

Project Descriptions for August 5, 2020

Board of Trustees Meeting

Asset Management Program Commitments

Dracut Water Supply District DW-20-05

The Dracut Water Supply District (DWSD) completed a Water Master Plan based on institutional knowledge. The DWSD will capture this institutional knowledge as a part of an asset management plan in the GIS system. Current system analysis and planning efforts are based on horizontal information of the assets. DWSD will incorporate vertical assets in their asset management program, perform and collect condition assessments to improve the Geographic Information System, and to manage their assets and funding based on a critical improvement approach.

Lanesborough Fire and Water District DW-20-06

The District does not have an asset inventory. The system's information is based upon institutional knowledge. The District will develop a GIS-based Asset Management Plan (AMP) to progress to a proactive operations and maintenance strategy that encompasses a risk-based capital improvements plan (CIP) that will be supported by the rate structure.

Millis CW-20-05

The Town of Millis will further its ability to plan investments and improve infrastructure by filling critical data gaps; collecting information on asset condition; prioritizing assets based on risk; and updating its capital improvement plan for drinking water, wastewater, and stormwater assets.

Community Septic Management Program Commitment

Middleborough CW-20-04

Community Septic Management Program

Clean Water Commitments

Gloucester CW-19-44

The project includes work at five wastewater pump stations. The Beacon Marine and Parker Street stations will undergo required architectural and structural rehabilitation to the roof, façade, doors and concrete wet wells (H₂S corrosion). Rehabilitation of these facilities is essential to maintaining a high level of service and reliability in the wastewater collection system.

The City of Gloucester has an aggressive Fats, Oils and Grease (FOG) program for industrial and commercial users, as well as, a comprehensive education program for residential users. Despite these efforts, FOG mitigation systems must be installed at the Corliss Ave, Finch Lane and Thurston Point stations, all of which service residential neighborhoods.

Orleans CW-19-33

The construction Project includes a new collection system, PS, WWTF and effluent disposal for the

Downtown Area consisting of about 1,087 users to address water quality in the various estuaries. In general, the project includes a WWTF (influent screening and flow measurement; flow equalization; biological process (SBR); effluent filters; post equalization; effluent pumps; UV disinfection; odor control; septage receiving and processing; solids storage and thickening); effluent disposal (wicks); about 30,800 lf of 8" to 12" GS and appurtenances, about 2,000 lf of 1 -1/2" to 2-1/2" LPS and appurtenances, about 9,200 lf of 8" effluent FM, 3 PS, and about 9,200 lf of 6" and 8" FM main and appurtenances for the estimated flow of 250,000 gpd.

Asset Management Program Agreements

Dracut Water Supply District DWA-20-05

The Dracut Water Supply District (DWSD) completed a Water Master Plan based on institutional knowledge. The DWSD will capture this institutional knowledge as a part of an asset management plan in the GIS system. Current system analysis and planning efforts are based on horizontal information of the assets. DWSD will incorporate vertical assets in their asset management program, perform and collect condition assessments to improve the Geographic Information System, and to manage their assets and funding based on a critical improvement approach.

Lanesborough Fire and Water District DWA-20-06

The District does not have an asset inventory. The system's information is based upon institutional knowledge. The District will develop a GIS-based Asset Management Plan (AMP) to progress to a proactive operations and maintenance strategy that encompasses a risk-based capital improvements plan (CIP) that will be supported by the rate structure.

Millis CWA-20-05

The Town of Millis will further its ability to plan investments and improve infrastructure by filling critical data gaps; collecting information on asset condition; prioritizing assets based on risk; and updating its capital improvement plan for drinking water, wastewater, and stormwater assets.

Community Septic Management Program Agreement

Middleborough CWT-20-04

Community Septic Management Program

Clean Water Agreements

Brockton CWP-19-34

The Taunton River watershed currently has bacteria water quality impairments during both wet and dry weather conditions. The majority of the bacteria sources can be eliminated by implementing an illicit discharge detection elimination (IDDE) program, which finds the sources of bacteria and develops recommendations to remove and eliminate them. The City would like to continue addressing areas identified through recent IDDE detection procedures and Sewer System Evaluation Study (SSES). By implementing these projects, the water quality within the City's receiving waters has improved.

Brockton CWP-19-34-A

The Taunton River watershed currently has bacteria water quality impairments during both wet and dry weather conditions. The majority of the bacteria sources can be eliminated by implementing an illicit discharge detection elimination (IDDE) program, which finds the sources of bacteria and develops

recommendations to remove and eliminate them. The City would like to continue addressing areas identified through recent IDDE detection procedures and Sewer System Evaluation Study (SSES). By implementing these projects, the water quality within the City's receiving waters has improved.

Gloucester CWP-19-44

The project includes work at five wastewater pump stations. The Beacon Marine and Parker Street stations will undergo required architectural and structural rehabilitation to the roof, façade, doors and concrete wet wells (H₂S corrosion). Rehabilitation of these facilities is essential to maintaining a high level of service and reliability in the wastewater collection system.

The City of Gloucester has an aggressive Fats, Oils and Grease (FOG) program for industrial and commercial users, as well as, a comprehensive education program for residential users. Despite these efforts, FOG mitigation systems must be installed at the Corliss Ave, Finch Lane and Thurston Point stations, all of which service residential neighborhoods.

Orleans CW-19-33

The construction Project includes a new collection system, PS, WWTF and effluent disposal for the Downtown Area consisting of about 1,087 users to address water quality in the various estuaries. In general, the project includes a WWTF (influent screening and flow measurement; flow equalization; biological process (SBR); effluent filters; post equalization; effluent pumps; UV disinfection; odor control; septage receiving and processing; solids storage and thickening); effluent disposal (wicks); about 30,800 lf of 8" to 12" GS and appurtenances, about 2,000 lf of 1-1/2" to 2-1/2" LPS and appurtenances, about 9,200 lf of 8" effluent FM, 3 PS, and about 9,200 lf of 6" and 8" FM main and appurtenances for the estimated flow of 250,000 gpd.

Saugus CWP-19-30

This project includes sewer system rehabilitation in Subsystem 1C in Saugus. Construction will include the rehabilitation of pipelines, manholes, and the removal of private inflow sources as necessary to eliminate I/I from the system. Approximately 13,400 feet of 8-inch and 2,000 feet of 10-inch pipe have been identified as being in need of CIPP in subsystem 1C 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 280 of this type of connection in Subsystem 1C. Approximately 72 manholes have also been identified and are in need of rehabilitation. Each manhole will be lined using the latest standards.

Drinking Water Agreements

Fall River DWP-19-14

This project includes the City of Fall River's cast iron water main and lead service replacement program. The Phase 19 water main improvements include the rehabilitation or replacement of approximately 11,390 linear feet of cast iron water mains and lead services. To provide safe and reliable drinking water to customers of the City of Fall River.

Lawrence DWP-19-12

This project involves replacement of the Marston Street Pump Station

Lawrence Emergency Drinking Water Agreement

Lawrence DWP-19-03

This project will replace approximately 8,800 linear feet of undersized, unlined water main and 6 associated lead service lines. It will also establish redundancy for a portion of South Lawrence through installation of a 20-inch river crossing.

