

The Pittsburgh Water and Sewer Authority 2024 - 2028 Capital Improvement Plan



Approved on December 15, 2023

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Organizational Leadership



Board Of Directors

Alex Sciulli, Chair

Erika Strassburger, Vice Chair

BJ Leber, Secretary and Treasurer

Michael Domach, Assistant Secretary and Treasurer

Dr. Audrey Murrell, Ph.D, Board Member

Margaret (Peg) McCormick Barron, Board Member

James Martin, Board Member

Jamil Bey, Board Member

Executive Leadership

William J. Pickering, Chief Executive Officer

Jennifer Presutti, Chief Operating Officer and Chief Financial Officer

Frank P. Sidari III, PE, BCEE, Chief Environmental Compliance and Ethics Officer

Logan Carmichael, PHR, SHRM-CP, Chief People and Culture Officer

Lee Haller, Chief Information and Performance Officer

Monica Walaan, Esquire, Chief Legal Officer

Senior Management Team

Edward Barca, CPA, Director of Finance

Kevin Pawlos, Deputy Director, Finance

John Nagel, Manager, Operating Budget

Julie Mechling, Director of Customer Service

Brittany Schacht, Deputy Director, Customer Service

Barry King, PE, PMP, Director of Engineering and Construction

Kate Mechler, PE, Deputy Director, Engineering and Construction

Terri Testa, Director of Human Resources

Kevin Wood, Senior Manager, Water Quality

Jason Felser, Director of Technology Services

Rebecca Zito, Senior Manager, Public Affairs

Kasey Stewart, APP, CSP, Director of Safety and Security

William McFaddin, Director of Operations

Joe Tewell, Deputy Director, Operations

Jeffrey Turko, Senior Manager, Water Quality and Treatment

William Bennett, Senior Manager, Warehouse

Randy Bergia, Senior Manager, Field Operations

John McCarthy, Senior Manager, Field Operations

Jason Auge, Senior Manager, Sewer Operations

Budget Process Overview



Introduction

The Pittsburgh Water and Sewer Authority ("**the Authority**" or "**the PWSA**") is a body corporate and politic organized and existing under the Act pursuant to resolution No. 36 of the Council of the City of Pittsburgh ("**the City**"), duly enacted on February 6, 1984, approved by the Mayor on February 8, 1984, and effective February 16, 1984. The Secretary of the Commonwealth of Pennsylvania approved the Authority's Articles of Incorporation and issued a Certificate of Incorporation on February 17, 1984. Articles of Amendment were approved and a Certificate of Amendment was issued by the Pennsylvania Department of State on December 11, 1989, to include, among authorized projects, low head dams and facilities for generating surplus electric power. Articles of Amendment were approved and a Certificate of Amendment was issued by the Pennsylvania Department of State on May 9, 2008, to extend the term of existence of the Authority to May 21, 2045. Articles of Amendment were approved and a Certificate of Amendment was issued by the Pennsylvania Department of State on March 19, 2020, to extend the term of existence of the Authority to March 13, 2070 and to include stormwater systems.

Under its Articles of Incorporation, the Authority is specifically authorized to acquire, hold, construct, finance improve, maintain, operate, own and lease, either as a lessor or lessee, projects of the following kinds and character: sewers, sewer systems or parts thereof, waterworks, water supply works, water distribution systems, low head dams, facilities for generating surplus power, and stormwater systems.

The Authority serves a population of 500,000 through its water, wastewater conveyance, and stormwater services. The System provides water to approximately 84% of the total population in the geographic boundaries of the City and the entire Borough of Millvale. The Authority provides wastewater conveyance and stormwater services to the entire City. The System does not include wastewater treatment facilities; such facilities are the responsibility of the Allegheny County Sanitary Authority ("ALCOSAN"), a separate and distinct entity.

The Authority operates and maintains 110 million gallon per day (MGD) rapid sand type water treatment plant, a 28 MGD microfiltration plant, approximately 964 miles of water mains, over 32,000 valves and fire hydrants, 1 raw water pump station, 10 finished water pump stations, 3 finished water reservoirs, 1 source water reservoir, 13 storage tanks, approximately 1,227 miles of sanitary, storm, and combined sewers, 29,502 manholes, 24,463 catch basins and inlets, 98 combined sewer overflow outfalls, 195 storm outfalls, and 4 wastewater pump stations.

Pennsylvania Public Utility Commission Oversight Of The Authority

On December 21, 2017, the Pennsylvania legislature enacted Act 65 of 2017 ("Act 65") placing the Authority under the jurisdiction of the Pennsylvania Public Utility Commission ("PUC") pursuant to the Pennsylvania Public Utility Code (the "Public Utility Code"). Act 65 applies most of the provisions of the Public Utility Code to the Authority in the same manner as a "public entity", resulting in regulation of the Authority's rate making, its operating effectiveness, debt issuances, and other aspects of conducting its business similar to the way the PUC regulates investor-owned utilities. Act 65 includes provisions that allow the Authority to impose, charge, or collect rates or charges as necessary to permit the Authority to comply with its covenants with holders of any bonds or other financial obligations, and prohibits the PUC from requiring the Authority to take any action that would cause the interest of the Authority's financial obligations to be included in gross income of the holders of such obligations for federal income tax purposes.

Capital Improvement Plan Overview

The PWSA's Capital Improvement Plan (CIP) focuses on sustaining cost-effective operations, while optimizing the system's asset performance and life expectancy. The 2024-2028 Capital Improvement Plan invests in programs which consider risk and consequence of asset failure and level of service benefits.

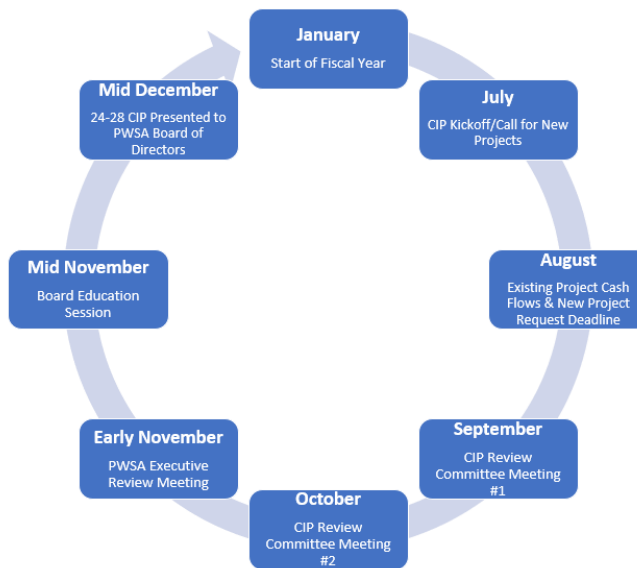
Capital Improvement Plan Development And Process

The PWSA's CIP process begins each year in July when existing project cash flows for the upcoming year and new projects are solicited from the entire organization. At the completion of the request period, the CIP Review Committee screens, evaluates, and prioritizes the projects that should be included in the upcoming CIP. The review committee is made up of 14 scoring and advisory members from other PWSA departments such as Finance, Engineering and Construction, Technology Services, Compliance and Ethics, Safety and Security, Laboratory, and Operations. Further planning efforts consist of the preparation of a project sheet, which provides more detailed information on a project's potential scope options, risks, schedule, and cost estimate. This process lasts several months and culminates with the presentation of the updated Capital Improvement Plan to PWSA's Board of Directors. Projects that are not selected for execution at any stage will be re-assessed during next year's CIP development process.

The PWSA CIP is organized into six project classes (types):

- Water Treatment Plant
- Water Pumping & Storage
- Water Distribution
- Wastewater System
- Stormwater
- Miscellaneous

Each project class is then made up of individual projects. Projects are defined based upon current information, which range from annual allowances for asset renewal and/or replacement activities, to major, multiple phase facility renewal projects.



Capital Project Prioritization

Due to funding limitations and the need to renew/replace a significant amount of aging infrastructure, the following criteria are used by the CIP Review Committee to evaluate and prioritize capital projects. Each new project proposal is reviewed and scored by how well they meet the following criteria:

- **Regulatory Compliance** - Ranks a project's relative importance for maintaining current compliance levels or mitigating future compliance impacts.
- **Quality of Service** - Ranks a project's role in maintaining or improving current quality of services.
- **Safety** - Ranks a project's relative importance in maintaining or improving employee or public health and safety.
- **Risk of Failure** - Ranks the project's probability of failing if not replaced or improved.
- **Security** - Ranks a project's relative impact on physical security measures to protect or fortify infrastructure.
- **Strategic Priorities** - Ranks how well a project addresses one or more of PWSA's strategic priorities.
- **Social Impact** - Ranks a project's relative importance to customer quality of life, environmental justice areas, and number of customers impacted.

The scores submitted by the CIP Review Committee are then used to generate a prioritized list for PWSA Executive team to use when making funding decisions and ultimately get incorporated into the proposed Capital Improvement Plan that is presented to the Board of Directors and adopted upon approval.

Capital Project Funding Sources

The PWSA Capital Improvement Plan is funded through several primary sources to which specific programs and projects are allocated. These funding sources include, but are not limited to, Debt (Revenue Bonds), Debt (Project Fund), Distribution System Improvement Charge ("DSIC"), Water Infrastructure Finance and Innovation Act ("WIFIA"), Pennsylvania Infrastructure Investment Authority ("PENNVEST"), American Rescue Plan Act ("ARPA"), and cost shares with other entities.

Capital Project Page Definitions

Project Description - A basic understanding of the project's intent and scope of work

Phase - Phase in the project life-cycle (i.e. design, construction)

Priority - Determines the applicable prioritization criteria categories

Project Justification - A detailed explanation to why the project is needed

Risk(s) - Outlines the risk(s) to the PWSA if the project is delayed or is not funded

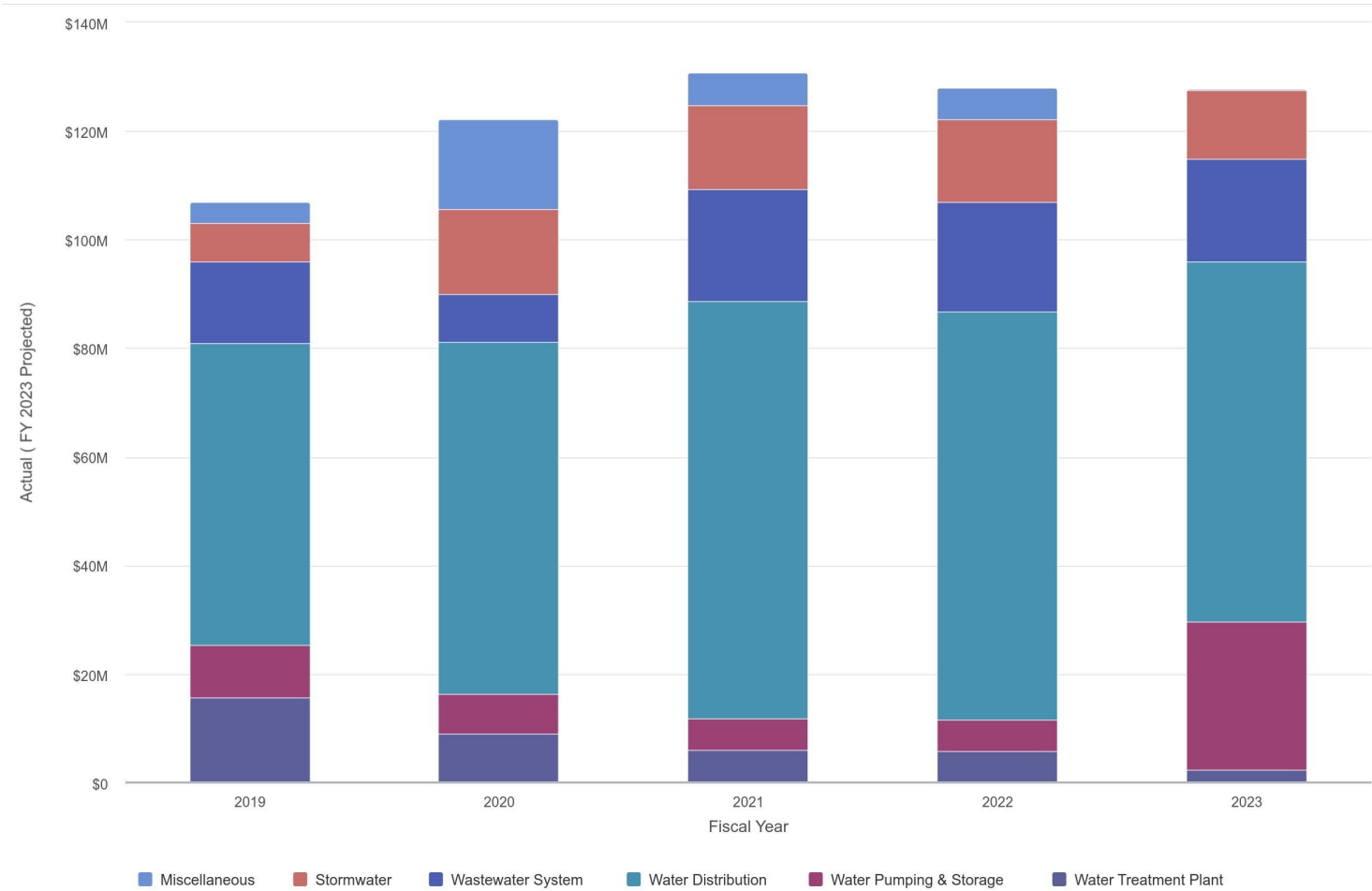
Impact on Operations - Describes the anticipated impact to the PWSA's operations when the project is completed

DSIC Eligibility - Determination of whether costs qualify under the Distribution System Improvement Charge

Capital Improvement Plan Summary

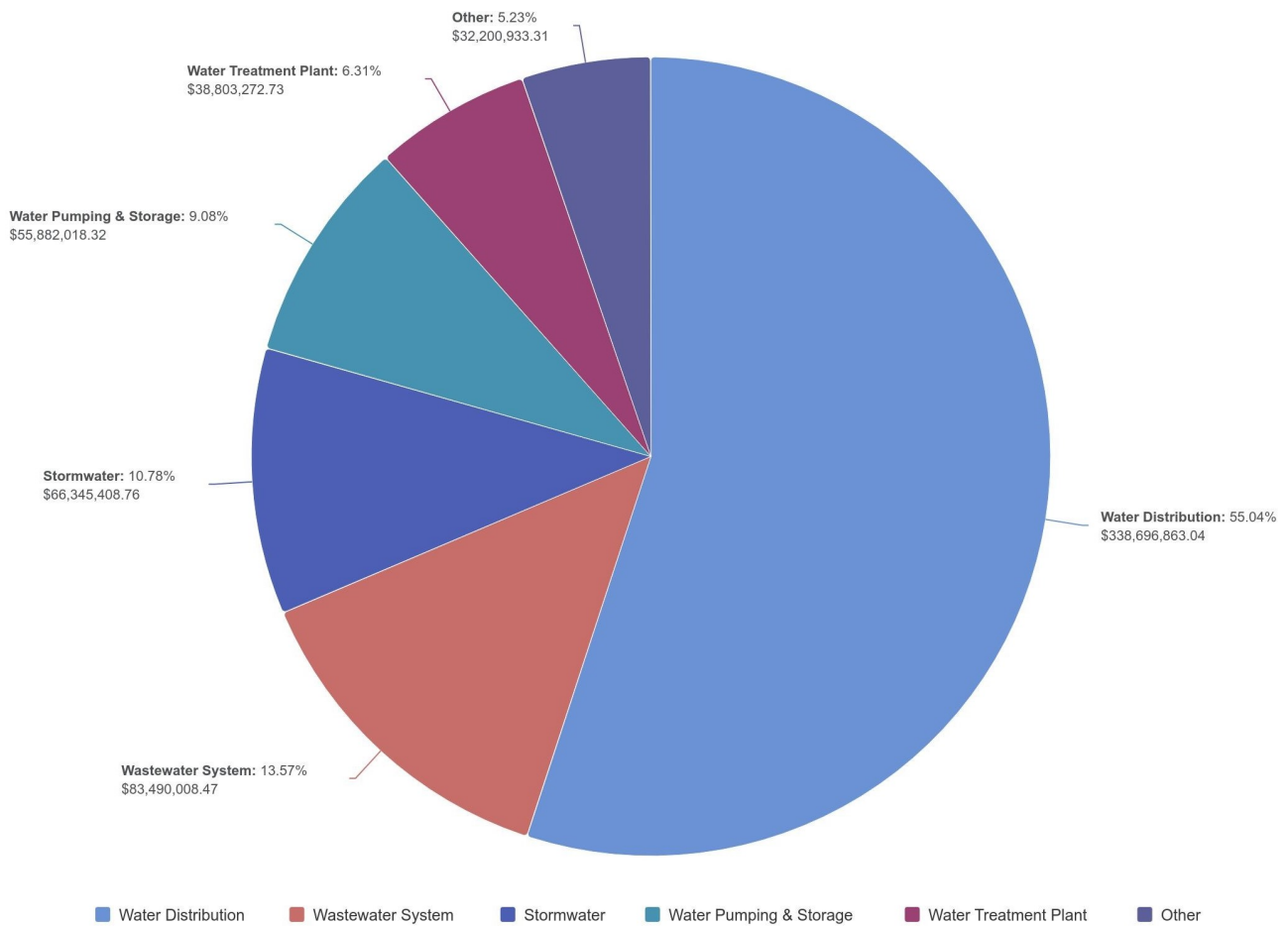


Annual Historical And Projected Capital Spend



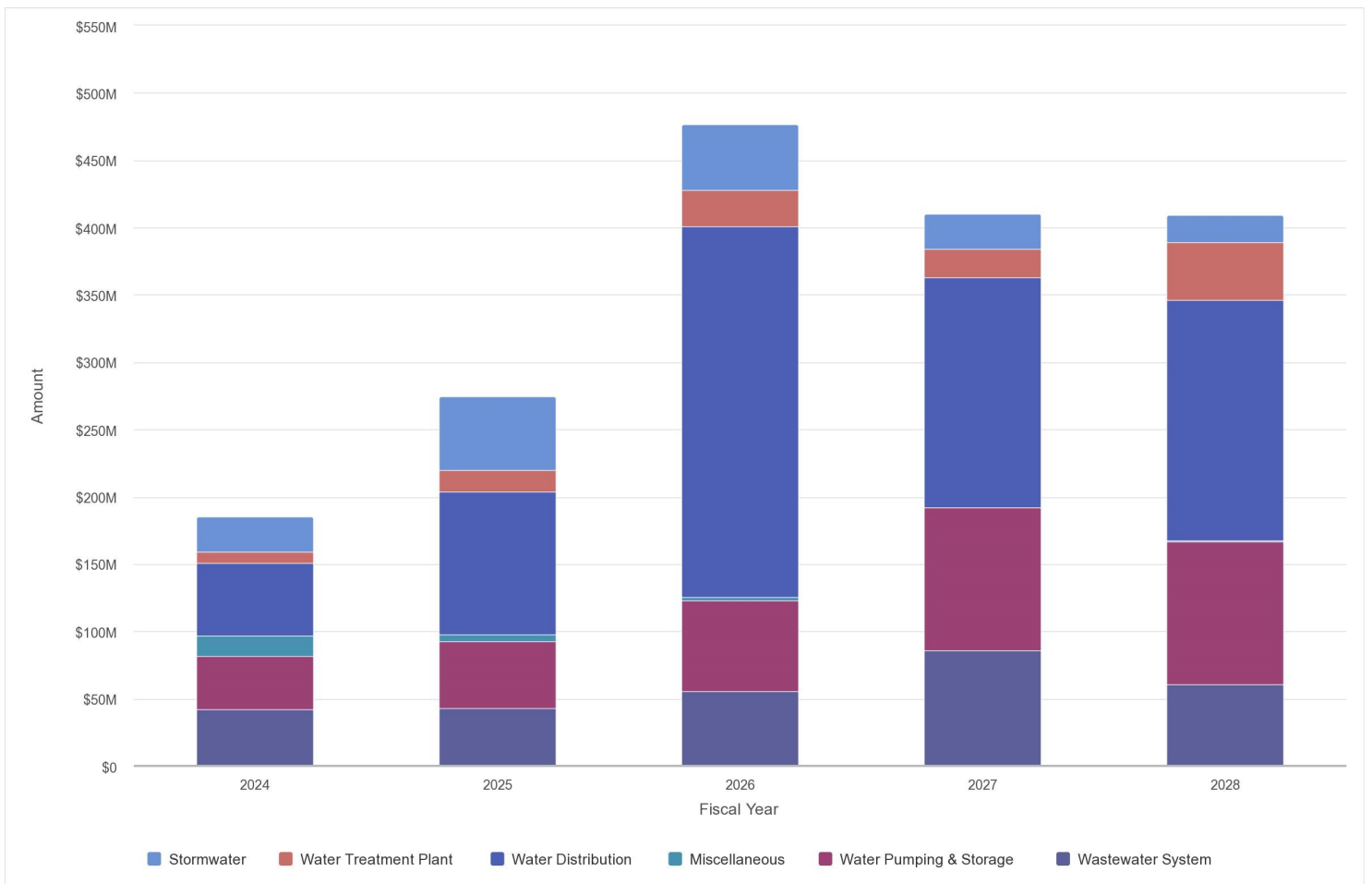
Historical Capital Budget Spend By Project Class

Capital Category	FY 2019 - Actual	FY 2020 - Actual	FY 2021 - Actual	FY 2022 - Actual	FY 2023 - Projected	5 Year Total
Water Treatment Plant	\$15,665,185	\$8,959,256	\$5,946,283	\$5,816,207	\$2,416,342	\$36,386,931
Water Pumping & Storage	\$9,667,165	\$7,304,722	\$5,941,184	\$5,811,219	\$27,157,728	\$28,724,290
Water Distribution	\$55,588,889	\$64,838,953	\$76,722,470	\$75,044,147	\$66,502,405	\$272,194,458
Wastewater System	\$15,152,656	\$8,767,047	\$20,632,500	\$20,181,159	\$18,756,648	\$64,733,361
Stormwater	\$6,901,255	\$15,791,622	\$15,614,923	\$15,273,343	\$12,764,266	\$53,581,143
Miscellaneous	\$4,023,798	\$16,446,590	\$5,875,126	\$5,746,606	\$108,813	\$32,092,120
Total	\$106,998,948	\$122,108,190	\$130,732,485	\$127,872,680	\$127,706,202	\$487,712,303



2024 - 2028 Capital Improvement Plan By Project Class

Project Category	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Water Treatment Plant	\$8,604,812	\$16,456,801	\$26,953,737	\$20,651,407	\$42,762,364	\$115,429,120
Water Pumping & Storage	\$39,891,833	\$49,919,066	\$67,744,177	\$106,324,185	\$106,386,518	\$370,265,779
Water Distribution	\$53,320,663	\$105,683,698	\$275,143,637	\$170,937,468	\$178,650,476	\$783,735,942
Wastewater System	\$41,501,076	\$42,398,435	\$55,250,027	\$85,575,152	\$60,409,854	\$285,134,544
Stormwater	\$25,998,656	\$54,679,388	\$50,008,308	\$26,214,585	\$20,233,795	\$177,134,731
Miscellaneous	\$15,246,992	\$4,429,020	\$1,770,689	\$500,000	\$500,000	\$22,446,700
PROJECT CATEGORY TOTAL	\$184,564,032	\$273,566,407	\$476,870,575	\$410,202,796	\$408,943,007	\$1,754,146,817



2024 - 2028 Funding Source Summary

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$119,703,939	\$125,840,308	\$168,035,397	\$185,968,297	\$227,412,331	\$826,960,272
WIFIA/PENNVEST	\$6,086,859	\$16,487,679	\$37,121,202	\$69,215,493	\$87,717,515	\$216,628,749
PENNVEST	\$37,798,382	\$96,637,962	\$235,378,117	\$121,473,450	\$75,363,361	\$566,651,272
ARPA	\$3,633,297	\$0	\$0	\$0	\$0	\$3,633,297
WIFIA	\$205,250	\$0	\$0	\$0	\$0	\$205,250
Debt (Project Fund)	\$0	\$4,985,877	\$4,710,639	\$2,014,455	\$2,196,447	\$13,907,418
WIFIA/PWSA Bond	\$3,478,694	\$17,042,622	\$21,218,975	\$21,074,165	\$6,013,572	\$68,828,029
City of Pittsburgh	\$3,558,314	\$1,911,753	\$0	\$0	\$0	\$5,470,067
Private Grants	\$0	\$572,500	\$268,100	\$268,100	\$0	\$1,108,700
DSIC - Water	\$7,184,925	\$7,169,415	\$7,205,262	\$7,241,288	\$7,277,495	\$36,078,385
DSIC - Wastewater	\$2,914,372	\$2,918,291	\$2,932,883	\$2,947,547	\$2,962,285	\$14,675,379
PROJECT FUNDING TOTAL	\$184,564,032	\$273,566,407	\$476,870,575	\$410,202,796	\$408,943,007	\$1,754,146,817

2024 - 2028 Project Summary

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Water Treatment Plant						
Aspinwall Water Treatment Plant Chemical Unloading Area Improvements and Underground Storage Tank Removal and Replacement	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Aspinwall Water Treat Plant Filter Building Sodium Hypochlorite Improvements	\$1,290,638	\$0	\$0	\$0	\$0	\$1,290,638
Aspinwall Water Treatment Plant Filter Improvements	\$0	\$0	\$406,437	\$316,113	\$4,745,841	\$5,468,391
Aspinwall Water Treatment Plant Raw Water Intakes	\$273,706	\$3,284,471	\$3,284,471	\$116,471	\$10,566,471	\$17,525,588
Chemical Feed Pumps/Rapid Mix Improvements	\$250,000	\$250,000	\$0	\$0	\$0	\$500,000
Chemical Feed Storage and Clarifier Improvements	\$0	\$0	\$1,994,764	\$2,506,933	\$18,220,331	\$22,722,028
Clearwell Emergency Response Project	\$1,858,006	\$6,764,482	\$7,490,688	\$6,936,556	\$2,639,539	\$25,689,271
Clearwell Improvements	\$0	\$0	\$3,082,744	\$3,405,698	\$441,937	\$6,930,380
Corrosion Control Chemical Storage and Feed Systems	\$26,385	\$0	\$0	\$0	\$0	\$26,385
Highland Park Membrane Filtration Plant UV System	\$40,000	\$0	\$0	\$0	\$0	\$40,000
Hydraulic Valve Replacement Program	\$232,401	\$825,468	\$2,192,131	\$0	\$0	\$3,250,000
Lime Slurry System Improvements	\$982,237	\$3,872,008	\$2,345,049	\$0	\$0	\$7,199,293
Overhead Crane Modernization	\$375,000	\$440,000	\$0	\$0	\$0	\$815,000
Ross Pump Station	\$0	\$0	\$1,788,845	\$2,385,127	\$657,127	\$4,831,099
Sedimentation Basin Rehabilitation Project	\$249,913	\$749,739	\$510,275	\$4,126,176	\$5,491,118	\$11,127,221
Sludge Chamber Project	\$2,215,978	\$107,301	\$0	\$0	\$0	\$2,323,279
Water Treatment Plant 84-Inch Diameter Line Rehabilitation	\$200,000	\$0	\$0	\$0	\$0	\$200,000
Water Treatment Plant Chemical Building Storage Tank Improvements	\$510,548	\$0	\$0	\$0	\$0	\$510,548
Water Treatment Plant Filter Building Roof	\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000
Water Treatment Plant HVAC Improvements	\$0	\$163,333	\$358,333	\$858,333	\$0	\$1,379,999
Water Treatment Plant Contingency	\$0	\$0	\$0	\$0	\$0	\$0
WATER TREATMENT PLANT TOTAL	\$8,604,812	\$16,456,801	\$26,953,737	\$20,651,407	\$42,762,364	\$115,429,120
Water Pumping & Storage						
Aspinwall and Fox Chapel Interim Feed	\$0	\$0	\$0	\$0	\$0	\$0
Aspinwall Pump Station Improvements	\$2,474,376	\$15,242,622	\$14,986,231	\$14,518,467	\$5,571,635	\$52,793,331
Aspinwall Pump Station to Lanpher Reservoir Rising Main	\$1,366,295	\$5,465,180	\$13,662,951	\$40,988,853	\$47,820,328	\$109,303,608
Bruecken Pump Station Improvements	\$1,064,504	\$4,258,017	\$15,967,563	\$21,290,084	\$37,257,648	\$79,837,817
Bruecken Pumps No. 4, 5, and 7 Starter Replacements	\$1,178,378	\$0	\$0	\$0	\$0	\$1,178,378
Bruecken Pump Station Valve Vault Upgrade	\$133,121	\$0	\$0	\$0	\$0	\$133,121
Chlorine Booster Station Improvements	\$433,418	\$0	\$4,233,897	\$11,760,250	\$0	\$16,427,565
Disinfection By-Products Mitigation	\$0	\$0	\$0	\$5,854,861	\$8,277,856	\$14,132,717
Garfield Tank Improvements	\$0	\$0	\$395,930	\$791,860	\$416,860	\$1,604,650
Herron Hill Pump Station Improvements	\$0	\$0	\$427,623	\$850,520	\$420,496	\$1,698,639
Herron Hill Reservoir Improvements	\$133,000	\$0	\$0	\$0	\$0	\$133,000
Herron Hill Reservoir Improvements - Sodium Hypochlorite Building	\$901,471	\$0	\$0	\$0	\$0	\$901,471
Herron Hill Tank Pump Station Improvements	\$0	\$0	\$0	\$180,221	\$360,442	\$540,663
Highland No. 2 Reservoir Liner and Cover Replacements	\$1,105,250	\$1,800,000	\$3,150,000	\$3,150,000	\$0	\$9,205,250
Highland Reservoir Pump Station and Rising Main	\$23,436,285	\$16,815,735	\$13,618,667	\$0	\$0	\$53,870,687
Howard Pump Station Improvements	\$0	\$0	\$0	\$577,267	\$1,154,534	\$1,731,801
Inline Pump Station (Coral and Pacific) Improvements	\$0	\$0	\$33,165	\$39,805	\$483,129	\$556,099
Lanpher Reservoir Improvements	\$5,545,404	\$5,791,201	\$0	\$0	\$0	\$11,336,605
Lincoln Pump Station Improvements	\$144,201	\$288,401	\$173,459	\$2,014,455	\$2,196,447	\$4,816,963
Lincoln Pump Station: Bypass Pump Station Project	\$1,803,473	\$0	\$0	\$0	\$0	\$1,803,473
Lincoln Tank Improvements	\$172,656	\$257,910	\$709,846	\$3,081,377	\$0	\$4,221,789
Mission Pump Station Improvements	\$0	\$0	\$0	\$575,923	\$1,151,845	\$1,727,768
Saline Pump Station Improvements	\$0	\$0	\$384,845	\$577,267	\$983,397	\$1,945,509
Spring Hill Tank Improvements	\$0	\$0	\$0	\$72,975	\$291,901	\$364,876
Water Pumping & Storage Contingency	\$0	\$0	\$0	\$0	\$0	\$0
WATER PUMPING & STORAGE TOTAL	\$39,891,833	\$49,919,066	\$67,744,177	\$106,324,185	\$106,386,518	\$370,265,779

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Water Distribution						
2019 Large Diameter Water Main Improvements -Rising Main 3/4	\$554,318	\$0	\$0	\$0	\$0	\$554,318
2019 Large Diameter Water Main Improvements - Rising Main 4	\$1,798,053	\$0	\$0	\$0	\$0	\$1,798,053
Bus Rapid Transit Water Distribution	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
Interconnection Vault Stormwater Removal	\$1,988,248	\$584,104	\$0	\$0	\$0	\$2,572,352
Intermediate Meter Replacement Program	\$300,000	\$330,000	\$365,000	\$401,500	\$441,650	\$1,838,150
Large Diameter Water Main Program	\$1,426,158	\$11,790,000	\$11,385,237	\$2,042,791	\$3,986,859	\$30,631,046
Large Meter Replacement Program	\$409,200	\$450,120	\$495,132	\$544,654	\$600,000	\$2,499,106
Neighborhood Lead Service Line Replacement Program	\$11,425,056	\$45,219,382	\$122,612,321	\$0	\$0	\$179,256,759
Pressure District Boundary Adjustments and Low Pressure Remediation	\$0	\$0	\$0	\$234,992	\$1,700,078	\$1,935,070
Private Lead Service Line Reimbursement	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Regulator Valve and Vault Replacement Program	\$0	\$0	\$0	\$1,394,479	\$4,851,499	\$6,245,978
Small Diameter Water Main Replacement Program	\$23,318,760	\$34,114,409	\$124,402,025	\$150,721,183	\$155,495,167	\$488,051,544
Small Meter Replacement Program	\$900,000	\$990,000	\$1,089,000	\$1,200,000	\$1,320,000	\$5,499,000
Urgent Lead Service Line Replacement Program	\$1,847,292	\$1,940,880	\$2,032,021	\$2,134,967	\$2,235,223	\$10,190,383
Valve Replacement Program	\$3,819,165	\$3,170,000	\$3,170,000	\$3,170,000	\$3,170,000	\$16,499,165
Water and Wastewater Safety and Security Improvements	\$151,862	\$0	\$0	\$0	\$0	\$151,862
Water and Wastewater Safety and Security Improvements (PENNVEST)	\$997,816	\$2,844,539	\$5,242,901	\$4,742,901	\$500,000	\$14,328,156
Water Relay Program	\$2,384,735	\$3,250,265	\$3,350,000	\$3,350,000	\$3,350,000	\$15,685,000
Water Distribution Contingency	\$0	\$0	\$0	\$0	\$0	\$0
WATER DISTRIBUTION TOTAL	\$53,320,663	\$105,683,698	\$275,143,637	\$170,937,468	\$178,650,476	\$783,735,942
Wastewater System						
31st Ward Pump Station and Appurtenances - Phase 2	\$910,131	\$770,210	\$3,630,139	\$10,992,839	\$2,098,095	\$18,401,415
Browns Hill Road Sewer Pump Station Replacement	\$347,026	\$3,121,599	\$308,401	\$0	\$0	\$3,777,026
Hayson Sanitary Sewer Extension	\$420,000	\$84,000	\$0	\$0	\$0	\$504,000
Large Diameter Sewer Rehabilitation Program	\$11,302,883	\$4,739,796	\$6,086,093	\$6,795,489	\$6,615,806	\$35,540,068
Maytide Storm and Sanitary Sewer System Improvements	\$0	\$460,434	\$302,162	\$4,686,497	\$427,276	\$5,876,369
Queenston Sewer Improvements	\$3,314,100	\$0	\$0	\$0	\$0	\$3,314,100
Sewer Reconstruction Program	\$5,139,073	\$2,834,662	\$3,277,312	\$3,677,895	\$4,491,028	\$19,419,969
Sewers Under Structures Program	\$6,781,254	\$8,588,535	\$2,897,708	\$3,410,357	\$3,425,495	\$25,103,349
Small Diameter Sewer Rehabilitation Program	\$13,286,609	\$21,799,200	\$38,748,212	\$56,012,074	\$43,352,154	\$173,198,248
Wastewater Contingency	\$0	\$0	\$0	\$0	\$0	\$0
WASTEWATER SYSTEM TOTAL	\$41,501,076	\$42,398,435	\$55,250,027	\$85,575,152	\$60,409,854	\$285,134,544
Stormwater						
Braywood Stormwater Improvements	\$690,787	\$206,517	\$0	\$0	\$0	\$897,304
Bus Rapid Transit Stormwater Infrastructure Improvements	\$820,167	\$1,175,065	\$1,391,348	\$0	\$0	\$3,386,581
Catch Basin and Inlet Replacement Program	\$3,895,532	\$20,322,263	\$22,115,756	\$20,112,013	\$16,144,247	\$82,589,811
Dragoon Way Stormwater Improvements	\$1,745,800	\$0	\$0	\$0	\$0	\$1,745,800
Four Mile Run Stormwater Infrastructure Improvements	\$828,644	\$7,598,360	\$16,289,562	\$306,524	\$0	\$25,023,090
Fowler Park Stormwater Improvements	\$271,400	\$280,800	\$1,706,500	\$1,706,500	\$0	\$3,965,200
Haverhill Street Stormwater Improvements Project	\$2,046,603	\$47,837	\$0	\$0	\$0	\$2,094,441
Heths Way Stormwater Improvements	\$172,000	\$1,174,000	\$0	\$0	\$0	\$1,346,000
Larimer Park Cost Share	\$39,617	\$0	\$0	\$0	\$0	\$39,617
Martin Luther King Field Stormwater Infrastructure Improvements	\$2,495,828	\$1,974,312	\$0	\$0	\$0	\$4,470,140
Oakridge Stormwater Separation	\$260,000	\$1,740,000	\$0	\$0	\$0	\$2,000,000
Saw Mill Run Watershed Improvements	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
Southside Flats Sewer Separation	\$6,864,029	\$3,576,701	\$0	\$0	\$0	\$10,440,730
Southside Stormwater Infrastructure Improvements	\$1,103,849	\$4,272,379	\$888,877	\$0	\$0	\$6,265,105
Stewart Avenue Stormwater Infrastructure Project	\$2,633,438	\$3,569,151	\$0	\$0	\$0	\$6,202,589
Wet Weather Program Projects	\$0	\$6,742,581	\$7,610,890	\$4,089,548	\$4,089,548	\$22,532,566
Wightman Park Phase 2 Project	\$185,000	\$0	\$0	\$0	\$0	\$185,000
Woods Run Stream Removal Stormwater Infrastructure Improvements	\$945,962	\$1,999,420	\$5,375	\$0	\$0	\$2,950,757
Stormwater Improvements Contingency	\$0	\$0	\$0	\$0	\$0	\$0
STORMWATER TOTAL	\$25,998,656	\$54,679,388	\$50,008,308	\$26,214,585	\$20,233,795	\$177,134,731
Miscellaneous						
2024 Capital Project Reclassification	\$13,676,302	\$0	\$0	\$0	\$0	\$13,676,302

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
New Headquarters and Operations Facility	\$1,270,690	\$3,929,020	\$1,270,689	\$0	\$0	\$6,470,398
Utility Cost Shares	\$300,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,300,000
Miscellaneous Contingency	\$0	\$0	\$0	\$0	\$0	\$0
MISCELLANEOUS TOTAL	\$15,246,992	\$4,429,020	\$1,770,689	\$500,000	\$500,000	\$22,446,700
PROJECT FUNDING TOTAL	\$184,564,032	\$273,566,407	\$476,870,575	\$410,202,796	\$408,943,007	\$1,754,146,817

Water Treatment Plant



Project Class Summary

Projects within this category are required to rehabilitate, upgrade, or provide new facilities at the PWSA Water Treatment Plant location. Projects can include, but are not limited to, improvements to pump stations, water intakes, chemical storage areas, sedimentation basins and the Clearwell, which is a large, century old water storage facility that is used to treat water with chlorine to kill any harmful bacteria or pathogens. The PWSA Water Treatment Plant produces an average of 70 million gallons of water daily and provides drinking water to the majority of the Pittsburgh.

Project Summary Table

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Aspinwall Water Treatment Plant Chemical Unloading Area Improvements and Underground Storage Tank Removal and Replacement	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Aspinwall Water Treat Plant Filter Building Sodium Hypochlorite Improvements	\$1,290,638	\$0	\$0	\$0	\$0	\$1,290,638
Aspinwall Water Treatment Plant Filter Improvements	\$0	\$0	\$406,437	\$316,113	\$4,745,841	\$5,468,391
Aspinwall Water Treatment Plant Raw Water Intakes	\$273,706	\$3,284,471	\$3,284,471	\$116,471	\$10,566,471	\$17,525,588
Chemical Feed Pumps/Rapid Mix Improvements	\$250,000	\$250,000	\$0	\$0	\$0	\$500,000
Chemical Feed Storage and Clarifier Improvements	\$0	\$0	\$1,994,764	\$2,506,933	\$18,220,331	\$22,722,028
Clearwell Emergency Response Project	\$1,858,006	\$6,764,482	\$7,490,688	\$6,936,556	\$2,639,539	\$25,689,271
Clearwell Improvements	\$0	\$0	\$3,082,744	\$3,405,698	\$441,937	\$6,930,380
Corrosion Control Chemical Storage and Feed Systems	\$26,385	\$0	\$0	\$0	\$0	\$26,385
Highland Park Membrane Filtration Plant UV System	\$40,000	\$0	\$0	\$0	\$0	\$40,000
Hydraulic Valve Replacement Program	\$232,401	\$825,468	\$2,192,131	\$0	\$0	\$3,250,000
Lime Slurry System Improvements	\$982,237	\$3,872,008	\$2,345,049	\$0	\$0	\$7,199,293
Overhead Crane Modernization	\$375,000	\$440,000	\$0	\$0	\$0	\$815,000
Ross Pump Station	\$0	\$0	\$1,788,845	\$2,385,127	\$657,127	\$4,831,099
Sedimentation Basin Rehabilitation Project	\$249,913	\$749,739	\$510,275	\$4,126,176	\$5,491,118	\$11,127,221
Sludge Chamber Project	\$2,215,978	\$107,301	\$0	\$0	\$0	\$2,323,279
Water Treatment Plant 84-Inch Diameter Line Rehabilitation	\$200,000	\$0	\$0	\$0	\$0	\$200,000
Water Treatment Plant Chemical Building Storage Tank Improvements	\$510,548	\$0	\$0	\$0	\$0	\$510,548
Water Treatment Plant Filter Building Roof	\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000
Water Treatment Plant HVAC Improvements	\$0	\$163,333	\$358,333	\$858,333	\$0	\$1,379,999
Water Treatment Plant Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$8,604,812	\$16,456,801	\$26,953,737	\$20,651,407	\$42,762,364	\$115,429,120

Aspinwall Water Treatment Plant Chemical Unloading Area and Underground Storage Tank Removal and Replacement



Project Description

Design and construction of secondary spill containment around railcar and truck chemical unloading areas. A nearby tunnel underdrain must also be disconnected from the combined sewers, and will be completed as part of the work in the area.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: Required as part of PADEP regulatory recommendations.

Risk(s): Not completing the work could lead to future environmental incidents and potential violations from regulatory agencies due to chemical spills.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved environmental conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-322-100-0 - Aspinwall Water Treatment Plant Chemical Unloading Area Improvements and Underground Storage Tank Removal and Replacement	\$100,000	\$0	\$0	\$0	\$0	\$100,000
PROJECT FUNDING TOTAL	\$100,000	\$0	\$0	\$0	\$0	\$100,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$100,000	\$0	\$0	\$0	\$0	\$100,000
PROJECT FUNDING TOTAL	\$100,000	\$0	\$0	\$0	\$0	\$100,000

Aspinwall Water Treatment Plant Filter Building Sodium Hypochlorite Improvements



Project Description

General and mechanical work will include demolition, new filling station, new storage and pumping room, furnishing and installing new storage tanks, feed pumps and piping. HVAC work will include furnishing and installing new HVAC system including air handling unit, condensing unit, exhaust system and ductwork. Plumbing work will include new water service lines inside building, furnishing and installing eyewash stations, hot water units, sanitary drain modifications and installation of a wet sprinkler fire suppression system and fire alarm system. Electrical work will include furnishing and installing power wiring and conduit to new equipment, control wiring to instrumentation and program system integration services to operate the new treatment process.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: To increase storage of sodium hypochlorite solution as required by the PADEP and enhance the operational safety and efficiency of the system.

Risk(s): Not meeting requirements of the PADEP if project not completed.

Impact on Operations: Operating budget will likely decrease due to efficiencies.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-322-101-8 - Aspinwall Water Treatment Plant Filter Building Sodium Hypochlorite Improvements - General/Mechanical	\$693,529	\$0	\$0	\$0	\$0	\$693,529
2017-322-101-9 - Aspinwall Water Treatment Plant Filter Building Sodium Hypochlorite Improvements - HVAC	\$133,309	\$0	\$0	\$0	\$0	\$133,309
2017-322-101-11 - Aspinwall Water Treatment Plant Filter Building Sodium Hypochlorite Improvements - Electrical	\$370,000	\$0	\$0	\$0	\$0	\$370,000
2017-322-101-14 - Aspinwall Water Treatment Plant Filter Building Sodium Hypochlorite Improvements - Fire Suppression	\$93,800	\$0	\$0	\$0	\$0	\$93,800
PROJECT FUNDING TOTAL	\$1,290,638	\$0	\$0	\$0	\$0	\$1,290,638

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,290,638	\$0	\$0	\$0	\$0	\$1,290,638
PROJECT FUNDING TOTAL	\$1,290,638	\$0	\$0	\$0	\$0	\$1,290,638

Aspinwall Water Treatment Plant Filter Improvements



Project Description

Improvements for filters at the Water Treatment Plant to address various recommendations from regulatory agencies including safety issues, improve process control, and monitoring. Project components including providing hand railing around filter basins to facilitate operator inspections, adding components to allow safer performance of required quarterly monitoring and cell entry, moving IFE turbidimeters to locate them within 10 feet of sample points, addressing structural issues, and other electrical and safety updates.

Project Details

Phase: Planning

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: To meet industry standards and regulatory recommendations, turbidimeters should be located not more than 10 feet away from the sample taps. Currently, meters are located up to 30 feet away, reducing meter response time and data accuracy. Structural deficiencies in the floor and beams of the filter building have been observed as evidenced by cracks and water leakage.

Risk(s): Failure to meet regulatory requirements if project is not completed.

Impact on Operations: Reduction of operating budget repair costs.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-100-101-0 - Aspinwall Water Treatment Plant Filter Improvements	\$0	\$0	\$406,437	\$316,113	\$4,745,841	\$5,468,391
PROJECT FUNDING TOTAL	\$0	\$0	\$406,437	\$316,113	\$4,745,841	\$5,468,391

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$406,437	\$316,113	\$4,745,841	\$5,468,391
PROJECT FUNDING TOTAL	\$0	\$0	\$406,437	\$316,113	\$4,745,841	\$5,468,391

Aspinwall Water Treatment Plant Raw Water Intakes



Project Description

Project will include condition assessment, renewing or replacing the existing West and East Raw Water Intake Gate House buildings and associated systems, including gates, screens, and associated mechanical equipment as well as the addition of SCADA. Influent piping through the Ross Pump Station will also be addressed.

Project Details

Phase: Design

Priority: Regulatory Compliance, Quality of Service, Risk of Failure

Project Justification: The West Gate is 90% closed and inoperable. Both gate houses are in need of rehabilitation or replacement. The West Gatehouse is 100 years old, and the East Gate is almost 90 years old.

Risk(s): Both gates have reach the end of their useful life and need replaced. Failure of the East Gate would cause a disruption to the supply of water.

Impact on Operations: Modernization of systems will require less time spent in operations and maintenance of these facilities.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-104-0 - Aspinwall Water Treatment Plant Raw Water Intakes	\$273,706	\$3,284,471	\$3,284,471	\$116,471	\$10,566,471	\$17,525,588
PROJECT FUNDING TOTAL	\$273,706	\$3,284,471	\$3,284,471	\$116,471	\$10,566,471	\$17,525,588

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$273,706	\$3,284,471	\$3,284,471	\$116,471	\$10,566,471	\$17,525,588
PROJECT FUNDING TOTAL	\$273,706	\$3,284,471	\$3,284,471	\$116,471	\$10,566,471	\$17,525,588

Chemical Feed Pumps/Rapid Mix Improvements



Project Description

Upgrade of chemical feed systems (equipment, storage, instrumentation, and injection points) to meet current regulatory requirements, improve chemical application, and optimize the water treatment process. Upgrades include ferric chloride, potassium permanganate, and other chemical systems located in the chemical building and possible construction of a new chemical building or repurposing of existing facilities. Assess, design, and construct repairs to structural defects associated with settlement with the pipe bridge between the Chemical Building and Screen Room.

Project Details

Phase: Not started

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: Chemical feed improvements will address recommendations from both consultants and regulatory agencies. The lack of attention to the pretreatment chemical feed systems could cause over/under dosing of chemicals leading to permit violations or the loss of a chemical system resulting in an emergency project.

Risk(s): Not addressing these recommendations will put the PWSA at risk for permit violations and failures at the Water Treatment Plant.

Impact on Operations: Optimization and flow/residual pacing of chemicals can result in reduced chemical consumption. New storage and chemical feed equipment will result in reduced maintenance costs associated with repairs on the existing pumps, maintaining storage bins and feeders. Improvements to SCADA system and flow/residual pacing will reduce manual adjustments to chemical feed systems.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-101-0 - Chemical Feed Pumps/Rapid Mix Improvements	\$250,000	\$250,000	\$0	\$0	\$0	\$500,000
PROJECT FUNDING TOTAL	\$250,000	\$250,000	\$0	\$0	\$0	\$500,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$250,000	\$250,000	\$0	\$0	\$0	\$500,000
PROJECT FUNDING TOTAL	\$250,000	\$250,000	\$0	\$0	\$0	\$500,000

Chemical Feed Storage and Clarifier Improvements



Project Description

Construction of new building for soda ash, fluoride, and phosphoric acid system closer to the feed point providing updated equipment, storage, instrumentation, and injection points. This will result in meeting current regulatory requirements, improve chemical application, and optimize the water treatment process. Portions of this project may be combined with the Clearwell Improvements Project or Aspinwall Pump Station Project.

Project Details

Phase: Not started

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: The improvements from this project will address the recommendations from various regulatory agencies. In addition, the lack of attention to the post-filter chemical feed systems could cause over/under dosing of chemicals leading to permit violations or the loss of a chemical system resulting in an emergency project.

Risk(s): Potential violations of permit conditions as a result of improper dosing of chemicals or failure of a chemical system resulting in emergency action.

Impact on Operations: Optimization and flow/residual pacing of chemicals can result in reduced chemical consumption. New storage and chemical feed equipment will result in reduced maintenance costs associated with repairs on the existing pumps, maintaining storage bins and feeders. Moving soda ash closer to the point of injection will reduce issues with feeding the chemical from the other end of the plant. Improvements to SCADA system and flow/residual pacing will reduce manual adjustments to chemical feed systems.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2026-100-101-0 - Chemical Feed Storage and Clarifier Improvements	\$0	\$0	\$1,994,764	\$2,506,933	\$18,220,331	\$22,722,028
PROJECT FUNDING TOTAL	\$0	\$0	\$1,994,764	\$2,506,933	\$18,220,331	\$22,722,028

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$1,994,764	\$2,506,933	\$18,220,331	\$22,722,028
PROJECT FUNDING TOTAL	\$0	\$0	\$1,994,764	\$2,506,933	\$18,220,331	\$22,722,028

Clearwell Emergency Response Project



Project Description

Long-term bypass of the existing 100 + year old clearwell (finished water structure) including the construction of pump wetwells at the Aspinwall and Bruecken Pump Stations, modifications to the clearwell inlet and outlet gate house, and the construction of a bypass line around the clearwell to the outlet gate house.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure, Strategic Priorities

Project Justification: The clearwell was constructed in 1908 and has not undergone any major modifications or upgrades since. The clearwell has two main functions: providing equalization storage that allows the filters to operate independently of potential fluctuations in system demands and providing sufficient contact time for disinfection agents to meet the requirements of the Surface Water Treatment Rule and Long-Term 2 Enhanced Surface Water Treatment Rule. In order to replace the clearwell, a long-term bypass is required in order to provide adequate suction pressure for the pump stations.

Risk(s): Failure of the Clearwell would cause a disruption to the supply of water.

Impact on Operations: Ability to meet system reliability and water quality regulations.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-323-100-0 - Clearwell Emergency Response Project	\$1,858,006	\$6,764,482	\$7,490,688	\$6,936,556	\$2,639,539	\$25,689,271
PROJECT FUNDING TOTAL	\$1,858,006	\$6,764,482	\$7,490,688	\$6,936,556	\$2,639,539	\$25,689,271

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PENNVEST	\$1,858,006	\$6,764,482	\$7,490,688	\$6,936,556	\$2,639,539	\$25,689,271
PROJECT FUNDING TOTAL	\$1,858,006	\$6,764,482	\$7,490,688	\$6,936,556	\$2,639,539	\$25,689,271

Clearwell Improvements



Project Description

Replacement of the existing 100 + year old clearwell (finished water structure) with multi-celled clearwell to allow for maintenance.

Project Details

Phase: Planning

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure, Strategic Priorities

Project Justification: The clearwell was constructed in 1908 and has not undergone any major modifications or upgrades since. It has two main functions: providing equalization storage that allows the filters to operate independently of potential fluctuations in system demands, and providing sufficient retention contact time for disinfection agents to meet the requirements of the Surface Water Treatment Rule and Long-Term 2 Enhanced Surface Water Treatment Rule.

Risk(s): Failure of the Clearwell would cause a service disruption.

Impact on Operations: Ability to meet system reliability and water quality regulations.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-100-104-0 - Clearwell Improvements	\$0	\$0	\$3,082,744	\$3,405,698	\$441,937	\$6,930,380
PROJECT FUNDING TOTAL	\$0	\$0	\$3,082,744	\$3,405,698	\$441,937	\$6,930,380

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PWSA Bond	\$0	\$0	\$3,082,744	\$3,405,698	\$441,937	\$6,930,380
PROJECT FUNDING TOTAL	\$0	\$0	\$3,082,744	\$3,405,698	\$441,937	\$6,930,380

Corrosion Control Chemical Storage and Feed Systems



Project Description

Installation of three phosphoric acid storage and feed systems located at Aspinwall Pump Station, Bruecken Pump Station, and the Membrane Filtration Plant to provide corrosion control in the distribution system.

Project Details

Phase: Close-out

Priority: Regulatory Compliance, Quality of Service

Project Justification: Required in order to improve water quality.

Risk(s): Not completing this project could result in the failure to meet regulatory requirements.

Impact on Operations: In order to prevent algae growth in the open Highland No. 1 Reservoir, treatment must occur at three major locations with 6 injection points. This requires additional maintenance of treatment facilities at satellite locations.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-322-107-0 - Corrosion Control Chemical Storage and Feed Systems	\$26,385	\$0	\$0	\$0	\$0	\$26,385
PROJECT FUNDING TOTAL	\$26,385	\$0	\$0	\$0	\$0	\$26,385

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$26,385	\$0	\$0	\$0	\$0	\$26,385
PROJECT FUNDING TOTAL	\$26,385	\$0	\$0	\$0	\$0	\$26,385

Highland Park Membrane Filtration Plant UV System



Project Description

Installation of a UV treatment system and appurtenances at the Highland Park Membrane Filtration Plant (MFP) to comply with PADEP requirements.

Project Details

Phase: Close-Out

Priority: Safety, Quality of Service, Regulatory Compliance, Risk of Failure

Project Justification: PADEP determined that additional disinfection was required.

Risk(s): Membrane Filtration Plant cannot operate without additional disinfection measures.

Impact on Operations: Membrane Filtration Plant would be inoperable without this project.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-322-106-0 - Highland Park Membrane Filtration Plant UV System	\$40,000	\$0	\$0	\$0	\$0	\$40,000
PROJECT FUNDING TOTAL	\$40,000	\$0	\$0	\$0	\$0	\$40,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$40,000	\$0	\$0	\$0	\$0	\$40,000
PROJECT FUNDING TOTAL	\$40,000	\$0	\$0	\$0	\$0	\$40,000

Hydraulic Valve Replacement Program



Project Description

This project is retrofitting the various hydraulic valve actuators primarily in the filters to electric valve actuators.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: Improve operational control while modernizing the facility to better align with industry standard practices.

Risk(s): Inefficient operations resulting from an aged facility that do not align with industry standard practices.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-100-105-0 - Hydraulic Valve Replacement Program	\$232,401	\$825,468	\$2,192,131	\$0	\$0	\$3,250,000
PROJECT FUNDING TOTAL	\$232,401	\$825,468	\$2,192,131	\$0	\$0	\$3,250,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$232,401	\$0	\$0	\$0	\$0	\$232,401
Debt (Project Fund)	\$0	\$825,468	\$2,192,131	\$0	\$0	\$3,017,599
PROJECT FUNDING TOTAL	\$232,401	\$825,468	\$2,192,131	\$0	\$0	\$3,250,000

Lime Slurry System and Sodium Permanganate System Improvements



Project Description

Lime slurry system capacity expansion improvements to include demolition, installation of additional tanks, chemical feed equipment, minor revisions to the existing lime slurry system, and Supervisory Control and Data Acquisition (SCADA) communications equipment and interface.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: Adequate lime storage is mandated by the PADEP. New system will be more efficient/require less labor to operate and maintain.

Risk(s): The extra storage for liquid lime is critical to the reliable operation of the Water Treatment Plant.

Impact on Operations: Adequate storage, increased reliability and efficiency, less housekeeping labor.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-322-101-7 - Lime Slurry System Improvements	\$982,237	\$3,872,008	\$2,345,049	\$0	\$0	\$7,199,293
2017-322-101-12 - Lime Slurry System and Sodium Permanganate System Improvements - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0
2017-322-101-13 - Lime Slurry System and Sodium Permanganate System Improvements - Electrical	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$982,237	\$3,872,008	\$2,345,049	\$0	\$0	\$7,199,293

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$982,237	\$0	\$0	\$0	\$0	\$982,237
Debt (Project Fund)	\$0	\$3,872,008	\$2,345,049	\$0	\$0	\$6,217,057
PROJECT FUNDING TOTAL	\$982,237	\$3,872,008	\$2,345,049	\$0	\$0	\$7,199,293

Overhead Crane Modernization



Project Description

Replacement and upgrade of existing cranes at Bruecken, Mission, Aspinwall, and Ross Pump Stations.

Project Details

Phase: Not Started

Priority: Safety, Quality of Service

Project Justification: The current age of existing overhead cranes are well beyond their useful life and are in need of a replacement.

Risk(s): Inefficient operations resulting from an aged facility that do not align with industry standard practices.

Impact on Operations: Increase operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-100-0 - Overhead Crane Modernization	\$375,000	\$440,000	\$0	\$0	\$0	\$815,000
PROJECT FUNDING TOTAL	\$375,000	\$440,000	\$0	\$0	\$0	\$815,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$375,000	\$440,000	\$0	\$0	\$0	\$815,000
PROJECT FUNDING TOTAL	\$375,000	\$440,000	\$0	\$0	\$0	\$815,000

Ross Pump Station



Project Description

Replacement of aged pump and valve equipment, meters, SCADA, electrical equipment, HVAC, auxiliary systems, as well as the rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Design

Priority: Regulatory Compliance, Quality of Service

Project Justification: Pump station is in need of rehabilitation. Pumps and ancillary systems are beyond their design life.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, reliability, life expectancy, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2026-100-102-0 - Ross Pump Station	\$0	\$0	\$1,788,845	\$2,385,127	\$657,127	\$4,831,099
PROJECT FUNDING TOTAL	\$0	\$0	\$1,788,845	\$2,385,127	\$657,127	\$4,831,099

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$1,788,845	\$2,385,127	\$657,127	\$4,831,099
PROJECT FUNDING TOTAL	\$0	\$0	\$1,788,845	\$2,385,127	\$657,127	\$4,831,099

Sedimentation Basin Rehabilitation Project



Project Description

Improvements to keep stormwater from infiltrating the Basins, rehabilitation or replacement of existing sluice gates including drain gates, disconnect existing stormwater outfall including related permitting, repair of existing vaults.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Quality of Service, Risk of Failure

Project Justification: The sedimentation basins are the only system in the Water Treatment Plant process that is open to the environment. As such, care must be taken to prevent infiltration of contaminants via surface runoff. These repairs and valve replacements were recommended by regulating agencies. Working isolation valves are required in order to properly isolate and maintain treatment. Proactive repair/maintenance will reduce the chance of complete failure of the asset.

Risk(s): Authority could experience regulatory violations.

Impact on Operations: Ability for staff to quickly isolate the sedimentation basins as part of routine or emergency maintenance.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-106-0 - Sedimentation Basin Rehabilitation Project	\$249,913	\$749,739	\$510,275	\$4,126,176	\$5,491,118	\$11,127,221
PROJECT FUNDING TOTAL	\$249,913	\$749,739	\$510,275	\$4,126,176	\$5,491,118	\$11,127,221

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$249,913	\$749,739	\$510,275	\$4,126,176	\$5,491,118	\$11,127,221
PROJECT FUNDING TOTAL	\$249,913	\$749,739	\$510,275	\$4,126,176	\$5,491,118	\$11,127,221

Sludge Chamber Project



Project Description

Replacement of existing Sludge Pump and related components to the sludge chamber.

Project Details

Phase: Design

Priority: Regulatory Compliance, Quality of Service, Risk of Failure

Project Justification: The submersible pumps are not operational because they are not capable of handling the type of sludge coming from the clarifier drainage. The pump system needs to be designed to ensure the proper pump size and selection suitable for sludge handling is utilized.

Risk(s): Inefficient operations resulting from an aged facility that do not align with industry standard practices.

Impact on Operations: Increased operating efficiency, flexibility, reliability, and life expectancy.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2021-322-102-0 - Sludge Chamber Pump Project	\$2,215,978	\$107,301	\$0	\$0	\$0	\$2,323,279
2021-322-102-1 - Sludge Chamber Pump Project - Construction	\$0	\$0	\$0	\$0	\$0	\$0
2021-322-102-2 - Sludge Chamber Pump Project - General	\$0	\$0	\$0	\$0	\$0	\$0
2021-322-102-3 - Sludge Chamber Pump Project - Mechanical/Electric	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$2,215,978	\$107,301	\$0	\$0	\$0	\$2,323,279

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$2,215,978	\$107,301	\$0	\$0	\$0	\$2,323,279
PROJECT FUNDING TOTAL	\$2,215,978	\$107,301	\$0	\$0	\$0	\$2,323,279

Water Treatment Plant 84-Inch Diameter Line Rehabilitation



Project Description

Replacement of various isolation valves at the plant and the encasement of an existing 84-inch diameter pipe coupling and lining of the conduit between the clarifiers and the filter building.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Risk of Failure, Quality of Service

Project Justification: These 84-inch coupling presents a single source of failure at the WTP. Water from the sedimentation basins travels through a single 84-inch diameter main to the filters. There is a coupling on this main that is highly corroded and at risk of failure. Proactive repair/maintenance will reduce the chance of complete failure of the asset.

Risk(s): Customers may experience service disruption.

Impact on Operations: Inability to route water through the sedimentation basins will lead to inability to meet water quality regulations.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-100-106-1 - Water Treatment Plant 84-Inch Diameter Line Rehabilitation Project	\$200,000	\$0	\$0	\$0	\$0	\$200,000
PROJECT FUNDING TOTAL	\$200,000	\$0	\$0	\$0	\$0	\$200,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$200,000	\$0	\$0	\$0	\$0	\$200,000
PROJECT FUNDING TOTAL	\$200,000	\$0	\$0	\$0	\$0	\$200,000

Water Treatment Plant Chemical Building Storage Tank Improvements



Project Description

The project involved three ferric chloride storage tanks and requires each tank, one at a time, to be removed from service, drained, old liner removed, bottom cone replaced, and a new liner installed. The tank will then be hydrostatically tested before being placed back into service and moving to the next tank. All work will be overseen by a certified tank installer and proper documentation filed with the PADEP for the work on the registered storage tanks. In addition, this project will install new remote fill point spill containment lockers to better contain any drips during the unloading process.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: PWSA maintains three above ground storage tanks for ferric chloride, which is a primary chemical used for coagulation in the drinking water treatment process. These steel tanks are lined to protect against the highly corrosive property of ferric chloride, however due to the age of the liner regulatory inspections have determined the liners require replacement. In addition, the bottom cone section of each tank has lost wall thickness due to age and requires replacement. This work is needed to maintain storage of the chemical and comply with regulatory inspections.

Risk(s): Compliance violation for improper operation of an above ground storage tank system. Product leakage resulting in emergency cleanup and disposal of a hazardous waste. Catastrophic failure resulting in employee safety concerns and loss of water treatment capacity or capability.

Impact on Operations: Water treatment can continue while one tank at a time is out of service for liner replacement. During this time more frequent deliveries are required to maintain chemical volumes with reduced storage capacity.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-100-111-0 - Water Treatment Plant Chemical Building Storage Tank Improvements	\$510,548	\$0	\$0	\$0	\$0	\$510,548
PROJECT FUNDING TOTAL	\$510,548	\$0	\$0	\$0	\$0	\$510,548

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$510,548	\$0	\$0	\$0	\$0	\$510,548
PROJECT FUNDING TOTAL	\$510,548	\$0	\$0	\$0	\$0	\$510,548

Water Treatment Plant Filter Building Roof



Project Description

Roof and parapet flashing replacement at the Water Treatment Plant filter building.

Project Details

Phase: Not Started

Priority: Safety, Security, Risk of Failure, Quality of Service

Project Justification: The existing roof is aged and in need of replacement.

Risk(s): Continued deterioration of the roof could result in a emergency replacement.

Impact on Operations: Decrease in yearly maintenance for the existing roof.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-103-0 - Water Treatment Plant Filter Building Roof	\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000
PROJECT FUNDING TOTAL	\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000
PROJECT FUNDING TOTAL	\$0	\$0	\$3,500,000	\$0	\$0	\$3,500,000

Water Treatment Plant HVAC Improvements



Project Description

Improvements to aged HVAC systems at the Water Treatment Plant.

Project Details

Phase: Not Started

Priority: Safety, Risk of Failure, Quality of Service

Project Justification: The HVAC systems at the Water Treatment Plant are at risk for failure due to its age.

Risk(s): Failure of existing HVAC systems.

Impact on Operations: Reduction in future maintenance costs associated with aging equipment and multiple HVAC units.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-102-0 - Water Treatment Plant HVAC Improvements	\$0	\$163,333	\$358,333	\$858,333	\$0	\$1,379,999
PROJECT FUNDING TOTAL	\$0	\$163,333	\$358,333	\$858,333	\$0	\$1,379,999

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$163,333	\$358,333	\$858,333	\$0	\$1,379,999
PROJECT FUNDING TOTAL	\$0	\$163,333	\$358,333	\$858,333	\$0	\$1,379,999

Water Treatment Plant Contingency



Project Description

Water Treatment Plant contingency project pass-through.

Project Details

Phase: Not applicable

Priority: Not applicable

Project Justification: Improved efficiency of capital improvement fund management.

Risk(s): No identified risks.

Impact on Operations: Improved efficiency of capital improvement plan management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-100-105-0 - Water Treatment Plant Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Water Pumping & Storage



Category Summary

Projects within this category improve, maintain, or replace assets within the distribution system that transports and store water that is utilized by PWSA customers. The system contains 1 raw water pump station, 10 finished water pump stations, 3 finished water reservoirs, 1 source water reservoir, and 13 storage tanks. These assets are critical to ensure that appropriate water levels are always maintained and available for customers.

Project Summary Table

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Aspinwall and Fox Chapel Interim Feed	\$0	\$0	\$0	\$0	\$0	\$0
Aspinwall Pump Station Improvements	\$2,474,376	\$15,242,622	\$14,986,231	\$14,518,467	\$5,571,635	\$52,793,331
Aspinwall Pump Station to Lanpher Reservoir Rising Main	\$1,366,295	\$5,465,180	\$13,662,951	\$40,988,853	\$47,820,328	\$109,303,608
Bruecken Pump Station Improvements	\$1,064,504	\$4,258,017	\$15,967,563	\$21,290,084	\$37,257,648	\$79,837,817
Bruecken Pumps No. 4, 5, and 7 Starter Replacements	\$1,178,378	\$0	\$0	\$0	\$0	\$1,178,378
Bruecken Pump Station Valve Vault Upgrade	\$133,121	\$0	\$0	\$0	\$0	\$133,121
Chlorine Booster Station Improvements	\$433,418	\$0	\$4,233,897	\$11,760,250	\$0	\$16,427,565
Disinfection By-Products Mitigation	\$0	\$0	\$0	\$5,854,861	\$8,277,856	\$14,132,717
Garfield Tank Improvements	\$0	\$0	\$395,930	\$791,860	\$416,860	\$1,604,650
Herron Hill Pump Station Improvements	\$0	\$0	\$427,623	\$850,520	\$420,496	\$1,698,639
Herron Hill Reservoir Improvements	\$133,000	\$0	\$0	\$0	\$0	\$133,000
Herron Hill Reservoir Improvements - Sodium Hypochlorite Building	\$901,471	\$0	\$0	\$0	\$0	\$901,471
Herron Hill Tank Pump Station Improvements	\$0	\$0	\$0	\$180,221	\$360,442	\$540,663
Highland No. 2 Reservoir Liner and Cover Replacements	\$1,105,250	\$1,800,000	\$3,150,000	\$3,150,000	\$0	\$9,205,250
Highland Reservoir Pump Station and Rising Main	\$23,436,285	\$16,815,735	\$13,618,667	\$0	\$0	\$53,870,687
Howard Pump Station Improvements	\$0	\$0	\$0	\$577,267	\$1,154,534	\$1,731,801
Inline Pump Station (Coral and Pacific) Improvements	\$0	\$0	\$33,165	\$39,805	\$483,129	\$556,099
Lanpher Reservoir Improvements	\$5,545,404	\$5,791,201	\$0	\$0	\$0	\$11,336,605
Lincoln Pump Station Improvements	\$144,201	\$288,401	\$173,459	\$2,014,455	\$2,196,447	\$4,816,963
Lincoln Pump Station: Bypass Pump Station Project	\$1,803,473	\$0	\$0	\$0	\$0	\$1,803,473
Lincoln Tank Improvements	\$172,656	\$257,910	\$709,846	\$3,081,377	\$0	\$4,221,789
Mission Pump Station Improvements	\$0	\$0	\$0	\$575,923	\$1,151,845	\$1,727,768
Saline Pump Station Improvements	\$0	\$0	\$384,845	\$577,267	\$983,397	\$1,945,509
Spring Hill Tank Improvements	\$0	\$0	\$0	\$72,975	\$291,901	\$364,876
Water Pumping & Storage Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$39,891,833	\$49,919,066	\$67,744,177	\$106,324,185	\$106,386,518	\$370,265,779

Aspinwall and Fox Chapel Interim Feed



Project Description

Design of alternative feed to Aspinwall and Fox Chapel during the construction clearwell bypass.

Project Details

Phase: Not Started

Priority: Quality of Service, Strategic Priorities

Project Justification: The Aspinwall Pump Station to Lanpher Reservoir Rising Main project was growing to exceed reasonable budget expectations. An alternate method to ensure contact time for Fox Chapel and Aspinwall will be explored as an alternative to the Lanpher Rising Main Project.

Risk(s): Excessive cost of the Lanpher Rising Main, delays due to permitting and borough negotiations, difficult operations due to two mains.

Impact on Operations: The Lanpher Rising Main is proving to likely be difficult to operate. This option will allow the Aspinwall Pumps to decrease in size as well as provide more bandwidth for pump operation.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-100-113-0 - Aspinwall and Fox Chapel Interim Feed	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PENNVEST	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Aspinwall Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems at the Bruecken and Aspinwall Pump Stations or replacement with a single high service pump station at the Water Treatment Plant.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions for staff. Additionally, installation of variable frequency drives will reduce water pressure surges during start-up, and allow the pumps to operate over a wide range of flow, allow the pumps to operate while the clearwell is being replaced. Alternately, a new high service pump station to replace the existing pump stations is also being investigated.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, and reliability and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-323-104-0 - Aspinwall Pump Station Improvements	\$2,024,376	\$15,242,622	\$14,986,231	\$14,518,467	\$5,571,635	\$52,343,331
2017-323-104-1 - Aspinwall Pump Station Concrete Floor Repairs	\$450,000	\$0	\$0	\$0	\$0	\$450,000
PROJECT FUNDING TOTAL	\$2,474,376	\$15,242,622	\$14,986,231	\$14,518,467	\$5,571,635	\$52,793,331

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$450,000	\$0	\$0	\$0	\$0	\$450,000
WiFiA/PWSA Bond	\$2,024,376	\$15,242,622	\$14,986,231	\$14,518,467	\$5,571,635	\$52,343,331
PROJECT FUNDING TOTAL	\$2,474,376	\$15,242,622	\$14,986,231	\$14,518,467	\$5,571,635	\$52,793,331

Aspinwall Pump Station to Lanpher Reservoir Rising Main



Project Description

Construction of a new, redundant rising main from Aspinwall Pump Station to Lanpher Reservoir.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure, Strategic Priorities

Project Justification: The existing 60 inch rising main that supplies the Lanpher Reservoir is a 150 year old riveted steel pipe, has several tap connections to critical and bulk customers, and has experienced recent pipe failures. The proposed rising main would serve as a primary supply source for the Lanpher Reservoir during the Clearwell Replacement Project and a redundant supply line in case of a failure or planned cleaning and rehabilitation of the existing 60 inch supply main.

Risk(s): Failure of the rising main could impact up to half of PWSA's customers.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2018-323-100-0 - Aspinwall Pump Station to Lanpher Reservoir Rising Main	\$1,366,295	\$5,465,180	\$13,662,951	\$40,988,853	\$47,820,328	\$109,303,608
PROJECT FUNDING TOTAL	\$1,366,295	\$5,465,180	\$13,662,951	\$40,988,853	\$47,820,328	\$109,303,608

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PENNVEST	\$1,366,295	\$5,465,180	\$13,662,951	\$40,988,853	\$47,820,328	\$109,303,608
PROJECT FUNDING TOTAL	\$1,366,295	\$5,465,180	\$13,662,951	\$40,988,853	\$47,820,328	\$109,303,608

Bruecken Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station was constructed in 1931. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions. Additionally, installation of variable frequency drives will reduce water pressure surges during start-up, allow the pumps to operate more efficiently over a wide range of flow demands, and will reduce the required size of the new Clearwell.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, reliability, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-323-106-0 - Bruecken Pump Station Improvements	\$1,064,504	\$4,258,017	\$15,967,563	\$21,290,084	\$37,257,648	\$79,837,817
PROJECT FUNDING TOTAL	\$1,064,504	\$4,258,017	\$15,967,563	\$21,290,084	\$37,257,648	\$79,837,817

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PENNVEST	\$1,064,504	\$4,258,017	\$15,967,563	\$21,290,084	\$37,257,648	\$79,837,817
PROJECT FUNDING TOTAL	\$1,064,504	\$4,258,017	\$15,967,563	\$21,290,084	\$37,257,648	\$79,837,817

Bruecken Pumps No. 4, 5, and 7 Starter Replacements



Project Description

Replacement of Bruecken Pump Station motor starters for Pumps No. 4, 5, and 7.

Project Details

Phase: Planning

Priority: Quality of Service, Risk of Failure

Project Justification: The motor starters failed and require immediate replacement.

Risk(s): May cause service disruptions.

Impact on Operations: Increased operating efficiency, flexibility, and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-323-101-0 - Bruecken Pumps No. 4, 5, and 7 Starter Replacements	\$1,178,378	\$0	\$0	\$0	\$0	\$1,178,378
PROJECT FUNDING TOTAL	\$1,178,378	\$0	\$0	\$0	\$0	\$1,178,378

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,178,378	\$0	\$0	\$0	\$0	\$1,178,378
PROJECT FUNDING TOTAL	\$1,178,378	\$0	\$0	\$0	\$0	\$1,178,378

Bruecken Pump Station Valve Vault Upgrade



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Close-out

Priority: Safety, Risk of Failure, Quality of Service

Project Justification: The pump station is in need of renovations and upgrades to maintain service and restore a 20 to 25 year useful life expectancy.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, reliability, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2013-323-175-0 - Bruecken Pump Station Upgrade - Consultant	\$30,000	\$0	\$0	\$0	\$0	\$30,000
2013-323-175-1 - Bruecken Pump Station Valve Vault Upgrade - General	\$100,000	\$0	\$0	\$0	\$0	\$100,000
2013-323-175-2 - Bruecken Pump Station Valve Vault Upgrade - Electrical	\$3,121	\$0	\$0	\$0	\$0	\$3,121
PROJECT FUNDING TOTAL	\$133,121	\$0	\$0	\$0	\$0	\$133,121

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$133,121	\$0	\$0	\$0	\$0	\$133,121
PROJECT FUNDING TOTAL	\$133,121	\$0	\$0	\$0	\$0	\$133,121

Chlorine Booster Station Improvements



Project Description

Replacement of existing chlorine injection facilities at reservoirs and tanks for chlorine residual.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: PWSA boosts chlorine residual at a majority of its storage facilities. Recent changes to PADEP regulations require an increase in minimum chlorine residual levels in the distribution system. All chlorine booster facilities need to be upgraded in order to meet these requirements.

Risk(s): Exposes the Authority's customers to poor water quality.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-323-101-0 - Chlorine Booster Station Improvements	\$433,418	\$0	\$4,233,897	\$11,760,250	\$0	\$16,427,565
PROJECT FUNDING TOTAL	\$433,418	\$0	\$4,233,897	\$11,760,250	\$0	\$16,427,565

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$433,418	\$0	\$4,233,897	\$11,760,250	\$0	\$16,427,565
PROJECT FUNDING TOTAL	\$433,418	\$0	\$4,233,897	\$11,760,250	\$0	\$16,427,565

Disinfection By-Products Mitigation



Project Description

Replacement of existing trihalomethane (THM) removal systems at Allentown, Squirrel Hill, and Brashear tanks.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: Repair of the existing system to improve the level of service provided to customers.

Risk(s): Delaying the replacement of the existing systems will result in increased downtime of the existing systems that need to be repaired. This will lead to possible regulatory violations for exceeding THM levels.

Impact on Operations: Decrease in yearly maintenance for the existing system.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-323-101-0 - Disinfection By-Products Mitigation	\$0	\$0	\$0	\$5,854,861	\$8,277,856	\$14,132,717
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$5,854,861	\$8,277,856	\$14,132,717

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$5,854,861	\$8,277,856	\$14,132,717
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$5,854,861	\$8,277,856	\$14,132,717

Garfield Tank Improvements



Project Description

Rehabilitation or replacement of the existing tank. Increasing the tank capacity may be necessary.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The Garfield elevated storage tank was constructed in 1959 and last rehabilitated in 1992. The existing tank does not have sufficient capacity to meet the PADEP requirements for sizing, which states that a tank must have sufficient capacity to meet average daily demand plus fire flow demand. This project will provide adequate storage through system redundancy to meet the pressure district's demand and fire flow conditions.

Risk(s): Could provide insufficient capacity and service disruptions.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2026-300-100-0 - Garfield Tank Improvements	\$0	\$0	\$395,930	\$791,860	\$416,860	\$1,604,650
PROJECT FUNDING TOTAL	\$0	\$0	\$395,930	\$791,860	\$416,860	\$1,604,650

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$395,930	\$791,860	\$416,860	\$1,604,650
PROJECT FUNDING TOTAL	\$0	\$0	\$395,930	\$791,860	\$416,860	\$1,604,650

Herron Hill Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Planning

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station was originally constructed in the late 1890's. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, and reliability and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-300-100-0 - Herron Hill Pump Station Improvements	\$0	\$0	\$427,623	\$850,520	\$420,496	\$1,698,639
PROJECT FUNDING TOTAL	\$0	\$0	\$427,623	\$850,520	\$420,496	\$1,698,639

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$427,623	\$850,520	\$420,496	\$1,698,639
PROJECT FUNDING TOTAL	\$0	\$0	\$427,623	\$850,520	\$420,496	\$1,698,639

Herron Hill Reservoir Improvements



Project Description

Replacement of existing reservoir liner and cover and associated reservoir rehabilitation. Replacement of existing chlorine injection system.

Project Details

Phase: Close-out

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: The existing cover has reached the end of its useful life and must be replaced. Existing chlorine feed systems are beyond their useful life and must be replaced.

Risk(s): Exposes the Authority's customers to poor water quality from reservoir failure and inadequate booster disinfection.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-323-100-0 - Herron Hill Reservoir Improvements	\$133,000	\$0	\$0	\$0	\$0	\$133,000
PROJECT FUNDING TOTAL	\$133,000	\$0	\$0	\$0	\$0	\$133,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$133,000	\$0	\$0	\$0	\$0	\$133,000
PROJECT FUNDING TOTAL	\$133,000	\$0	\$0	\$0	\$0	\$133,000

Herron Hill Reservoir Improvements - Sodium Hypochlorite Building



Project Description

Replacement of existing chlorine injection system.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: Existing chlorine feed systems are beyond their useful life and must be replaced.

Risk(s): Exposes the Authority's customers to poor water quality and possible PADEP violations due to inadequate booster disinfection.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-323-100-1 - Herron Hill Reservoir Improvements - Sodium Hypochlorite Building - General	\$640,450	\$0	\$0	\$0	\$0	\$640,450
2019-323-100-2 - Herron Hill Reservoir Improvements - Sodium Hypochlorite Building - Electrical	\$203,722	\$0	\$0	\$0	\$0	\$203,722
2019-323-100-3 - Herron Hill Reservoir Improvements - Sodium Hypochlorite Building - HVAC	\$36,854	\$0	\$0	\$0	\$0	\$36,854
2019-323-100-4 - Herron Hill Reservoir Improvements - Sodium Hypochlorite Building - Plumbing	\$20,445	\$0	\$0	\$0	\$0	\$20,445
PROJECT FUNDING TOTAL	\$901,471	\$0	\$0	\$0	\$0	\$901,471

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$901,471	\$0	\$0	\$0	\$0	\$901,471
PROJECT FUNDING TOTAL	\$901,471	\$0	\$0	\$0	\$0	\$901,471

Herron Hill Tank Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station was originally constructed in the late 1890's. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Lack of facility planning exposes PWSA to higher capital costs to address emergency failures and customers to a potentially deficient water supply.

Impact on Operations: Increased operating efficiency, flexibility, and reliability and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2027-300-100-0 - Herron Hill Tank Pump Station Improvements	\$0	\$0	\$0	\$180,221	\$360,442	\$540,663
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$180,221	\$360,442	\$540,663

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$180,221	\$360,442	\$540,663
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$180,221	\$360,442	\$540,663

Highland No. 2 Reservoir Liner and Cover Replacements



Project Description

Replacement of existing reservoir liner and cover and associated reservoir rehabilitation. Replacement of existing chlorine injection system and an upgrade of the reservoir outlet structure.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: The Highland No. 2 Reservoir will be used as a temporary Clearwell while the new Clearwell is being constructed. Existing chlorine feed facilities must be upgraded to meet PADEP regulatory requirements for distribution chlorine residual. Existing reservoir outlet structure must be upgraded to accommodate new Highland Reservoir Pump Station.

Risk(s): Authority could experience poor water quality and regulatory violations.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-323-102-0 - Highland No. 2 Reservoir Liner and Cover Replacements	\$205,250	\$0	\$0	\$0	\$0	\$205,250
2019-323-102-3 - Highland No. 2 Reservoir Dam Permitting and Slope Stability	\$900,000	\$1,800,000	\$3,150,000	\$3,150,000	\$0	\$9,000,000
PROJECT FUNDING TOTAL	\$1,105,250	\$1,800,000	\$3,150,000	\$3,150,000	\$0	\$9,205,250

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
WIFIA	\$205,250	\$0	\$0	\$0	\$0	\$205,250
WIFIA/PWSA Bond	\$900,000	\$1,800,000	\$3,150,000	\$3,150,000	\$0	\$9,000,000
PROJECT FUNDING TOTAL	\$1,105,250	\$1,800,000	\$3,150,000	\$3,150,000	\$0	\$9,205,250

Highland Reservoir Pump Station and Rising Main



Project Description

Construction of a new finished water pump station and transmission main to supply water to the Highland No. 1 service area from Highland No. 2 Reservoir.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: All water supply for the Highland No. 1 service area currently flows through the Highland No. 1 reservoir and the MFP. There is no other source water supply for the Highland No. 1 service area. In addition to providing alternate supply, this project is to temporarily provide finished water that meets the chlorine disinfection rules to the Highland No. 1 service area during the Clearwell Replacement Project. Additionally, this new facility could also be designed to service the Garfield pressure district, thus eliminating the rehabilitation of the Highland Pump Station.

Risk(s): Customers may experience service disruption.

Impact on Operations: Increased operation and maintenance labor and expenses. Increased operating flexibility in the future.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-323-101-0 - Highland Reservoir Pump Station and Rising Main	\$3,084,885	\$2,805,735	\$2,449,667	\$0	\$0	\$8,340,287
2017-323-101-1 - Highland Reservoir Pump Station and Rising Main - General	\$13,680,000	\$9,370,000	\$8,740,000	\$0	\$0	\$31,790,000
2017-323-101-2 - Highland Reservoir Pump Station and Rising Main - Electrical	\$3,540,000	\$3,700,000	\$2,060,000	\$0	\$0	\$9,300,000
2017-323-101-3 - Highland Reservoir Pump Station and Rising Main - HVAC	\$284,000	\$520,000	\$196,000	\$0	\$0	\$1,000,000
2017-323-101-4 - Highland Reservoir Pump Station and Rising Main - Plumbing	\$270,000	\$420,000	\$173,000	\$0	\$0	\$863,000
2017-323-101-5 - Highland Reservoir Pump Station and Rising Main - Supply and Rising Main	\$2,577,400	\$0	\$0	\$0	\$0	\$2,577,400
PROJECT FUNDING TOTAL	\$23,436,285	\$16,815,735	\$13,618,667	\$0	\$0	\$53,870,687

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$23,436,285	\$16,815,735	\$13,618,667	\$0	\$0	\$53,870,687
PROJECT FUNDING TOTAL	\$23,436,285	\$16,815,735	\$13,618,667	\$0	\$0	\$53,870,687

Howard Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station was originally constructed between 1900 and 1904. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Lack of facility planning exposes the Authority to higher capital costs to address emergency failures and its customers to a potentially deficient water supply.

Impact on Operations: Increased operating efficiency, flexibility, and reliability and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2027-300-101-0 - Howard Pump Station Improvements	\$0	\$0	\$0	\$577,267	\$1,154,534	\$1,731,801
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$577,267	\$1,154,534	\$1,731,801

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$577,267	\$1,154,534	\$1,731,801
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$577,267	\$1,154,534	\$1,731,801

Inline Pump Station (Coral and Pacific) Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Lack of facility planning exposes the Authority to higher capital costs to address emergency failures and its customers to a potentially deficient water supply.

Impact on Operations: Increased operating efficiency, flexibility, and reliability and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2026-300-101-0 - Inline Pump Station (Coral and Pacific) Improvements	\$0	\$0	\$33,165	\$39,805	\$483,129	\$556,099
PROJECT FUNDING TOTAL	\$0	\$0	\$33,165	\$39,805	\$483,129	\$556,099

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$33,165	\$39,805	\$483,129	\$556,099
PROJECT FUNDING TOTAL	\$0	\$0	\$33,165	\$39,805	\$483,129	\$556,099

Lanpher Reservoir Improvements



Project Description

Replacement of existing reservoir liner and cover and associated reservoir rehabilitation. Replacement of existing chlorine injection system.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The existing cover failed and had to be replaced on an emergency basis as part of the PADEP October 2017 Administrative Order. Existing chlorine feed systems are beyond their useful life and must be replaced.

Risk(s): Exposes the Authority's customers to poor water quality from reservoir failure and inadequate booster disinfection.

Impact on Operations: Increased flexibility and reliability, system compliance, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-323-105-0 - Lanpher Reservoir Improvements	\$5,045,404	\$5,791,201	\$0	\$0	\$0	\$10,836,605
2017-323-105-4 - Lanpher Reservoir Booster Disinfection Improvements - Construction	\$0	\$0	\$0	\$0	\$0	\$0
2017-323-105-5 - Lanpher Reservoir Booster Disinfection Improvements - General/Mechanical	\$0	\$0	\$0	\$0	\$0	\$0
2017-323-105-6 - Lanpher Reservoir Booster Disinfection Improvements - Electrical	\$0	\$0	\$0	\$0	\$0	\$0
2017-323-105-7 - Lanpher Reservoir Booster Disinfection Improvements - HVAC	\$0	\$0	\$0	\$0	\$0	\$0
2017-323-105-8 - Lanpher Reservoir Booster Disinfection Improvements - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0
2017-323-105-9 - Lanpher Reservoir Dam Permitting	\$500,000	\$0	\$0	\$0	\$0	\$500,000
PROJECT FUNDING TOTAL	\$5,545,404	\$5,791,201	\$0	\$0	\$0	\$11,336,605

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$5,545,404	\$5,791,201	\$0	\$0	\$0	\$11,336,605
PROJECT FUNDING TOTAL	\$5,545,404	\$5,791,201	\$0	\$0	\$0	\$11,336,605

Lincoln Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, and auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The pump station was originally constructed in 1952. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Lack of facility planning exposes the Authority to higher capital costs to address emergency failures and customers to a potentially deficient water supply.

Impact on Operations: Increased operating efficiency, flexibility, and reliability and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-300-101-0 - Lincoln Pump Station Improvements	\$144,201	\$288,401	\$173,459	\$2,014,455	\$2,196,447	\$4,816,963
PROJECT FUNDING TOTAL	\$144,201	\$288,401	\$173,459	\$2,014,455	\$2,196,447	\$4,816,963

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$144,201	\$0	\$0	\$0	\$0	\$144,201
Debt (Project Fund)	\$0	\$288,401	\$173,459	\$2,014,455	\$2,196,447	\$4,672,762
PROJECT FUNDING TOTAL	\$144,201	\$288,401	\$173,459	\$2,014,455	\$2,196,447	\$4,816,963

Lincoln Pump Station: Bypass Pump Station Project



Project Description

Construction of a temporary bypass pump station that will be used at the Lincoln Pump Station and Saline Pump Station. This pump station will allow for the existing pump station to be taken off line completely for rehabilitation.

Project Details

Phase: Construction

Priority: Safety, Quality of Service

Project Justification: Repair of existing pump station while trying to keep it online increases the cost and construction time. This is a cost effective way to provide temporary pumping.

Risk(s): Delaying the construction of this pump station will delay the renewal of existing pump stations that are in need of upgrades.

Impact on Operations: Decrease in yearly maintenance for the existing system.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-323-100-0 - Lincoln Pump Station: Bypass Pump Station Project	\$169,640	\$0	\$0	\$0	\$0	\$169,640
2020-323-100-1 - Lincoln Pump Station: Bypass Pump Station Project - General	\$1,428,550	\$0	\$0	\$0	\$0	\$1,428,550
2020-323-100-2 - Lincoln Pump Station: Bypass Pump Station Project - Electrical	\$205,283	\$0	\$0	\$0	\$0	\$205,283
PROJECT FUNDING TOTAL	\$1,803,473	\$0	\$0	\$0	\$0	\$1,803,473

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,803,473	\$0	\$0	\$0	\$0	\$1,803,473
PROJECT FUNDING TOTAL	\$1,803,473	\$0	\$0	\$0	\$0	\$1,803,473

Lincoln Tank Improvements



Project Description

Rehabilitation or replacement of the existing tank.

Project Details

Phase: Planning

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: Constructed in 1939, this tank is nearing the end of its useful life. The last inspection, which was performed in 2018, noted deficiencies that need to be addressed to ensure water quality standards are met.

Risk(s): Authority could experience poor water quality, higher costs for emergency maintenance, and customers could experience a service disruption.

Impact on Operations: Increased flexibility and reliability and system compliance.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-300-102-0 - Lincoln Tank Improvements	\$172,656	\$257,910	\$709,846	\$3,081,377	\$0	\$4,221,789
PROJECT FUNDING TOTAL	\$172,656	\$257,910	\$709,846	\$3,081,377	\$0	\$4,221,789

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$172,656	\$257,910	\$709,846	\$3,081,377	\$0	\$4,221,789
PROJECT FUNDING TOTAL	\$172,656	\$257,910	\$709,846	\$3,081,377	\$0	\$4,221,789

Mission Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: The Mission Pump Station is the only pumping station located south of the Monongahela River and was originally constructed between 1910 and 1912. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, reliability, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2027-300-102-0 - Mission Pump Station Improvements	\$0	\$0	\$0	\$575,923	\$1,151,845	\$1,727,768
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$575,923	\$1,151,845	\$1,727,768

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$575,923	\$1,151,845	\$1,727,768
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$575,923	\$1,151,845	\$1,727,768

Saline Pump Station Improvements



Project Description

Replacement of aged pump and valve equipment, electrical equipment, HVAC, auxiliary systems, and rehabilitation of the building architectural and energy management systems.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service

Project Justification: The pump station was originally constructed in 1935. The pump station is in need of renovations and upgrades to maintain service, restore a 20 to 25 year useful life expectancy, and to provide safer conditions.

Risk(s): Authority could experience higher costs for emergency maintenance and customers could experience a service disruption.

Impact on Operations: Increased operating efficiency, flexibility, reliability, and improved safety conditions.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2026-300-102-0 - Saline Pump Station Improvements	\$0	\$0	\$384,845	\$577,267	\$983,397	\$1,945,509
PROJECT FUNDING TOTAL	\$0	\$0	\$384,845	\$577,267	\$983,397	\$1,945,509

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$384,845	\$577,267	\$983,397	\$1,945,509
PROJECT FUNDING TOTAL	\$0	\$0	\$384,845	\$577,267	\$983,397	\$1,945,509

Spring Hill Tank Improvements



Project Description

Perform a comprehensive inspection of the existing storage tanks and rehabilitation or replacement of the existing tanks.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: Constructed in 1929 of riveted steel, the coatings and structure of these tanks need to be rehabilitated due to corrosion.

Risk(s): Authority could experience poor water quality, higher costs for emergency maintenance, and customers could experience a service disruption.

Impact on Operations: Increased flexibility, reliability, and system compliance.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2027-300-103-0 - Spring Hill Tank Improvements	\$0	\$0	\$0	\$72,975	\$291,901	\$364,876
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$72,975	\$291,901	\$364,876

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$72,975	\$291,901	\$364,876
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$72,975	\$291,901	\$364,876

Water Pumping & Storage Contingency



Project Description

Water Pumping & Storage contingency project pass-through.

Project Details

Phase: Not Applicable

Priority: Not Applicable

Project Justification: Improved efficiency of capital improvement fund management.

Risk(s): No identified risks.

Impact on Operations: Improved efficiency of capital improvement plan management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-300-103-0 - Water Pumping & Storage Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Water Distribution



Category Summary

Projects within this category improve, maintain, or replace various aspects of the distribution system responsible for providing safe and clean drinking water to PWSA customers. The drinking water system contains approximately 964 miles of water lines and over 32,000 valves and fire hydrants. The distribution process begins at the PWSA Water Treatment Plant where water is pulled from the Allegheny River, processed for treatment, and ends at private service lines. PWSA continually conducts compliance monitoring and sample testing and is committed to providing customers with the highest quality drinking water that exceeds EPA standards.

Project Summary Table

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019 Large Diameter Water Main Improvements - Rising Main 3/4	\$554,318	\$0	\$0	\$0	\$0	\$554,318
2019 Large Diameter Water Main Improvements - Rising Main 4	\$1,798,053	\$0	\$0	\$0	\$0	\$1,798,053
Bus Rapid Transit Water Distribution	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
Interconnection Vault Stormwater Removal	\$1,988,248	\$584,104	\$0	\$0	\$0	\$2,572,352
Intermediate Meter Replacement Program	\$300,000	\$330,000	\$365,000	\$401,500	\$441,650	\$1,838,150
Large Diameter Water Main Program	\$1,426,158	\$11,790,000	\$11,385,237	\$2,042,791	\$3,986,859	\$30,631,046
Large Meter Replacement Program	\$409,200	\$450,120	\$495,132	\$544,654	\$600,000	\$2,499,106
Neighborhood Lead Service Line Replacement Program	\$11,425,056	\$45,219,382	\$122,612,321	\$0	\$0	\$179,256,759
Pressure District Boundary Adjustments and Low Pressure Remediation	\$0	\$0	\$0	\$234,992	\$1,700,078	\$1,935,070
Private Lead Service Line Reimbursement	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Regulator Valve and Vault Replacement Program	\$0	\$0	\$0	\$1,394,479	\$4,851,499	\$6,245,978
Small Diameter Water Main Replacement Program	\$23,318,760	\$34,114,409	\$124,402,025	\$150,721,183	\$155,495,167	\$488,051,544
Small Meter Replacement Program	\$900,000	\$990,000	\$1,089,000	\$1,200,000	\$1,320,000	\$5,499,000
Urgent Lead Service Line Replacement Program	\$1,847,292	\$1,940,880	\$2,032,021	\$2,134,967	\$2,235,223	\$10,190,383
Valve Replacement Program	\$3,819,165	\$3,170,000	\$3,170,000	\$3,170,000	\$3,170,000	\$16,499,165
Water and Wastewater Safety and Security Improvements	\$151,862	\$0	\$0	\$0	\$0	\$151,862
Water and Wastewater Safety and Security Improvements (PENNVEST)	\$997,816	\$2,844,539	\$5,242,901	\$4,742,901	\$500,000	\$14,328,156
Water Relay Program	\$2,384,735	\$3,250,265	\$3,350,000	\$3,350,000	\$3,350,000	\$15,685,000
Water Distribution Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$53,320,663	\$105,683,698	\$275,143,637	\$170,937,468	\$178,650,476	\$783,735,942

2019 Large Diameter Water Main Improvements - Rising Main 3/4



Project Description

Strategic replacement or rehabilitation of large diameter water mains (16-inch and larger) and appurtenances to improve system reliability and hydraulics, including internal and external inspections.

Project Details

Phase: Close-Out

Priority: Regulatory Compliance, Safety, Quality of Service, Strategic Priorities

Project Justification: The Authority's water system has approximately 122 miles of large diameter water mains. Maintaining a proactive approach to replacing large mains will ensure that large mains are replaced before the end of their useful life.

Risk(s): The consequences of failure for larger mains are much greater than for smaller distribution mains, which typically include significant service outages (larger area and longer time frame impacts), as well as property and roadway damage.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-325-103-0 - 2019 Large Diameter Water Main Improvements - Rising Main 3/4	\$554,318	\$0	\$0	\$0	\$0	\$554,318
PROJECT FUNDING TOTAL	\$554,318	\$0	\$0	\$0	\$0	\$554,318

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PWSA Bond	\$554,318	\$0	\$0	\$0	\$0	\$554,318
PROJECT FUNDING TOTAL	\$554,318	\$0	\$0	\$0	\$0	\$554,318

2019 Large Diameter Water Main Improvements - Rising Main 4



Project Description

Strategic replacement or rehabilitation of large diameter water mains (16-inch and larger) and appurtenances to improve system reliability and hydraulics, including internal and external inspections.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service, Strategic Priorities

Project Justification: The Authority's water system has approximately 122 miles of large diameter water mains. Maintaining a proactive approach to replacing large mains will ensure that large mains are replaced before the end of their useful life.

Risk(s): The consequences of failure for larger mains are much greater than for smaller distribution mains, which typically include significant service outages (larger area and longer time frame impacts), as well as property and roadway damage.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-325-103-1 - 2019 Large Diameter Water Main Improvements - Rising Main 4	\$1,798,053	\$0	\$0	\$0	\$0	\$1,798,053
PROJECT FUNDING TOTAL	\$1,798,053	\$0	\$0	\$0	\$0	\$1,798,053

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
WIFIA/PENNVEST	\$1,798,053	\$0	\$0	\$0	\$0	\$1,798,053
PROJECT FUNDING TOTAL	\$1,798,053	\$0	\$0	\$0	\$0	\$1,798,053

Bus Rapid Transit Water Distribution



Project Description

The City of Pittsburgh is making roadway improvements on Fifth Ave and Forbes Ave from downtown through Oakland, with full depth reconstruction planned on Forbes from Crosstown Blvd to Craft Ave and on Fifth between Crosstown Blvd and the Birmingham Bridge. The City's work, in partnership with the Port Authority, will include signal pole upgrades, traffic redesign, sidewalk bumpouts, and new bus shelters. The full depth reconstruction portion of the project has the potential to affect existing 15-inch, 16-inch, 20-inch, and 6-inch mains that are 80-100+ years old. The full depth replacement of the roadway along with lowering of the roadway could result in damage to these mains. These mains should be replaced as part of this project.

Project Details

Phase: Construction

Priority: Safety, Quality of Service, Strategic Priorities, Social Impact

Project Justification: The full depth replacement of the roadway along with lowering of the roadway could result in damage to these mains.

Risk(s): Replacement of water mains along the Fifth and Forbes corridor reduces the risk of service outages due to breaks, reduces the potential for inadequate capacity for firefighting activities, and improves water quality.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-325-102-0 - Bus Rapid Transit Water Distribution	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
PROJECT FUNDING TOTAL	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
PROJECT FUNDING TOTAL	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000

Interconnection Vault Stormwater Removal



Project Description

The purpose of this project is to install permanent sump pumps for stormwater dewatering at all of our interconnection vault locations. This project is required by a Consent Order Agreement.

Project Details

Phase: Design

Priority: Regulatory Compliance, Risk of Failure, Quality of Service

Project Justification: This project is required by a Consent Order Agreement.

Risk(s): Failure to maintain regulatory compliance.

Impact on Operations: Improved system efficiency.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-325-102-0 - Interconnection Vault Stormwater Removal	\$1,988,248	\$584,104	\$0	\$0	\$0	\$2,572,352
PROJECT FUNDING TOTAL	\$1,988,248	\$584,104	\$0	\$0	\$0	\$2,572,352

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,988,248	\$584,104	\$0	\$0	\$0	\$2,572,352
PROJECT FUNDING TOTAL	\$1,988,248	\$584,104	\$0	\$0	\$0	\$2,572,352

Intermediate Meter Replacement Program



Project Description

Replacement of customer meters size 1.5 inches to 2 inches.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Quality of Service, Strategic Priorities, Risk of Failure

Project Justification: Ensure capture of all revenue. As meters age, they typically underestimate the amount of water consumed.

Risk(s): Failure to replace meters annually could result in lost revenue or violate regulatory requirements.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2021-325-100-0 - Intermediate Meter Replacement Program	\$300,000	\$330,000	\$365,000	\$401,500	\$441,650	\$1,838,150
PROJECT FUNDING TOTAL	\$300,000	\$330,000	\$365,000	\$401,500	\$441,650	\$1,838,150

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$300,000	\$330,000	\$365,000	\$401,500	\$441,650	\$1,838,150
PROJECT FUNDING TOTAL	\$300,000	\$330,000	\$365,000	\$401,500	\$441,650	\$1,838,150

Large Diameter Water Main Program



Project Description

Strategic replacement or rehabilitation of large diameter water mains (16 inches and larger) and appurtenances to improve system reliability and hydraulics, including internal and external inspections.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The Authority's water system has approximately 122 miles of large diameter water mains. Maintaining a proactive approach to replacing large mains will ensure that large mains are replaced before the end of their useful life.

Risk(s): The consequences of failure for larger mains are much greater than for smaller distribution mains, which typically include significant service outages (larger area and longer time frame impacts), as well as property and roadway damage.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-200-100-0 - 2024 Large Diameter Water Main	\$1,426,158	\$11,790,000	\$10,363,842	\$0	\$0	\$23,580,000
2027-200-100-0 - 2027 Large Diameter Water Main	\$0	\$0	\$1,021,395	\$2,042,791	\$1,944,069	\$5,008,255
2028-200-100-0 - 2028 Large Diameter Water Main	\$0	\$0	\$0	\$0	\$2,042,791	\$2,042,791
PROJECT FUNDING TOTAL	\$1,426,158	\$11,790,000	\$11,385,237	\$2,042,791	\$3,986,859	\$30,631,046

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,426,158	\$11,790,000	\$11,385,237	\$2,042,791	\$3,986,859	\$30,631,046
PROJECT FUNDING TOTAL	\$1,426,158	\$11,790,000	\$11,385,237	\$2,042,791	\$3,986,859	\$30,631,046

Large Meter Replacement Program



Project Description

Annual replacement of water meters larger than 2 inch.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Quality of Service, Strategic Priorities, Risk of Failure

Project Justification: Ensure capture of all revenue. As meters age, they typically underestimate the amount of water consumed.

Risk(s): Failure to replace meters annually could result in lost revenue.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-200-102-0 - Large Meter Replacement Program	\$409,200	\$450,120	\$495,132	\$544,654	\$600,000	\$2,499,106
PROJECT FUNDING TOTAL	\$409,200	\$450,120	\$495,132	\$544,654	\$600,000	\$2,499,106

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$409,200	\$450,120	\$495,132	\$544,654	\$600,000	\$2,499,106
PROJECT FUNDING TOTAL	\$409,200	\$450,120	\$495,132	\$544,654	\$600,000	\$2,499,106

Neighborhood Lead Service Line Replacement Program



Project Description

Neighborhood Lead Service Line Replacement (LSLR) program to replace all remaining public and private lead service lines within the PWSA water service area. Program will be developed once 2024-2028 Small Diameter Water Main Replacement program is fully planned.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Risk of Failure, Quality of Service, Strategic Priorities, Social Impact

Project Justification: Comply with water quality regulatory requirements.

Risk(s): Noncompliance with PWSA goals and regulatory requirements.

Impact on Operations: Increased operating flexibility and reliability and water quality.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2021-325-109-0 - 2022 Neighborhood Lead Service Line Replacement	\$3,633,297	\$0	\$0	\$0	\$0	\$3,633,297
2022-325-104-0 - 2023 Neighborhood Lead Service Line Replacement	\$1,783,685	\$1,408,173	\$6,195,959	\$0	\$0	\$9,387,817
2022-325-104-1 - 2023 Neighborhood Lead Service Line Replacement Program - Contract B	\$2,531,019	\$2,750,881	\$10,253,100	\$0	\$0	\$15,535,000
2024-200-105-0 - 2024 Neighborhood Lead Service Line Replacement - Contract A	\$3,477,055	\$16,635,719	\$14,657,773	\$0	\$0	\$34,770,547
2024-200-105-1 - 2024 Neighborhood Lead Service Line Replacement - Contract B	\$0	\$18,825,765	\$17,948,255	\$0	\$0	\$36,774,020
2025-200-106-0 - 2025 Neighborhood Lead Service Line Replacement - Contract A	\$0	\$5,598,845	\$33,013,877	\$0	\$0	\$38,612,721
2025-200-106-1 - 2025 Neighborhood Lead Service Line Replacement - Contract B	\$0	\$0	\$40,543,357	\$0	\$0	\$40,543,357
PROJECT FUNDING TOTAL	\$11,425,056	\$45,219,382	\$122,612,321	\$0	\$0	\$179,256,759

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$2,143,687	\$8,359,245	\$5,386,475	\$0	\$0	\$15,889,406
PENNVEST	\$5,648,072	\$36,860,137	\$117,225,846	\$0	\$0	\$159,734,056
ARPA	\$3,633,297	\$0	\$0	\$0	\$0	\$3,633,297
PROJECT FUNDING TOTAL	\$11,425,056	\$45,219,382	\$122,612,321	\$0	\$0	\$179,256,759

Pressure District Boundary Adjustments and Low Pressure Remediation



Project Description

This project will address chronically low pressure areas by either neighboring higher pressure districts into the area, booster pump stations, or household booster pumps.

Project Details

Phase: Not Started

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: This project is in response to the low pressure monitors required by the October 2017 Administrative Order.

Risk(s): Existing long dead ends can cause water quality issues. Customers may also experience temporary service outages as a result of the work on these projects.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2027-200-102-0 - Pressure District Boundary Adjustments and Low Pressure Remediation	\$0	\$0	\$0	\$234,992	\$1,700,078	\$1,935,070
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$234,992	\$1,700,078	\$1,935,070

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$234,992	\$1,700,078	\$1,935,070
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$234,992	\$1,700,078	\$1,935,070

Private Lead Service Line Reimbursement



Project Description

Reimbursement of private line lead service line costs.

Project Details

Phase: Non-Construction

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure, Strategic Priorities, Social Impact

Project Justification: Replacing both private and public lead service lines is required to eliminate lead in the water system.

Risk(s): Failure to replace private lead service lines poses a public health risk.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-200-103-0 - Private Lead Service Line Reimbursement	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
PROJECT FUNDING TOTAL	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
PROJECT FUNDING TOTAL	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000

Regulator Valve and Vault Replacement Program



Project Description

Replacement of pressure zone interconnection vaults including new pressure regulators, flow meters, pressure transmitters, and Supervisory Control and Data Acquisition (SCADA) communications.

Project Details

Phase: Not started

Priority: Quality of Service, Risk of Failure

Project Justification: Existing regulator stations are in need of replacement. This will also aid in identification of non-revenue water.

Risk(s): Failure to fix could result in failure of the vault.

Impact on Operations: Decreased leakage will result in decrease of pumping energy.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2027-200-101-0 - Regulator Valve and Vault Replacement	\$0	\$0	\$0	\$1,394,479	\$4,851,499	\$6,245,978
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$1,394,479	\$4,851,499	\$6,245,978

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$1,394,479	\$4,851,499	\$6,245,978
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$1,394,479	\$4,851,499	\$6,245,978

Small Diameter Water Main Replacement Program



Project Description

Strategic replacement of water mains to improve system reliability as well as improve water pressure, maintain water quality, and minimize disturbance to the community. Program will initially focus on replacing existing 4 inch and 6 inch unlined cast iron mains and mains with a history of frequent breaks.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-Out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure, Strategic Priorities, Social Impact

Project Justification: By maintaining a proactive approach to asset management, efforts can be directed towards remedying assets before their failure, thus saving overall replacement cost. Additionally, projects will be coordinated with other utilities to minimize disturbance to the community and street surface restoration costs. Water quality will also improve by removing tuberculated mains.

Risk(s): Customers may be subject to service outages or the potential for inadequate pressure.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-325-106-0 - 2021 Small Diameter Water Main Replacement - Contract A	\$0	\$0	\$0	\$0	\$0	\$0
2020-325-106-1 - 2021 Small Diameter Water Main Replacement - Contract B	\$4,631,344	\$0	\$0	\$0	\$0	\$4,631,344
2020-325-106-2 - 2021 Small Diameter Water Main Replacement - Contract C	\$3,782,477	\$0	\$0	\$0	\$0	\$3,782,477
2021-325-104-0 - 2022 Small Diameter Water Main Replacement	\$770,041	\$1,925,103	\$5,005,267	\$0	\$0	\$7,700,411
2021-325-104-1 - 2022 Small Diameter Water Main Replacement - Contract A1	\$3,606,173	\$3,875,468	\$10,229,453	\$10,229,453	\$10,229,453	\$38,170,000
2021-325-104-2 - 2022 Small Diameter Water Main Replacement - Contract B	\$3,045,248	\$3,750,999	\$6,981,679	\$10,848,807	\$0	\$24,626,733
2021-325-104-3 - 2022 Small Diameter Water Main Replacement - Contract C	\$3,026,569	\$2,716,259	\$9,787,039	\$8,635,661	\$0	\$24,165,527
2021-325-104-4 - 2022 Small Diameter Water Main Replacement - Contract A2	\$0	\$0	\$0	\$0	\$0	\$0
2022-325-113-0 - 2023 Small Diameter Water Main Replacement	\$1,453,526	\$10,974,088	\$21,970,540	\$23,190,161	\$29,124,517	\$86,712,832
2022-325-113-2 - 2023 Small Diameter Water Main Replacement - Contract A1	\$51,423	\$0	\$0	\$0	\$0	\$51,423
2022-325-113-3 - 2023 Small Diameter Water Main Replacement - Contract B1	\$74,360	\$0	\$0	\$0	\$0	\$74,360
2023-200-105-0 - 2024 Small Diameter Water Main Replacement	\$2,877,600	\$7,908,563	\$35,588,531	\$35,588,531	\$28,504,936	\$110,468,161
2025-200-105-0 - 2025 Small Diameter Water Main Replacement	\$0	\$2,963,928	\$31,786,671	\$26,343,869	\$26,343,869	\$87,438,337
2026-200-105-0 - 2026 Small Diameter Water Main Replacement	\$0	\$0	\$3,052,846	\$32,740,271	\$27,134,185	\$62,927,302
2027-200-105-0 - 2027 Small Diameter Water Main Replacement	\$0	\$0	\$0	\$3,144,431	\$30,919,444	\$34,063,875
2028-200-105-0 - 2028 Small Diameter Water Main Replacement	\$0	\$0	\$0	\$0	\$3,238,764	\$3,238,764
PROJECT FUNDING TOTAL	\$23,318,760	\$34,114,409	\$124,402,025	\$150,721,183	\$155,495,167	\$488,051,544

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$6,592,290	\$14,760,422	\$43,126,377	\$62,228,571	\$87,636,261	\$214,343,921
PENNVEST	\$16,726,471	\$19,353,986	\$81,275,648	\$88,492,612	\$67,858,905	\$273,707,623
PROJECT FUNDING TOTAL	\$23,318,760	\$34,114,409	\$124,402,025	\$150,721,183	\$155,495,167	\$488,051,544

Small Meter Replacement Program



Project Description

Annual replacement of water meters 1 inch or less.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Quality of Service, Strategic Priorities, Risk of Failure

Project Justification: Ensure capture of all revenue. As meters age, they typically underestimate the amount of water consumed.

Risk(s): Failure to replace meters annually could result in lost revenue or violate regulatory requirements.

Impact on Operations: Increased system reliability, reliability, and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-200-106-0 - Small Meter Replacement Program	\$900,000	\$990,000	\$1,089,000	\$1,200,000	\$1,320,000	\$5,499,000
PROJECT FUNDING TOTAL	\$900,000	\$990,000	\$1,089,000	\$1,200,000	\$1,320,000	\$5,499,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$900,000	\$990,000	\$1,089,000	\$1,200,000	\$1,320,000	\$5,499,000
PROJECT FUNDING TOTAL	\$900,000	\$990,000	\$1,089,000	\$1,200,000	\$1,320,000	\$5,499,000

Urgent Lead Service Line Replacement Program



Project Description

This project involves the private side Lead Service Line Replacements (LSLR) associated with operations public side replacements. It includes provisions for some full line replacements when operations requests both sides be completed due to their workload or other factors.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Strategic Priorities, Social Impact

Project Justification: This project involves the private side Lead Service Line Replacements (LSLR) associated with operations public side replacements. It includes provisions for some full line replacements when operations requests both sides be completed due to their workload or other factors.

Risk(s): Required to terminate service if property owners do not replace their private side lead service lines after operations replaces a public side service line.

Impact on Operations: Increased operating flexibility and reliability and water quality.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-200-107-0 - 2023 Urgent Lead Service Line Replacement	\$1,847,292	\$1,263,538	\$0	\$0	\$0	\$3,110,830
2025-200-107-0 - 2025/2026 Urgent Lead Service Line Replacement	\$0	\$677,342	\$2,032,021	\$1,389,892	\$0	\$4,099,255
2027-200-107-0 - 2027/2028 Urgent Lead Service Line Replacement	\$0	\$0	\$0	\$745,076	\$2,235,223	\$2,980,299
PROJECT FUNDING TOTAL	\$1,847,292	\$1,940,880	\$2,032,021	\$2,134,967	\$2,235,223	\$10,190,383

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$866,267	\$1,191,730	\$1,346,759	\$1,413,679	\$1,477,729	\$6,296,163
DSIC - Water	\$981,025	\$749,150	\$685,262	\$721,288	\$757,495	\$3,894,220
PROJECT FUNDING TOTAL	\$1,847,292	\$1,940,880	\$2,032,021	\$2,134,967	\$2,235,223	\$10,190,383

Valve Replacement Program



Project Description

Replacement of defective or non-operational valves on transmission and distribution mains throughout the water distribution system, excluding valves replaced during waterline relays.

Project Details

Phase: Not started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: Increasing the number of operable valves in the system will reduce the number of valves that would need to be closed during emergency conditions, and therefore the number of customers that may be impacted.

Risk(s): A larger number of customers may be subject to service outages.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2021-325-113-0 - 2022 Valve Replacement	\$50,000	\$0	\$0	\$0	\$0	\$50,000
2023-200-108-0 - 2023 Valve Replacement	\$2,849,165	\$0	\$0	\$0	\$0	\$2,849,165
2024-200-108-0 - 2024 Valve Replacement	\$920,000	\$2,250,000	\$0	\$0	\$0	\$3,170,000
2025-200-108-0 - 2025 Valve Replacement	\$0	\$920,000	\$2,250,000	\$0	\$0	\$3,170,000
2026-200-108-0 - 2026 Valve Replacement	\$0	\$0	\$920,000	\$2,250,000	\$0	\$3,170,000
2027-200-108-0 - 2027 Valve Replacement	\$0	\$0	\$0	\$920,000	\$2,250,000	\$3,170,000
2028-200-108-0 - 2028 Valve Replacement	\$0	\$0	\$0	\$0	\$920,000	\$920,000
PROJECT FUNDING TOTAL	\$3,819,165	\$3,170,000	\$3,170,000	\$3,170,000	\$3,170,000	\$16,499,165

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
DSIC - Water	\$3,819,165	\$3,170,000	\$3,170,000	\$3,170,000	\$3,170,000	\$16,499,165
PROJECT FUNDING TOTAL	\$3,819,165	\$3,170,000	\$3,170,000	\$3,170,000	\$3,170,000	\$16,499,165

Water and Wastewater Safety and Security Improvements



Project Description

Safety and security improvements throughout PWSA facilities.

Project Details

Phase: Close-out

Priority: Safety, Security, Strategic Priorities

Project Justification: Failure to implement safety and security measures will increase the likelihood of a security breach.

Risk(s): Security breaches.

Impact on Operations: Increased safety and security at all PWSA facilities.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-325-101-0 - Water and Wastewater Safety and Security Improvements	\$151,862	\$0	\$0	\$0	\$0	\$151,862
PROJECT FUNDING TOTAL	\$151,862	\$0	\$0	\$0	\$0	\$151,862

Founding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$151,862	\$0	\$0	\$0	\$0	\$151,862
PROJECT FUNDING TOTAL	\$151,862	\$0	\$0	\$0	\$0	\$151,862

Water and Wastewater Safety and Security Improvements (PENNVEST)



Project Description

Safety and security improvements throughout PWSA facilities.

Project Details

Phase: Planning

Priority: Safety, Security, Strategic Priorities

Project Justification: Failure to implement safety and security measures will increase the likelihood of a security breach causing harm to PWSA employees and customers.

Risk(s): Security breaches.

Impact on Operations: Increased safety and security at all PWSA facilities.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-200-109-0 - Water and Wastewater Safety and Security Improvements (PENNVEST)	\$997,816	\$2,494,539	\$3,242,901	\$3,242,901	\$0	\$9,978,156
2025-200-109-0 - Water and Wastewater Safety and Security Improvements Phase 2 (PENNVEST)	\$0	\$350,000	\$2,000,000	\$1,500,000	\$500,000	\$4,350,000
PROJECT FUNDING TOTAL	\$997,816	\$2,844,539	\$5,242,901	\$4,742,901	\$500,000	\$14,328,156

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
PENNVEST	\$997,816	\$2,844,539	\$5,242,901	\$4,742,901	\$500,000	\$14,328,156
PROJECT FUNDING TOTAL	\$997,816	\$2,844,539	\$5,242,901	\$4,742,901	\$500,000	\$14,328,156

Water Relay Program



Project Description

Replacement of existing water mains, valves, fittings, service connections, and hydrants due to emergency situations.

Project Details

Phase: Not started, Planning, Procurement, Design, Construction, Close-out

Priority: Safety, Quality of Service, Risk of Failure

Project Justification: The existing water distribution system is aging and updates are required to address failures that could be significant public safety hazards.

Risk(s): Customers will be subject to service outages or inadequate pressure.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-200-110-0 - 2023 Water Relay	\$2,134,735	\$800,265	\$0	\$0	\$0	\$2,935,000
2024-200-110-0 - 2024 Water Relay	\$250,000	\$2,200,000	\$900,000	\$0	\$0	\$3,350,000
2025-200-110-0 - 2025 Water Relay	\$0	\$250,000	\$2,200,000	\$900,000	\$0	\$3,350,000
2026-200-110-0 - 2026 Water Relay	\$0	\$0	\$250,000	\$2,200,000	\$900,000	\$3,350,000
2027-200-110-0 - 2027 Water Relay	\$0	\$0	\$0	\$250,000	\$2,200,000	\$2,450,000
2028-200-110-0 - 2028 Water Relay	\$0	\$0	\$0	\$0	\$250,000	\$250,000
PROJECT FUNDING TOTAL	\$2,384,735	\$3,250,265	\$3,350,000	\$3,350,000	\$3,350,000	\$15,685,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
DSIC - Water	\$2,384,735	\$3,250,265	\$3,350,000	\$3,350,000	\$3,350,000	\$15,685,000
PROJECT FUNDING TOTAL	\$2,384,735	\$3,250,265	\$3,350,000	\$3,350,000	\$3,350,000	\$15,685,000

Water Distribution Contingency



Project Description

Water Distribution System contingency pass-through project.

Project Details

Phase: Not Applicable

Priority: Not Applicable

Project Justification: Improved efficiency of capital improvement plan fund management.

Risk(s): No identified risks.

Impact on Operations: Improved efficiency of capital improvement plan fund management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-200-106-0 - Water Distribution Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Wastewater System



Project Class Summary

Projects within this category address the rehabilitation, replacement, or improvement to the system that conveys wastewater and stormwater to the ALCOSAN wastewater treatment facility. The sewer system includes approximately 1,227 miles of sanitary, stormwater, and combined sewer lines and 24,463 catch basins and inlets. Approximately 75 percent of the sewer system is a combined system, meaning the stormwater and wastewater flow through the same pipe. The remaining 25 percent is a separate system which means that wastewater flows through one sewer pipe and stormwater flows through another. Projects include, but are not limited to, small and large diameter sewer rehabilitation programs along with the replacement and relocation sewer lines that have been built underneath structures such as bridges, buildings, or railroads.

Project Summary Table

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
31st Ward Pump Station and Appurtenances - Phase 2	\$910,131	\$770,210	\$3,630,139	\$10,992,839	\$2,098,095	\$18,401,415
Browns Hill Road Sewer Pump Station Replacement	\$347,026	\$3,121,599	\$308,401	\$0	\$0	\$3,777,026
Hayson Sanitary Sewer Extension	\$420,000	\$84,000	\$0	\$0	\$0	\$504,000
Large Diameter Sewer Rehabilitation Program	\$11,302,883	\$4,739,796	\$6,086,093	\$6,795,489	\$6,615,806	\$35,540,068
Maytide Storm and Sanitary Sewer System Improvements	\$0	\$460,434	\$302,162	\$4,686,497	\$427,276	\$5,876,369
Queenston Sewer Improvements	\$3,314,100	\$0	\$0	\$0	\$0	\$3,314,100
Sewer Reconstruction Program	\$5,139,073	\$2,834,662	\$3,277,312	\$3,677,895	\$4,491,028	\$19,419,969
Sewers Under Structures Program	\$6,781,254	\$8,588,535	\$2,897,708	\$3,410,357	\$3,425,495	\$25,103,349
Small Diameter Sewer Rehabilitation Program	\$13,286,609	\$21,799,200	\$38,748,212	\$56,012,074	\$43,352,154	\$173,198,248
Wastewater Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$41,501,076	\$42,398,435	\$55,250,027	\$85,575,152	\$60,409,854	\$285,134,544

31st Ward Pump Station and Appurtenances - Phase 2



Project Description

Evaluation to identify and locate the source(s) of the infiltration and inflow (I/I), removal of public I/I sources, and rehabilitation/replacement of the Rogers Street and Mifflin Road Pump Station and force main.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: Both sewage pump stations and the force main that convey flow to the Streets Run Sanitary Trunk Sewer were constructed in the late 1940's and are reaching the end of their useful life. Additionally, past studies suggest this sewershed may be significantly impacted by high levels of infiltration/inflow.

Risk(s): Increased combined sewer overflows and pump station system failures.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-108-0 - 31st Ward Pump Station and Appurtenances - Phase 2	\$910,131	\$770,210	\$3,630,139	\$10,992,839	\$2,098,095	\$18,401,415
PROJECT FUNDING TOTAL	\$910,131	\$770,210	\$3,630,139	\$10,992,839	\$2,098,095	\$18,401,415

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$910,131	\$770,210	\$3,630,139	\$10,992,839	\$2,098,095	\$18,401,415
PROJECT FUNDING TOTAL	\$910,131	\$770,210	\$3,630,139	\$10,992,839	\$2,098,095	\$18,401,415

Browns Hill Road Sewer Pump Station Replacement



Project Description

Construction of a replacement 160 GPM sanitary sewer pump station, including standby power, safer ingress and egress for routine maintenance, a water supply for equipment wash down and odor control facilities, if required. Additionally, perform a condition assessment of the 4 inch force main (approx. 790 l.f.) constructed in 2007, but not utilized and confirm sanitary sewer separation occurred.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: The existing sanitary sewer pump station has reached the end of its useful life. The replacement station will provide increased operating efficiency and resiliency and improved safety conditions.

Risk(s): If the station is not replaced, pump or wet well failures could occur, which would result in sanitary sewer overflows. Sanitary sewer overflows could result in fines and notice of violations from regulating agencies.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-109-0 - Browns Hill Road Sewer Pump Station Replacement	\$347,026	\$3,121,599	\$308,401	\$0	\$0	\$3,777,026
PROJECT FUNDING TOTAL	\$347,026	\$3,121,599	\$308,401	\$0	\$0	\$3,777,026

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$347,026	\$3,121,599	\$308,401	\$0	\$0	\$3,777,026
PROJECT FUNDING TOTAL	\$347,026	\$3,121,599	\$308,401	\$0	\$0	\$3,777,026

Hayson Sanitary Sewer Extension



Project Description

8 inch Sanitary Sewer Extension to convey sanitary flow from Hayson Avenue that previously connected to the storage.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: Considered the best alternative to address basement sewer backups for the four properties based on investigation done.

Risk(s): Basement backups may continue for residents.

Impact on Operations: Extension to system will require minimal increase in system operations and maintenance. Current engineering staff will be utilized to prepare project for construction.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-500-103-0 - Hayson Sanitary Sewer Extension	\$420,000	\$84,000	\$0	\$0	\$0	\$504,000
PROJECT FUNDING TOTAL	\$420,000	\$84,000	\$0	\$0	\$0	\$504,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$420,000	\$84,000	\$0	\$0	\$0	\$504,000
PROJECT FUNDING TOTAL	\$420,000	\$84,000	\$0	\$0	\$0	\$504,000

Large Diameter Sewer Rehabilitation Program



Project Description

Proactive, trenchless rehabilitation of 36 inch diameter or greater sewer mains to restore structural integrity, reduce root intrusion, and reduce infiltration and inflow; including cleaning and pre and post construction CCTV inspections.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: Provides the Authority with a means to address several moderate/major structural defects in pipe segments prior to complete failure. This trenchless pipe renewal method renews the asset, eliminates disruptive excavation, and is more cost effective than replacement.

Risk(s): If moderate/major structural defects are not proactively addressed, complete failure will eventually occur and excavation will be required. Any complete failure that occurs will result in dramatically increased expenditures for repair.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-424-107-0 - 2021 Large Diameter Sewer Rehabilitation	\$5,032,991	\$1,515,265	\$0	\$0	\$0	\$6,548,256
2021-424-105-0 - 2022 Large Diameter Sewer Rehabilitation	\$4,712,009	\$689,072	\$0	\$0	\$0	\$5,401,082
2022-424-110-0 - 2023 Large Diameter Sewer Rehabilitation	\$1,295,365	\$1,295,365	\$0	\$0	\$0	\$2,590,730
2024-400-101-0 - 2024 Large Diameter Sewer Rehabilitation	\$233,000	\$699,000	\$1,165,000	\$1,631,000	\$932,000	\$4,660,000
2025-400-101-0 - 2025 Large Diameter Sewer Rehabilitation	\$29,518	\$510,482	\$4,360,000	\$0	\$0	\$4,900,000
2026-400-101-0 - 2026 Large Diameter Sewer Rehabilitation	\$0	\$30,611	\$529,389	\$4,580,000	\$0	\$5,140,000
2027-400-101-0 - 2027 Large Diameter Sewer Rehabilitation	\$0	\$0	\$31,704	\$548,296	\$5,060,000	\$5,640,000
2028-400-101-0 - 2028 Large Diameter Sewer Rehabilitation	\$0	\$0	\$0	\$36,194	\$623,806	\$660,000
PROJECT FUNDING TOTAL	\$11,302,883	\$4,739,796	\$6,086,093	\$6,795,489	\$6,615,806	\$35,540,068

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$9,745,000	\$2,234,949	\$561,093	\$5,164,489	\$5,683,806	\$23,389,338
PENNVEST	\$1,557,883	\$2,504,847	\$5,525,000	\$1,631,000	\$932,000	\$12,150,730
PROJECT FUNDING TOTAL	\$11,302,883	\$4,739,796	\$6,086,093	\$6,795,489	\$6,615,806	\$35,540,068

Maytide Storm and Sanitary Sewer System Improvements



Project Description

Reconstruction of storm infrastructure from Merritt Avenue to the storm interceptor on Ravilla Avenue and the realignment of the 10 inch sanitary sewer on Maytide Street (Sanderson to Valline).

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: Localized property and street flooding has been well-documented for several years at this location and the undeveloped right-of-way of Sanderson has significantly deteriorated. Additionally, an inspection of the 10 inch sanitary sewer on Maytide Street revealed structural and construction defects.

Risk(s): Continual degradation to a steep slope could result in property damage and an increased cost to stabilize. Customers may be subject to basement backups, or overflows may occur due to collapsed pipes.

Impact on Operations: Increased operating reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-424-109-0 - Maytide Storm and Sanitary Sewer System Improvements	\$0	\$460,434	\$302,162	\$4,686,497	\$427,276	\$5,876,369
PROJECT FUNDING TOTAL	\$0	\$460,434	\$302,162	\$4,686,497	\$427,276	\$5,876,369

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$460,434	\$302,162	\$4,686,497	\$427,276	\$5,876,369
PROJECT FUNDING TOTAL	\$0	\$460,434	\$302,162	\$4,686,497	\$427,276	\$5,876,369

Queenston Sewer Improvements



Project Description

Removal of a combined sewer diversion chamber and installation of new sewer infrastructure, which will result in the separation of the sewershed.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: The existing sewer infrastructure (both storm and sanitary) have significant structural defects, which are located under a large structure in a paper street over 40 feet deep.

Risk(s): Customers may be subject to basement backups or overflows may occur due to collapsed pipes.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-424-103-2 - Queenston Sewer Improvements	\$3,314,100	\$0	\$0	\$0	\$0	\$3,314,100
PROJECT FUNDING TOTAL	\$3,314,100	\$0	\$0	\$0	\$0	\$3,314,100

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$3,314,100	\$0	\$0	\$0	\$0	\$3,314,100
PROJECT FUNDING TOTAL	\$3,314,100	\$0	\$0	\$0	\$0	\$3,314,100

Sewer Reconstruction Program



Project Description

Reconstruction of existing sewers, manholes, catch basins, and inlets due to emergency situations or pipe failures.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: The existing sewer system is aging and immediate repairs are required to address failures that could be significant public safety hazards.

Risk(s): Customers may be subject to basement backups or overflows may occur due to collapsed pipes.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-100-0 - 2022 Sewer Reconstruction	\$1,467,199	\$0	\$0	\$0	\$0	\$1,467,199
2023-400-100-0 - 2023 Sewer Reconstruction	\$2,304,500	\$0	\$0	\$0	\$0	\$2,304,500
2024-400-100-1 - 2024 Sewer Reconstruction	\$1,367,374	\$1,132,626	\$0	\$0	\$0	\$2,500,000
2025-400-100-0 - 2025 Sewer Reconstruction	\$0	\$1,683,299	\$1,316,701	\$0	\$0	\$3,000,000
2026-400-100-0 - 2026 Sewer Reconstruction	\$0	\$18,737	\$1,945,987	\$1,535,277	\$0	\$3,500,000
2027-400-100-0 - 2027 Sewer Reconstruction	\$0	\$0	\$14,624	\$2,124,290	\$1,861,086	\$4,000,000
2028-400-100-0 - 2028 Sewer Reconstruction	\$0	\$0	\$0	\$18,329	\$2,629,942	\$2,648,270
PROJECT FUNDING TOTAL	\$5,139,073	\$2,834,662	\$3,277,312	\$3,677,895	\$4,491,028	\$19,419,969

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$2,224,701	\$0	\$344,429	\$730,348	\$1,528,743	\$4,828,220
DSIC - Wastewater	\$2,914,372	\$2,834,662	\$2,932,883	\$2,947,547	\$2,962,285	\$14,591,749
PROJECT FUNDING TOTAL	\$5,139,073	\$2,834,662	\$3,277,312	\$3,677,895	\$4,491,028	\$19,419,969

Sewers Under Structures Program



Project Description

Rehabilitation, relocation, and abandonment, if applicable, of existing sewer infrastructure located under or adjacent to buildings, bridges, or railroads or located on steep slopes.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: In recent years, there has been an increasing rate of failure of this asset type due to limited accessibility and pipe age. By maintaining a proactive approach to asset management, efforts can be directed towards remedying assets before their failure, thus saving in overall replacement cost.

Risk(s): Failure of this asset type could result in significant property/structure damage, increased replacement cost, and increased service outages or bypass pumping.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-424-104-0 - 2020 Sewers Under Structures Contract 1	\$3,937,647	\$1,797,304	\$0	\$0	\$0	\$5,734,951
2020-424-104-1 - 2020 Sewers Under Structures Contract 2	\$1,272,101	\$4,822,733	\$0	\$0	\$0	\$6,094,834
2022-424-107-0 - 2022 Sewers Under Structures	\$1,383,794	\$1,568,756	\$0	\$0	\$0	\$2,952,550
2023-400-101-0 - 2023 Sewers Under Structures	\$179,146	\$203,734	\$2,512,598	\$474,522	\$0	\$3,370,000
2024-400-102-0 - 2024 Sewers Under Structures	\$8,566	\$187,442	\$187,442	\$2,514,783	\$471,768	\$3,370,000
2025-400-102-0 - 2025 Sewers Under Structures	\$0	\$8,566	\$187,442	\$187,442	\$2,514,783	\$2,898,232
2026-400-102-0 - 2026 Sewers Under Structures	\$0	\$0	\$10,226	\$223,777	\$223,777	\$457,781
2027-400-102-0 - 2027 Sewers Under Structures	\$0	\$0	\$0	\$9,833	\$215,167	\$225,000
2028-400-102-0 - 2028 Sewers Under Structures	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$6,781,254	\$8,588,535	\$2,897,708	\$3,410,357	\$3,425,495	\$25,103,349

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$6,781,254	\$8,588,535	\$2,897,708	\$3,410,357	\$3,425,495	\$25,103,349
PROJECT FUNDING TOTAL	\$6,781,254	\$8,588,535	\$2,897,708	\$3,410,357	\$3,425,495	\$25,103,349

Small Diameter Sewer Rehabilitation Program



Project Description

Proactive, trenchless rehabilitation of sewer mains (36 inch diameter and less) to restore structural integrity, reduce root intrusion, and reduce infiltration and inflow; including cleaning and pre and post construction Closed-Circuit Television (CCTV) inspections.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: Provides the Authority with a means to address several moderate/major structural defects in pipe segments prior to complete failure. This trenchless pipe renewal method renews the asset, eliminates disruptive excavation, and is more cost effective than replacement.

Risk(s): If moderate/major structural defects are not proactively addressed, complete failure will eventually occur and excavation will be required. Any complete failure that occurs will result in dramatically increased expenditures for repair.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: Yes

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-424-100-1 - 2020 Small Diameter Sewer Rehabilitation Contract 2 (Defined Sites)	\$414,086	\$414,086	\$0	\$0	\$0	\$828,172
2020-424-106-0 - 2021 Small Diameter Sewer Rehabilitation Contract 1	\$32,804	\$0	\$0	\$0	\$0	\$32,804
2020-424-106-1 - 2021 Small Diameter Sewer Rehabilitation Contract 2	\$391,228	\$391,228	\$0	\$0	\$0	\$782,456
2020-424-106-2 - 2021 Small Diameter Sewer Rehabilitation Contract 3	\$206,669	\$0	\$0	\$0	\$0	\$206,669
2021-424-101-0 - 2022 Small Diameter Sewer Rehabilitation Contract 1	\$1,191,688	\$1,191,688	\$1,191,688	\$0	\$0	\$3,575,063
2021-424-101-1 - 2022 Small Diameter Sewer Rehabilitation Contract 2	\$854,361	\$854,361	\$854,361	\$0	\$0	\$2,563,083
2021-424-108-0 - 2023 Small Diameter Sewer Rehabilitation Contract 1	\$506,790	\$2,533,950	\$4,054,320	\$3,040,740	\$0	\$10,135,800
2021-424-108-1 - 2023 Small Diameter Sewer Rehabilitation Contract 2	\$353,512	\$707,023	\$1,414,046	\$4,595,650	\$0	\$7,070,231
2021-424-108-2 - 2023 Small Diameter Sewer Rehabilitation Contract 3	\$1,212,113	\$1,212,113	\$1,212,113	\$1,212,113	\$0	\$4,848,450
2021-424-108-3 - 2023 Small Diameter Sewer Rehabilitation IDIQ	\$2,137,311	\$0	\$0	\$0	\$0	\$2,137,311
2024-400-103-0 - 2024 Small Diameter Sewer Rehabilitation Contract 1	\$1,240,000	\$1,240,000	\$1,240,000	\$1,240,000	\$0	\$4,960,000
2024-400-103-1 - 2024 Small Diameter Sewer Rehabilitation Contract 2	\$385,749	\$1,928,746	\$2,314,495	\$3,085,993	\$0	\$7,714,983
2024-400-103-2 - 2024 Small Diameter Sewer Rehabilitation Contract 3	\$363,053	\$1,815,267	\$2,178,321	\$2,904,427	\$0	\$7,261,069
2024-400-103-3 - 2024 Small Diameter Sewer Rehabilitation IDIQ	\$2,176,690	\$1,083,310	\$0	\$0	\$0	\$3,260,000
2025-400-103-0 - 2025 Small Diameter Sewer Rehabilitation Contract 1	\$1,820,556	\$3,036,228	\$4,048,304	\$6,072,456	\$6,072,456	\$21,050,000
2025-400-103-1 - 2025 Small Diameter Sewer Rehabilitation Contract 2	\$0	\$0	\$0	\$0	\$0	\$0
2025-400-103-2 - 2025 Small Diameter Sewer Rehabilitation Contract 3	\$0	\$0	\$0	\$0	\$0	\$0
2025-400-103-3 - 2025 Small Diameter Sewer Rehabilitation IDIQ	\$0	\$2,251,200	\$1,108,800	\$0	\$0	\$3,360,000
2026-400-103-0 - 2026 Small Diameter Sewer Rehabilitation	\$0	\$3,140,000	\$15,591,765	\$11,828,235	\$0	\$30,560,000
2027-400-103-0 - 2027 Small Diameter Sewer Rehabilitation	\$0	\$0	\$3,540,000	\$18,102,459	\$13,447,541	\$35,090,000
2028-400-103-0 - 2028 Small Diameter Sewer Rehabilitation	\$0	\$0	\$0	\$3,930,000	\$19,392,157	\$23,322,157
2029-400-103-0 - 2029 Small Diameter Sewer Rehabilitation	\$0	\$0	\$0	\$0	\$4,440,000	\$4,440,000
PROJECT FUNDING TOTAL	\$13,286,609	\$21,799,200	\$38,748,212	\$56,012,074	\$43,352,154	\$173,198,248

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$4,314,001	\$6,390,881	\$20,240,565	\$33,860,694	\$37,279,698	\$102,085,839
PENNVEST	\$8,972,609	\$14,752,189	\$18,239,547	\$21,883,279	\$6,072,456	\$69,920,080
Private Grants	\$0	\$572,500	\$268,100	\$268,100	\$0	\$1,108,700
DSIC - Wastewater	\$0	\$83,629	\$0	\$0	\$0	\$83,629
PROJECT FUNDING TOTAL	\$13,286,609	\$21,799,200	\$38,748,212	\$56,012,074	\$43,352,154	\$173,198,248

Wastewater Contingency



Project Description

Wastewater contingency project pass-through.

Project Details

Phase: Not applicable

Priority: Not applicable

Project Justification: Improved efficiency of capital improvement fund management.

Risk(s): Not applicable

Impact on Operations: Improved efficiency of capital improvement fund management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-400-104-0 - Wastewater Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Stormwater



Project Class Summary

Projects within this category manage stormwater during heavy rain events. Projects use a combination of green and gray infrastructure that on the surface mimic nature using vegetation, engineered soils, and open channels that retain water. Underneath are storage systems that hold water back before slowly releasing it through a network of pipes. These projects reduce basement backups, sewer overflows, and improve water quality.

Project Summary Table

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Braywood Stormwater Improvements	\$690,787	\$206,517	\$0	\$0	\$0	\$897,304
Bus Rapid Transit Stormwater Infrastructure Improvements	\$820,167	\$1,175,065	\$1,391,348	\$0	\$0	\$3,386,581
Catch Basin and Inlet Replacement Program	\$3,895,532	\$20,322,263	\$22,115,756	\$20,112,013	\$16,144,247	\$82,589,811
Dragoon Way Stormwater Improvements	\$1,745,800	\$0	\$0	\$0	\$0	\$1,745,800
Four Mile Run Stormwater Infrastructure Improvements	\$828,644	\$7,598,360	\$16,289,562	\$306,524	\$0	\$25,023,090
Fowler Park Stormwater Improvements	\$271,400	\$280,800	\$1,706,500	\$1,706,500	\$0	\$3,965,200
Haverhill Street Stormwater Improvements Project	\$2,046,603	\$47,837	\$0	\$0	\$0	\$2,094,441
Heths Way Stormwater Improvements	\$172,000	\$1,174,000	\$0	\$0	\$0	\$1,346,000
Larimer Park Cost Share	\$39,617	\$0	\$0	\$0	\$0	\$39,617
Martin Luther King Field Stormwater Infrastructure Improvements	\$2,495,828	\$1,974,312	\$0	\$0	\$0	\$4,470,140
Oakridge Stormwater Separation	\$260,000	\$1,740,000	\$0	\$0	\$0	\$2,000,000
Saw Mill Run Watershed Improvements	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
Southside Flats Sewer Separation	\$6,864,029	\$3,576,701	\$0	\$0	\$0	\$10,440,730
Southside Stormwater Infrastructure Improvements	\$1,103,849	\$4,272,379	\$888,877	\$0	\$0	\$6,265,105
Stewart Avenue Stormwater Infrastructure Project	\$2,633,438	\$3,569,151	\$0	\$0	\$0	\$6,202,589
Wet Weather Program Projects	\$0	\$6,742,581	\$7,610,890	\$4,089,548	\$4,089,548	\$22,532,566
Wightman Park Phase 2 Project	\$185,000	\$0	\$0	\$0	\$0	\$185,000
Woods Run Stream Removal Stormwater Infrastructure Improvements	\$945,962	\$1,999,420	\$5,375	\$0	\$0	\$2,950,757
Stormwater Improvements Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$25,998,656	\$54,679,388	\$50,008,308	\$26,214,585	\$20,233,795	\$177,134,731

Braywood Stormwater Improvements



Project Description

Stormwater detention system in the right-of-way in and around Braywood Way to increase stormwater control and mitigate flooding experienced by residents. Infrastructure could include permeable pavement, bioswales, subsurface detention, etc. depending on design determinations.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: There's a low point on Braywood Way that experiences persistent, severe flooding. The previously installed system is undersized and deteriorating.

Risk(s): Risks associated with not completing this project include poor level of service.

Impact on Operations: This project would decrease the need for persistent catch basin cleaning in this location.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-105-0 - Braywood Stormwater Improvements	\$690,787	\$206,517	\$0	\$0	\$0	\$897,304
PROJECT FUNDING TOTAL	\$690,787	\$206,517	\$0	\$0	\$0	\$897,304

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$345,393	\$103,259	\$0	\$0	\$0	\$448,652
City of Pittsburgh	\$345,393	\$103,259	\$0	\$0	\$0	\$448,652
PROJECT FUNDING TOTAL	\$690,787	\$206,517	\$0	\$0	\$0	\$897,304

Bus Rapid Transit Stormwater Infrastructure Improvements



Project Description

The redesign of Forbes Avenue and Fifth Avenue to accommodate bus rapid transit from downtown to the Birmingham Bridge. This project will include the installation of permeable paving, underground storage, and bioretention plantings and is tributary to the M-05 and M-19 outfall. Phase 2 currently includes the stormwater and green infrastructure improvements in the Uptown Neighborhood.

Project Details

Phase: Planning, Procurement, Design

Priority: Safety, Quality of Service, Strategic Priorities, Social Impact

Project Justification: The construction of the Bus Rapid Transit (BRT) project requires that certain assets owned and/or operated by PWSA be removed, replaced, and/or relocated. This project will help slow or reduce runoff into the combined sewer system during wet weather events.

Risk(s): Wet weather flow may continue to flow into the combined sewer system prior to the completion of the project, which could cause issues during wet weather events.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-500-105-0 - Bus Rapid Transit - Phase 2	\$300,000	\$300,000	\$1,000,000	\$0	\$0	\$1,600,000
2020-GI-100-0 - Bus Rapid Transit Stormwater Infrastructure Improvements	\$520,167	\$875,065	\$391,348	\$0	\$0	\$1,786,581
PROJECT FUNDING TOTAL	\$820,167	\$1,175,065	\$1,391,348	\$0	\$0	\$3,386,581

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$820,167	\$1,175,065	\$1,391,348	\$0	\$0	\$3,386,581
PROJECT FUNDING TOTAL	\$820,167	\$1,175,065	\$1,391,348	\$0	\$0	\$3,386,581

Catch Basin and Inlet Replacement Program



Project Description

Strategic replacement of catch basins and storm inlets throughout the system to replace failed units, stormwater control reliability, and minimize disturbance to the community.

Project Details

Phase: Not Started, Planning, Procurement, Design, Construction, Close-out

Priority: Regulatory Compliance, Safety, Quality of Service, Risk of Failure

Project Justification: By maintaining a proactive approach to asset management, efforts can be directed towards remedying assets before their failure, thus saving in overall replacement cost.

Risk(S): Overland and street flooding could occur due to a defective or undersized catch basin or storm inlet, creating a public health and safety hazard during wet weather events.

Impact On Operations: Increased operating reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-106-0 - 2023 Catch Basin and Inlet Replacement (A.Merante)	\$1,213,119	\$1,213,119	\$1,213,119	\$0	\$0	\$3,639,357
2022-424-106-1 - 2023 Catch Basin and Inlet Replacement (Facchiano)	\$1,228,980	\$1,228,980	\$1,228,980	\$0	\$0	\$3,686,940
2024-500-100-0 - 2024 Catch Basin and Inlet Replacement	\$1,453,433	\$3,633,583	\$4,723,657	\$4,723,657	\$0	\$14,534,330
2025-500-100-0 - 2025 Catch Basin and Inlet Replacement	\$0	\$14,246,581	\$703,419	\$0	\$0	\$14,950,000
2026-500-100-0 - 2026 Catch Basin and Inlet Replacement	\$0	\$0	\$14,246,582	\$703,419	\$0	\$14,950,000
2027-500-100-0 - 2027 Catch Basin and Inlet Replacement	\$0	\$0	\$0	\$14,684,938	\$725,062	\$15,410,000
2028-500-100-0 - 2028 Catch Basin and Inlet Replacement	\$0	\$0	\$0	\$0	\$15,419,185	\$15,419,185
PROJECT FUNDING TOTAL	\$3,895,532	\$20,322,263	\$22,115,756	\$20,112,013	\$16,144,247	\$82,589,811

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$14,246,582	\$15,388,356	\$16,144,247	\$45,779,185
PENNVEST	\$3,895,532	\$20,322,263	\$7,869,175	\$4,723,657	\$0	\$36,810,627
PROJECT FUNDING TOTAL	\$3,895,532	\$20,322,263	\$22,115,756	\$20,112,013	\$16,144,247	\$82,589,811

Dragoon Way Stormwater Improvements



Project Description

This would involve upsizing stormwater infrastructure as well as road paving on Dragoon Way. This project is subject to a cost share between the Pittsburgh Water and Sewer Authority and City of Pittsburgh.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: This area experiences significant roadway and property flooding. Runoff flows down Dragoon Way and through multiple Adelphia Street properties, flooding Adelphia Street.

Risk(s): Risks associated with not completing this project include poor level of service.

Impact on Operations: Reduced need for catch basin cleaning after significant precipitation events.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-103-0 - Dragoon Way Stormwater Improvements	\$1,745,800	\$0	\$0	\$0	\$0	\$1,745,800
PROJECT FUNDING TOTAL	\$1,745,800	\$0	\$0	\$0	\$0	\$1,745,800

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$872,900	\$0	\$0	\$0	\$0	\$872,900
City of Pittsburgh	\$872,900	\$0	\$0	\$0	\$0	\$872,900
PROJECT FUNDING TOTAL	\$1,745,800	\$0	\$0	\$0	\$0	\$1,745,800

Four Mile Run Stormwater Infrastructure Improvements



Project Description

Sewer separation to reduce wet weather flow currently discharging into the combined sewer located in M-29.

Project Details

Phase: Design

Priority: Regulatory Compliance, Safety, Quality of Service

Project Justification: This project will separate wet weather flow being directly discharged into the Authority's combined sewer system.

Risk(s): Wet weather flow may continue to flow into the combined sewer system prior to the completion of the project, which could in issues during wet weather events.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2018-GI-102-0 - Four Mile Run Stormwater Infrastructure Improvements	\$828,644	\$7,598,360	\$16,289,562	\$306,524	\$0	\$25,023,090
PROJECT FUNDING TOTAL	\$828,644	\$7,598,360	\$16,289,562	\$306,524	\$0	\$25,023,090

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$828,644	\$7,598,360	\$16,289,562	\$306,524	\$0	\$25,023,090
PROJECT FUNDING TOTAL	\$828,644	\$7,598,360	\$16,289,562	\$306,524	\$0	\$25,023,090

Fowler Park Stormwater Improvements



Project Description

Construction of storm sewer system and green infrastructure improvements as part of City of Pittsburgh Park Master Plan improvements. Project will include installation of stormwater storage, storm sewer conveyance, new catch basins, and vegetated stormwater control measures. Project is subject to cost share request with the City of Pittsburgh.

Project Details

Phase: Design

Priority: Regulatory Compliance, Quality of Service, Safety, Risk of Failure, Strategic Priorities, Social Impact

Project Justification: Existing combined sewer system in this area has been identified as a flooding risk and for evaluation as a critical area for sewer capacity improvements.

Risk(s): Reduced need for catch basin cleaning after significant precipitation events.

Impact on Operations: Increased operating reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-500-102-0 - Fowler Park Stormwater Improvements	\$271,400	\$280,800	\$1,706,500	\$1,706,500	\$0	\$3,965,200
PROJECT FUNDING TOTAL	\$271,400	\$280,800	\$1,706,500	\$1,706,500	\$0	\$3,965,200

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$271,400	\$280,800	\$1,706,500	\$1,706,500	\$0	\$3,965,200
PROJECT FUNDING TOTAL	\$271,400	\$280,800	\$1,706,500	\$1,706,500	\$0	\$3,965,200

Haverhill Street Stormwater Improvements Project



Project Description

This project will capture and redirect an existing nuisance groundwater seep into retention/slow release subsurface infrastructure, either in the form of a perforated pipe and gravel bed or a retention tank. The project will also involve landslide stabilization to prevent current persistent sediment accumulation in the downstream sewer and green infrastructure as well as associated roadway restoration. Project is subject to cost share request with the City of Pittsburgh.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Quality of Service ,Safety, Risk of Failure, Strategic Priorities, Social Impact

Project Justification: There is currently an unmanaged groundwater seep flowing down Haverhill Street, flooding properties, depositing significant amounts of sediment into PWSA's sewer system and a PWSA green infrastructure site (Oakwood and Batavia), and degrading the roadway. This project would decrease private property flooding, reduce the amount of sediment entering the sewer system, save PWSA maintenance costs involved with removing sediment from nearby catch basins and green infrastructure, stop continued green infrastructure system degradation caused by this seep, and improve roadway conditions and safety in the area.

Risk(s): Groundwater seep will continue to cause issues.

Impact on Operations: This would decrease maintenance needs for both the green infrastructure maintenance contract as well as the catch basin cleaning contract.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-102-0 - Haverhill Street Improvements Project	\$2,046,603	\$47,837	\$0	\$0	\$0	\$2,094,441
PROJECT FUNDING TOTAL	\$2,046,603	\$47,837	\$0	\$0	\$0	\$2,094,441

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,023,302	\$23,919	\$0	\$0	\$0	\$1,047,220
City of Pittsburgh	\$1,023,302	\$23,919	\$0	\$0	\$0	\$1,047,220
PROJECT FUNDING TOTAL	\$2,046,603	\$47,837	\$0	\$0	\$0	\$2,094,441

Heths Way Stormwater Improvements



Project Description

Construction of storm sewer infrastructure to address persistent street flooding and roadway damage at Heths Way between Stanton Avenue and Sharp Way. Project will include installation of stormwater storage, storm sewer conveyance, new catch basins, as well as inverting the crown of the roadway for improved drainage. Project is subject to cost share request with the City of Pittsburgh.

Project Details

Phase: Planning

Priority: Regulatory Compliance, Quality of Service, Safety, Risk of Failure, Strategic Priorities, Social Impact

Project Justification: The existing site conditions do not allow for stormwater drainage or infiltration. The roadway experiences frequent ponding after rain events causing further damage to the roadway. Project provides opportunity to improve the existing capacity of the PWSA combined sewer system which has reported issues of basement flooding during wet weather events in this portion of the system.

Risk(s): Existing combined sewer system in this area has been identified as a flooding risk and for evaluation as a critical area for sewer capacity improvements.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-500-104-0 - Heths Way Stormwater Improvements	\$172,000	\$1,174,000	\$0	\$0	\$0	\$1,346,000
PROJECT FUNDING TOTAL	\$172,000	\$1,174,000	\$0	\$0	\$0	\$1,346,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$172,000	\$1,174,000	\$0	\$0	\$0	\$1,346,000
PROJECT FUNDING TOTAL	\$172,000	\$1,174,000	\$0	\$0	\$0	\$1,346,000

Larimer Park Cost Share



Project Description

Based upon a July 19, 2013 letter of support, PWSA committed to GI related improvements as part of the Choice Neighborhood Development in Larimer and East Liberty.

Project Details

Phase: Close-out

Priority: Quality of Service

Project Justification: This project separated wet weather flow being directly discharged into the Authority's combined sewer system.

Risk(s): None

Impact on Operations: Subsurface cleaning on the GI infrastructure.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-424-115-0 - Larimer Park Cost Share	\$39,617	\$0	\$0	\$0	\$0	\$39,617
PROJECT FUNDING TOTAL	\$39,617	\$0	\$0	\$0	\$0	\$39,617

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$39,617	\$0	\$0	\$0	\$0	\$39,617
PROJECT FUNDING TOTAL	\$39,617	\$0	\$0	\$0	\$0	\$39,617

Martin Luther King Field Stormwater Infrastructure Improvements



Project Description

Installation of regenerative bioswale and underground detention facilities to capture and detain impervious acres from the adjacent streets and upstream separate storm sewers, which currently discharges into the combined sewer located in M-19.

Project Details

Phase: Construction

Priority: Regulatory Compliance, Quality of Service, Safety, Risk of Failure, Strategic Priorities, Social Impact

Project Justification: This project will help slow or reduce runoff into the combined sewer system during wet weather events.

Risk(s): Wet weather flow may continue to flow into the combined sewer system prior to the completion of the project, which could cause issues during wet weather events.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-GI-104-0 - Martin Luther King Field Stormwater Infrastructure Improvements	\$2,495,828	\$1,974,312	\$0	\$0	\$0	\$4,470,140
PROJECT FUNDING TOTAL	\$2,495,828	\$1,974,312	\$0	\$0	\$0	\$4,470,140

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$2,495,828	\$1,974,312	\$0	\$0	\$0	\$4,470,140
PROJECT FUNDING TOTAL	\$2,495,828	\$1,974,312	\$0	\$0	\$0	\$4,470,140

Oakridge Stormwater Separation



Project Description

Improvements for PWSA separated storm sewer system to eliminate illicit storm connections to the existing PWSA sanitary sewer system located along Oakridge St and Brookline Memorial Park driveway. Project includes design and installation of new storm sewers and connection tributary to the existing PWSA 42-inch outfall sewer on Brookline Boulevard. Stormwater storage alternatives to be evaluated based on field investigations, with capture of contributing impervious area managed (appx. 1.2 acres) to the 95th percentile storm event (1.66 inches of runoff depth) to mitigate project impacts to existing PWSA sewer system.

Project Details

Phase: Construction

Priority: Safety, Quality of Service

Project Justification: Improvements will reduce sanitary sewer overflows to Saw Mill Run.

Risk(s): Additional storm flow could travel faster to the 42-inch outfall sewer.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-500-102-1 - Oakridge Stormwater Separation	\$260,000	\$1,740,000	\$0	\$0	\$0	\$2,000,000
PROJECT FUNDING TOTAL	\$260,000	\$1,740,000	\$0	\$0	\$0	\$2,000,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$260,000	\$1,740,000	\$0	\$0	\$0	\$2,000,000
PROJECT FUNDING TOTAL	\$260,000	\$1,740,000	\$0	\$0	\$0	\$2,000,000

Saw Mill Run Watershed Improvements



Project Description

Implementation of stormwater treatment and reconnection of streams to vegetated floodplains to help mitigate stormwater peak flows and reduce sediment and other pollutant loads. This project will demonstrate the effectiveness of green infrastructure in reducing pollutants, controlling CSO/SSOs, and restoring the health of the aquatic ecosystems in the Saw Mill Run watershed to comply with regulatory obligations.

Project Details

Phase: Design

Priority: Safety, Quality of Service, Regulatory Compliance

Project Justification: This project will help to comply with regulatory obligations by reducing pollutants and controlling CSO/SSOs.

Risk(s): It may be difficult to comply with certain regulatory obligations prior to the completion of the project.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2020-424-109-0 - Saw Mill Run Watershed Improvements	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
PROJECT FUNDING TOTAL	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
PROJECT FUNDING TOTAL	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000

Southside Flats Sewer Separation



Project Description

Separation of 17 acres of combined sewer through the construction of storm drain along Wharton Street to 18th Street.

Project Details

Phase: Construction

Priority: Safety, Quality of Service

Project Justification: This project will help slow or reduce runoff into the combined sewer system during wet weather events.

Risk(s): Community members are concerned about disruptions during construction and potential rooftop disconnect costs.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2021-424-106-0 - Southside Flats Sewer Separation	\$6,864,029	\$3,576,701	\$0	\$0	\$0	\$10,440,730
PROJECT FUNDING TOTAL	\$6,864,029	\$3,576,701	\$0	\$0	\$0	\$10,440,730

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$6,864,029	\$3,576,701	\$0	\$0	\$0	\$10,440,730
PROJECT FUNDING TOTAL	\$6,864,029	\$3,576,701	\$0	\$0	\$0	\$10,440,730

Southside Stormwater Infrastructure Improvements



Project Description

This project is located in the M-16 sewershed, which discharges approximately 103MG of CSOs in a typical year as it is defined in the current system model. Additionally, there are 15 known surface streams/seeps within the park that appear to connect into the combined sewer system. The project will focus on stormwater management source control opportunities within Southside Park. The project will look at separating the stormwater runoff from the park and road right-of-way areas. It will connect through a new storm sewer discharge to be built under South 21st Street to the Monongahela River. The project will detain and slowly return the stormwater runoff to the combined sewer system.

Project Details

Phase: Design

Priority: Safety, Quality of Service, Regulatory Compliance

Project Justification: This project will help comply with regulatory requirements by reducing CSOs.

Risk(s): It may be difficult to comply with certain regulatory obligations prior to the completion of the project.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2019-GI-100-0 - Southside Stormwater Infrastructure Improvements	\$1,103,849	\$4,272,379	\$888,877	\$0	\$0	\$6,265,105
PROJECT FUNDING TOTAL	\$1,103,849	\$4,272,379	\$888,877	\$0	\$0	\$6,265,105

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,103,849	\$4,272,379	\$888,877	\$0	\$0	\$6,265,105
PROJECT FUNDING TOTAL	\$1,103,849	\$4,272,379	\$888,877	\$0	\$0	\$6,265,105

Stewart Avenue Stormwater Infrastructure Project



Project Description

Overland stormwater runoff during larger precipitation events in the Stewart Avenue area contribute to downstream flooding along Saw Mill Run Blvd, flooding of nearby private properties, street flooding, and roadway damage. Catch basins and storm inlets once discharged to an open drainage channel along Stewart Avenue, however this is no longer operational as the road was recently paved and widened, eliminating the channel. Recognizing that the Saw Mill Run stream corridor is overwhelmed during relatively small rainfall events, PWSA desires to evaluate alternatives with an emphasis toward source control measures and other green strategies where peak flows from the Stewart Avenue runoff area can be possibly detained and mitigated. This project is subject to a cost share between the Pittsburgh Water and Sewer Authority and City of Pittsburgh.

Project Details

Phase: Construction

Priority: Safety, Quality of Service

Project Justification: This project is necessary to increase stormwater service and control in the area, which is currently lacking adequate stormwater infrastructure.

Risk(s): Failing to complete this project will lead to persistent private property and roadway flooding, chronic depreciation of roadway conditions, and continued worsening flooding and impairment of Saw Mill Run.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2022-424-101-0 - Stewart Avenue Stormwater Infrastructure Project	\$2,633,438	\$3,569,151	\$0	\$0	\$0	\$6,202,589
PROJECT FUNDING TOTAL	\$2,633,438	\$3,569,151	\$0	\$0	\$0	\$6,202,589

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,316,719	\$1,784,576	\$0	\$0	\$0	\$3,101,295
City of Pittsburgh	\$1,316,719	\$1,784,576	\$0	\$0	\$0	\$3,101,295
PROJECT FUNDING TOTAL	\$2,633,438	\$3,569,151	\$0	\$0	\$0	\$6,202,589

Wet Weather Program Projects



Project Description

This project is for improvements to the sewer system facilities to bring combined sewer overflows into compliance with the negotiated consent decree and to remediate sanitary sewer overflows.

Project Details

Phase: Planning

Priority: Regulatory Compliance, Safety, Quality of Service, Strategic Initiatives, Social Impact

Project Justification: This project is required to ensure PWSA meets regulatory requirements related to wet weather flow being directly discharged into the PWSA's combined sewer system.

Risk(s): Failure to meet future regulatory requirements.

Impact on Operations: Increased system reliability and improved system management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-500-102-0 - Wet Weather Program Projects	\$0	\$6,742,581	\$7,610,890	\$4,089,548	\$4,089,548	\$22,532,566
PROJECT FUNDING TOTAL	\$0	\$6,742,581	\$7,610,890	\$4,089,548	\$4,089,548	\$22,532,566

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$6,742,581	\$7,610,890	\$4,089,548	\$4,089,548	\$22,532,566
PROJECT FUNDING TOTAL	\$0	\$6,742,581	\$7,610,890	\$4,089,548	\$4,089,548	\$22,532,566

Wightman Park Phase 2 Project



Project Description

Project is located in the Squirrel Hill neighborhood of the City of Pittsburgh and is a tributary to the M-29 outfall. Stormwater management within the park itself as well as the necessary piping or inlet work to direct up to 3.25 impervious acres from the adjacent streets into the park. The Wightman Park project along with the future street bioswale projects are expected to increase the impervious acres captured as well as alleviate reported sewer basement backups in the neighborhood around Wightman Park.

Project Details

Phase: Close-out

Priority: Safety, Quality of Service, Social Impact, Regulatory Compliance

Project Justification: 2.24 million gallons of stormwater runoff will be managed through this project in a typical year, producing downstreet CSO reduction. The project will also improve the performance of adjacent, downstream sewers through peak flow reduction.

Risk(s): Failure to meet regulatory compliance.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-424-105-1 - Wightman Park Phase 2 Project	\$185,000	\$0	\$0	\$0	\$0	\$185,000
PROJECT FUNDING TOTAL	\$185,000	\$0	\$0	\$0	\$0	\$185,000

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$185,000	\$0	\$0	\$0	\$0	\$185,000
PROJECT FUNDING TOTAL	\$185,000	\$0	\$0	\$0	\$0	\$185,000

Woods Run Stream Removal Stormwater Infrastructure Improvements



Project Description

This project will redirect an existing stream inflow location into a detain and slow release subsurface storage facility. The stream base and wet weather flow currently discharge directly into a 36" diameter combined sewer on Mairdale Avenue.

Project Details

Phase: Construction

Priority: Safety, Quality of Service

Project Justification: This project will separate wet weather flow being directly discharged into the PWSA's combined sewer system.

Risk(s): Wet weather flow may continue to flow into the combined sewer system prior to the completion of the project, which could be issues during wet weather events.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2017-424-108-0 - Woods Run Stream Inflow -Mairdale Avenue	\$945,962	\$1,999,420	\$5,375	\$0	\$0	\$2,950,757
2017-424-108-1 - Woods Run Improvements - Mairdale Avenue	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$945,962	\$1,999,420	\$5,375	\$0	\$0	\$2,950,757

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$945,962	\$1,999,420	\$5,375	\$0	\$0	\$2,950,757
PROJECT FUNDING TOTAL	\$945,962	\$1,999,420	\$5,375	\$0	\$0	\$2,950,757

Stormwater Improvements Contingency



Project Description

Stormwater contingency project pass-through.

Project Details

Phase: Not applicable

Priority: Not applicable

Project Justification: Improved efficiency of capital improvement fund management.

Risk(s): No identified risks.

Impact on Operations: Improved efficiency of capital improvement plan management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-500-101-0 - Stormwater Improvements Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Miscellaneous



Project Class Summary

Projects within this category do not qualify for any of the other five project categories and include, but are not limited to, a new PWSA headquarters building, utility cost shares with other entities, and the annual capital reclassification.

Project Summary Table

	2024-2028 CAPITAL PLAN					5 YEAR TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024 Capital Project Reclassification	\$13,676,302	\$0	\$0	\$0	\$0	\$13,676,302
New Headquarters and Operations Facility	\$1,270,690	\$3,929,020	\$1,270,689	\$0	\$0	\$6,470,398
Utility Cost Shares	\$300,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,300,000
Miscellaneous Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$15,246,992	\$4,429,020	\$1,770,689	\$500,000	\$500,000	\$22,446,700

2024 Capital Project Reclassification



Project Description

Annual capital project reclassification originally expensed through the annual operating budget.

Project Details

Phase: No Applicable

Priority: Not Applicable

Project Justification: This project is required to reclassify operating costs related to urgent water replacements, urgent sewer replacements, and manhole and point repairs.

Risk(s): Failure to fully capitalize PWSA assets.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-600-100-0 - 2024 Capital Project Reclassification	\$13,676,302	\$0	\$0	\$0	\$0	\$13,676,302
PROJECT FUNDING TOTAL	\$13,676,302	\$0	\$0	\$0	\$0	\$13,676,302

Funding Sources

	2024- 2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$13,676,302	\$0	\$0	\$0	\$0	\$13,676,302
PROJECT FUNDING TOTAL	\$13,676,302	\$0	\$0	\$0	\$0	\$13,676,302

New Headquarters and Operations Facility



Project Description

PWSA is searching for a new headquarters location that would also include a space for the operations division.

Project Details

Phase: Planning

Priority: Strategic Priorities, Quality of Service

Project Justification: A new location would provide additional space that is needed as a result of increased operations.

Risk(s): Increased operational challenges.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2023-600-101-0 - New Headquarters and Operations Facility	\$1,270,690	\$3,929,020	\$1,270,689	\$0	\$0	\$6,470,398
PROJECT FUNDING TOTAL	\$1,270,690	\$3,929,020	\$1,270,689	\$0	\$0	\$6,470,398

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$1,270,690	\$3,929,020	\$1,270,689	\$0	\$0	\$6,470,398
PROJECT FUNDING TOTAL	\$1,270,690	\$3,929,020	\$1,270,689	\$0	\$0	\$6,470,398

Utility Cost Shares



Project Description

This project will fund future cost share projects.

Project Details

Phase: Not Applicable

Priority: Quality of Service, Strategic Priorities

Project Justification: Cost sharing projects can provide a savings to the Authority.

Risk(s): Increased costs to the Authority.

Impact on Operations: Increased operating flexibility and reliability.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-600-102-0 - Utility Cost Shares	\$300,000	\$500,000	\$500,000	\$500,000	\$484,500	\$2,284,500
2023-600-107-0 - Charles Anderson Bridge Utility Coordination	\$0	\$0	\$0	\$0	\$15,500	\$15,500
2023-600-108-0 - PennDot SR19 A63	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$300,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,300,000

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$300,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,300,000
PROJECT FUNDING TOTAL	\$300,000	\$500,000	\$500,000	\$500,000	\$500,000	\$2,300,000

Miscellaneous Contingency



Project Description

Miscellaneous contingency project pass-through.

Project Details

Phase: Not Applicable

Priority: Not Applicable

Project Justification: Improved efficiency of capital improvement fund management.

Risk(s): No identified risks.

Impact on Operations: Improved efficiency of capital improvement plan management.

DSIC Eligible: No

Project Funding

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
2024-600-101-0 - Miscellaneous Contingency	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0

Funding Sources

	2024-2028 CAPITAL PLAN					TOTAL
	FY2024	FY2025	FY2026	FY2027	FY2028	
Project Funding						
Debt (Revenue Bonds)	\$0	\$0	\$0	\$0	\$0	\$0
PROJECT FUNDING TOTAL	\$0	\$0	\$0	\$0	\$0	\$0