Project Descriptions for January 17, 2024

Board of Trustees Meeting

Asset Management Planning Commitments

Peabody DW-23-137
Peabody Water Asset Management
The Project will build out and refine data in the City's water GIS to better represent recent records to locate above ground infrastructure such as hydrants and valves.

Ware CW-23-50
Town of Ware Wastewater Asset Management Plan
The Project is to expand upon the Town's horizontal asset mapping efforts to develop a comprehensive Asset Management Plan (AMP) that includes vertical assets at one sewer pumping station and the Town's wastewater treatment plant, as well as horizontal assets within the sewer collection system.

Asset Management Planning Commitments and Agreements

Braintree CWA-23-38
Sewer Pump Station & Stormwater Culvert Evaluation
The Project will assess the condition and maintenance needs of the Town's 60 stormwater culverts. Data from the assessment will be used to create a recommended maintenance plan and estimate costs. Environmental Partners will also perform a rate analysis to incorporate O&M costs into future stormwater rates. The sewer project will evaluate the condition and performance of the Town's 11 wastewater pump stations. Data from the evaluation will be used to create a capital plan with recommended actions and estimated costs to improve pump station efficiency, performance, safety, reliability, and capacity. According to the Clean Water Trust's calculation for the 2022 IUP, Braintree is a Tier 1 Affordability community.

Holbrook CWA-23-40
Holbrook Sewer & Stormwater Asset Management Plan
The Project is to complete an asset inventory of the Town's existing Sewer and Stormwater Infrastructure to understand the utilities' existing condition, network connectivity and maintenance needs with the goal of better management of the Town's infrastructure. Having updated information is critical for the Town to make assessments on repairs and rehabilitation projects and will also assist in financial planning for the Town's Department of Public Works (DPW) staff for capital improvements. Having a robust Asset Management Plan (AMP) will be a critical resource as the community deals with aging infrastructure, changing climates and environmental needs now and in the future.

Southampton CWA-23-43
Town of Southampton Stormwater Management Plan
The Project is to conduct a Town-wide inventory and mapping effort of Southampton's approximately 140 culverts to identify and prioritize those culverts that are most in need of proactive mitigation. The AMP will allow the Town of Southampton to better understand the condition of the existing stormwater infrastructure, create a risk-based AMP and capital improvement planning methodology and establish a stormwater GIS database.

Sudbury Water District DWA-23-133
Sudbury Water System Asset Management Plan
The Project will enhance the District's Asset Management Platform to include key network structures/vertical assets for its system with the goal of managing assets through their Asset Management Platform (PeopleGIS) as they currently do for their pipes, valves and hydrants. By tying these assets into the platform, the District can manage these assets through its work order system, ultimately leading to better service for its customer base. With the Asset Management Planning document, the District will also realize cost savings through timely maintenance and proper long-term capital planning.

Lead Service Line Planning Program Commitments and Agreements

Chelsea DWL-23-146
Lead Service Line Investigation
The City of Chelsea proposes to perform confirmatory curb stop test pits between November 2023 and July 2024 as the most efficient means of identifying remaining lead services and confirming copper services on both sides of the property line. This rapid accumulation of data for the existing water service inventory will allow the City to more efficiently use funds in future lead service replacement phases.

Lancaster DWL-23-156
Service Line Inventory and LSL Replacement Plan
The project proposes to complete the LSL Inventory, the Replacement Plan based on the inventory results, and SRF Grant Administration. The inventory and replacement plan will be completed and submitted. according to Massachusetts Department of Environmental Protection (MassDEP) requirements.

Clean Water Commitments

Barnstable CW-23-53
Centerville Village Sewer Expansion
The Project will expand the municipal sewer system within the Centerville River Watershed to address nitrogen loading to the Centerville River and pond protection of Wequaquet Lake consistent with the Town’s Comprehensive Wastewater Management Plan (CWMP).

Barnstable CW-23-54
2023 Wastewater Pump Station Improvements
The Project will upgrade the Town of Barnstable’s existing Old Colony, Bay Shore Road, Ocean Street, and Gosnold Street wastewater pumping stations to improve reliability, energy efficiency and resiliency.

Billerica CW-23-15
Sewer Contract 37
This Project includes two sewer extensions and the construction of two pump stations in the Webb Brook Watershed Area (Contract 37) delineated as Sewer Needs Area 4 and in the South Billerica area (Sewer Contract 38) delineated as Sewer Needs Area 6 in the Town's CWMP. The objective of these sewer extension projects is to alleviate existing and potential short- and long-term problems with on-site wastewater disposal systems in specific delineated sections of the Town of Billerica.

Brockton CW-23-29
Cashman Road Sewer
The Project includes open cut and trenchless pipe installation of prioritized areas in the City's wastewater collection system to address sources of exfiltration, infiltration and inflow, and sections of undersized pipe. The objective is to reduce flows at the AWRF, allowing for more capacity for Brockton residents and surrounding communities, prevent exceedances of the City's NPDES permit for the AWRF flows, lower maintenance costs of effected pumping and treatment facilities, reduce sanitary sewer overflows (SSOs), provide system redundancy, and improve water quality of surrounding watersheds.

Brockton CW-23-30
Sewer System Rehabilitation Phase 3
The Project includes up to 10 miles of preparatory cleaning of existing sewer pipe, internal television inspection, cured-in-place (CIP) sewer pipe lining, and rehabilitation of manholes. The work also includes all restoration, bypass pumping, miscellaneous work and cleanup. Sewer reaches and sewer manholes selected for this project have been identified based on the 2017 sewer flow monitoring program and will be prioritized based on the City's on-going sewer infiltration investigations.

Chatham CW-23-42
WPCF Sludge Processing Upgrades
The Project includes upgrades to the solids processing facilities, including adding a belt filter press and associated equipment, upgrading a sludge holding tank and adding an additional blower. This project will further the wastewater management strategies set forth in the Town's Comprehensive Wastewater Management Plan (CWMP), allowing the facility to continue to process sludge as collection systems are expanded both in Chatham and in the neighboring Town of Harwich. This project will provide critical improvements to allow the WPCF to increase its sludge processing capacity as collection systems are expanded throughout the Town.

Fall River CW-23-25
Ferry Street Pump Station Rehabilitation
The Project includes the rehabilitation of existing drywell, wet well, and generator building structures. The project also includes replacement of a standby generator, and all electrical equipment and controls. A permanent emergency bypass will be installed. Constructed in 1965, the City's Ferry Street Sewer Pump Station is nearing the end of its service life.

Fitchburg CW-23-34

CSO 032, 045, 083 Separation/Rehabilitation

The CSO 032, 045, 083 Separation/Rehabilitation Project involves the separation of an estimated 21,800 linear feet (LF) of combined sewers, the separation of 2 combination manholes, and the closure of 3 CSO regulators (CSO 032, 045, and 083) that have discharged a combined estimated 39.1 million gallons of untreated combined sewage into the North Nashua River between 2015 and 2021. The project also includes approximately 24,100 LF of trenchless rehabilitation of sanitary sewers to reduce infiltration/inflow upstream of the 3 regulators. The project will also include green infrastructure, when applicable, and includes stormwater improvements for the 2070 10-year, 24-hour storm event.

Harwich CW-23-19

Harwich Phase 3 Sewer Extension

The Harwich 2023 Phase 3 Sewer Project will allow the town to continue implementing their approved Comprehensive Wastewater Management Plan (CWMP). This project will continue the sewer implementation called for in the CWMP to address nitrogen loading from septic systems by implementing a wastewater collection system to serve watersheds that impact coastal estuaries. This project will address a portion of the Pleasant Bay Watershed including Muddy Creek Upper and Lower, Round Cove, and Pleasant Bay.

Haverhill CW-23-14

Pump Station Upgrades

The Project will implement recommendations of the City's 2016 Wastewater Pumping Station Evaluation and Capital Improvement Plan. The project will replace deficient and aging infrastructure to reduce the risk of failure and potential sewer overflows.

Haverhill CW-23-58

Haverhill MA Locke Street Sewer Separation Phase 1

The Project is the first phase of a project separating approximately 3,500 LF of combined sewers in the Town's Locke Street area, by installing new drainage pipe, disconnecting catch basins from the sanitary sewer and connecting them to the separate storm sewer, and rehabilitating existing sewers and manholes, as necessary. This project is part of Haverhill's 2017 Integrated FLTCP and 2016 Consent Decree and will reduce the volume and frequency of combined sewer overflow (CSO) discharges from the three CSO regulators within the Locke Street Area to the Little River and Merrimack River.

Holyoke CW-23-51

River Terrace Sewer Separation Project - Phase 1

The Project consists of the separation of combined sewers in the River Terrace Basin (CSO-21) to eliminate combined sewer overflows discharging to the Connecticut River from CSO-21 outfall. Work includes construction of 12,000-feet of new sanitary sewers and storm drains, and 10,000-feet of existing sewer lining. This project will result in a significant improvement in the water quality of the Connecticut River downstream of CSO-21 outfall. The project is consistent with the City's CSO Long-Term Control Plan and is being required by a Partial Consent Decree issued by the U.S. Department of Justice.

Kingston CW-23-33

Effluent Recharge Site No. 3 & Sewer Expansion

The Project consists of the construction of a new force main connection and effluent discharge. The Town is upgrading the capacity of their WWTF to accept flow up to 700,000 gpd. Effluent Recharge Site No. 3 was identified by the Town and approved by MassDEP to receive this new flow. An existing force main will be redirected to a distribution structure where effluent will flow to six leaching areas for recharge. Upgrading the WWTF will allow the Town to convert the privately owned WWTP at Town and Country Estates into a pumping station and install 3,600 LF of 4" force main to tie into the Town's existing gravity sewer system.

Lowell CW-23-52

Duck Island WWTF Phase 3 Upgrade

The Project includes important upgrades to Lowell Duck Island Wastewater Treatment Facility including: chemical addition facilities to meet the pending effluent phosphorus limit of 1.08 mg/l outlined in the most recent NPDES Permit; new centrifuge dewatering facilities and upgrades of ancillary facilities for sludge pumping, blending, and polymer feed; new scum well pumping, mixings, and dewatering equipment; replacement of aeration diffusers and piping in the aeration basins; replacement of the primary sludge de-gritting system; replacement of the gravity thickener mechanism; new bisulfite storage and feed facility; and, a second standby generator to allow full WWTF Operations during a power outage.

Marshfield CW-23-18

Plymouth Ave Pump Station Upgrades

The Project includes a full rehabilitation of the Plymouth Ave Pump Station, force main, wet well, HVAC system, electrical system, and roof system. Many of the components are beyond their intended useful life and need immediate replacement in order to maintain reliable sewer service in the area. The upgrades include concrete repair work in the wet well, replacement of the existing 50 HP dry pit pumps, piping and valves, replacement of the undersized generator, replacement of the outdated HVAC and electrical systems and replacement of the existing asphalt roofing system.

Mashpee CW-23-27

Phase 1 Mashpee Treatment and Collection System

The Project consists of construction of a new collection system as recommended by the state approved 2015 Mashpee Watershed Nitrogen Management Plan to address nitrogen impacts to the Mashpee River watershed and the Pomponesett Bay. The collection system will convey flow to the Mashpee Water Resource Recovery Facility.

Massachusetts Water Resources Authority CW-23-60
DITP Asset Protection Phase 3
Contract No. 7110 HVAC Equipment Replacement - Replacement of various Heating, Ventilation and Cooling units through the treatment plant. Replacements include fan coil units, air handling units, chiller systems, the WWTP central HVAC control system, and 29 existing fume hoods in the Laboratory. Contract Nos. 7059/7420 Switchgear and NMPS MCC Replacements - Replacement of various electrical low voltage distribution equipment that provides power to critical pumping stations and laboratory processes. Contract No. 7051 Fire Alarm Replacement - Replacement of the central fire detection and alarm system throughout the treatment plant. This project will ensure that the plant continues to meet its discharge permit requirements by replacing obsolete equipment and systems. Some of the contracts are expected to result in decreased required maintenance and/or lower operating costs. All equipment is at the end of its useful life.

Massachusetts Water Resources Authority CW-23-61
DITP Clarifier #2
The Massachusetts Water Resources Authority's project is needed to correct deficiencies noted during the first Primary & Secondary Clarifier project. Project will include the replacement of systems such as: influent gates that are not providing adequate isolation; effluent launders and aeration systems that are in need of repair/replacement; and concrete corrosion in primary clarifiers above the water line that require repair and coating to prevent future corrosion. The sludge removal system in primary tanks and aeration/recirculation systems in secondary tanks need to be rehabilitated as well. The Authority will not be able to meet its discharge permit without this upgrade.

New Bedford CW-23-24
Buttonwood Brook Improvements
The Project consists of improvements around Buttonwood Brook that include the construction of green infrastructure and structural BMPs along Kempton Street and Brownell Avenue, constructed wetlands at the Buttonwood Park Zoo and Community Center, and a culvert replacement at Hawthorn Street. Implementation of this project will result in improved water quality in the Buttonwood Brook and reduced flooding at Fuller Parkway and at the intersection of Brownell Avenue and Hawthorn Street.

New Bedford CW-23-26
Sassaquin Pond Water Quality Improvements
The Project consists of water quality improvements within the area tributary to Sassaquin Pond, located at the north end of the City of New Bedford. The pond has historically poor water quality and is subject to algal blooms. This project will directly abate the issues addressed in an existing court order and improve water quality in the pond.

Quincy CW-23-48
FY24 Sewer & Drain Improvements
The Project consists of various sewer improvements as well as repairs to the City's drainage that reflect recommendations from the past SSES reports as well as findings from the City's ongoing and continuous effort to improve their sewer collection system and water quality. In addition to SSES and I/I based projects, the City has been advancing their MS4 obligations under the MS4 Permit and the EPA Consent Decree (Attachment C) to address water quality concerns.

Revere CW-23-57

Phase 15 Field Investigations

The Phase 15 Investigations - 1/1 and IDDE Project is a continuation of the City's ongoing efforts to identify sources of inflow, infiltration, illicit connections and deficiencies in the City's wastewater system. This investigation program will include IDDE, CCTV of drains and sewers throughout the City, dye testing, smoke testing, wastewater and stormwater pump station inspections, and inspections of private homes and businesses to identify sources of inflow from sump pumps, roof leaders, roof drains, driveway drains, yard drains and other miscellaneous sources of inflow. The findings in these investigations will be incorporated into the City's future construction projects to address the detected deficiencies.

Saugus CW-23-47

Comprehensive Sewer System Rehabilitation- 3A

The Project includes comprehensive sewer system rehabilitation in Subsystem 3A in Saugus. Construction will include the rehabilitation of pipelines, manholes and service laterals necessary to eliminate I/I from the system. Approximately 16,500 feet of 8-inch and 5,550 feet of 10-inch pipe have been identified as being in need of CIPP in subsystem 3A to eliminate I/I. Also included in this project will be the installation of a lining system to improve the quality of the service to mainline connection. There are approximately 410 of this type of connection in Subsystem 3A. Approximately 174 manholes have also been identified and are in need of rehabilitation. Each manhole will be lined using the latest standards.

Shrewsbury CW-23-22

Rolfe & Maple Ave PS Upgrade and FM Replacement

The Project involves the upgrade of Rolfe Avenue and Maple Avenue Pump Stations and Force Main Replacement. The purpose of these improvements is to restore useful life of the stations and force main, improve operator safety, and improve system reliability.

Shutesbury CW-23-62

Shutesbury Fire Dept. Immediate Response Action

Implementation of an Immediate Response Action to address a release of PFAS to the environment that is impacting private wells in neighboring residential properties.

Somerset CW-23-31

Somerset Wastewater Pump Station Upgrades

The Project consists of upgrades to five wastewater pump stations in Somerset. These stations were built in the 1960's and 1970's and are past their useful service life. Upgrades to these facilities, highlighted in the Town's CWMP, include but are not limited to, replacement and installation of submersible pumps, repairs to wet well sections, new valve vaults, new force main bypass pump/pig launch connection, new concrete pads with NEMA 12 steel enclosure for pump controls, new electrical equipment, generator, generator fuel tanks, quick connects, new level and instrumentation equipment, new ventilation and odor control, and connection of pump station monitoring and alarm signals to the Town's remote alarm network.

South Essex Sewerage District CW-20-35

Primary Clarifier Concrete Restoration

SESD operates a regional WWTF that was originally constructed in 1972 and upgraded in the 1990s. Average daily flows at the WWTF are approximately 30 MGD, with a peak capacity of 99 MGD. The WWTF discharges effluent to Salem Sound. The primary treatment process consists of 7 underground cast-in-place concrete tanks with precast concrete roofs. The concrete surface in the headspace of the tanks has corroded over the years and has reached a point where the issue needs to be addressed. If this issue is not addressed, there is a risk that the primary clarifiers could structurally fail. The goal of this project is to restore the impacted concrete within all 7 primary clarifiers to ensure long term structural reliability of the tanks.

Upper Blackstone Clean Water CW-23-21

Standby Power for Resiliency

The Project includes the construction of new facilities to provide standby power for the entire WWTF, including new standby generators and related elements such as switchgear and electrical conduit, as well as additional renewable energy sources to provide resiliency, currently being evaluated for inclusion.

Wareham CW-23-56

WPCF Improvements - Phase 2

The Project consists of upgrades to the Wareham WPCF to continue to treat existing and future flows that are anticipated as a result of growth within the community and for nutrient management. Upgrading these processes is critical to the continued functioning of the facility and will allow for further expansion of the collection system and potentially bringing many failing septic systems into the centralized wastewater treatment system.

Wellfleet CW-23-16

Wellfleet Enhanced I&A Septic System Program

The Project focuses on a new generation of enhanced innovative and alternative (EIA) septic systems that achieve effluent quality of less than 10 mg nitrogen/liter. According to the Targeted Watershed Plan, EIA systems could provide a cost effective, decentralized, and sustainable solution for 59% of the required nitrogen loading reductions. The operation, maintenance and monitoring of the EIA systems would be managed by a Responsible Management Entity (RME). The Wellfleet Targeted Watershed Plan recommends a hybrid of conventional and non-conventional nutrient reduction technologies and strategies to achieve the water quality thresholds throughout the Wellfleet Harbor estuarine system.

Wellfleet CW-23-17

95 Lawrence Wastewater Treatment and Collection Sy

The 95 Lawrence Road Project includes a new neighborhood scale wastewater treatment plant, designed to reduce nitrogen in the Duck Creek sub-watershed of Wellfleet Harbor. The wastewater treatment plant will serve the proposed 95 Lawrence Road affordable housing project, 3 existing municipal buildings (the Police station, Fire Station and Wellfleet Elementary School) and existing abutting residential properties. The project is part of the MEP Threshold Compliance Approach to restore the water quality in Wellfleet Harbor, as outlined in the Wellfleet Targeted Watershed Management Plan.

Worcester CW-23-20

Lake Avenue Pump Station Improvements

The Project consists of removal and replacement of existing sewage pumps, and their corresponding suction piping, valves, and pipe supports, relocation of equipment not rated for submersible conditions to prevent damage due to flooding, reconfiguration of force mains and modification of backup float system and installing separate cellular dialing system. These upgrades will improve the response time during an emergency, reduce the frequency and severity of SSOs into the adjacent lake, and reduce the maintenance frequency and corresponding cost.

Yarmouth CW-23-03

Phase I - WRRF and Collection System

The Project implements Phase 1 of Yarmouth's CWMP that includes: construction of Water Resource Recovery Facility, construction of effluent recharge site and collection system with sewering (approximately 78,000 linear ft) and pumping stations along Rte. 28, from the Barnstable town line to the Bass River, along with sewering on South Shore Drive. The construction of the new WRRF and collection system in Phase 1 will begin to reduce nitrogen loading in the nitrogen-sensitive Bass River, Parkers River, and Lewis Bay watersheds. These watersheds require a large reduction in nitrogen based on the MEP reports and TMDLs. Phase 1 will also help protect municipal drinking water wells from contamination by reducing on-site septic systems.

Drinking Water Commitments

Braintree DW-23-151

Tri-Town Regional Water Treatment Plant

The proposed Tri-Town Regional Water Treatment Plant (TTRWTP) project would create a regional facility to replace the existing Braintree WTP and Randolph/Holbrook WTP. The new regional facility would eliminate redundancies of having two individual plants and their associated capital and operation and maintenance costs. The new Tri-Town WTP will help protect public health by reducing bacteria, carcinogenic compounds, and disinfectant byproducts present in the current systems. The water treatment process would be as follows:

- Polymer and PACL addition for coagulation of raw water
- Dissolved air floatation (DAF) for removal of larger, coagulated solids
- Granular activated carbon (GAC) filtration for removal of per- and polyfluoroalkyl substances (PFAS) and smaller, finer solids
- Chlorine addition for disinfection and pH adjustment for corrosion control

The new TTRWTP will incorporate improved treatment technology in order to provide high quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of 12.5 MGD, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.

East Brookfield DW-23-135

West Street Fe and Mn WTP

The Project is to provide treatment to the sole wellfield in town to remove iron and manganese that is required under an administrative consent order.

Foxborough DW-23-118

Chestnut Street WTP Improvements

The Project consists of system improvements to add treatment of per- and poly-fluoroalkyl substances (PFAS) at the Chestnut Street Water Treatment Plant.

Harvard DW-23-130

Harvard-Devens Water System Interconnection

The Project includes construction of an interconnection between the Town of Harvard and the Devens water distribution systems, including installation of approximately 8,500 linear feet. (1.6 miles) of new 12-inch ductile iron water main and appurtenances and construction of a meter building with booster pumps.

Holbrook DW-23-152

Tri-Town Regional Water Treatment Plant

The proposed Tri-Town Regional Water Treatment Plant (TTRWTP) project would create a regional facility to replace the existing Braintree WTP and Randolph/Holbrook WTP. The new regional facility would eliminate redundancies of having two individual plants and their associated capital and operation and maintenance costs. The new Tri-Town WTP will help protect public health by reducing bacteria, carcinogenic compounds, and disinfectant byproducts present in the current systems. The water treatment process would be as follows:

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- Chlorine addition for disinfection and pH adjustment for corrosion control

The new TTRWTP will incorporate improved treatment technology in order to provide high quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of 12.5 MGD, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.

Hopedale DW-23-117

Greene Street WTP PFAS Treatment

The Project consists of adding PFAS treatment to the WTP that includes construction of two 10-foot diameter pressure vessels containing granular activated carbon (GAC), an additional 8-foot diameter greensand filter, and a sodium thiosulfate system for de-chlorination. A new truck pad will be constructed as well for simpler chemical delivery.

Littleton DW-23-136

Water Supply Main Extension Littleton/Boxborough

The Project will develop a new water supply well at 153 Taylor St. The new well should supply ~0.5MGD. The new well will pump to the new LELWD WTP & provide additional water to the existing customers of Littleton and proposed 18 PWSs in Boxborough that are impacted by PFAS, sodium, chloride, & perchlorate. The work includes drilling & construction of the new groundwater well & associated pump station, a new raw water main to convey water from the new well to the new WTP, and a new finished water main extending from the existing Littleton main in Whitcomb Ave and continuing south ~4.5 miles to the Codman Hill Condominiums PWS#2037001 in Boxborough.

Massachusetts Water Resources Authority DW-23-141

CP-2 NEH Improvements

The Project consists of the installing up to 6,700 linear feet of new 24-inch ductile iron pipe to interconnect Section 83 (in the vicinity of Meter 183) to Section 45 (in the vicinity of Meter 47).

Massachusetts Water Resources Authority DW-23-142

Section 23, 24, 47 Water Mains Rehab

The Massachusetts Water Resources Authority seeks to rehabilitate three water mains designated as Sections 23, 24 and 47 under contract 6392. The water mains serve the communities of Boston and Watertown. Section 23 and section 24 are 124-year-old cast iron pipes, Section 47 is a 103-year-old cast iron main. The goal of this project is to improve the condition, hydraulic capacity and reliability of the existing water mains, avoid potential service disruption as a result of breaks and leaks, and improve hydraulic and operating deficiencies in the distribution system.

Massachusetts Water Resources Authority DW-23-148

Weston Aqueduct Supply Main Rehabilitation

The Weston Aqueduct Supply Main 3 (WASM 3) is an existing 10-mile, 56-inch to 60-inch diameter, steel water main that supplies the communities of Waltham, Watertown, Belmont, Arlington, Lexington, Bedford and Winchester. In addition, the pipe conveys flow to the MWRA's Intermediate High, Northern High and Northern Extra High pressure systems. The pipe was built in the 1920's and is in need of repair due to frequent leaks and aging valves and appurtenances. It serves as a primary means of backup supply within the MWRA's distribution system in the event of a failure along the City Tunnel and City Tunnel Extension.

Massachusetts Water Resources Authority DW-23-149

Northern Intermediate High Section 89 Replacement

This construction project will replace approximately 10,500 feet of 48-inch PCCP water main, Section 89, in Stoneham, Winchester, and Woburn, the abandonment of Section 29 in Stoneham, and the replacement of valves and appurtenances for approximately 9000 feet of 36-inch Ductile Iron water main in Woburn. Replacement of the older PCCP pipeline in Section 89 (identified as having a significant risk of catastrophic failure) will ensure that this service area has a redundant means of water supply.

New Bedford DW-23-155

Quittacas Water Treatment Plant Upgrades

The City of New Bedford’s Quittacas Water Treatment Plant (QWTP) Upgrades project is the second phase of the QWTP upgrades. The QWTP was constructed in the 1970's and no major upgrade has been completed since. Phase 1 was just completed and included upgrades to the electrical distribution system. This phase includes upgrades to the remaining major equipment such as the HVAC system, SCADA, and process areas to ensure the plant continues to function safely and properly.

Randolph DW-23-153

Tri-Town Regional Water Treatment Plant

The proposed Tri-Town Regional Water Treatment Plant (TTRWTP) project would create a regional facility to replace the existing Braintree WTP and Randolph/Holbrook WTP. The new regional facility would eliminate redundancies of having two individual plants and their associated capital and operation and maintenance costs. The new Tri-Town WTP will help protect public health by reducing bacteria, carcinogenic compounds, and disinfectant byproducts present in the current systems. The water treatment process would be as follows:

- Polymer and PACL addition for coagulation of raw water
- Dissolved air floatation (DAF) for removal of larger, coagulated solids
- Granular activated carbon (GAC) filtration for removal of per- and polyfluoroalkyl substances (PFAS) and smaller, finer solids
- Chlorine addition for disinfection and pH adjustment for corrosion control

The new TTRWTP will incorporate improved treatment technology in order to provide high quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of 12.5 MGD, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.

Raynham Center Water District DW-23-143

PFAS Water Treatment Plants

The Project includes the construction of two PFAS water treatment plants, one at the Lake Nip site and one at the Gushee Pond site.

Scituate DW-23-125

Surface Water Treatment Plant

The Project includes the construction of a new water treatment facility in accordance with the Administrative Consent Order (ACO) received in August 2020. The new water treatment facility will include plate settler clarification, dual media filter treatment, new emergency back-up power, intake piping, interconnection piping and appurtenances. The completed project will improve drinking water quality by reducing high manganese and iron concentrations and eliminate microbiological contaminations and discoloration.

Sharon DW-23-123

Wells 2 & 4 Water Treatment Plant

The Project consists of the construction of a permanent treatment facility to reduce PFAS6 and manganese levels in the finished water from Wells 2 & 4.

Springfield Water And Sewer Commission DW-23-140

Replacement of Water Treatment Plant – Phase 2B

The Project consists of the construction of a water treatment plant with new treatment processes including coagulation, flocculation, Dissolved Air Flotation (DAF) and filtration to replace the existing direct filtration and slow sand filtration processes. The DAF as a clarification process will increase removal of natural organic matter to achieve compliance with Disinfection Byproduct (DBP) maximum contaminant levels (MCLs).

Sudbury Water District DW-23-138
East Street WTP PFAS Treatment
The Project includes construction of a permanent treatment facility consisting of two 10-foot diameter Granular Activated Carbon pressure vessels and four 6-foot diameter ion exchange resin vessels. The vessels will be housed in a building adjacent to the East Street WTP.

Water Supply District of Acton DW-23-126
PFAS Treatment at South Acton WTP
The Project includes the construction of a building addition at the existing South Acton WTP site to house the equipment needed for PFAS removal. Treatment will include Granular Activated Carbon and/or Ion Exchange. The completed project will improve drinking water quality by reducing high PFAS concentrations.

Water Supply District of Acton DW-23-127
PFAS Treatment at Central Acton WTP
The Project includes PFAS treatment including the construction of a building addition at the existing Central Acton WTP site to house the equipment needed for PFAS removal. Treatment will include Granular Activated Carbon and/or Ion Exchange, and the connection of two bedrock wells to the Central Acton WTP to reduce the PFAS concentration by blending the two new sources with the existing Conant sources at the CAWTP.

Webster DW-23-119
PFAS Water Treatment Plants
The Project consists of the construction of two new PFAS water treatment plants and a meter system upgrade project. The WTPs will remove PFAS to below regulatory limits from both the Memorial Beach and Bigelow Well Sites. The proposed new WTP at the Bigelow site will also remove manganese to below regulatory limits. Two replacement wells will also be installed to improve system redundancy. The water meter upgrade project will significantly reduce the Town's unaccounted for water (UAW).

West Bridgewater DW-23-124
West Bridgewater Long Term PFAS Compliance
The Project consists of the construction of a PFAS treatment modification to the Manley Street Water Treatment Facility to comply with the PFAS6 MCL.

Westborough DW-23-129
Oak Street WTP PFAS Improvements
The Project includes the construction of a treatment process at the Oak Street Water Treatment Plant (WTP) for the removal of elevated concentrations of perfluoroalkyl substances (PFAS) from two groundwater wells, one of which is above the Massachusetts Maximum Contaminant Limit. The treatment process will consist of two trains of two, twelve-foot diameter pressure vessels in lead/lag configuration, each filled with 20,000 pounds of granular activated carbon (GAC). Based on rapid small scale column testing, GAC will remove PFAS for an extended period to non-detectable concentrations of PFAS. The treatment process will be installed in an extension to the existing Oak Street WTP and involve other minor upgrades to the existing facility.

Winchendon DW-23-110

Water Transmission Main Replacement

The Project includes the construction of approximately 21,000 linear feet of new 12" ductile iron water transmission main in Winchendon and Ashburnham. The Project also includes installation of 2 water meter vaults, 2 bridge crossings, and 1 culvert crossing. The Project will replace the existing water main that was installed in the early 1950's and has a history of excessive breaks. The existing water main is the sole transmission water main providing water to the Town of Winchendon and many residents within the Town of Ashburnham.

Clean Water Agreements

Massachusetts Water Resources Authority CW-23-60

DITP Asset Protection Phase 3 Contract No. 7110 HVAC Equipment Replacement

Replacement of various Heating, Ventilation and Cooling units through the treatment plant. Replacements include fan coil units, air handling units, chiller systems, the WWTP central HVAC control system, and 29 existing fume hoods in the Laboratory.

Contract Nos. 7059/7420 Switchgear and NMPS MCC Replacements

Replacement of various electrical low voltage distribution equipment that provides power to critical pumping stations and laboratory processes.

Contract No. 7051 Fire Alarm Replacement

Replacement of the central fire detection and alarm system throughout the treatment plant. This project will ensure that the plant continues to meet its discharge permit requirements by replacing obsolete equipment and systems. Some of the contracts are expected to result in decreased required maintenance and/or lower operating costs. All equipment is at the end of its useful life.

Massachusetts Water Resources Authority CW-23-61

DITP Clarifier #2

The Massachusetts Water Resources Authority’s project is needed to correct deficiencies noted during the first Primary & Secondary Clarifier project. Project will include the replacement of systems such as: influent gates that are not providing adequate isolation; effluent launders and aeration systems that are in need of repair/replacement; and concrete corrosion in primary clarifiers above the water line that require repair and coating to prevent future corrosion. The sludge removal system in primary tanks and aeration/recirculation systems in secondary tanks need to be rehabilitated as well. The Authority will not be able to meet its discharge permit without this upgrade.

Nahant CW-22-46
Sewer Collection System Repair & Replacement 2022
The Town of Nahant seeks to upgrade the wastewater collection system to be more reliable, resilient, energy efficient, and cost-efficient. The sewer system repair and replacement work is required to prevent sanitary sewer overflows, reduce inflow/infiltration to the sewer system and build a more reliable and resilient wastewater system for the Town. The proposed work includes: Lowlands Pump Station Upgrades, Willow Road Force Main Replacement, Lowlands Pump Station Force Main Causeway Section Replacement, and Gravity Sewer Collection System Repairs.

Shutesbury CWPEC-23-62
Shutesbury Fire Dept. Immediate Response Action
Implementation of an Immediate Response Action to address a release of PFAS to the environment that is impacting private wells in neighboring residential properties.

South Essex Sewerage District CWP-20-35
Primary Clarifier Concrete Restoration
SESD operates a regional WWTF that was originally constructed in 1972 and upgraded in the 1990s. Average daily flows at the WWTF are approximately 30 MGD, with a peak capacity of 99 MGD. The WWTF discharges effluent to Salem Sound. The primary treatment process consists of 7 underground cast-in-place concrete tanks with precast concrete roofs. The concrete surface in the headspace of the tanks has corroded over the years and has reached a point where the issue needs to be addressed. If this issue is not addressed, there is a risk that the primary clarifiers could structurally fail. The goal of this project is to restore the impacted concrete within all 7 primary clarifiers to ensure long term structural reliability of the tanks.

Drinking Water Agreements

Andover DWLC-23-105
Lead Service Line Replacement
The Project will replace approximately 300 Lead Service Lines within the water distribution system. In April 2022 MassDEP issued ACO 00012844 which requires the Town investigate a minimum of 400 water service lines of unknown material per year and replace a minimum of 25 LSLs per year. Based on extrapolation of early data from the inspection program, an additional 156 service lines are expected to be found to be lead service line containing material. Between 154 existing LSLs in the Town's inventory and expected future LSLs of 156, 300 LSLs are estimated to be replaced.

Boston Water And Sewer Commission DWLC-22-50
Elimination of Lead Water Services in Boston
The Boston Water and Sewer Commission seeks to eliminate lead water services in both the public way and private property. The Commission has an ongoing lead water service replacement program which was initiated in response to the exceedance of the lead action level in 2020.

Braintree DWPEC-23-151

Tri-Town Regional Water Treatment Plant

The proposed Tri-Town Regional Water Treatment Plant (TTRWTP) project would create a regional facility to replace the existing Braintree WTP and Randolph/Holbrook WTP. The new regional facility would eliminate redundancies of having two individual plants and their associated capital and operation and maintenance costs. The new Tri-Town WTP will help protect public health by reducing bacteria, carcinogenic compounds, and disinfectant byproducts present in the current systems. The water treatment process would be as follows:

- Polymer and PACL addition for coagulation of raw water
- Dissolved air floatation (DAF) for removal of larger, coagulated solids
- Granular activated carbon (GAC) filtration for removal of per- and polyfluoroalkyl substances (PFAS) and smaller, finer solids
- Chlorine addition for disinfection and pH adjustment for corrosion control

The new TTRWTP will incorporate improved treatment technology in order to provide high quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of 12.5 MGD, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.

Holbrook DWPEC-23-152

Tri-Town Regional Water Treatment Plant

The proposed Tri-Town Regional Water Treatment Plant (TTRWTP) project would create a regional facility to replace the existing Braintree WTP and Randolph/Holbrook WTP. The new regional facility would eliminate redundancies of having two individual plants and their associated capital and operation and maintenance costs. The new Tri-Town WTP will help protect public health by reducing bacteria, carcinogenic compounds, and disinfectant byproducts present in the current systems. The water treatment process would be as follows:

- Polymer and PACL addition for coagulation of raw water
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- Chlorine addition for disinfection and pH adjustment for corrosion control

The new TTRWTP will incorporate improved treatment technology in order to provide high quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of 12.5 MGD, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.

Massachusetts Water Resources Authority DW-23-142

Section 23, 24, 47 Water Mains Rehab

The Massachusetts Water Resources Authority seeks to rehabilitate three water mains designated as Sections 23, 24 and 47 under contract 6392. The water mains serve the communities of Boston and Watertown. Section 23 and section 24 are 124-year-old cast iron pipes, Section 47 is a 103-year-old cast iron main. The goal of this project is to improve the condition, hydraulic capacity and reliability of the existing water mains, avoid potential service disruption as a result of breaks and leaks, and improve hydraulic and operating deficiencies in the distribution system.

Massachusetts Water Resources Authority DW-23-148

Weston Aqueduct Supply Main Rehabilitation

The Weston Aqueduct Supply Main 3 (WASM 3) is an existing 10-mile, 56-inch to 60-inch diameter, steel water main that supplies the communities of Waltham, Watertown, Belmont, Arlington, Lexington, Bedford and Winchester. In addition, the pipe conveys flow to the MWRA's Intermediate High, Northern High and Northern Extra High pressure systems. The pipe was built in the 1920's and is in need of repair due to frequent leaks and aging valves and appurtenances. It serves as a primary means of backup supply within the MWRA's distribution system in the event of a failure along the City Tunnel and City Tunnel Extension.

Massachusetts Water Resources Authority DW-23-149

Northern Intermediate High Section 89 Replacement

This construction project will replace approximately 10,500 feet of 48-inch PCCP water main, Section 89, in Stoneham, Winchester, and Woburn, the abandonment of Section 29 in Stoneham, and the replacement of valves and appurtenances for approximately 9000 feet of 36-inch Ductile Iron water main in Woburn. Replacement of the older PCCP pipeline in Section 89 (identified as having a significant risk of catastrophic failure) will ensure that this service area has a redundant means of water supply.

New Bedford DWP-23-155

Quittacas Water Treatment Plant Upgrades

The City of New Bedford’s Quittacas Water Treatment Plant (QWTP) Upgrades project is the second phase of the QWTP upgrades. The QWTP was constructed in the 1970's and no major upgrade has been completed since. Phase 1 was just completed and included upgrades to the electrical distribution system. This phase includes upgrades to the remaining major equipment such as the HVAC system, SCADA, and process areas to ensure the plant continues to function safely and properly.

Randolph DWPEC-23-153

Tri-Town Regional Water Treatment Plant

The proposed Tri-Town Regional Water Treatment Plant (TTRWTP) project would create a regional facility to replace the existing Braintree WTP and Randolph/Holbrook WTP. The new regional facility would eliminate redundancies of having two individual plants and their associated capital and operation and maintenance costs. The new Tri-Town WTP will help protect public health by reducing bacteria, carcinogenic compounds, and disinfectant byproducts present in the current systems. The water treatment process would be as follows:

- Polymer and PACL addition for coagulation of raw water
- Dissolved air floatation (DAF) for removal of larger, coagulated solids
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- Chlorine addition for disinfection and pH adjustment for corrosion control

The new TTRWTP will incorporate improved treatment technology in order to provide high quality finished water and to maintain distribution system residuals. The regional facility, with a design capacity of 12.5 MGD, would meet all current and anticipated drinking water standards, and would also improve the aesthetic quality of drinking water for Braintree, Randolph, and Holbrook.