0.027
			TOTAL SALES BASE	**182.308**

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 11 - Operations And Maintenance Rate Component

Fiscal Year 2028

Operations and Maintenance Rate Component
Fiscal Year: 2028

Funds Required for FY28 Budget

Proposed Operating Expense and Capital Budget	$	21,186,220
Less Miscellaneous Revenues & Interest Income		($431,000)
Other Available Funds		($3,448,250)
Net Budget Requirement		$17,306,970
Less: 182.308 x 203 x 61Days (Cash received in July and August for water used in May and June based on $203.00/mg)		($2,257,520)
Additional Revenue required to cover Operations and Maintenance Expense through 6/30/28		$15,049,450

Computation of Operations & Maintentance Rate for Fiscal Year 2028

Sales Base
Period 7/1/27 to 4/30/28 305 days x 182.308 mgd = 55,603.94 mg

Required Operations & Maintenance Rate FY2028

$$\frac{\$15,049,450 \text{ mg}}{55,603.94 \text{ mg}} = 271.00 \text{ mg}$$

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 12 - Debt Service Rate Component for NJEIFP Loan Repayment

Debt Service Rate Component for NJIB Loan Repayment

Effective July 1, 2027 (FY2028, July 1, 2027-June 30, 2028)

Total due on Principal and Interest $ 7,265,796 /year

$$\text{Debt Service Rate for NJIB Loan} = \frac{\$7{,}265{,}796}{182.339\text{mgd} \times 365\text{ days}} = \$109.00\text{ /mg}$$

*This rate may be subject to future adjustments based on actual loan terms.

NEW JERSEY WATER SUPPLY AUTHORITY
RARITAN BASIN SYSTEM

Schedule 13 - Capital Improvement Program

Fiscal Years 2027-2031

PROJECT	ESTIMATED PROJECT COST	ESTIMATED PROJECT COST (FY25)	Period First Identified	Priority	Prior Years	$33 FY 2027	$55 FY 2028	$55 FY 2029	$55 FY 2030	$55 FY 2031+
Rehab Swan Creek Aqueduct New Project Includes Culvert Work (1245)	$ 1,500,000	$ 1,200,000	2015	High	$ 255	$ 150,000	$ 300,000	$ 500,000	$ 549,745	
Dam Improvements as Recommended by TRB (Preliminary Eng'g and Owner's Eng't) (1258)	$ 2,700,000	$ 2,700,000	2013	High	$ 2,539,733	$ 100,000	$ 60,267			
Round Valley Reservoir Dams-Rehab & Resource Preservation Project (eng only) (bond)	$ 5,533,917	$ 5,900,000	2015	High	$ -					
Round Valley Dam Improvements - Construction (bond)	$ 67,321,522	$ 65,000,000	2015	High	$ -					
Construction Management for Round Valley Dam Improvements - Engineering (bond)	$ 10,006,469	$ 9,000,000	2015	High	$ -					
Security Camera Improvements at RV & SRA (Not bonded)	$ 1,100,000	$ 1,200,000	2016	High	$ -	$ 1,100,000				
Security Improvements at RV and SR (Perimeter hardening) (Not bonded)	$ 800,000	$ 800,000	2017	High	$ -			$ 500,000	$ 300,000	
Spruce Run Grouting (bond)	$ 68,000,000	$ 30,000,000	2015	High	$ -					
Spruce Run Spillway Improvements (bond)	$ 13,000,000	$ 44,000,000		High	$ -					
New 2D Inundation Mapping for Round Valley and Spruce Run Reservoir and No Name Dam 31	$ 500,000	$ 500,000	2015	High	$ -		$ 250,000	$ 250,000		
Refurbis. of Main Pumps/Motors 4, 5, 7, & 8 with addtl upgrades (trav. water screens) (1212,1213,1214,1246	$ 6,000,000	$ 9,000,000	2008	High	$ 2,680,352	$ 500,000	$ 2,819,648			
Authority Wide Underground Storage Tank Removal Program and Ancillary Work:				High						
- Replace Boilers at Spruce Run Administration Building	$ 175,000	$ 175,000	2018	High	$ -	$ 43,750	$ 131,250			
- Emergency Generator at Spruce Run Administration Building	$ 400,000	$ 400,000	2019	High	$ -	$ 100,000	$ 300,000			
- Replace Underground Heating Oil Tank at South Branch Pumping Station	$ 600,000	$ 300,000	2018	High	-	$ 150,000	$ 450,000			
- Replace Underground Heating Oil Tank at Spruce Run Admin Building (1215)	$ 600,000	$ 300,000	2019	High	96,253	$ 150,000	$ 353,747			
- Replace Underground Storage Tanks at Canal Field Office (1211)	$ 600,000		2019	High	114,817	$ 150,000	$ 335,183			
- Replace Underground Diesel and Gasoline Tanks at Spruce Run Admin Building	$ 600,000	$ 600,000	2019	High		$ 150,000	$ 450,000			
SR Reservoir Multidisciplinary Release Works Improvements & Studies (1288)	$ 5,000,000	$ 4,000,000	2016	High	$ 790,990	$ 600,000	$ 2,000,000	$ 1,609,010		
Prallsville Pit / Spillway Gates - FEMA (1297)	$ 400,000	$ 400,000		High	$ 309,735	$ 90,265				
Round Valley Outlet Tower Sluice Gates 1218	$ 500,000	$ 500,000		High	$ 514,579	Done as of Q127				
Wastegate and Lock Evaluation and Repair - D&R Canal	$ 603,656	$ 603,656	2020	High					$ 350,000	$ 253,656
7500 kVA Transformer Replacement - SBPS (Includes Roof Replacement)	$ 5,000,000	$ 5,000,000		High		$ 500,000	$ 1,000,000	$ 1,000,000	$ 2,500,000	
SBPS Complete Electrical Rehabilitation (includes MV motor controllers for all pumps/motors) (bond)	$ 12,000,000			High	$ -					
Watershed Generator	$ 32,900			High	-	$ 32,900				
RV Force Main & Release Drains and Air Relief Chambers Rehab	$ 1,000,000		2025	High	-			$ 500,000	$ 500,000	
RV North Vault Flow Control System (Valves, Meters, Controls)	$ 200,000		2025	High	-		$ 100,000	$ 100,000		
	$ 204,173,464	**$ 181,578,656**								
SBPS Alternate RV Release Works Rehabilitation	$ 1,000,000		2026	Med High				$ 250,000	$ 750,000	
Scudder Falls Wastegate Controls Improvement / Washington Crossing/Ten Mile - SCADA replacement	$ 250,000	$ 75,000	2019	Med High	$ -		$ 250,000			
Rehab of Upper Canal Embankment - Raven Rock to Prallsville (1254)	$ 8,000,000	$ 6,000,000	2006	Med High	$ 271,190	$ 250,000	$ 4,000,000	$ 3,478,810		
Rehabilitate Flow Control Gate on Back Race at Lambertville	$ 150,000	$ 150,000	2019	Med High	$ -		$ 75,000	$ 75,000		
Repair of Pipe at Whitehead Road	$ 800,000	$ 500,000	2012	Med High	$ -			$ 250,000	$ 550,000	
Rehabilitation Work at Washington Crossing Spillway	$ 400,000	$ 300,000	2012	Med High	$ -				$ 200,000	$ 200,000
Security System and Upgrades (Clinton and Canal)	$ 450,000	$ 450,000	2003	Med High	$ -	$ 50,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
Rooftop Hydronic Heater for Auto Shop - Spruce Run Admin.	$ 50,000	$ 50,000	2020	Med High				$ 50,000		
Removal of Collapsed Canal Railroad Bridge at Station 523+50 (1216)	$ 500,000		2024	Med High	$ 90,275	250,000	159,725			
Watershed New Lab	$ 1,000,000		2025	Med High	$ -		100,000	500,000	400,000	
SR Annex Roof	$ 300,000		2025	Med High	$ -		150,000	150,000		
	$ 12,900,000	**$ 7,525,000**								
Alexauken Creek Aqueduct	$ 1,000,000	$ 1,000,000	2015	Medium	$ -				$ 500,000	$ 500,000
Rebuild Stone Embankment at the 10 Mile Waste Gate and Rebuild Façade	$ 350,000	$ 200,000	1990	Medium	$ -		$ 100,000	$ 250,000		
Rehab of Spillway Upstream of Griggstown Lock	$ -	$ -	2010	Medium	-					
Rehab of Culvert at Station 2550+90 (1 mile upstream of 10-mile)	$ 700,000	$ 700,000	2008	Medium	-				$ 700,000	
Spruce Run Administration Building Network Data Closet Construction	$ 100,000	$ 100,000	2019	Medium	-				$ 100,000	
Round Valley South Dam Access Road Paving	$ 400,000		2024	Medium	-				400,000	
Mannon Sauerland Pond	$ 500,000		2024	Medium	-					500,000
Spruce Run Tower and Sluice Gate Work (Change to Scheduled RV & SR Tower Dive Inspections)	$ 275,000		2025	Medium	-				275,000	
Roof at 10-Mile Pump Station	$ 50,000		2025	Medium	-		50,000			
Improvements to Bernard Drive Overbank Spillway	$ 100,000		2025	Medium	-			100,000		
	$ 3,475,000	**$ 2,000,000**			**7,408,179**	**4,366,915**	**13,534,820**	**9,662,820**	**8,174,745**	**1,553,656**
Rehab of Traprock Spillway	$ -	$ -	2010	Low	-					
Dredging between Landing Lane and Route 18 - Engineering	$ -	$ -	2007	Low	-					
Dredging of Canal Between Lambertville and Route 1	$ -	$ -	2015	Low	-					
Dredging of Canal Between Amwell Road and 10 Mile	$ -	$ -	2015	Low	-					
Storage Building at Canal Field Office	$ 500,000	$ 500,000	2019	Low	-				500,000	
Spruce Run Administration Building Tie-in to Public Water Supply	$ -	$ -	2018	Low	-					
Storage Building near Spruce Run Annex	$ 500,000	$ 500,000	2018	Low	-				500,000	
Construction Bedload Stone Trap @ Wickecheoke Creek	$ -	$ -	1995	Low	-					
Cutoff Wall in Shipetaukin Creek Guard Bank	$ -	$ -	2005	Low	-					
Rehab of Gold Run Spillway	$ -	$ -	2008	Low	-					
Carnegie Lake Culverts Investigation / Isolation	$ -	$ -	2015	Low	-					
Raven Rock Retaining Wall Downcanal of Lock	$ 500,000	$ -	2015	Low	-			100,000	400,000	
Refurbishment of the Main Pumps & Motors 3 & 9	$ -	$ -	2015	Low	-					
Refurbishment of the Main Pumps & Motors 2 & 10	$ -	$ -	2015	Low	-					
Canal Culvert Rehabilitation 2249+79 (Suydam)	$ -	$ -	2015	Low	-					
Canal Culvert Rehabilitation 2661+86 (Randolph Brook)	$ -	$ -	2015	Low	-					
Canal Culvert Rehabilitation 2992+34 (Mile Run Culvert)	$ -	$ -	2015	Low	-					
Concrete Repairs at the Sullivan Way Aqueduct	$ -	$ -	2007	Low	-					
Rehab of the Four Mile Spillway	$ -	$ -	2010	Low	-					
Third Hand Shop Culvert under D&R Canal Cleaning (Partially Clogged)	$ -	$ -	2019	Low	-					
No-Name Culvert Under Canal Sta. 936+50 Outlet Cleaning (Partially Clogged)	$ -	$ -	2019	Low	-					
Pipeline Evaluation - Whitehouse Release Pipeline	$ -	$ -	1990's	Low	-					
Pipeline Evaluation - Round Valley Force Main	$ -	$ -	1990's	Low	-					
Kingston Wastegate Operators	$ -	$ -		Low	-					
Spruce Run Administration Building HVAC Evaluation	$ -		2024	Low	-					
	$ 1,500,000	**$ 1,000,000**								
TOTAL	**46,201,135**			**-**	**7,408,179**	**4,366,915**	**13,534,820**	**9,762,820**	**9,574,745**	**1,553,656**
Balance CIP						**21,328,985**	**11,453,998**	**5,351,011**	**(563,901)**	**1,542,276**

RARITAN BASIN SYSTEM
CAPITAL IMPROVEMENT PROGRAM
Fiscal Years 2027 – 2031
Updated – August 2026

The following is a description of projects that the Authority anticipates being funded from the Capital Improvement Program (CIP) in Fiscal Years 2027-2031. Discussion also includes projects that may be delayed beyond FY 2031 due to funding.

PROJECT
Rehab Swan Creek Aqueduct New Project Includes Culvert Work
Dam Improvements as Recommended by TRB (Preliminary Eng'g and Owner's Eng'r)
Round Valley Reservoir Dams-Rehab & Resource Preservation Project (Eng. only) (bond)
Round Valley Dam Improvements - Construction (bond)
Construction Management for Round Valley Dam Improvements - Engineering (bond)
Security Improvements at RV Reservoir (Cameras) (Not bonded)
Security Improvements at RV and SR (Perimeter hardening) (Not bonded)
Spruce Run Grouting (bond)
Spruce Run Spillway Improvements (bond)
New 2D Inundation Mapping for Round Valley and Spruce Run Reservoir
Refurbishment of the Main Pumps & Motors 4, 5, 7, & 8 with additional upgrades
Authority Wide Underground Storage Tank Removal Program and Ancillary Work
A. Replace Boilers at Spruce Run Administration Building
B. Emergency Generator at Spruce Run Administration Building
C. Replace Underground Heating Oil Tank at South Branch Pumping Station
D. Replace Underground Heating Oil Tank at Spruce Run Admin Building
E. Replace Underground Storage Tanks at Canal Field Office
F. Replace Underground Diesel and Gasoline Tanks at Spruce Run Administration Building
SR Reservoir Multidisciplinary Release Works Improvements & Studies
Prallsville Pit / Spillway Gates – FEMA
Sluice Gate Cleaning, Inspection, and Refurbishment at the Spruce Run and Round Valley Reservoirs – 1218
Wastegate and Lock Evaluation and Repair - D&R Canal
7500 kVA Transformer Replacement - SBPS
SBPS Complete Electrical Rehabilitation (includes MV motor controllers for all pumps/motors)

Watershed Generator
RV Force Main & Release Drains and Air Relief Chambers Rehab
RV North Vault Flow Control System (Valves, Meters, Controls)
SBPS Alternate RV Release Works Rehabilitation
Scudder Falls Wastegate Controls Improvement
Rehab of Upper Canal Embankment - Raven Rock to Prallsville
Rehabilitate Flow Control Gate on Back Race at Lambertville
Repair of Pipe at Whitehead Road
Rehabilitation Work at Washington Crossing Spillway
Security System and Upgrades (Clinton and Canal)
Rooftop Hydronic Heater for Auto Shop - Spruce Run Admin.
Removal of Collapsed Canal Railroad Bridge at Station 523+50
Watershed New Lab
SR Annex Roof
Alexauken Creek Aqueduct
Rebuild Stone Headwalls of the Wastegate Downstream of Ten Mile Lock
Rehab of Spillway Upstream of Griggstown Lock
Rehab of Culvert at Station 2550+90 (1 mile upstream of 10-mile)
Spruce Run Administration Building Network Data Closet Construction
Round Valley South Dam Access Road Paving
Mannon Sauerland Pond
Spruce Run Tower and Sluice Gate Work (Change to Scheduled RV & SR Tower Dive Inspections)
Roof at Ten Mile Pump Station
Improvements to Bernard Drive Overbank Spillway
Rehab of Traprock Spillway
Dredging between Landing Lane and Route 18 - Engineering
Dredging of Canal Between Lambertville and Route 1
Dredging of Canal Between Amwell Road and 10 Mile
Storage Building at Canal Field Office
Spruce Run Administration Building Tie-in to Public Water Supply
Storage Building near Spruce Run Annex
Construction Bedload Stone Trap at Wickecheoke Creek

Cutoff Wall in Shipetaukin Creek Guard Bank
Rehab of Gold Run Spillway
Carnegie Lake Culverts Investigation / Isolation
Raven Rock Retaining Wall Down Canal of Lock
Refurbishment of the Main Pumps & Motors 3 & 9
Refurbishment of the Main Pumps & Motors 2 & 10
Canal Culvert Rehabilitation 2249+79 (Suydam)
Canal Culvert Rehabilitation 2661+86 (Randolph Brook)
Canal Culvert Rehabilitation 2992+34 (Mile Run Culvert)
Concrete Repairs at the Sullivan Way Aqueduct
Rehab of the Four Mile Spillway
Third Hand Shop Culvert under D&R Canal Cleaning (Partially Clogged)
No-Name Culvert Under Canal Sta. 936+50 Outlet Cleaning (Partially Clogged)
Pipeline Evaluation - Whitehouse Release Pipeline
Pipeline Evaluation – Round Valley Force Main
Kingston Wastegate Operators
Spruce Run Administration Building HVAC Evaluation

Rehabilitation of the Swan Creek Aqueduct & Culvert

The Swan Creek Aqueduct and Culvert are located at approximate Station 363+00 on the Canal in the City of Lambertville, Hunterdon County. The aqueduct structure was erected to carry the Canal over Swan Creek, with the secondary function of a spillway for the Canal. An adjacent culvert also contributes to the conveyance of Swan Creek under the Canal, the multi-use trail, and the former Belvidere-Delaware Railroad. The Swan Creek Aqueduct is a concrete and masonry structure that was partially rehabilitated in 1989 when waste gates were replaced, some of the masonry was reconstructed, and some of the existing concrete was repaired with shotcrete.

Repairs were made to the aqueduct in 2006 following major flooding events on the Delaware River. Significant leakage occurred through the masonry wall on the southeast part of the structure where Swan Creek enters the opening under the aqueduct. A contractor was hired on an emergency basis to pump pressure grout behind the wall where a sinkhole had formed as a result of the seepage. The seepage was slowed significantly by the injection of the grout, although it did not stop completely.

A jet grout seepage cutoff wall was constructed in April 2009 to eliminate seepage through the wingwall. Most of the seepage was stopped with this strategy. An additional phase of repairs was

conducted in 2014, which included rehabilitation of masonry and concrete and replacement of the bent stem for one of the two waste gates.

The scope of work for the 2014 repair project was reduced during construction due to dewatering issues and safety concerns of the contractor. The corrugated metal liner in the north culvert showed signs of being corroded, limiting the amount of work which could be conducted in the culvert.

A Scope of Services has been developed and fee negotiations are under way to retain a consulting engineer to design a new structural liner to guard against further deterioration and concrete spalling. The design engineer will have to address all the concerns noted during the 2014 construction, as well as consider design options for the culvert rehabilitation and reinforcement that will not significantly reduce the flow rate capacities of the culverts. It is anticipated that design will commence in FY27.

Round Valley Reservoir Dams-Rehabilitation & Resource Preservation Project – Earthen Dam Rehabilitation and Ancillary Work

Preliminary Engineering and Owner's Engineer

Design Improvements to Round Valley Dams - Engineer of Record – Design Engineering Only

Earthen Dam Rehabilitation and Ancillary Work (Improvements to Round Valley Dams) – Construction (Bond)

Construction Engineering Management for Design Improvements to Round Valley Dams (Bond)

Round Valley Security Improvements (Cameras & Perimeter Hardening)

In connection with the 2013 Formal Dam Inspection, the Authority convened a Technical Review Board (TRB) in April-May 2014 comprised of experts in the fields of dam construction on limestone formations, evaluation of critical dam construction features, and geology related to dam construction. This was the first TRB that was assembled to review information about the construction and operation of the Round Valley (RV) Reservoir and the first one in 20 years to look at operations data at Spruce Run (SR) Reservoir. The SR and RV Dams were constructed in the 1960s. The TRB recommended additional information gathering of the construction plans and records for the RV dams, and the installation of piezometers at the three embankments at RV Reservoir. The TRB also recommended installation of additional piezometers at SR Dam. The TRB recommended that the side scan sonar, previously conducted in the mid-1980s at the SR Reservoir, be repeated and that the drainage pipes at the toe of the SR Dam be visually inspected by remotely operated cameras. The TRB also recommended that a follow-up to the first TRB be performed for RV and SR.

The 2013 contract with Gannett Fleming, the engineering consultant for the Formal Dam Inspection, was amended to oversee the performance of the above noted work, including but not limited to, subcontracting the specialty drillers for the installation of the piezometers at all four dams, subcontracting for the performance of the side scan sonar, and overseeing the follow-up TRB meetings for RV and SR.

In preparation for the follow-up RV TRB, Authority staff was tasked with compiling and digitizing all available records of the RV embankments. A searchable database was constructed to assist Authority staff, the TRB, the Owner's Engineer, and the Engineer of Record eventually chosen for the rehabilitation work at RV in their analysis of all available data pertaining to the construction and maintenance of the embankments. The first RV TRB took place in July 2015 and was specifically slated to conduct a Potential Failure Mode Analysis (PFMA) on the three RV Embankments (RV South, RV North, and RV Dike). In its report on the PFMA, the TRB recommended that the Authority "begin budgeting, engineering, and planning for the required modifications" to RV.

At that time, it was anticipated that construction would be large in scale and include the following, at a minimum:

- Foundation rock grouting, particularly at the embankments/abutments to mitigate potential sources of seepage; and
- Installation of a new blanket drain system on the downstream slopes of all three embankments at Round Valley to filter the existing seepage; and
- Installation of new toe drains to filter, collect, and convey embankment and foundation seepage safely away from the structures; and
- Installation of additional fill to flatten the downstream slopes to increase the stability factor of safety.

Schnabel Engineering was procured to act as the Engineer of Record to investigate, plan, design, and provide full-time construction management services for the above noted efforts. Gannett Fleming was procured to provide further engineering and consulting services during design and construction in the role of Owner's Engineer. While Schnabel Engineering will act as the Engineer of Record, Gannett Fleming will continue to provide advice and consultation to Authority staff during this very important project.

Schnabel Engineering and their subcontractor, French and Parrello completed the design plans, specifications, and permitting for the project. The following represents a summary of the tasks that comprise part of the design:

- Dredging of the Round Valley South Tower Intake Channel (detailed below);
- Security improvements at RV Reservoir (detailed below);
- Consider alternatives to rehabilitate the hydraulic valve on the Round Valley South Dam (detailed below);
- Remove and replace ten-inch cast iron pipe that connects the RV Force Main to the RV South Vault (detailed below);

- Repairs to the Round Valley building structures (towers and vaults, detailed below);
- Installation of a new blanket drain system on the downstream slopes of all three embankments at Round Valley to filter the existing seepage;
- Installation of new toe drains to filter, collect, and convey embankment and foundation seepage safely away from the structures;
- Electrical service improvements to the three embankments at RV Reservoir (detailed below);
- Grouting of the abutments at the North and South Dams.

It is noted that, apart from the security improvements, which will be financed through the CIP, long-term bond funding has been obtained from the New Jersey Infrastructure Bank (NJIB). Once the funding limit of the NJIB bond funding is reached, additional funds needed to meet project costs will be drawn from a designated debt service fund. The project is intended to be phased with the abutment grouting, RV South Dam intake channel dredging, and electrical improvements to be implemented prior to the large-scale work on the embankments, which will incorporate all the remaining noted scope items. The security improvements are scheduled to be constructed after the large-scale embankment work.

Round Valley North and South Dam Abutment Grouting (Construction Completed in FY20)

Following an initial recommendation from the TRB, the Engineer of Record reviewed all of the grouting records associated with the original construction. The Engineer of Record recommended grouting of the abutments at the North and South Dams. The abutments are the edges of the dam where the constructed embankment meets the existing valley slope. Review of the original grouting records suggested that the grouting was terminated before it reached the end of the abutments. The grouting in this project was accomplished by drilling through the overburden soils and into the bedrock below. Cementitious grout was then pumped under pressure into the bedrock to fill existing cracks or voids that may be present. This project was completed in FY20.

This project was bid out separately from the other RV projects so that it could be completed ahead of the large-scale embankment modifications. Since this project was financed through NJIB bonding, funding is not included in the CIP budget.

Dredging Intake Channel to Round Valley South Dam Tower (Construction completed in FY20)

When the Round Valley Reservoir was originally constructed, a channel was blasted and excavated from the rock leading into the reservoir side of the Round Valley South Dam Tower. Over more than 50 years of pumping from the river, the constructed channel filled with sediment. As part of the large-scale Round Valley Rehabilitation & Resource Preservation Project, the consultants were asked to prepare design plans to remove the significant volume of sediment from the channel.

The investigation and design for this project is included in the scope for the Engineer of Record on the Round Valley Reservoir Dams-Rehabilitation & Resource Preservation Project. The chosen design called for relocation of the sediment to the deepest parts of the reservoir. The project was bid, awarded, constructed, and completed in the winter of 2019/2020 (FY20).

This project was bid out separately from the other RV projects so that it could be completed ahead of the large-scale embankment modifications. Since this project was financed through NJIB bonding, funding is not included in the CIP budget.

Round Valley Reservoir Electrical Service Upgrades (Construction completed in FY21)

The Earthen Dam Rehabilitation and Ancillary Work (detailed below) project required the installation of a dewatering pump system at the toe of each embankment. Such a system requires the use of significant electricity. In advance of the large-scale project, the Authority made upgrades to the existing electrical service at the North Dam and South Dam and installed electrical service at the Dike. These services were sized appropriately for the dewatering system at each embankment and future improvements to the structures, including security upgrades and electric actuators. This project also included upgraded electric panels at each vault, generator transfer switches at each vault, and internet service installation at the Dike (for security improvements). This work was financed through NJIB bonding, so funding is not included in the CIP budget, and was completed in fall 2020 (FY21).

Earthen Dam Rehabilitation and Ancillary Work (One Construction Contract):

Embankment Modifications

The goal of the embankment modifications, as stated above, was to install a new blanket drain system on the downstream slopes of all three embankments at Round Valley to filter the existing seepage. Further, the existing seepage will be collected in new toe drains, monitored, and conveyed safely away from the structures.

Final design plans and technical specifications and permitting were completed. The scope of the design was discussed and vetted at a meeting that included the Engineer of Record, members of Authority staff, representatives of the NJDEP Bureau of Dam Safety, the Authority's Technical Review Board (TRB), and the Owner's Engineer. The design included excavation into each dam while maintaining a specific slope acceptable to the Engineer of Record and the TRB. The soils removed from the embankments were stockpiled at or near each dam site. Once the excavations

reached a certain depth, sand and gravel filtering drains were installed across the entire exposed downstream slope. In order to maintain a crest width sufficient for construction operations, the crests of the North and South dams were temporarily lowered. The maximum allowable reservoir pool elevation during the project was 360 feet, or 25 feet below normal pool.

At each embankment, the major excavation work was preceded by the installation of dewatering wells and piezometers. The dewatering wells lowered the phreatic line (groundwater levels) in the embankments. The new piezometers determined the effectiveness of the dewatering wells, which were proved prior to excavation into the embankments.

This project (Earthen Dam Rehabilitation & Ancillary Work) was bid in the fall of 2019 and awarded to a contractor with a notice to proceed in January of 2020. Construction was initiated shortly thereafter. The embankment work was phased with the Dike being constructed first, followed by the North Dam, and then the South Dam. The work is substantially complete. Only relatively minor punch list items remain. This project has been paid for through a separate application for bonding. Since it was bonded, funding is not included in the CIP budget. The funding limit of the NJIB bond funding has been reached and additional funds needed to meet project costs are being drawn from a designated debt service fund.

Round Valley Ancillary Work

Rehabilitate Hydraulic Valve on RV South Dam Low-Level Release

The existing RV low-level release valve was last rehabilitated in 1992 when a hydraulic valve actuator and hydraulic control system were installed at the Round Valley South Tower. This hydraulic system, with hoses reaching down to 180 feet below the water surface to the low-level release valve, replaced the out-of-service, original control system. The hydraulic valve installed in 1992 was no longer functional and required rehabilitation.

The investigation and design for this project was included in the scope for the Engineer of Record on the Round Valley Reservoir Dams-Rehabilitation & Resource Preservation Project. After inspection of the system and a report of proposed alternatives, the selected alternative was the complete abandonment of the low-level release pipeline. Abandonment was accomplished by filling the pipeline with grout. The hydraulic lines to the underwater actuator were also removed. This work was included in the contract for the Earthen Dam Rehabilitation and Ancillary Work contract and paid for through the above noted bonding. Since it was bonded, funding is not included in the CIP budget. This portion of the ancillary work was completed in FY22.

Rehabilitation of Ten-inch Cast Iron Pipe Connecting RV-S Dam Vault to Force Main

The existing ten-inch cast iron pipe connecting the 108-inch RV Force Main to the RV South Dam Vault was installed as part of the original construction of the Force Main. Through dye testing, Authority staff confirmed that an underground leak exists somewhere in this ten-inch cast iron pipe, likely adjacent to the vault. This pipe was installed underground with flanged

connections which are prone to leak in buried applications. The alternative selected for the repair was to replace the pipe by direct burial.

The investigation and design for this project were included in the scope for the Engineer of Record on the Round Valley Reservoir Dams-Rehabilitation & Resource Preservation Project. This work was included in the contract for the Earthen Dam Rehabilitation and Ancillary Work contract and paid for through the above noted bonding. Since it was bonded, funding is not included in the CIP budget. The funding limit of the NJIB bond funding has been reached and additional funds needed to meet project costs are being drawn from a designated debt service fund. This work was completed in FY24.

Repairs to Round Valley Reservoir Building Structures (Towers and Vaults)

The building structures (towers and vaults) at the Round Valley Reservoir were in need of maintenance. Authority staff believed it was prudent to take advantage of the potential lowered reservoir condition to make repairs to the reservoir building structures, including the underwater portions of the towers.

The Engineer of Record made inspections, including underwater portions, of the two towers in the Round Valley Reservoir. The work on the towers included repairs to the sluice gates, roof replacements, access ladder replacements, and replacement of the existing cranes. This project also included the purchase of an emergency portable generator to be used with the transfer switches being installed at each vault as part of the Round Valley Reservoir Electrical Upgrades project.

This work was included in the contract for the Earthen Dam Rehabilitation and Ancillary Work contract and paid for through the above noted bonding. Since it was bonded, funding is not included in the CIP budget. The funding limit of the NJIB bond funding has been reached and additional funds needed to meet project costs are being drawn from a designated debt service fund. This work was completed during the fourth quarter of FY25.

Security Improvements at RV Reservoir - Cameras

Staff has identified potential improvements to existing cameras and has recommended the addition of new cameras as the most prudent means of enhancement. The investigation and design for this project is included in the scope for the Engineer of Record on the Round Valley Reservoir Dams-Rehabilitation & Resource Preservation Project. Engineering design is nearly complete and this work is expected to begin in late FY27. It is anticipated that this work will be paid for from the CIP budget.

Security Improvements RV and SR Perimeter Hardening

Additional security improvements are considered for the RV and SR embankments on a continual basis. Furtherance of the existing perimeter hardening is being considered as part of the next improvements to the existing security. It is anticipated that this work will be paid for from the CIP

budget. The work will be completed as part of multiple projects over the next several years, with the earliest improvements expected to take place in FY28.

Spruce Run Dam Foundation Grouting Program

Construction of the Spruce Run Dam in the early 1960s faced a significant engineering challenge: the bedrock intended as the dam's foundation was comprised of the Kittatinny Limestone formation. Limestone is a soluble carbonate rock which gradually dissolves in the presence of even the weakest acids. Over years of chemical weathering by groundwater, limestone formations characteristically develop extensive networks of solution channels, caverns, and voids.

The dam designers needed to find a way to fill the fractures and cavities to create a suitable foundation for the earthen embankment. After various studies and explorations, the designers developed a grouting program which added strength and minimized seepage through the dam's foundation. The program consisted of installing a 100-foot-deep grout curtain along the dam's alignment as well as conducting shallow blanket grouting over the worst cavernous zones.

For the last 60+ years, the Spruce Run Dam's original grout curtain has largely performed as intended. However, one of the challenges with grouting in limestone formations is that the rock's voids and fissures are often filled with native soil material, which is not usually displaced by the pressure-injected grout. As time passes, this soil infill can be flushed out by groundwater, leaving voids behind.

Authority staff has monitored this condition since the 1980's using instrumentation located in the dam embankment and foundation. In the 1990's the Authority convened a Technical Review Board (TRB) to analyze foundation conditions and make recommendations. In 2014, on the basis of observed trends in the instrumentation, the Authority retained the services of a TRB consisting of three highly qualified experts in treating dam foundation seepage. Since 2014, the TRB has met on numerous occasions and most recently in June 2022. The TRB also reviews instrumentation data several times a year. In September 2021, the TRB concluded that the instrumentation suggests that the existing grout curtain continues to slowly deteriorate and that the condition has progressed to a point that it would be prudent to initiate plans for a remedial grouting program.

Following the TRB recommendation, the Authority issued a Request for Proposals (RFP) in spring 2022 for professional engineering services for the project. A design contract was awarded in December 2022. A construction contract was awarded in November 2024 with a Notice to Proceed issued February 23, 2025. Construction is expected to take up to three years, with project completion occurring in April 2028 (FY28). Both the design and construction of this project are being financed through a combination of a Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities (BRIC) grant with the balance of project cost coming from NJIB bonding. As such, funding is not included in the CIP budget.

Spruce Run Spillway Improvements

As part of the Spruce Run Reservoir multidisciplinary engineering project, the consultant was tasked with evaluating the spillway design flood (SDF) and the existing spillway capacity.

The SDF represents the runoff resulting from the Probable Maximum Precipitation (PMP). The PMP is the regulatory design basis for large dams in New Jersey. Preliminary analysis utilizing the current PMP indicates the spillway is undersized for this extreme weather event (approximately 34 inches of rain in 24 hours). The NJDEP recently completed a re-evaluation of the PMP using state-of-the-art analyses. The consultant utilized the updated PMP generated by NJDEP to finalize the analysis of the Spruce Run spillway capacity in late FY26. It was determined that the revised SDF will not exceed the existing capacity of the spillway, but the compounded effect of wind generated wave action will slightly overtop the earthen embankment. The consultant is currently investigating New Jersey Dam Safety requirements related to this to determine the level of modification required to the spillway weir and/or earthen embankment to pass the SDF. The Authority has begun preparation of a scope of services to procure professional services for investigation, design, and construction management of any necessary spillway modifications in FY27-28. Construction of improvements will follow. It is anticipated that construction of the improvements will be funded via NJIB bonding. As such, funding is not included in the CIP budget.

New 2-dimensional (2-D) Inundation Mapping for Round Valley and Spruce Run Reservoir

In 2014 and 2015, the Authority upgraded the inundation mapping (attachments to the Emergency Action Plan) for all four of the high hazard dams at the Spruce Run and Round Valley Reservoir Complex in Clinton. This mapping upgrade was done by taking the old inundation model's one-dimensional (1-D) data that was originally drawn onto high scale USGS mapping and transferring it into a GIS overlay of modern aerial images. This work produced maps that were significantly more detailed than the previous mapping and showed the location of residential and commercial structures that may be affected by flooding during a dam emergency.

The drawback regarding these upgraded maps is that the inundation areas are still dependent upon the 1-D computational data from 1980. The 1-D mapping is based on empirical calculations using cross-sections taken at large intervals along the rivers. The Authority believes that it is prudent to invest in a new study where computers model the flows based on 2-D topographic squares in the flood zones. The degree of accuracy of this method far surpasses the existing 1980 1-D studies. Modern deliverables may also include animations as well as color coded mapping layers depicting depth of water in any particular area in a time-sequenced video. It is also possible to better simulate the effect of tidal fluctuations on the inundation area, which was not possible to analyze at the time of the initial models. This work will begin in FY27, now that the dam rehabilitation work at Round Valley is substantially complete so that the modeling correctly represents the final configuration of the dams and once the final configuration of the Spruce Run spillway weir is determined from the results of the recently updated H&H study incorporating the newly modeled SDF.

Refurbishment of Main Pumps and Motors No. 4, 5, 7, & 8 with Additional Upgrades at the South Branch Pumping Station

The Authority's South Branch Pumping Station (SBPS) is located in Clinton Township. The primary purpose of the SBPS is to pump up to 350 million gallons per day (MGD) of raw water from the South Branch of the Raritan River to the Round Valley Reservoir as needed to replace depleted storage. The water transfer is accomplished using ten horizontal, centrifugal pumps with 2,000 horsepower motors. Maintenance of the pumps and motors is essential to operations at the SBPS.

The SBPS was built in 1965. In 2009, the Authority procured an engineering consultant to provide professional engineering services to prepare an Asset Management Plan (AMP) for the SBPS, which was completed in 2011. The AMP included inspection, testing, and conditions assessment for major mechanical and electrical systems and identified a need for renewal and replacement of some mechanical and electrical components. Following recommendations of the AMP, the Authority proceeded to retrofit several of the major mechanical and electrical equipment systems. The Authority recently refurbished two of the ten pumps, numbers 1 and 6, as part of a trial and a phased approach to rehabilitate ten pumps, motors, suction piping, and baseplate assemblies. The two pumps refurbished under the pilot program were placed back into service in 2016.

This project represents the second phase of the rehabilitation. An engineering consultant designed the rehabilitation of four additional pumps, motors, and base plate mountings in the north and south bays of the SBPS, listed as pump Nos. 4, 5, 7, and 8. The project includes fabrication and installation of new baseplates to address alignment issues. A construction contract was awarded in April 2023. The pumps and motors are complete, and the contractor is awaiting delivery of custom fabricated, location specific piping couplings to facilitate installation. Work is expected to continue into FY28.

While pump and motor refurbishment are under way, the next phase of pump station rehabilitation commenced, which is a construction project to replace the existing traveling water screens, which are original to the station and at the end of their service life. A construction contract was awarded in the fourth quarter of FY24 to remove the existing traveling water screens and furnish and install new screen assemblies. This work was completed in FY2025.

The replacement of the Force Main surge tank roof and Whitehouse Release structure roof are being incorporated into this project as well, with design nearly complete as of this writing and bidding for construction anticipated in the second quarter of FY27.

Other miscellaneous pump station system upgrades, including electrical and control upgrades, are anticipated to be addressed in this project as well. These include alarm sensors and systems replacement, computerized monitoring of pump performance, control room improvements, safety upgrades, HVAC upgrades, pump cooling systems, asset management plan update, force main hydraulic model study, and VFD drive unit study.

While the rehabilitation of the four pump and motor assemblies and surge tank and release structure roofs are currently under way and the replacement of the traveling water screens is complete, the remaining components of this project will be implemented in subsequent fiscal years.

Authority Wide Underground Storage Tank Removal Program and Ancillary Work

The consulting engineering work for the projects outlined below as Items A - F will be combined into a single engineering contract due to the interconnectedness of the various systems and overlap in professional services needed to perform the work. The projects will likely be bid as separate construction contracts. The RFP for professional design services is nearly complete and is anticipated to be advertised in early FY27. Construction will follow in subsequent years.

A. Replace Boilers at Spruce Run Administration Building

The four oil-fired boilers in the basement of the Spruce Run Administration Building are nearing the end of their service life and require replacement. These boilers provide the main source of heat for most of the original portion of the Administration Building, although there are currently multiple independent systems elsewhere in the building that provide additional heating. This project requires HVAC engineering analysis, design, and construction code permitting work. The engineer would be tasked with determining the best HVAC solution to replace the four boilers. Possibilities include modern high efficiency boilers, oil fired boilers, natural gas boilers (requiring external gas line extensions), or installation of a system of boilers which could utilize both options. The project would also include the replacement of the hot water heater.

B. Emergency Generator at Spruce Run Administration Building

The Spruce Run Administration Building's emergency power service is dependent on the operation of a generator that is nearing the end of its service life. The existing generator is in the basement and was historically supplied by the building's heating oil underground storage tank. This tank has since been removed, and the boilers and emergency generator are currently being serviced by a temporary above ground storage tank. The Authority intends to replace the generator with an outdoor unit powered by either diesel supplied by a new, permanent above ground storage tank (AST) or natural gas, requiring a gas line service extension. The project will involve load analysis and testing, upgrade and/or replacement of existing electrical panels and transfer switches. An engineer will be procured who will design necessary elements and acquire all required permits.

C. Replace Underground Heating Oil Tank at South Branch Pumping Station

The existing 10,000-gallon steel underground storage tank (UST) which contains heating oil for the pumping station is approximately 30 years old. EPA/NJDEP regulations require cathodic protection and testing. If replaced with an underground tank, the new tank would likely be a modern double-wall fiberglass reinforced UST. This project would also include the abandonment and removal of the existing steel tank with a contracted licensed LSRP and permitting with the NJDEP. However, the recommendation at this time would be to replace the tank with an above ground storage tank in an alternate location. This would reduce the environmental liability of the Authority in the long term and reduce insurance costs. Additionally, the two oil-fired boilers that provide heat to the pump station are at the end of their service life and in need of replacement. An engineer will be procured who will design the necessary elements and acquire all required permits.

D. Replace Underground Heating Oil Tank at Spruce Run Administration Building

The 5,000-gallon steel underground storage tank (UST) which contained heating oil for the Spruce Run Administration Building was approximately 30 years old. This tank serviced the boilers, hot water heater, and the building's emergency generator. EPA/NJDEP regulations require cathodic protection and testing. In June of 2024, the tank failed its triennial cathodic protection test, NJDEP was notified, and an Administrative Consent Order (ACO) was issued with a compliance schedule for procuring an above ground storage tank (AST) and emptying, removing, and closing the existing UST by June 30, 2025. It is noteworthy that the test of the cathodic protection system was performed on the appropriate NJDEP-approved frequency. Further, all other testing of the tank, including tightness testing, and interstitial space monitoring were in full compliance and showed no deficiencies. Contracts were secured with a design engineer and a licensed site remediation professional (LSRP) to prepare design drawings and specifications in addition to handling permitting with the NJDEP and DCA. A temporary AST has been procured, and a licensed plumber contracted to connect it to the Authority's existing equipment. An engineer will be procured for these projects who will evaluate alternative fuel sources for the proposed SRA generator, boilers, and hot water heater to determine the need for a permanent AST.

E. Replace Underground Storage Tanks at Canal Field Office

The Authority's Canal Field Office (CFO) is located at 770 Bear Tavern Road, Ewing Township, Mercer County. The facility was constructed in 1992 and is a combination of an office building, maintenance yard, storage shed and auto shop. The existing fuel station is situated in the northeast portion of the site and consists of two bays; one bay dispenses gasoline from a 10,000-gallon UST and the other bay dispenses diesel fuel from a 6,000-gallon UST. The fuel station is original, has been in service for approximately 30 years, and the Authority is planning to replace it with new fuel dispensing equipment and above ground storage tanks. The procured professional services will include both a design consultant and a Licensed Site Remediation Professional (LSRP).

F. Replace Gasoline and Diesel Underground Storage Tanks at Spruce Run Administration Building Fuel Island

The Spruce Run fuel dispensing facility utilizes two existing underground storage tanks (USTs) for gasoline and diesel product. The 5,000-gallon and 2,000-gallon double-wall steel fiberglass externally coated USTs contain gasoline and diesel fuel, respectively. The tanks supply fuel for the maintenance equipment and vehicle fleet being used by the Spruce Run Administration Building staff, South Branch Pump Station staff, and Watershed Protection staff. These tanks are approximately 30 years old and were considered for replacement with modern double-wall fiberglass reinforced USTs or possibly with above ground storage tanks in an alternate location adjacent to the fueling island. However, during the construction of the SR fuel dispensers' replacement project, it was necessary to pump out remnant fuel within the gas and diesel fuel tanks. The operation included a confined space entry in order to swipe and inspect the interior of the tanks. The inspection revealed the tanks to be in sound condition. However, due to age and insurance requirements, these tanks are included for replacement in this project.

Multidisciplinary Engineering Project for Structures Rehabilitation in Connection with the Spruce Run Reservoir Outlet Works

Authority staff has procured a consultant to provide professional engineering services for all the tasks described below as A through J. The tasks will manifest as more than one construction project.

A. Rehabilitation of the Spruce Run Flow Measuring Weir

The Spruce Run Flow Measuring Weir is a reinforced concrete structure that crosses the Spruce Run downstream of the Spruce Run Reservoir and upstream from the confluence with the South Branch of the Raritan River. The weir was constructed in the early 1960s with the rest of Spruce Run Dam to provide a pool that functions as a stilling basin for the primary spillway. The adjoining USGS gauging station on the west bank of the weir measures the total flow of water that is discharging from Spruce Run, including releases through the pipelines and/or overflow at the spillway. Authority staff has been making "patchwork" repairs to the weir over the past decade. However, the concrete structure is deteriorated and spalling or cracking surfaces must be routinely repaired. The consulting engineer has inspected and evaluated the weir and is in the process of designing replacement of the structure, including a bypass sluice gate. It is noted that the structure meets the definition of a dam, and the New Jersey Bureau of Dam Safety has classified the structure as a Class III – Low Hazard dam.

Near final design plans and specifications have been submitted to NJDEP Bureau of Dam Safety for permit review, with construction bidding anticipated for the second half of FY27.

B. Spruce Run Primary Overflow Spillway Rehabilitation

The primary spillway is a 550-foot long, five-foot high, reinforced concrete ogee overflow weir located at the west abutment of the dam with a crest at elevation 273.0, which is the normal full operating pool level of the reservoir. In plan, the spillway is a circular arc oriented generally north-south. The spillway was constructed in the early 1960s with the rest of the dam. The spillway was rehabilitated in 1987 to repair longitudinal surface cracks, surface spalling, and transverse joint deterioration along the downstream face. As deterioration of the concrete surface of the spillway continued, including spalling and horizontal cracking, a second rehabilitation was done in the fall of 2004. The rehabilitation work consisted of removing deteriorated concrete from the spillway weir and abutment wall surfaces and applying gunite to all prepared surfaces. Over time, mild spalling and cracking were observed in the fiber reinforced, gunite overlay. During a recent inspection in March of 2019, more significant concrete/gunite damage was observed at the toe of the ogee. Also, some spalling and cracking has been observed at the bottom of the ogee spillway's abutment walls. The consulting engineer investigated the concrete structure at the end of 2019 and suggested that a cementitious repair could be done, but it would not necessarily improve the structural integrity of the ogee structure. Therefore, limited temporary repairs have been performed by Authority staff, while NJDEP worked toward completion of the revised spillway design flood model that ultimately allowed the completion of the updated H&H model evaluating the capacity of the existing spillway and informing any required improvements. Authority staff are working on a scope of services to procure a design professional to design this work and the updated 2-D inundation mapping, expected to begin in early FY28. It is anticipated that this project will be funded via NJIB bonding. As such, funding is not included in the CIP budget.

C. Clearing of Spruce Run Spillway Discharge Channel

The Spruce Run Spillway was cut into the bedrock as part of the original Spruce Run Dam construction. Woody vegetation and trees have grown within the channel bottom and side slopes because the spillway often has low flows or does not flow for long stretches of time. Clearing enables better observation of existing springs and seeps located within the channel bedrock that may be related to the performance of the dam. Clearing of the spillway channel is also important in order to preserve adequate flow capacity during significant spillway flows. As a result, the consultant prepared plans, specifications, and obtained permits to restore the channel to original condition by clearing trees and woody vegetation within 14 acres of the discharge channel. This work was completed in FY23 and will likely become a regular maintenance item to keep the channel in good condition.

D. Replace Fixed Cone Valves at Spruce Run Vault

The Spruce Run Reservoir Vault is fitted with two 30-inch fixed cone valves that serve as the primary release valves from Spruce Run Reservoir. When compared to other valves, the fixed cone valves allow for increased accuracy in release rates while providing significant pressure reduction and reduced erosion potential. When the structure was reconstructed in 1982, the original valves that were installed in the early 1960s were relocated to their current position. Authority staff performs annual maintenance on the valves, but corrosion present on the valves is making this maintenance increasingly difficult over time. The fixed cone valves are

critical to the operation of the reservoir and are nearing the end of their service life. The consulting engineer has provided design plans that are currently under review. Authority staff hope to be able to advertise for construction in late FY27.

E. Manual Transfer Switch for Emergency Operation

Reservoir release capabilities depend on uninterrupted power supply for the operation of the tower crane to remove stop logs. Thus, Authority staff recommends adding an emergency backup power source to the reservoir's vault/tower electrical supply system for drawdown equipment operation. As part of the Round Valley Reservoir Dam Rehabilitation and Resource Preservation Project, a consultant has been directed to size an emergency tow-behind portable generator and to design transfer switches at the Round Valley North and South Dam vaults that will feed power to the towers' hoisting equipment. It is anticipated that the consultant will design a manual transfer switch to be installed at the Spruce Run vault that is compatible with the tow-behind portable generator for the current Round Valley project. The consulting engineer has provided preliminary recommendations as part of a draft schematic design report. Work will commence after the conclusion of the Spruce Run Dam foundation grouting project.

F. Spruce Run Tower Hoisting Equipment

The existing outlet tower overhead bridge crane is a hand operated geared bridge and trolley type with a motor driven hoist. The bridge is constructed on standard I-beams with a hand chain operated drive. The overhead bridge crane is original to the dam construction in the early 1960s. It is still operational and is used to remove and/or reinstall the stop logs during release operations. However, the unit has developed a minor "travel" over the years, which is sometimes observed during stop-plank hoisting. In addition, it has become difficult to purchase parts for the crane system. The consulting engineer will investigate the existing overhead bridge crane, review the load rating, and recommend a partial or full replacement of an equal or alternate type of crane in compliance with OSHA regulations. The consulting engineer has provided preliminary recommendations as part of a draft schematic design report. Work will commence after the conclusion of the Spruce Run Dam foundation grouting project.

G. Spruce Run Tower Sluice Gate Operators

The Spruce Run Tower mechanical system includes two sets of three sluice gates each, which are operated with floor stand operators fabricated by Rodney Hunt Machine Co. The stands are mounted to the floor and are equipped with stem covers with visual indicators that show the position of the gate at all times. The stands are suitable for motor operation and are also equipped with a hand crank for manual operation. Currently, the motor operation is typically performed with the aid of a gasoline powered "donkey" engine. The Authority would like to improve the mechanical operation of the sluice gates with an electrically actuated system. The consultant will evaluate conditions of the current system and consider use of the existing floor stand operators with compatible electric actuators, or recommend a new, electrically actuated system that reduces operational time and improves labor safety standards. The

consulting engineer has provided preliminary recommendations as part of a draft schematic design report. Work will commence after the conclusion of the Spruce Run Dam foundation grouting project.

H. Spruce Run Other Ancillary Works

The multidisciplinary project also includes the installation of several other appurtenances: a door on the southern façade of the vault, a hardened access gate adjacent to the vault, OSHA compliant exterior access ladders for the tower and vault, remote reading capability of the vault releases, and new roofs for both the tower and vault. A thorough inspection of the release tower superstructure will also be conducted. The consulting engineer has provided preliminary recommendations as part of a draft schematic design report. Work will commence after the conclusion of the Spruce Run Dam foundation grouting project.

I. Reservoir Hydrologic and Hydraulic Modeling

The Spruce Run reservoir was constructed at the former confluence of Spruce Run and Mulhockaway Creek. The reservoir is fed by these two major, and several other minor streams, with a total drainage area of 41 square miles. The original Spruce Run hydrologic and hydraulic (H&H) calculations were performed by Whitman, Requardt and Associates in March 1960. The engineer used the available historic stream flow records for streams in the reservoir's watershed and assumed values for others in the absence of data. H&H calculations were performed using empirical formulas to predict passing flows over the reservoir's primary spillway and ogee weir.

The 2017 Potential Failure Mode Analysis (PFMA) report concluded that an updated H&H analysis was recommended using current methods. As a result, the consulting engineer developed H&H models that evaluate the capacity of the existing dam and spillway relative to the runoff produced by the Probable Maximum Precipitation (PMP) in compliance with the spillway design storm requirements of the NJDEP Bureau of Dam Safety. The H&H analysis was recently updated due to revised PMP modeling recently released by NJDEP and is anticipated to be completed in FY27.

J. Rapid Drawdown Planning

The outlet works at Spruce Run reservoir consist of an intake tower and twin pipes leading to a control vault at the downstream toe of the dam. Each of the twin pipes reduce from 84-inch diameter at the intake tower to 60-inch diameter near the control vault and to 48-inch diameter within the vault. The consultant is reviewing the current drawdown operations and computations in order to find ways to expedite the reservoir drawdown process. To this end, the consultant provided preliminary recommendations as part of a draft schematic design report and followed with preliminary designs that are currently under review. It is anticipated that this work will be combined with the replacement of the fixed cone valves with the goal of advertising for construction bids in late FY27.

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

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

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

In spring 2022, the Authority solicited Statements of Qualifications and Technical Proposals for professional engineering services for the rehabilitation of the Prallsville Culvert Pit. After an alternatives analysis, it was decided that the project will consist of using a precast concrete box culvert to connect the two culverts within the pit and filling the pit to grade, which will prevent future failures of the retaining wall, and more importantly, the canal embankment it supports. It was also decided that the damaged sluice gates will be decommissioned as part of this project, as they are no longer needed.

A consultant has been retained and completed the design and permitting. The contractor was procured with Notice to Proceed issued in April 2026 and construction anticipated to be completed by the end of FY27. Because this project was necessitated by damage associated with Hurricane Ida, it is expected that a portion of the project costs will be reimbursed by FEMA. Remaining costs not covered by FEMA will be funded through the CIP.

Sluice Gate Cleaning, Inspection, and Refurbishment at the Spruce Run and Round Valley Reservoirs

There are a total of nine sluice gates at the Round Valley Reservoir: three in the South Tower, and six in the North Tower. The sluice gates allow the Authority to release water from the reservoir. At the South Tower, the gates are also opened to allow water to be pumped into the reservoir from the Round Valley Force Main. Additionally, there are six sluice gates located in the Spruce Run outlet tower. The sluice gates date back to the original construction of the reservoirs and appurtenant structures in the 1960s.

As part of the larger Round Valley Resource Preservation Project, underwater inspections of the sluice gates were conducted by both an engineering consultant and a contractor. The contractor also cleaned the gates and replaced some components of their assemblies, including hardware associated with the gate wedges, stem guide bushings, and thrust nuts. From the contractor's inspection, it was determined that there were remaining components of the sluice gate assemblies

that require replacement. These included stem couplings, gate wedges, and hardware for the stem guide brackets and gate side rails.

Authority staff received bids for the cleaning and inspection of the three towers and complete replacement of all deficient components for each of the nine sluice gate assemblies at the Round Valley North and South Towers. Also, it has been recommended that the Authority implement a program to have the gates cleaned and inspected regularly. This work was completed in the first quarter of FY27.

Wastegate and Lock Evaluation and Repair – D&R Canal

The Canal was converted into a water supply source in the 1940s and 1950s. This included conversion of the original locks into flow control structures with sluice gates to regulate the flow. These structures are critical to the operation of the Canal. Numerous wastegates and locks along the D&R Canal need maintenance, rehabilitation, or improvements. Most of these structures were last inspected underwater in 2001. Underwater engineering evaluations are necessary to identify and prioritize the required work. This project will undertake a phased evaluation of the Canal's wastegates and locks based on operational needs and known problems. This project may also include priority repairs.

7500 kVA Transformer Replacement at South Branch Pump Station

The two 7500 kVA transformers, associated substation components, metering station, and cable runs that provide step-down power to meet the pump station's large energy demands are original equipment from the 1960's construction. Consultants have evaluated the components as part of the Authority's asset management plan. Due to age, unfavorable location of the transformers and substation (on a portion of the pump station roof without containment), and criticality to pumping operations, the consultants have recommended that the Authority plan for replacement of the equipment at a new location on-site. The new location will also need containment and protection from the weather. Authority staff is currently preparing a Request for Qualifications for consulting engineering services for the preparation of bid documents, and it is anticipated that design will begin in mid FY27. It is anticipated that this project will be funded via NJIB bonding. As such, funding is not included in the CIP budget.

South Branch Pump Station Complete Electrical Rehabilitation (includes MV motor controllers for all pumps/motors)

As previously discussed, the SBPS was built in 1965 and retains much of the original mechanical and electrical equipment. The Authority is in the process of upgrading and rehabilitating several mechanical systems per the Asset Management Plan (AMP). The AMP included inspection, testing, and condition assessments for the major electrical systems as well and identified a need for renewal and replacement of some components. The AMP was completed nearly 15 years ago, and the electrical equipment has continued to deteriorate, with replacement parts being difficult to source due to obsolescence. In addition to the discreet components identified within the CIP for replacement or rehabilitation, Authority Staff would like to pursue a comprehensive

and focused electrical systems rehabilitation project to include power feed, motor control centers, pump and motor control systems, and instrumentation and monitoring equipment. It is anticipated that construction of the improvements will be funded via NJIB bonding. As such, funding is not included in the CIP budget. It is anticipated that engineering for this project will begin in FY28.

Watershed Generator

The Watershed Protection Programs Group operates out of an office converted from an old residence. While adjacent to the Spruce Run Administration Building, the building is standalone with its own dedicated electrical feed and other utilities infrastructure. As such, the building is not connected to the standby power that supplies the Administration Building and loses power with some regularity. The Watershed Group maintains a New Jersey state certified laboratory and power outages threaten expensive equipment and refrigerated test kits and samples. The building will be fitted with a standby generator and automatic transfer switch (ATS) to ensure continuous reliable operation of the laboratory and administrative functions of the group. A contractor has been procured and it is anticipated that this project will be completed in mid FY27.

RV Force Main & Release Drains and Air Relief Chambers Rehab

The Round Valley Force Main and North Release Pipeline, installed in the 1960's and 1970's respectively, are each approximately 3-mile long 108" diameter prestressed concrete cylinder pipes responsible for filling and release at the reservoir. The pipelines feature drains at intermediate low points to facilitate draining and air release chambers at intermediate high points to purge air from the line when filling. Each access manhole, drain, and air relief location has a chamber containing various types of valves, piping, and appurtenances to facilitate the necessary functions of the various types of chambers along the approximately six (6) miles of large diameter pipelines. These devices are critical to water supply operations, and most hardware is original to the construction of the pipelines and in need of replacement. Construction activities would occur completely around the Authority's release and pumping seasons. This project is anticipated to begin in FY29.

RV North Vault Flow Control System (Valves, Meters, Controls)

The Round Valley North Dam Release Vault contains retrofitted flow control valves (Bailey valves) that were not part of the original construction of the dam and vault. These valves were installed approximately 40 years ago for the purpose of limiting the flow through the release pipeline to controllable and measurable quantities and to reduce the pressure and keep the pipeline operating as a gravity pipeline. There is also an electrical control system which provides monitoring and operational control over these flows. Currently, the control circuitry and flow meters that measure the rate and quantity of water released from the reservoir are at the end of their useful life. Authority staff has the ability to adjust the valves to the desired flow rate using rating tables based on percentage open. This is less reliable and precise than what could be achieved with a modern flow control system. As part of this project the Authority would also evaluate and rehabilitate, as necessary, additional components of the RV North Vault, such as

pivot valves, butterfly valves, and the Bailey Valves themselves, as well as install electrical, lighting, and HVAC upgrades. The Authority seeks to begin equipment replacement efforts in FY28.

SBPS Alternate RV Release Works Rehabilitation

The 1989 Round Valley Alternate Release modification to the Authority's South Branch Pumping Station contains a single retrofitted flow control valve (Jet valve) and appurtenant piping and controls that were not part of the original construction of the pump station and force main. This system was installed approximately 37 years ago for the purpose of allowing the direction of flow in the pump station force main to be reversed to allow the force main to act as a release pipeline. This provides additional redundancy to the Raritan System by providing a means to return water to the Raritan River upstream of the Stanton USGS Gauge Station in order to be able to maintain NJDEP minimum passing flow requirements if releases were not able to be made from Spruce Run Reservoir. The flow control jet valve limits the flow volume and pressure through the pipeline to controllable and measurable quantities and reduces water hammer. There is an electrical control system which provides monitoring via flowmeters and operational control via valves and electric actuators. Currently, the control circuitry and flow meters that measure the rate and quantity of water released from the reservoir are at the end of their useful life. The Authority has the ability to manually adjust the valves to the desired flow rate using rating tables based on percentage open. This is less reliable and precise than what could be achieved with a modern flow control system. As part of this project the Authority would also evaluate, rehabilitate, and modify the design of the alternate release piping, valving, and design of the concrete stilling basin chamber in order to allow for maintenance and debris removal from the jet valve. The Authority seeks to begin equipment replacement efforts in FY29.

Improvements to Scudders Falls Wastegate Controls

Scudders Falls is located in Ewing Township at approximate station 821+20, upstream of the Perdicaris wastegate in Trenton. This wastegate, along with the Washington Crossing wastegate, allows the Water Supply Operators (WSO) to divert water back to the Delaware River during heavy rain, before it reaches Trenton. The Scudders Falls gates, controls, and gate house were constructed in the mid-1980s. During power outages, the transfer switch should signal the generator to turn on, which will allow the WSO to operate the gates and maintain the level of the Canal. The transfer switch no longer operates, the controls that operate the gates are old and do not work on one of the gates, and the generator needs repair. Staff would like to upgrade the entire electrical/control system at this location. Project initiation is anticipated in FY 28.

Rehabilitation of the Upper Canal Embankment - Raven Rock to Prallsville

Since September 2004, four major flood events in the Delaware River have overtopped the Canal embankment between the Raven Rock Lock and Prallsville Lock. The Canal embankment in this stretch separates the Canal from the River. It is very narrow and is inaccessible by vehicle, so it is necessary to maintain the embankment by boat, which is challenging. During the large flood events, the Canal and the Delaware River water levels were elevated above the embankment and

became one body of water. There are several areas in this stretch that experienced heavy deterioration during these events, typically initiated by fallen trees.

The Authority had to implement emergency measures to prevent further erosion of the embankment following Tropical Storms Irene and Lee in 2011. Due to the location and access issues discussed above, all of the work had to be done by hand. Barges were used to supply the materials (riprap and cement bags), and Authority forces placed the materials in the embankment to close the openings. These temporary repairs require replacement with more appropriate materials, to satisfy both structural and historical requirements.

An engineering consultant and a cultural resources consultant were retained to design repairs to this section of the embankment. A professional services contract was awarded to a team led by GZA GeoEnvironmental (GZA) as the engineer for the repairs of the embankment. Paulus, Sokolowski, & Sartor (PS&S) was selected as the cultural resource consultant for the project.

Authority staff identified eight primary locations in this reach that required investigation, design, and repair. GZA was charged with inspecting the entire embankment from Raven Rock to Prallsville and identifying any additional locations that should be considered for repair.

A schematic design report identified and prioritized additional areas that warrant repair, and these areas have been added to the scope of work. Conceptual approval has been received from the State Historic Preservation Office and Delaware Raritan Canal Commission. The approach to completing these repairs has been further refined and the Authority is working with the consulting engineer to obtain necessary NJDEP approvals and continue to develop bid documents. Final design is expected in FY27, with construction following soon thereafter.

Rehabilitate Flow Control Gate at Back Race at Lambertville

The back raceway in Lambertville, located approximately at Station 371+00, consists of one manually operated gate and was constructed as a bypass to the Lambertville Lock. Due to the configuration of the raceway, the Authority uses this gate during the summer months to prevent the water from stagnating and to flush the algae that may accumulate. Further, it can be used to bypass Canal flow in the event it is necessary to work on the lock. The sluice gate is currently inoperable and in need of replacement. Additionally, the structure's right and left stone masonry wingwalls are undermined and the timber discharge apron is damaged. The structure is in need of rehabilitation to prevent further deterioration. In-house design for this project has been initiated.

Repair of Pipe at Whitehead Road

In 2011, a sinkhole developed in the towpath 1,600 feet up canal from Whitehead Road in Lawrence Township, Mercer County. This location is 3,600 feet down canal of the outlet of the Trenton Conduit. The sinkhole developed as a result of a failed 42-inch reinforced concrete (RC) stormwater pipe that connects to a 48-inch RC pipe which goes under the Canal and the U.S. Route 1 Freeway before ultimately discharging into the Assunpink Creek. It is noted that the 48-inch pipe replaced a stone masonry culvert under the Canal (same alignment) during construction of the U.S. Route 1 Freeway in the early 1950's. The sinkhole caused erosion of the Canal left bank

and multi-use trail. Staff filled the sinkhole with six-inch riprap and regraded the area in 2011, but the sinkhole has been recurring. As a result, the Authority contacted the NJDOT, which in turn ordered an inspection of the site by their contractor (IEW) in April 2021. An additional inspection was performed in early 2025 and identified the source of the migrating soil. Authority staff is working to obtain site access to the neighboring parcel, where the stormwater pipe originates.

Rehabilitation Work at the Washington Crossing Spillway

The Delaware River Joint Toll Bridge Commission advised the Authority on June 6, 2013, of a small amount of clear seepage coming from its historic stone bridge abutment at the Washington Crossing Bridge. At the time of notification, the Authority had been operating the Canal at raised levels in that vicinity to address a flow problem in the Trenton area. The higher-than-normal levels of the Canal caused the Washington Crossing spillway, which is directly adjacent to the abutment, to operate (overflow).

Authority staff placed sandbags on the spillway crest to force spillway discharge away from the northern portion of the spillway. This temporary measure is working to eliminate the seepage. Experience from earlier trials has shown that the seepage returns if the sandbags are removed or washed off and flow discharges from the northernmost pipes. Seepage may cause damage to the spillway structure, the bridge tender's house, or the bridge abutment as a result of removal of fines by piping or undermining.

Staff is continuing to monitor the situation and to investigate alternatives for controlling the flowing water.

Security System and Upgrades –Clinton and Canal

Several security improvements have been included as part of the large Round Valley Dam Rehabilitation project identified above, such as electrical service improvements and internet communications improvements. Security monitoring system upgrades will follow the infrastructure upgrades. Other protective measures continue to be considered on an ongoing basis.

Rooftop Hydronic Heater for Auto Shop - Spruce Run Admin.

The 1992 rooftop hydronic heater that serves the Auto Shop at the Spruce Run Administration Building is nearing the end of its service life and should be replaced with a similar unit. Repairs are becoming routine and obtaining parts is growing more difficult. This project may be included in the Authority Wide Underground Storage Tank Removal Program and Ancillary Work project.

Removal of Collapsed Canal Railroad Bridge at Station 523+50

The Mercer County Workhouse Quarry, located on Belle Mountain in Hopewell Township, Mercer County, was established in 1892 as part of the Workhouse farm complex to provide employment for inmates of the facility. The quarry produced crushed stone that was distributed throughout the area for road and general construction. A bridge was constructed over the canal to a spur adjacent to the main Pennsylvania Railroad line located on the canal embankment, to

carry crushed stone from the quarry. The bridge, located at approximate station 523+50, was constructed to allow barge and boat passage in the canal, with half being of a fixed, wooden trestle construction and the other half a steel and wood section on a turning mechanism.

Due to safety concerns, the bridge is considered an attractive nuisance and has been fenced off by NJDEP State Parks in an attempt to block the ongoing problem of pedestrian access from NJ State Route 29, across the canal to an unsanctioned, recreational rope swing on the left bank of the Delaware River. The bridge is in an advanced state of deterioration and there is concern that collapse is imminent, resulting in potential blockage of canal flow and disruption in water supply operations.

The D&R Canal is listed in the National Register of Historic Places and is subject to the jurisdiction of the NJ Historic Preservation Office (HPO) and Historic Sites Council (HSC). Any action taken on this structure will require procurement of design and cultural resource consultants to prepare mitigation alternatives analysis and recommendations prior to presenting to HPO and HSC. A consultant has been procured to prepare design plans and specifications and is in the process of obtaining various required permitting. Construction is anticipated to be bid in early FY28.

Watershed New Lab

The Watershed Protection Programs Group maintains a NJ state certified laboratory used for testing and analysis of water samples from the reservoirs and various streams and waterbodies within the watersheds of the Raritan and Manasquan systems. The current lab is located in a portion of the kitchen of the Watershed Office. Emerging contaminants and increasing demand for sampling and analysis require an updated laboratory space to house additional equipment in addition to the safety and environmental controls necessary for the function of a certified lab. Procurement of consulting engineering services is scheduled for late FY28.

Spruce Run Annex Roof

The Annex, located adjacent to the Spruce Run Administration Building, is a metal building used for equipment and material storage in addition to conference room / meeting space. The building was constructed in 1991, and the standing seam metal roof has corrosion, pinholes, and leaks. There have been numerous repairs over the years, and the roof is in need of replacement. This work is anticipated to begin in FY2028.

Alexauken Creek Aqueduct

Paralleling the western side of the Alexauken Creek Aqueduct is the former Belvidere-Delaware Railroad concrete bridge, which passes over the creek, immediately adjacent to the 1940s-era concrete aqueduct trunk. The Aqueduct's historic (circa 1834) northeast, center, and southeast stone abutments were rehabilitated in 1989-1990. Recent inspections revealed that all the abutments have missing mortar on the lower areas, which are continuously exposed to the water level fluctuation. In addition, the northeast abutment shows vegetation covering the structure on the creek side.

Two Canal leaks were observed at the aqueduct in 2007. The first one was located at the southwest contact of the aqueduct trunk and the stone masonry wall. The second one was observed between the joint of the concrete aqueduct northeast flap wall and the stone masonry abutment. The first leak was addressed with a project engineered in-house, publicly bid, and completed in 2009. The second leak was remediated by Canal staff by placement of a clay plug along the affected Canal left bank. There are no leaks to remediate at Alexauken Creek aqueduct at this time, but it is anticipated that further repairs will be required to maintain the structure.

Rebuild Stone Headwalls of the Wastegate Downstream of Ten Mile Lock

The wastegate is located at Canal Station 2599+50, approximately 600 feet downstream of the Ten Mile Lock in Franklin Township, Somerset County. The existing non-operational wastegate consists of a wooden gate structure set between guides that are attached to the recessed portion of a concrete inlet headwall. A 60-inch diameter concrete pipe under the multi-use trail was permanently sealed with concrete in June 2014. Currently, the stone masonry outlet headwalls are in a serious state of disrepair, and some leakage is evident. The waste gate's façade and the downstream stone headwall need to be rehabilitated.

Rehabilitation of the Spillway Upcanal of the Griggstown Lock

The spillway upcanal of the Griggstown Lock between Station 2060+40 and Station 2064+20 of the Canal in Franklin Township, Somerset County, is in poor condition and warrants rehabilitation. The 380-foot-long spillway was built as part of the original Canal construction in the 1830s and is part of the Canal's flood control system into the Millstone River. Engineering services are required to inspect the structure, prepare a schematic design, prepare a design of the approved rehabilitation alternative and provide construction management services during the rehabilitation of the structure. A cultural resource consultant is also required to perform an investigation for the rehabilitation of the spillway and to provide observation during rehabilitation. Funding for this project is not included in this five-year program.

Rehabilitation of D&R Canal Culvert at Canal Station 2550+90 (One mile upstream of 10-Mile Lock)

The unnamed culvert at Station 2550+90 is located in Franklin Township, Somerset County, approximately one mile east of the Weston Causeway and ¼ mile east of School House Road. Boswell Underwater Engineering inspected the culvert in September 2007. The inspection identified numerous areas exhibiting missing mortar pointing and stone along both the walls and crown of the structure. Missing stones were also identified on both the upstream and downstream headwalls. The contractor classified the culvert as being in fair condition and recommended repairs be made to the culvert barrel as well as both headwalls. Repairs will be scheduled as needed.

Spruce Run Administration Building Network Data Closet Construction

The Spruce Run Administration Building is in need of a modern environmentally HVAC-controlled data closet in the basement to isolate the network servers and network switches from high temperatures, dust, and humidity. As the demand for network storage capacity continues to increase and as more engineering projects are completely reliant upon the transfer of plans, specifications and construction photographs digitally, the need for a dedicated space in the building to accommodate the networking hardware and servers has increased as well. This project will require installation of dedicated HVAC equipment and ductwork, relocation of electrical services, and relocation of network cabling and conduits.

Round Valley South Dam Access Road Paving

As part of the Round Valley Dams Improvement – Construction project, the South Dam access road, extending from CR 629 to the South Dam Tower, was proposed to be milled and paved. Subsequent investigative borings revealed that the thickness of existing pavement was insufficient to support the proposed work, and it was removed from the contract. Road reconstruction will be performed as a standalone project, under separate contract. The work is anticipated to commence in FY30.

Mannon Sauerland Pond

The Sauerland Mannon Pond (Pond) is located on the Sauerland Outdoor Center (SOC), which is on the same block and lot as the Round Valley Reservoir, Round Valley Recreation Area, and the Round Valley North and South Dams. The property is owned by the Authority and a Maintenance and Operation Agreement (MOA) grants management jurisdiction to NJDEP who, in turn, manages a lease agreement with the SOC.

The pond is located adjacent to the Sauerland Outdoor Center driveway, approximately 300 LF from County Route 629 (Lebanon Stanton Road). It is located adjacent to the Round Valley South Dam. The pond collects runoff from uphill areas, and discharges through an outlet structure that feeds an unnamed tributary to the Prescott Brook. The pond is approximately 0.75 acres in area, with an unknown depth, and has an approximate 200 LF earthen embankment.

During the construction, the pond experienced increased flow (due to increased runoff from construction activities) and increased sediment loading. The upland areas have been replanted with grasses and young trees but will take time to return to the preconstruction forest condition.

On numerous considerable rainfall events the pond has overtopped its embankment and washed out the adjacent driveway. Authority Staff have cleared excess vegetation around the pond's outlet structure and secondary spillway to improve function. The area will be monitored to determine if there is a need for mitigative efforts.

Spruce Run Tower and Sluice Gate Work (Change to Scheduled RV & SR Tower Dive Inspections)

The project referenced above as "Sluice Gate Cleaning, Inspection, and Refurbishment at the Spruce Run and Round Valley Reservoirs" involved only cleaning and inspection at the Spruce

Run Outlet Tower. It was anticipated that the inspection would result in deficiencies discovered that would require corrective action, but the structures were found to be in good condition. This line item will be changed to allow for routine dive inspections at approximate three-year intervals, with the next occurring in FY30.

Roof at Ten Mile Pump Station

The Ten Mile Pump Station, situated between the Millstone River and Delaware & Raritan Canal in Franklin Township, Somerset County. Its purpose is to transfer water from the Millstone River to the Delaware & Raritan Canal in the event of an emergency that leaves the canal without water. In certain circumstances, the pump station can be used to divert water to the canal to continue to serve Middlesex and New Brunswick Water Companies. The station has a flat membrane roof with gravel ballast. The roof is beyond its useful life, and numerous leaks are present that have been and continue to be patched by Authority staff. It is anticipated that this project will begin in FY28.

Improvements to Bernard Avenue Overbank Spillway

In 1986, the Authority commissioned a feasibility study to investigate means of mitigating flooding and sedimentation issues caused by stormwater inflows along the "Feeder" portion of the D&R Canal. That study included development of a hydrologic model, which identified numerous areas between Station 790+00 and 960+00 where the Canal embankment was vulnerable to overtopping during the 100-year flood. To reduce this risk, it was recommended to raise low areas on the embankment and to construct two new spillway structures along this reach, which spans through Hopewell and Ewing Townships in Mercer County. The two spillways that were constructed are now known as the Jacobs Creek (Station 793+50) and Bernard Avenue (Station 848+00) Overbank Spillways. Both consist of a depression in the towpath/multi-use trail, with downstream slopes constructed of gabion mattresses. A grass cover was established to conceal the gabions and provide a historically appropriate appearance.

Since the structures are designed based on the erosion resistance of gabions, it was always expected that the grass cover would need to be periodically maintained. Over the years, however, maintenance at Bernard Avenue Spillway has been found to be disproportionately demanding. Unlike Jacobs Creek, which requires attention only after major storms, erosion of the grass cover at Bernard Avenue is commonplace. The downstream slope is now significantly eroded, with many gabions exposed, and repairs to the grass cover are very quickly undone by the next rain event. The effects of repetitive erosion events are compounding, with the uneven surface resulting in concentrated flows and damage to the gabions themselves. There is a need to investigate the cause of these issues and to implement improvements that will allow the structure to function with a manageable level of maintenance effort. This work is scheduled to begin in FY29.

Rehabilitation of the Trap Rock Quarry Spillway

The Trap Rock Quarry Spillway between Station 1925+90 and Station 1929+20 of the Canal in Franklin Township, Somerset County, approximately ¾ mile upcanal from Route 518, is in poor

condition and warrants rehabilitation. The 330-foot-long spillway was built as part of the original Canal construction in the 1830s and is part of the Canal's flood control system into the Millstone River. Engineering services are required in order to inspect the structure, prepare a schematic design, prepare a design of the approved rehabilitation alternative and provide construction management services during the rehabilitation of the structure. A cultural resource consultant is also required to perform an investigation for the rehabilitation of the spillway and to provide observation during rehabilitation. Funding for this project is not included in this five-year program.

Dredging of Canal between Landing Lane and Route 18

Approximately 70 percent of water diverted from the Canal is taken by purveyors at the Canal terminus near Route 18 in the City of New Brunswick, Middlesex County. Sediment bars have formed just upstream of the two primary intakes from the Canal wherein the normal Canal operating level is only 18 inches above the sediment level. A decrease in the Canal operating level by more than 12 inches makes it difficult for the water purveyors to divert water. Removal of this accumulation is essential to ensure delivery to these water purveyors.

Removal of the accumulation must be carefully coordinated with the water purveyors in this reach. Development of a program will likely be modeled after the dredging program that was conducted for the Canal reach between Kingston and Amwell Road. Funding for this project is not included in this five-year program.

Dredging of Canal Between Lambertville and Rt. 1

Sediment was removed from this reach in the mid-1980s. Breach of the embankment at the Workhouse Spillway in 2011 drained the Canal between the Lambertville Lock and the Kingston Lock, exposing sediment that has accumulated since the 1980s. While the Canal was drained, Authority staff removed the most pronounced sediment mounds but was unable to remove all the mounds. Long-term planning will focus on the removal of sediment from this reach. Funding for this project is not included in this five-year program.

Dredging of Canal between Amwell Road and Ten Mile Lock

Dredging was recently completed in a 10.5-mile stretch of the Canal between Kingston and Amwell Road. Flow in the stretch of the Canal between Amwell Road and Ten Mile Lock is also being impeded by the accumulation of sediment. Long term planning will focus on the removal of sediment from this reach. Funding for this project is not included in this five-year program.

Storage Building at Canal Field Office

The Authority is considering the construction of a pole barn, or similar storage building at the CFO facility. The additional space for storage of equipment will allow staff to keep certain equipment out of the elements which can extend the life expectancy of this equipment. This project is anticipated to commence in FY30.

Spruce Run Administration Building Tie-In to Public Water Supply

The Authority is conducting a preliminary study/investigation into the possibility of connecting to the regional municipal public water supply system. There are allocation and supply issues being experienced by the local water company which may delay this process, as well as the potential for water system connection fees. This would allow the Authority to abandon the local administration building supply well and the well to the Annex and the Watershed offices. Funding for this project is not included in this five-year program.

Storage Building near Spruce Run Annex

The Authority is considering the construction of a pole barn type structure in the Spruce Run Storage Yard. The need for additional space for storage of equipment and materials has been raised. One benefit of this building would be to provide additional space to keep certain equipment stored out of the elements which would potentially extend the service life of equipment. This project is anticipated to commence in FY30.

Construction of a Bedload Stone Trap at the Wickecheoke Creek

Wickecheoke Creek enters the Canal just upstream of the Prallsville Lock Control Structure on the border of Delaware Township and Stockton Borough in Hunterdon County. Excess flow from the Canal and the Creek are discharged over the Wickecheoke Creek spillway into the Delaware River. Investigations in the early 1990s resulted in a recommendation to construct a bedload stone trap in the creek, upstream of its confluence with the Canal, to improve the ability to remove the bedload without disrupting the flow in the Canal.

The Authority recommends construction of the structure because of the escalating need to remove bedload from the Canal at this location and the difficulty in performing such removal. This project is currently on hold and has been moved to low priority. Funding for this project is not included in this five-year program.

Cutoff Wall in the Shipetaukin Creek Guard Bank

The Shipetaukin Creek Guard Bank located in Lawrence Township, Mercer County, was constructed along the western side of the Canal to separate the Canal from the Lawrence Meadows and Shipetaukin Creek. The Guard Bank breached during Hurricane Floyd in September 1999 because of high water levels in Lawrence Meadows. Typically, the water level in the Lawrence Meadows between Province Line Road and the Route 295 Interchange is higher than the water levels in the Delaware and Raritan Canal, so the breach did not cause a loss of Canal water supply. Improvements are necessary to control leakage and prevent piping and a potential failure of the embankment. This section of towpath (multi-use trail) is approximately 7,000 feet long.

The construction of a cutoff wall is being considered in this reach of the embankment. The depth of the cutoff wall is expected to range between eight and 18.5 feet, and it will be constructed of

either slurry concrete mix or a clay mix. The slurry concrete mix has the advantage of ease of installation but may cause permit problems.

It will be necessary to retain a consultant to obtain boring information through the guard bank to determine the precise recommended depth of the cutoff wall. Funding for this project is not included in this five-year program.

Rehabilitation of the Gold Run Spillway

The Gold Run Spillway is located at Station 955+00, approximately 500 feet upstream of Lower Ferry Road in Ewing Township, Mercer County. The Gold Run Spillway is a concrete structure built in 1913. The concrete spillway box is approximately 98 feet long and four feet wide. The elevation of the spillway crest is 56.70 feet.

Fourteen 36-inch diameter concrete pipes handle the flow of water coming through the spillway. The pipes discharge onto a downstream concrete apron that protects the embankment from erosion. The spillway box is leaking and needs to be replaced. Funding for this project is not included in this five-year program.

Carnegie Lake Culverts Investigation / Isolation

There are two submerged culverts located adjacent to Carnegie Lake which the Authority must locate and investigate. Funding for this project is not included in this five-year program.

Raven Rock Retaining Wall Downcanal of Lock

The control structure at Raven Rock Lock is located at Canal station 0+00 at Bull's Island State Park in Delaware Township, Hunterdon County. The concrete lock structure consists of four metal sluice gates and operators. Adjacent to and downcanal from the lock there is a stone retaining wall. Several stones are missing from the wall, and a portion was displaced by a large sycamore tree that has been removed. This project is anticipated to commence in FY29.

Refurbishment of Main Pumps and Motors No. 3 & 9
Refurbishment of Main Pumps and Motors No. 2 & 10

See description above for Refurbishment of Main Pumps and Motors No. 4, 5, 7 & 8. The remaining four pumps would be refurbished in the order stated above. Funding for these projects is not included in this five-year program.

Canal Culvert Rehabilitation 2249+79 (Suydam)

The culvert near Suydam Road is a single barrel drop style culvert located at Station 2249+79 of the Canal. During the April 2006 inspection, the condition appeared very much the same as its condition in October 2003, when it was dewatered and surveyed. On the inlet side, there are a few stones missing at the base of the inlet structure and there is some shifting of some of the capstones.

On the outlet side, the entire dry-laid headwall has the appearance of being bowed inward. Additional inspection is required to determine the priority of repairs. Funding for this project is not included in this five-year program.

Canal Culvert Rehabilitation 2661+86 (Randolph Brook)

The Randolph Brook culvert structure consists of three distinct sections. Looking downstream from the inlet, the culvert has a semicircular corrugated steel section that is 63 feet long, 13 feet wide and eight feet high, which runs beneath Weston Canal Road. The pipe abuts a six-foot long transition box or access chamber where the alignment of the structure shifts slightly to the left. A double barrel stone arched structure carries the Brook under the Canal into the Raritan River. The barrels measure approximately 139.5 feet long, five feet wide and 4.5 feet high.

The culvert was rehabilitated in 1990. The rehabilitation entailed the installation of a sleeve of steel liner plates within the arches of the main culvert barrels. Support for the liner plates was provided by newly poured concrete walls. The outlet headwall and timber apron were restored, preserving their historic appearance. During a recent inspection of County bridge No. H0703, County engineers noticed several pinhole leaks within the stone archway that connects to the left culvert barrel.

Additional inspection is required to determine the priority of repairs. Funding for this project is not included in this five-year program.

Canal Culvert Rehabilitation 2992+34 (Mile Run Culvert)

The Mile-Run culvert consists of two semi-circular barrels that are approximately 129 feet long, which appear to be founded on natural rock. The culvert conveys Mile-Run Creek under the Canal and discharges into the Raritan River in the City of New Brunswick. The barrels are approximately twelve feet wide and six feet high. The culvert barrels were constructed of stone masonry and at some time, a brick liner was installed in the east barrel, and a shotcrete coating was installed in the west barrel.

The culvert was rehabilitated in 1994. The rehabilitation was comprised of the restoration of the headwalls and deteriorated barrels. A structural steel liner was installed in the east barrel, set back 15 feet from the upstream end and 25 feet from the downstream end. The shotcrete liner in the west barrel was patched as needed.

A previous inspection revealed that the east barrel's first 25-foot brick liner section has minor spalls, and the remaining metal liner section appears to be in good condition. On the west barrel

it was observed that the gunite layer has spalled away at several locations at the mid-length of the barrel, above the footing.

Additional inspection is required to determine the priority of repairs. Funding for this project is not included in this five-year program.

Concrete Repairs at the Sullivan Way Aqueduct

The Sullivan Way Aqueduct is located in the City of Trenton, Mercer County. The structure was constructed in the early 1900s and has been waterproofed and patched several times. The superstructure is a concrete encased steel structure constructed to carry the Canal over Sullivan Way. The concrete on the abutments is spalling and needs attention. Funding for this project is not included in this five-year program.

Rehabilitation of the Four-Mile Spillway

The Four-Mile Spillway is located in the section of the Canal between Five-Mile Lock and Route 18 in Franklin Township, Somerset County, opposite the Rutgers Preparatory School on Easton Avenue. This 600-foot spillway was rehabilitated in 1999 with the installation of a tremie concrete cutoff wall to eliminate leakage from the Canal. The spillway was finished with hand placed stones across the crest, the river side slope and the Canal side slope of the rehabilitated structure. The stones were laid in a mortar bed with a recess in the pointing finish.

Past flooding events washed away some of the cement from the mortar, leaving the stones sitting in a loose sand bed. The stones have the potential to become dislodged and the spillway crest needs to be stabilized. The planned rehabilitation will be to remove all stone from the crest, pour a concrete slab and rest the stones with ties to the concrete slab, similar to the recently completed rehabilitation of the Colonial Park Spillway. Recent inspections, however, show that the spillway appears stable, with grass growing between the stones. Funding for this project is not included in this five-year program.

Third Hand Shop Culvert under D&R Canal Cleaning (Partially Clogged)

This culvert is located at approximate Station 592+00 of the Canal feeder section and consists of an 18-inch clay pipe that crosses under the D&R Canal. The inlet is located on the eastern end of Route 29 (inbound north). Solids and vegetation may be entering the culvert and partially clogging. An eventual cleanup of the pipe and/or installation of a cage at the inlet end may be recommended. Funding for this project is not included in this five-year program.

No-Name Culvert Under Canal at Sta. 936+50 Outlet Cleaning (Partially Clogged)

This culvert crosses under the D&R canal and is located approximately 2600 feet downcanal from Wilburtha Road. The 2019 inspection revealed that the outlet is partially clogged by soil and debris. An inspection of the intake end of the culvert revealed that a large pool has developed over time since the exit flow is poor. A cleanup of the culvert's outlet structure is recommended. Funding for this project is not included in this five-year program.

Pipeline Evaluation – Whitehouse Release Pipeline

The Round Valley Release Pipeline (RVRP) conveys water from the Round Valley North Vault to the Whitehouse Release area and was also intended to carry water back to the reservoir from the planned Confluence Pumping Station. One pipe section of the 108-inch diameter prestressed concrete cylinder pipe ruptured in 1988, and numerous other sections were found to contain broken prestressing wire that may lead to additional ruptures of the pipe sections. The RVRP was converted into a gravity release pipeline in 1996 with the installation of pressure reducing valves in the North Vault. The reduced pressure design assumes that all the prestressing wire has failed and relies on the strength of the embedded steel cylinder. It was recommended that the pipeline continue to be monitored on a regular basis. The manufacturing and installation dates of the specific pipe sections used in this release line fall within the range of dates when there were faulty materials being manufactured in the industry, resulting in failures of pipelines of similar vintage.

Funding for a more thorough evaluation by an outside consultant is not included in this five-year program; however, the Authority continues to conduct scheduled internal inspection of the release piping. Staff will continue periodic inspection of the pipeline and act accordingly.

Pipeline Evaluation – Round Valley Force Main

The Round Valley Force Main is a 3.5-mile long 108-inch diameter prestressed concrete cylinder pipe that conveys water from the South Branch Pumping Station (SBPS) to the South Dam Tower at Round Valley Reservoir. The Force Main can also be used for releases from the reservoir to the South Branch Raritan River.

Non-destructive testing of the Force Main was conducted in 1999. The non-destructive testing identified that the majority of the pipe sections were in very good condition. Approximately five percent of the 1,062 pipe sections exhibited anomalous readings that give rise to varying degrees of concern. One section of pipe, pipe section 42, located within the SBPS property, was excavated and further examined externally and internally. The examinations confirmed the results of the non-destructive testing. Instead of instituting a program to immediately replace pipe section 42 and other sections of pipe that were of concern, the Authority embarked on a program to develop a management plan to estimate the anticipated longevity of various pipe sections and prioritize pipe replacement.

Pipe section 42 was replaced in 2005 and was dismantled and tested in January 2006. Pipe section 42 was designed to have a double wrap of pre-stressing wire. The outer level of pre-stressing was missing, and the pipe section was considered to be structurally compromised. Stresses within a large portion of the prestressing wire was significantly lower than its specified stress as determined by the strain gauge testing. With those structural deficiencies, the pipe was not in a state of incipient failure. Authority staff attempts to perform internal non-destructive pipe inspections that have a high probability of locating pipes in a state of incipient failure.

Funding for a more thorough evaluation by an outside consultant is not included in this five-year program; however, the Authority continues to conduct scheduled internal inspections of the force main piping. Staff will continue periodic inspection of the pipeline and act accordingly.

Kingston Wastegate Operators

The Kingston Wastegate is located in the Kingston section of South Brunswick Township, Middlesex County at Canal Station 1853+40. The structure is approximately a quarter mile upstream of the Kingston Lock.

This wastegate is part of the Canal's appurtenant structures used to control water elevations in the Canal upstream of the Kingston Lock, by diverting excess canal flow into the Millstone River by way of the Heathcote Brook. The wastegate inlet structure is comprised of two 36" wide by 48" high sluice gates on the structure's headwall on the Canal side.

As the wastegate is being used more than it historically has, as a measure to combat the development of harmful algae blooms (HAB) in the Millstone River, we are investigating running power to the location and replacing the existing, manual gate actuators with electric actuators. Funding for this project is not included in this five-year program.

Spruce Run Administration Building HVAC Evaluation

The Administration Building HVAC system is comprised of several independent systems that work in concert to provide conditioning for the various office, mechanical, and shop spaces. Some of the components are nearing the end of their useful life and a holistic, building-wide approach should be taken to evaluate condition, performance, system balance, and controls to plan for prudent upgrades in the future. Funding for this project is not included in this five-year program.

PART III – PROPOSED RULE AMENDMENT

NEW JERSEY WATER SUPPLY AUTHORITY

Amendments To The Schedule Of Rates, Charges And Debt Service Assessments For The Sale Of Water From The Raritan Basin System

To Become Effective July 1, 2027

The following rules and regulations can be found in the New Jersey Administrative Code under N.J.A.C. 7:11-2.1, et seq.

7:11- 2.3 General rate schedule for operations and maintenance

(a)1.-7. (No change.)

8. Any other current costs, expenses or obligations required to be paid by the Authority under the provision of any agreement or instrument relating to bonds, other indebtedness of the Authority or by law. The current sales base of 182.308 million gallons per day has been used in setting the rate listed in (b) below.

(b) General rate schedule for operations and maintenance:

Period (State fiscal year unless otherwise indicated)	Allocation	Rate/Million Gallons
State fiscal year [2027] **2028**	Million Gallons per Day (MGD)	[$203.00] **$271.00**

7:11-2.4 Debt service assessments

(a) (No change.)

(b) The following Debt Service Assessment rate for the New Jersey Environmental Infrastructure Financing Program loans, based on a sales base of [182.339] **182.308** million gallons per day will be applied to all customers: Debt service rates for future periods will no longer be reported.

Period (State fiscal year unless otherwise indicated)	Allocation	Rate/Million Gallons
State fiscal		

year [2027] **2028**	Million Gallons per Day (MGD)	$109.00

7:11- 2.5 Capital Fund Component

(a)-(b) (No change.)

(c) Capital Fund Assessment

Period (State fiscal year unless otherwise indicated)	Allocation	Rate/Million Gallons
State fiscal year [2027] **2028**	Million Gallons per Day (MGD)	[$33.00] **$55.00**

7:11- 2.6 Source Water Protection Fund Component

(a) (No change.)

(b) Source Water Protection Fund Assessment

Period (State fiscal year unless otherwise indicated)	Allocation	Rate/Million Gallons
State fiscal year [2027] **2028**	Million Gallons per Day (MGD)	$20.00

APPENDICES

I. Report of Mercadien PC – Allocation of Headquarters General and Administrative Expenses – FY2028

II. Report of Mercadien PC – Allocation of Headquarters General and Administrative Expenses – Audited FY2026 Expenditures