Project Descriptions for December 1, 2021

Board of Trustees Meeting

Asset Management Planning Commitments

Adams CW-21-26
The Town of Adams desires to develop an asset management plan for its sewer and stormwater systems. The goal would be to further develop existing horizontal asset GIS data so that Town management staff can utilize this tool to better manage the assets. The overarching goal is to develop an asset management plan that will populate the GIS database with relevant information on status and condition of assets, generate work orders, and help with budgeting needs. This asset management plan will replace a reactive maintenance approach with a proactive operation and maintenance philosophy.

Dudley DW-21-08
Much of the Town of Dudley's water system's information is the institutional knowledge of the Water Superintendent, who is nearing retirement. Dudley would like to capture this institutional knowledge through the development of an asset management plan (AMP). The effort would include: vertical AMP (pump stations and water storage tanks), horizontal AMP (water distribution system), performing and collecting condition assessments at key buildings, improving the existing Geographic Information System (GIS), and taking a more proactive criticality-based approach to managing its assets and funding it's infrastructure improvements.

Pepperell CW-21-47
The Town of Pepperell's goals for this Asset Management Plan are to continue to proactively meet permit requirements but also establish a level of service for the entire program that considers the towns goals for both water quality and drainage / flooding. This project will improve the asset inventory, develop criticality ranking of infrastructure, and evaluate the sufficiency and equity of current stormwater fee structure. The Town is considered a small system with <3,300 water service connections. Pepperell is a small town newly under EPA's Small MS4 Stormwater Program in 2016. In October 2018, the Town adopted a Stormwater Enterprise Fund which has allowed the program to gradually grow.

Winthrop CW-21-23
The Town of Winthrop will prepare an Asset Management Plan to inventory and assess the current state of the Town's wastewater collection system assets; assist the Town in updating GIS; evaluate the level of service in terms of quality, quantity, reliability and environmental standards; identify assets critical to sustaining system performance; quantify minimum life cycle costs for critical assets, operation and maintenance; and, determine a long-term funding strategy to ensure high-level performance.

Clean Water Commitments

Mashpee CW-21-16
The Town of Mashpee proposes the construction of the new Phase 1 Mashpee Water Resource Recovery Facility (WRRF) and collection system to address nitrogen impacts to the Mashpee River watershed. The facility will provide advanced wastewater treatment including nitrogen removal through a membrane bioreactor process. The Phase 1 WRRF is designed for an average flow of 0.12 mgd and maximum month flow of 0.31 mgd. The facility has been designed to be expanded through future phases of the Town's multi-phase Recommended Plan in order to meet the TMDLs for the Town's two nitrogen impaired watersheds.

MWRA CW-21-51
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.

Quincy CW-21-37
The City of Quincy's project will implement the recommendations from the 2020 Sewer System Evaluation Survey (SSES) to cost effectively remove I/I and rehabilitate approximately 3.25 miles of sewer pipe in the City of Quincy through open cut repairs and cured-in-place pipe (CIPP) lining. This project will reduce infiltration and inflow to the system, supporting the regional I/I reduction program and reducing the risk of sanitary sewer overflows and backups.

Drinking Water Commitments

Dighton Water District DW-21-17
The Dighton Water District's project includes installation of approximately 11,600 linear feet (LF) of 12-inch ductile iron (DI) water main, 100 LF of 10-inch DI water main and 60 LF of 8-inch DI water main including hydrants, gate valves and service connections along Main Street between Williams Street and the intersection with Pleasant Street and Somerset Avenue.

Dracut Water Supply District DW-20-18
This project is intended to reduce iron and manganese levels in the Dracut Water Supply District's Tyngsborough wells to below the SMCL and ORSG limits. The project also includes a new sole transmission main and a water storage tank to increase capacity to meet current demands and create redundancy.

Natick DW-21-24
Emergency funding to treat PFAS at the Springvale Water Treatment Plant (H&T groundwater wells).

New Bedford DW-21-18
The Braley Station Transmission Main Replacement Project will replace and reinforce a section of two 100-year-old 48-inch water transmission mains located underneath a MBTA SCR commuter railroad. SCR is currently progressing with construction of a capital improvement project that upgrades rail transit, including track upgrades that crosses over the existing transmission mains. The City is concerned that the track upgrades may have a significant impact on the transmission main, which lacks the reinforcement requirements in accordance with AREMA standards. Failure of the water transmission main will have a public health and safety impact and potentially leave over 100,000 customers without water.

Asset Management Planning Grant Agreements

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Clean Water Agreements

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
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Pittsfield CWP-18-12-B
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Pittsfield CWP-18-12-C
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