

Project Descriptions for January 15, 2019

Board of Trustees Meeting

Clean Water Commitments

Brockton CW-18-42

This biological nutrient removal (BNR) project is necessary to enable the Brockton Advanced Water Reclamation Facility (AWRF) to comply with its NPDES permit requirement to achieve effluent total nitrogen (TN) of 450 lbs/day seasonally, equivalent to 3 mg/L on an 18-MGD average flow basis. The improvements anticipated are based on the demonstrated results and findings of a full-scale pilot process train that has been operational for almost two full nitrogen-removal seasons. This project will involve upgrading the AWRF's other six aeration basins to the Bardenpho configuration and making other AWRF improvements as necessary to support the process upgrade.

Chatham CW-18-24

The Collection System Extension Project allows the Town of Chatham to continue moving forward in addressing the nitrogen loading concerns by further extending the wastewater collection system (Phase 1D - Chatham/Harwich Regionalization Connection). The Towns of Chatham and Harwich have successfully executed an Intermunicipal Agreement (IMA) for Wastewater Collection and Treatment. The purpose of this project is to provide the infrastructure in Chatham to support the connection to Harwich for collection and treatment of their wastewater. The Town of Harwich is submitting a separate PEF for their portion of this important regional project to address nitrogen TMDLs.

Easton CW-18-25

The Five Corners Sewer Project will provide sewer to the Five Corners Needs Area in Easton, MA. This Needs Area was determined to be a high-priority area during the CWMP process completed in 2014. The Needs Area stretches between the intersection of Foundry St & Robert Dr to the intersections of Foundry St, Depot St, & Bay Rd. This area includes ponds, wetlands, and 2 historical districts, which are being threatened by failing septic systems. The Project will consist of approximately 11,100 linear feet (LF) of gravity sewer, 2,700 LF of forcemain & 850 LF of low pressure sewer. Additionally, the project will require the construction of 1 pump station on a town-owned parcel. Flows will be conveyed to the Mansfield WPCF for treatment.

Fall River CW-18-35

The proposed project involves conveyance improvements and capacity increase to the existing drainage infrastructure. The objective of this project is to mitigate flooding on Hyacinth Street, reduce inflow to the President Avenue Sewer System, improve the water quality of storm water discharge through the use of BMPs, and protect the Watuppa Ponds (Fall River's water supply).

Fall River CW-18-36

The purpose of this project is to fully replace a 1400 gpm sewer pump station that serves a population equivalent of 4500. Constructed in the 1960's, the pump station is beyond its useful life. Existing piping, pumps, electrical equipment, instrumentation and standby power system are severely corroded due to age. The pump station is unable to consistently handle wet weather flows, resulting in SSO's.

A new submersible pump station will be constructed with additional capacity, standby power generator, motor controls and SCADA system. Operation of the new pump station will not require confined space entry. Force main isolation valves, bypass connection and flow meter will give the City flexibility in emergency operations and SSO control.

Fall River CW-18-38

The City of Fall River's WWTF is aging and requires rehabilitation/upgrade to maintain reliable operation and performance. Additionally, EPA has indicated its intent to include a nitrogen limit in the City's next NPDES permit.

Mt. Hope Bay is listed as impaired; Fall River's wet weather discharges and operational SSOs contribute to its impairment.

Recent air quality regulations (Title V) necessitated shut down of the WWTF incinerator. Liquid sludge is trucked off site for disposal, dramatically increasing disposal costs. Administrative facilities are ineffective and undersized for current needs. Site electrical and security issues will also be addressed.

Fall River CW-18-44

The area known as Stafford Square in the city of Fall River has historically been subject to severe urban flooding. Inadequate storm drains and combined sewers are known to cause SSOs, impair water quality, and risk the public health and safety. This project will consist of an integrated stormwater and wastewater collection system evaluation for the Stafford Square watershed. The proposed planning study will advance the current resolution concepts identified in the City's Wastewater and Stormwater Integrated Plan to and provide a listing of phased capital improvements to help mitigate chronic flooding and SSOs, while maximizing use of existing infrastructure systems.

Fall River CW-18-45

The purpose of the proposed planning project is to implement a comprehensive asset management system for the City of Fall River Department of Community Utilities. The project will include a review of the existing asset management systems, planning workshops with City personnel, asset management software selection and implementation, and asset inventory and condition assessment. The proposed comprehensive asset management system will include all vertical and horizontal water, wastewater, and stormwater assets, and track all operations and maintenance activities.

Framingham CW-18-16

The project consists of combining two existing pump stations into one new pump station. The two existing pump stations will be eliminated. New gravity sewer and new force main will be installed to upgrade the sewers and to connect the new pump station to the Town's existing sewer. Water mains and storm drains disturbed by the project will be replaced. The roads will be restored.

The project will resolve the capacity concerns due to undersized, outdated equipment. The proposed design will prevent further hydrogen sulfide corrosion and odor issues. The new pump station will also provide significant performance and maintenance improvements.

Harwich CW-18-23

The Town of Harwich will be implementing Phase 2 of their Comprehensive Wastewater Management Plan and will be installing a sewer collection system in the Pleasant Bay Watershed. After a 400% population increase since 1951, the Town has seen water quality issues due to septic systems releasing nutrients which infiltrate into the ground and over fertilize water bodies, resulting in degraded water quality. Wastewater collected in Pleasant Bay in Harwich will be treated at the existing Chatham Water Pollution Control Facility. The Towns of Harwich and Chatham have signed an inter-municipal agreement to work together to meet their shared goals of the Pleasant Bay TMDL and to protect their resources, which include drinking water supply wells.

Hull CW-18-20

Hull's WWTF was built in the late 70's, with partial upgrade in 02. Due to age and location (subjects the plant to coastal flooding), a Facility Plan and Resiliency Update is needed. The '16 Coastal Climate Change Vulnerability Assessment & Adaptation Study, noted the WWTF with the highest consequence of failure score, signifying immediate long-term capital planning needs. Hull is completing a CMOM under AOC and a Fiscal Sustainability Plan, both of which recommend planning updates for capital repairs and improvements to the collection system, pump stations and treatment plant processes, as well as energy & conservation measures. The Town also recently evaluated connecting to MWRA. The Study will identify options and detail solutions.

Hull CW-18-21

RCM provides for improved reliability, resiliency, sustainability & overall improved asset management. It provides a comprehensive, structured & analytical development of cost effective solutions to provide:

- Risk avoidance or reduction
- Safety and environmental hazards reduction
- Reduced capital & optimized O&M cost
- Maximize \$ over life cycle
- Redundant systems based on risk profile
- Maintenance strategy for protective devices & safety systems
- Cost savings & lower insurance costs
- Maintainability oriented Design
- RCD provides Reliability-Centered Maintenance Strategies before start-up
- Failure mode records
- Baseline for improvement
- Integrated Team Work
- Improved spare-part inventory planning
- Standardization of design & O&M practices

Hull CW-18-22

The SSES project includes flow isolation, CCTV, MH inspection, smoke and building inspection in project area that consists of approximately 165,000 linear feet of sanitary sewer ranging in size from 8" to 36" and approximately 1,000 manholes. Hull experiences high levels of I/I, with recent estimates totaling in the range of up to 30% of wastewater flow seen at the WWTF. The study will also evaluate underground piping at the WWTF. The study will also inspect the physical and hydraulic conditions of the 24" Outfall that extends approximately 2,700 ' feet out into Massachusetts Bay.

Hull CW-18-29

Hull is completing a CMOM, under AOC (Docket CWA-01-AO-16-09), which identified a number of upgrades that are in order. In addition, the Town completed a Fiscal Sustainability Plan (FSP) in June 2017, which prioritized facility/wastewater system upgrades. This project addresses the Year One Upgrades that includes three construction contracts. These Year One contracts were deemed an extreme risk to the system and a priority for immediate attention due to age, historic failure histories, impacts to the wastewater operations and cost benefit analyses of repair/replacement. The construction project includes Contract No. 1 Sewer Interceptor Pipeline Renewal, Contract No. 2 Atlantic Avenue/Gunrock Area Sewer Infrastructure Renewal, and Contract No. 3 Critical Replacements at POTW contracts.

MWRA CW-18-10

The Nut Island Headworks is a preliminary treatment facility serving 22 communities that provides screening and degritting of wastewater prior to the wastewater receiving primary and secondary treatment and disinfection at MWRA's Deer Island Treatment Facility. This project replaces the odor control and HVAC systems at the Nut Island Headworks to maintain reliable operation of the systems, to meet requirements of the MADEP Air Quality Permit and to maintain an environment within the facility that is safe for workers and suitable for equipment. The project will also replace other equipment at the headworks that is approaching the end of its lifecycle to ensure reliable operation of this critical wastewater treatment facility.

MWRA CW-18-32

Design, construction administration, and resident engineering/inspection services for the inspection/evaluation and rehabilitation of approximately 6,500 feet of the Dorchester Interceptor Sewer (DIS), and associated manholes. The DIS (sections 240/241/242) was constructed in 1895 and is an irregular shaped brick sewer. Recent inspections have revealed many structural and non-structural deficiencies in the 120 year old sewer including cracked, broken and deformed pipe, numerous areas of heavy root intrusion and light to heavy infiltration.

MWRA CW-18-47

MWRA Project 7541 to evaluate, provide recommendations and rehabilitate or replace approximately 31,000 ft of water and sewer pipe in poor condition including: 8,000ft of MWRA 48-inch low service water pipeline Section 57 including Malden River crossing; 12,000-ft of MWRA 20-inch high service water Section 50 crossing the Mystic River; and 11,000ft of adjacent MWRA 56in x 61in brick North Metropolitan Sewer Section 21/20/19 within same roadways and trench as water pipeline Section 57 and also crosses the Malden River. All work located within Medford and Malden, MA. Project to remove leaks; provide structurally sound pipeline transmission/distribution of water and sewer; ensure quality drinking water; and protect waterways.

MWRA CW-18-48

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 maintenance and/or operating costs. All equipment is at the end of its useful life.

New Bedford CW-18-31

The Wastewater Treatment Plant Facilities Plan will provide a road map for what improvements need to be made in each of the different process areas as well as those required to meet more stringent treatment limits expected within the NPDES permit.

Norton CW-18-43

This project involves providing new sanitary sewers to reduce pollution caused from the failed and malfunctioning private onsite sewage disposal systems, and more specifically the already failed systems at the Woodland Meadows Elderly Housing development. The new system will also provide the ability to connect the High School and the Yelle School to the sewer and bring the sewer closer to the Middle School for future connection and decommissioning of their WWTF, which is currently experiencing problems meeting Groundwater Discharge Permit requirements. This project will connect the properties to the MFN Regional WWTF. Failures of these onsite systems directly affects the quality of groundwater and surface water in the project area.

Pittsfield CW-18-12

This project is to upgrade the WWTP to achieve compliance with NPDES permit limits and an AO (CWA-01-15-014) issued by the EPA. The project will optimize the nitrogen removal process and result in reductions of phosphorus and aluminum discharges to the Upper Housatonic River Area of Critical Environmental Concern and remediate documented nutrient enrichment in the downstream Wood's Pond impoundment. Four major component projects are necessary to achieve compliance: Tertiary Treatment Upgrade, Sludge Dewatering Upgrade, Nitrogen Removal Upgrade (Phase I) and Secondary Clarifiers Upgrade. The project components are consistent with the plant needs and energy efficiency improvements identified in the recently updated WWTP Facilities Plan.

Revere CW-18-19

The Illicit Connection and Sump Pump Investigation Program continuation is important for the City to enhance its progress in removing inflow from the sanitary sewer system. This program will continue the inspections of private homes and businesses to identify sources of inflow from sump pumps, roof leaders, roof drains, driveway drains, yard drains and other sources inflow.

Revere CW-18-26

The Phase X Field Investigations and Illicit Discharge Detections and Elimination (IDDE) are important planning projects for the City of Revere. These planning investigations are vital for the assessment of the City's wastewater and stormwater systems. These field investigation programs will include IDDE, CCTV of drains and sewers throughout the City, dye testing, smoke testing and private building inspections. The findings of these investigations will be incorporated in the City's future construction projects to address the detected deficiencies.

Revere CW-18-27

The continuation of the implementation through construction contracts of the Illicit Connection and Sump Pump Removal Program is essential for the City of Revere to meet their goals and comply with the Consent Decree. There are a significant amount of illicit sump pump, roof drain, roof leader, driveway drain, yard drain, etc. connections from private homes and businesses that must be removed from the sewer in order to remove inflow and increase the wastewater capacity of the City's sewer system. These contracts become the mechanism to remove the illicit inflow.

Revere CW-18-28

The Phase IX Construction Project will include the removal of inflow/infiltration (I/I) from the City's sewer system. Construction will include the redirection of public and private inflow sources discovered during the Phase IX Field Investigations, IDDE source removal, and drainage improvements. Construction will also include pump station improvements (both stormwater and wastewater), CIPP lining, sewer spot repairs, replacements, new sewer lines, cleaning, and additional wastewater metering.

SESD CW-18-15

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.

Taunton CW-18-49

Community Septic Management Program

Tyngsborough CW-18-17

The Phase 2 Middlesex Road North Project is located on the northern portion of Route 3A (Middlesex Road) in Tyngsborough, Massachusetts. There are multiple public groundwater supplies directly abutting the Phase 2 Sewer Project. The TJMaxx WWTF is located on the northern most section of Middlesex Road within the Phase 2 project area and has a groundwater discharge which is a potential threat to the environmental resources in the area. By adding public sewer to the Phase 2 area, the TJMaxx WWTF could come offline and the plaza would connect into the sewer which would eliminate the potential harmful groundwater discharge. There are multiple issues with septic systems due to a large number of commercial parcels located here.

Westport CW-18-30

Prepare a Targeted Water Resource Management Plan to guide the Town's selection and implementation of actions to improve the Westport River's water quality with the goal of achieving the TMDL nitrogen load reductions. The plan will also assess the water, wastewater and stormwater infrastructure demands from future development and address the health risk to residents with small lots that don't meet Title 5 setbacks.

The Plan will quantify the extent of current problems and future needs in the targeted areas, identify and evaluate alternative technologies and management practices, prioritize environmentally appropriate and cost-effective remedies, and propose implementation, financing, and scheduling plans.

Drinking Water Commitments**Barnstable DW-18-10**

Maher Water Treatment Facility Upgrade to mitigate chemical contamination of PFOS, 1,4 Dioxane and any other CEC that maybe found in Hyannis Supply System.

Brockton DW-18-11

Cleanings and inspections of the finished water pump well have been conducted at the Silver Lake Water Treatment Plant. Several deficiencies have been discovered such as the ceiling losing as much as 3 inches of concrete in areas where reinforcement has been exposed among several other findings. The findings from these evaluations indicate a critical need to repair the backwash/finished water pump well ceiling, and replace the CMU baffle wall in the clearwell to protect the treatment facility's finished water quality and to maintain proper operating conditions for the equipment in the pump room.

Fall River DW-18-15

City of Fall River's eighteenth year of its annual cast iron water main and lead service replacement program. The Phase 18 water main improvements include the rehabilitation or replacement of approximately 5,730 linear feet of cast iron water mains and lead services. A Project Location Map is included in Appendix A. The narrative highlights the issues resolved by the project, its goal of preventing a serious problem in the distribution system, and its importance to providing safe and reliable drinking water to customers of the City of Fall River.

Haverhill DW-18-06

This project involves replacement of approximately 14,150 linear feet of water mains and associated lead service lines and installing valves for isolation. This project is necessary to provide redundancy, isolation control, and fire flow. The improvements will allow the City to continue to supply water and fire protection to the entire distribution system in the event of a break in either the 20-inch mains from the Gale Hill Storage Tank to the downtown area. This project continues the work currently being conducted under Phase I of water main improvements currently being constructed under DWSRF No. 4045.

MWRA DW-18-02

Construction of low service suction and pumps for the Commonwealth Avenue Pump Station (CAPS) in Newton. The project includes 24-inch diameter low service connections to the Weston Aqueduct Supply Mains 1 & 2 (W2 & W6) in the Carriage Lane of Commonwealth Avenue, a 325-lf 24-inch diameter low service suction main from the WASM 1 & 2 connections to the existing Shaft 6 Line suction main and the capability to pump using low service suction into the Newton Southern Pressure District with one new pump and one replacement pump in the East Building. The new low service suction and pumps provide redundancy to the CAPS if there is an interruption in the high service water supplied to the pump station from Shaft 6 of the City Tunnel.

MWRA DW-18-14

This project includes the rehabilitation of approximately 8,700 linear feet of 36-inch diameter and 21,950 linear feet of 20-inch diameter 98 to 119 year-old cast iron mains serving the communities of Boston and Watertown.

MWRA DW-18-17

MWRA Project 7541 to evaluate, provide recommendations and rehabilitate or replace approximately 31,000 ft of water and sewer pipe in poor condition including: 8,000ft of MWRA 48-inch low service water pipeline Section 57 including Malden River crossing; 12,000-ft of MWRA 20-inch high service water Section 50 crossing the Mystic River; and 11,000ft of adjacent MWRA 56in x 61in brick North Metropolitan Sewer Section 21/20/19 within same roadways and trench as water pipeline Section 57 and also crosses the Malden River. All work located within Medford and Malden, MA. Project to remove leaks; provide structurally sound pipeline transmission/distribution of water and sewer; ensure quality drinking water; and protect waterways.

Revere DW-18-08

This project includes the preliminary planning and investigations required for Water Main Improvements in the densely populated Oak Island neighborhood. Results of hydrant fire flow tests and investigations indicate the distribution system cannot maintain 20 psi residual pressure during a fire. This neighborhood is fed by a single aging 6-inch unlined cast iron water pipe that crosses beneath the MBTA train tracks. Because of this sensitive location, the City will need to obtain survey, preliminary borings, easements and other preliminary information prior to design of this water main replacement. This project will be vital for understanding the existing conditions, evaluating the most cost effective route and approach for proper design.

Revere DW-18-09

The Oak Island neighborhood of Revere has shown significant deficiencies including low pressure, water main breaks, and a lack of redundancy. The aging 6-inch unlined cast iron water main that is the sole source of water to this neighborhood runs under the MBTA railroad tracks, making it susceptible to failure due to its age and exposure to vibration from the trains. The hydrant flow tests conducted in this neighborhood produced results of 175 gpm with the residual pressure dropping to 5 psi, which is well below the MassDEP and ISO standards. Additionally, a similar neighborhood in the city of Revere recently experienced a 4-alarm fire, where water system issues affected the ability to fight the fire.

Southampton DW-18-12

Southampton (PWS # 1276000) needs a backup water source as identified on page 9 of MassDEP's January 14, 2015 Sanitary Survey Report ("Findings, Section 5, Water Quantity"). Southampton presently has only one active water source, the Glendale Well # 02 G.

This project provides the required backup water source by constructing a Booster Pump Station in Southampton, near the Southampton -Easthampton Town line, to convey water from the Easthampton PWS to and throughout the Southampton PWS water system. It also includes rehabilitation of Southampton's Glendale Well field to regain its approved pumping capacity, and piping and controls to connect the Booster Pump Station in the best manner to the Southampton distribution system.

Spencer DW-18-13

The project consists of 7,275 linear feet of 12" diameter main to be installed from the Moose Hill Tank to Greenville Street, along Greenville Street to Main Street, along Main Street, and along Cherry Street. This project eliminates the dead end on Greenville Street, replaces a main with a higher risk of failure based on its asset management scoring, eliminates a hydraulic deficiency along Greenville Street and at the intersection of Main Street and North Street, and allows the Town to take the 14" diameter main, which is also an identified critical component in need of replacement, off-line for rehabilitation, repairs or replacement while continuing to provide fire protection to the service area.

Taunton DW-18-07

The project consists of removing lead goosenecks and installing new ductile iron water mains. City records indicate no known lead service connections, but lead goosenecks were used for connections from the water main to service connections in the early part of the 20th Century. Lead goosenecks could leach lead into the water, so replacing them will lower potential lead exposure and protect public health. The water mains to which the lead goosenecks are connected also will be replaced. They are old, unlined cast iron pipes with substantial tuberculation, which can cause dirty water and reduce the hydraulic capacity. These upgrades will improve water quality and increase the available fire flow.

Whately DW-16-11

The Whately Water Department serves approximately 1,500 total residents along with a small number of retail businesses. The system is experiencing manganese levels in the water, exceeding 0.3 mg/L. Consequently a manganese removal system is to be installed at the supply, in order to bring the Town into compliance with current MassDEP Public Water Supply requirements.

Clean Water Agreements**Chatham CW-13-10-A**

This sewer Collection System Extension and Improvement Project will address nitrogen loading concerns by further extending the wastewater collection system. This project is the third phase of implementing nitrogen mitigation efforts that began in 2010. The project will include sewerage additional sections of Chatham and constructing two pump stations capable of handling a total of 68,000 gpd of sewage.

New Bedford CW-18-31

The Wastewater Treatment Plant Facilities Plan will provide a road map for what improvements need to be made in each of the different process areas as well as those required to meet more stringent treatment limits expected within the NPDES permit.

Pittsfield CWP-18-12

This project is to upgrade the WWTP to achieve compliance with NPDES permit limits and an AO (CWA-01-15-014) issued by the EPA. The project will optimize the nitrogen removal process and result in reductions of phosphorus and aluminum discharges to the Upper Housatonic River Area of Critical Environmental Concern and remediate documented nutrient enrichment in the downstream Wood's Pond impoundment. Four major component projects are necessary to achieve compliance: Tertiary Treatment Upgrade, Sludge Dewatering Upgrade, Nitrogen Removal Upgrade (Phase I) and Secondary Clarifiers Upgrade. The project components are consistent with the plant needs and energy efficiency improvements identified in the recently updated WWTP Facilities Plan.

Pittsfield CWP-18-12-A

This project is to upgrade the WWTP to achieve compliance with NPDES permit limits and an AO (CWA-01-15-014) issued by the EPA. The project will optimize the nitrogen removal process and result in reductions of phosphorus and aluminum discharges to the Upper Housatonic River Area of Critical Environmental Concern and remediate documented nutrient enrichment in the downstream Wood's Pond impoundment. Four major component projects are necessary to achieve compliance: Tertiary Treatment Upgrade, Sludge Dewatering Upgrade, Nitrogen Removal Upgrade (Phase I) and Secondary Clarifiers Upgrade. The project components are consistent with the plant needs and energy efficiency improvements identified in the recently updated WWTP Facilities Plan.

SWSC CWP-18-18

Consistent with the Commission's Integrated Wastewater Plan, the York Street Pump Station and Connecticut River Crossing Project will increase the wet weather flow to the Springfield Regional Wastewater Treatment Facility (SRWTF), substantially reducing the volume and frequency of combined sewer overflow events from multiple CSO regulators across the Connecticut River CSO system. The Project includes a new 62 MGD wastewater pumping station and screening facility, 3 new pipes crossing under the Connecticut River to the SRWTF, and modification to the SRWTF Influent Structure.

Taunton CW-17-19

The Taunton WWTF receives all of its flow from the Main Lift Pump Station, and improvements to the station are required to provide reliable operation. This project will replace the existing station and include new screening facilities, new pumps and force main, electrical equipment and controls. The primary goals of the project are to provide more reliable service, increase pumping capacity, and reduce combined sewer overflows into the Taunton River. Currently, when flows exceed the capacity of the Main Lift station, the system surcharges and overflows into the river. Pumps frequently clog with debris, which will be greatly reduced by a screening system. The project is also being done in anticipation of WWTF upgrades in the near future.

Taunton CWT-18-49

Community Septic Management Program

Westport CW-18-30

Prepare a Targeted Water Resource Management Plan to guide the Town's selection and implementation of actions to improve the Westport River's water quality with the goal of achieving the TMDL nitrogen load reductions. The plan will also assess the water, wastewater and stormwater infrastructure demands from future development and address the health risk to residents with small lots that don't meet Title 5 setbacks.

The Plan will quantify the extent of current problems and future needs in the targeted areas, identify and evaluate alternative technologies and management practices, prioritize environmentally appropriate and cost-effective remedies, and propose implementation, financing, and scheduling plans.

Drinking Water Agreements

Chicopee DW-16-04-A

The City of Chicopee's source of drinking water is the Chicopee Aqueduct, which is owned and maintained by the Massachusetts Water Resources Authority. The City's transmission main from this source is a single 36-inch diameter cast iron main. With no redundant transmission main, a majority of the City is at risk of losing water, if the single transmission line goes down.

Depending on where the damage to the existing main occurs, service could be lost for an extended period of time. Construction of the second main also allows repairs and upgrades to be made to the existing 36-inch main, without interruption in service. The project will also replace the existing gaseous chlorine system with a sodium or calcium hypochlorite system to improve safety and performance of the transmission main.

Whately DW-16-11

The Whately Water Department serves approximately 1,500 total residents along with a small number of retail businesses. The system is experiencing manganese levels in the water, exceeding 0.3 mg/L. Consequently a manganese removal system is to be installed at the supply, in order to bring the Town into compliance with current MassDEP Public Water Supply requirements.