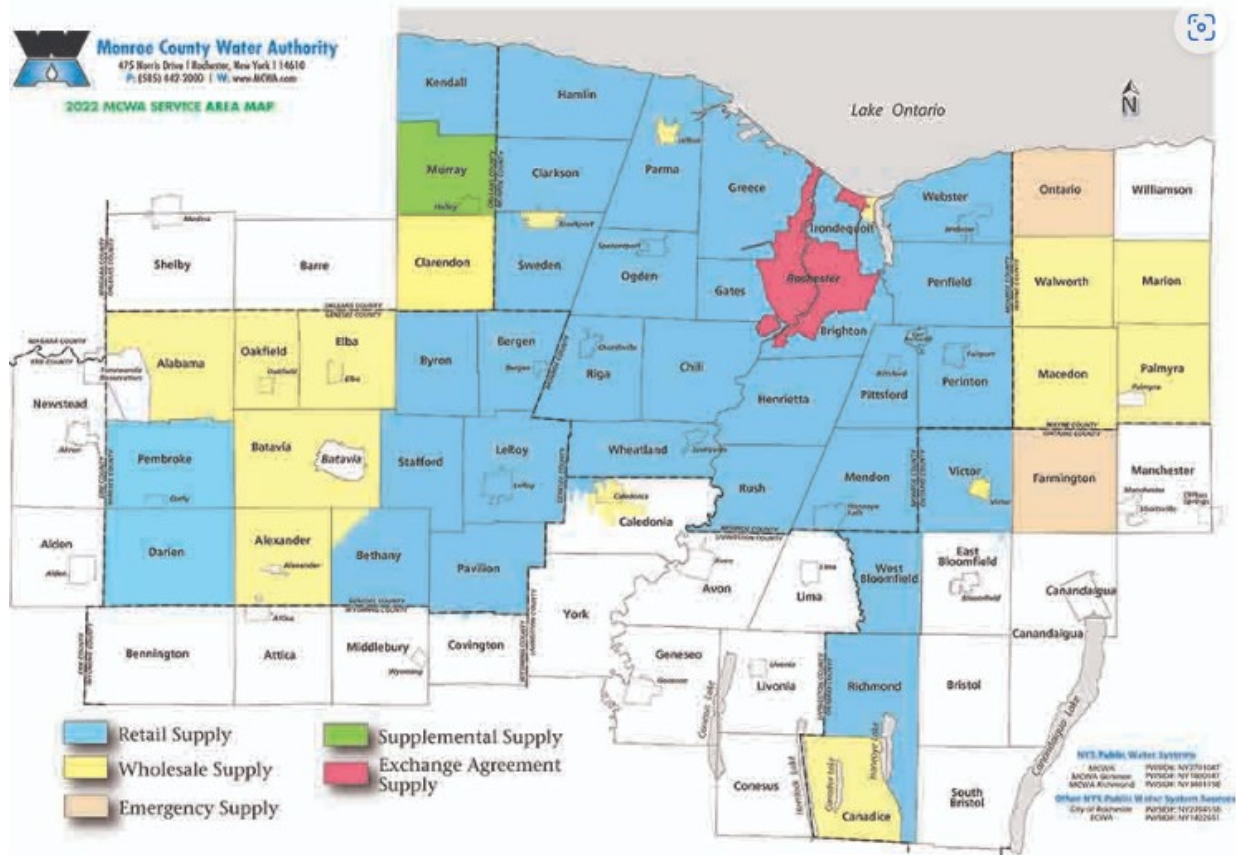


OPERATIONS OF THE MONROE COUNTY WATER AUTHORITY

BACKGROUND

The Monroe County Water Authority (the "Authority") services Monroe County and portions of each of the five surrounding counties. Our service area includes over 50 towns, villages, cities, and other water authorities. The Authority presently serves approximately 200,000 separate retail, wholesale, and other customer accounts. It also provides the City of Rochester with up to 26 million gallons per day (mgd) for distribution within its retail service area.



The Authority currently sets rates at levels sufficient to pay debt service on outstanding Authority obligations, to pay operating and maintenance expenses, and to make payments to the County under the existing lease and financing agreement between the Authority and the County.

WATER SUPPLY

The Authority's primary source of water is Lake Ontario. The water is treated at the Shoremont Water Treatment Plant (WTP) in the Town of Greece, and the 50 mgd Webster WTP in the Town of Webster. The Authority's other major source of water consists of water purchases from the City of Rochester pursuant to an existing exchange agreement. This water comes from Hemlock and Canadice Lakes in Livingston County south of Monroe County.

The Authority can also purchase water from the Town of Ontario, Wayne County, the City of Batavia, Genesee County, and the Erie County Water Authority. These sources are minor in relation to the overall water system and are for our convenience or pursuant to terms of agreements when the Authority became the provider of water.

The Authority provides water on a retail or wholesale basis. In retail areas the Authority supplies the water, maintains the distribution system, and bills the customer directly. In wholesale areas, a municipality or water district buys some or all of its water from the Authority, but maintains its own distribution and customer billing systems.

FACILITIES

The Shoremont and Webster Water Treatment Plants employ the direct filtration process using Lake Ontario as their source of supply. The main components of each plant are the raw water intake, pumping and transmission, chemical addition, rapid mixing, contact basins, filtration, residuals disposal, clearwell storage, and high lift pumping. The Authority also operates a small well supply to a plant in the Village of Corfu. With the exception of the Corfu plant, the entire water supply receives the same chemical process, coagulation, filtration, carbon absorption, and disinfection. The Corfu Water Plant uses carbon absorption, softening, and disinfection. Water is pumped from the treatment plants to storage facilities and customers in the water system service area through approximately 3,500 miles of transmission and distribution mains, ranging in diameter from 2-inch to 60-inch. The water system operates 49 pumping stations to provide the pressure to distribute water to storage facilities and customers. The system includes 2 reservoirs and 51 other storage facilities with an aggregate capacity of 140 million gallons. All service connections are metered, with the meters owned by the Authority.

As with most other water systems, our water usage also varies year to year depending on weather variations. Hot, dry summers tend to increase water usage, while colder and wetter summers tend to dampen or reduce water usage.

FINANCIAL HIGHLIGHTS

Water Authority Rates & Charges – The Authority sets its rates annually in concurrence with the adoption of its annual operating budget. The Authority is required by its Trust Indenture dated October 1, 1991 and Supplemental Indentures issued with and specific to each subsequent revenue bond issue (Trust Indentures) to set rates and fees sufficient to cover all its operating and capital expenses. The Authority raised rates in 2023 to achieve the projected revenues to cover total budgeted expenses.

Summary of Operating Revenues

	<u>2023</u>
Water Sales:	
Residential/Quarterly	\$ 68,745,585
Large Commercial/Monthly	7,306,289
Water Districts/Wholesale	<u>5,384,851</u>
Total Water Sales	81,436,725
Other Water and Operating Revenue	<u>5,922,888</u>
Total Operating Revenue	\$ 87,359,613

OPERATING EXPENSES

The Authority's expenses (excluding depreciation and amortization) are budgeted and tracked functionally by operating department. The Authority is functionally divided into: Administration; Production/Transmission; Engineering; Facilities, Fleet & Operations; and Finance & Business Services.

The following is a breakdown of the Authority's functional expenses by operating department (excluding depreciation and amortization):

Functional Expenses

	<u>2023</u>
Administration	\$ 3,963,220
Production/Transmission	15,610,961
Engineering	4,515,398
Facilities, Fleet & Operations	14,160,597
Finance & Business Services	<u>7,658,409</u>
Total Functional Expenses	<u>\$ 45,908,585</u>

LONG-TERM DEBT ADMINISTRATION

The Authority has six water revenue bond series outstanding totaling \$130,350,000 as of December 31, 2023.

CREDIT RATINGS

The Authority is the recipient of very favorable credit ratings from both Moody's and Standard & Poor's. The Authority has an Aa1 rating assigned to its revenue bonds by Moody's Investors Service and an AA+ rating by Standard & Poor's. The Authority's bond ratings were last reviewed by Moody's Investors Service and Standard & Poor's in March of 2020. The Authority issues revenue bonds subject to its master Trust Indenture dated October 1, 1991 and Supplemental Indentures issued with and specific to each subsequent revenue bond issue.

Monroe County Water Authority
2023 Water System Accomplishments / Projects

Below is a summary of improvements made to the Monroe County Water Authority (MCWA) water system in 2023. This list includes both completed and ongoing projects, but does not include all bids and procurements completed.

Water Mains

- ✓ Completed the construction of the River Meadow Drive Water Main Replacement Project. This project included the replacement of approximately 4,100 linear feet of 6-inch water main and approximately 90 water services on River Meadow Drive and Hazel Street in the Town of Henrietta.
- ✓ Completed the construction of the Fourth Section Road and Owens Road Main Replacements project. This project included the replacement of approximately 9,700 linear feet of water main and appurtenances, including approximately 60 water services, on Fourth Section Road and Owens Road in the Town of Sweden.
- ✓ Substantially completed the construction of the Van Voorhis Road Main Replacement project. This project included the replacement of approximately 5,500 linear feet of 8-inch water main and appurtenances, including approximately 30 water services, on Van Voorhis Road in the Town of Mendon and Ionia Road in the Town of Pittsford.
- ✓ Completed the design, easement acquisition, permitting and construction for the Flynn Road Water Main Replacement project. This project included the replacement of approximately 2,600 linear feet of 8-inch water main, 2,000 linear feet of 12-inch water main, 35 water services, and appurtenances on Flynn Road in the Town of Greece.
- ✓ Completed the design, permitting, easement acquisition, and construction of the Brace Road, Lyndon Road and Orchard Street Water Main Replacement Project. This project consisted of the replacement of 1,820 linear feet of 6-inch water main, 5,520 linear feet of 8-inch water main, 262 linear feet of 12-inch water main, 82 water services and appurtenances on Brace Road in the Town of Victor, Lyndon Road (County Road 44) in the Town of Perinton, and on Orchard Street in the Village of Webster.
- ✓ Completed the design, bid and commenced with construction for the Rochester Street, Scottsville-West Henrietta Road and Stuart Road Water Main Replacement project. This project includes the replacement of approximately 3,315 linear feet of 6-inch water main, 1,020 linear feet of 8-inch water main, and appurtenances on Rochester Street, Scottsville-West Henrietta Road, and Stuart Road in the Town of Chili and the Village of Scottsville.
- ✓ Completed the design, permitting, procurement of materials, and construction of the of the 30-inch butterfly valve on the 48-inch transmission main located at the intersection of Dewey Avenue and the Lake Ontario State Parkway in the Town of Greece.
- ✓ Completed design, permitting, and easement acquisition for the Golden Road Main Replacement project. This project includes the replacement of approximately 2,000 linear feet of 6-inch ductile iron water main and appurtenances on Golden Road in the Town of Chili. Construction for this project is scheduled for 2024.

- ✓ Completed the design, easement acquisition, permitting, and substantially completed construction for the Kings Highway Main Replacement project. This project includes the replacement of approximately 2,300 linear feet of 6-inch and 8-inch water main, 28 water services, and appurtenances on Kings Highway in the Town of Irondequoit.
- ✓ Completed the design, easement acquisition, permitting, and commenced with construction for the North Union Street Main Replacement project. This project includes the replacement of approximately 2,500 linear feet of 12-inch, 8-inch, and 6-inch water main and appurtenances on North Union Street (NYS Route 259) in the Town of Ogden and the Village of Spencerport.
- ✓ Completed the design, permitting and easement acquisition for the S. Landing Road and Penfield Road Water Main Connections project. This project includes the abandonment of a section of 12-inch water main in the existing railroad right-of-way near S. Landing Road in the Town of Penfield and the installation of approximately 1,100 linear feet of 6-inch and 8-inch water main and appurtenances. The work for this project is scheduled to be completed in 2024.
- ✓ Completed the design, permitting and construction for the Warsaw Road Main Replacement project. This project included the replacement of approximately 195 linear feet of 12-inch water main and appurtenances on Warsaw Road in the Town of LeRoy.
- ✓ Completed the design, easement acquisition, and bid the Paul Road Main Replacement project. This project includes the replacement of approximately 9,400 linear feet of 8-inch water main replacement on Paul Road in the Town of Chili. Work for this project is scheduled to be completed in 2024.
- ✓ Completed the design and commenced with permitting for the Oatka Creek Crossing project. This project includes the replacement of approximately 395 linear feet of 8-inch water main that crosses Oatka Creek on Wheatland Center Road in the Town of Wheatland.
- ✓ Completed the design, permitting, and construction for the Landing Road Pipe Bridge repairs. This project included the emergency replacement of 16 hanger assemblies supporting the existing 8-inch insulated ductile iron water main suspended from the South Landing Road bridge over NYS I-490 in the Town of Brighton.
- ✓ Developed contract documents, bid and awarded the 2023 Vacuum Excavation Contract. This project included the vacuum excavation of approximately 2,000 water services to identify the water service material as required to update the water service material inventory for compliance with current and pending regulatory requirements.
- ✓ Designed the East Manitou Road Main Replacement project. This project includes the replacement of approximately 10,730 linear feet of 8-inch water main on East Manitou Road in the Town of Greece. Construction for this project is anticipated to commence in 2024.
- ✓ Designed the Frisbee Hill Road Main Replacement project. This project includes the installation of approximately 4,650 linear feet of 8-inch water main and appurtenances on Frisbee Hill Road in the Town of Greece. Construction for this project is anticipated to commence in 2024.
- ✓ Designed the Glen Iris and Colonnade Main Replacement project. This project includes the replacement of approximately 4,660 linear feet of 6-inch and 8-inch water main on Glen Iris Drive and Colonnade Drive in the Town of Henrietta. Work for this project is anticipated for 2024.

- ✓ Completed the construction of the Ontario Street water main replacement project. This project included the replacement of approximately 1,530 linear feet of 6-inch and 90 linear feet of 8-inch water main and appurtenances on Ontario Street and East Walnut Street in the Town / Village of East Rochester.

Water Storage Facilities

- ✓ Designed, bid and commenced with the construction of the 2023 Water Storage Tank painting and rehabilitation contract. This project includes the rehabilitation and painting of the Shoremont Water Treatment Plant Backwash Tank, which is a 600,000 gallon welded steel standpipe tank, located in the Town of Greece. The work for this tank is scheduled to be completed in the spring of 2024. The project also includes the rehabilitation and coating of the Gloria Drive water storage tank which is a 1,050,000 gallon welded steel standpipe tank, located on Gloria Drive in the Town of Penfield. The work for this tank is substantially completed.
- ✓ Completed the coating and rehabilitation of the Lee Road East water storage tank. This project included repairing and rehabilitating the 5 million gallon welded steel water storage tank and installing a new interior and exterior coating system on the tank.
- ✓ Developed Contract Documents, bid and substantially completed the construction of the Pavilion Water Storage Tank Demolition Contract. This project included the demolition of the 320,000 gallon welded steel, standpipe water storage tank located on Big Tree Road in the Town of Pavilion.
- ✓ Completed design, permitting, bid and award for the 2024 Tank Rehabilitation project. This project includes the rehabilitation and coating of the West Webster water storage tank which is a 1 million gallon welded steel, standpipe water storage tank in the Town of Webster. This work for this tank is scheduled to be completed in 2024.
- ✓ Completed the design, permitting, bid and award of the Walker Road Water Storage Tank project. This project includes the construction of a new 1.63 million gallon precast, prestressed concrete water storage tank including site and piping improvements on Walker Road in the Town of Pavilion. The majority of the work for this project is scheduled to be completed in 2024.
- ✓ Developed Contract Documents, bid and awarded the Membrane Cover Repair Contract. This contract will be used to perform maintenance and make repairs to the membrane covers on the Southeast Reservoir in the Town of Pittsford and the Parrish Reservoir in the Town of Mendon.
- ✓ Cleaned and inspected the following water storage facilities:
 - Boughton Hill Tank (2 yr warranty cleaning and repairs)
 - Cobblestone Tank (2 yr warranty cleaning and repairs)
 - Corfu Tank
 - Darien Tank
 - Douglas Tank
 - East Lake Road Tank
 - Eastview Tank
 - Harek Tank
 - Harris Hill Tank
 - Hilton Tank (Contractor Cleaning)
 - Loud Road Tank
 - Pembroke Tank
 - State Road Tank

- Temperance Hill East
- Webster Water Treatment Plant North Clearwell
- Webster Water Treatment Plant South Clearwell

Water Districts

At the request of Towns in the MCWA service area, we assist with their implementation of water district projects. In 2023 we:

- Provided support for the following completed and activated water district projects:

• Henrietta – Middle Road Water District	3,750 lf	10 services
• Bergen - Water Improvement Benefits Area #1 – Contract B	<u>68,100 lf</u>	<u>144 services</u>
Total:	71,850 lf	154 services

- Provided support for the following water district projects currently in construction:

• Byron - Water Improvement Benefits Area #1	150,000 lf	224 services
• Stafford – Water District #12	<u>28,450 lf</u>	<u>78 services</u>
Total	178,450 lf	302 services

- Provided review comments for the following water district projects currently in design phase:

• Clarkson – Water Improvement Benefits Area #1	<u>69,500 lf</u>	<u>178 services</u>
Total:	69,500 lf	178 services

- Provided preliminary comments for the following proposed water district projects:

• LeRoy – Water District #12	<u>173,000 lf</u>	<u>356 services</u>
Totals:	173,000 lf	356 services

Developer Main Extensions (DME's) and New Services

- Generated 26 Main Extension Agreements (MEA), and 20 were executed. Generated 14 WSIA and 13 were executed. Placed 27 projects in service this year compared to 41 in 2021/2022.
- Processed 55 initial and 54 revised DME application submissions this year compared to 49 initial and 53 revised in 2021/2022. Of the 55 DME initial application reviews, 17 were installed under a Water Service Installation Agreement (WSIA).

New Service Program

- Coordinated the creation of 711 new 1-inch service accounts:
 - 356 from DMEs,
 - 145 from water districts,
 - 40 from secondary source change-overs,
 - 143 from new construction.
 - 27 other projects.

Booster Pump Stations

- ✓ Completed construction of Emergency Pump Connections at the Riga Booster Pumping Station (BPS) in the Town of Riga and the Morgan Road BPS in the Town of Chili. The emergency pump connection will be used to maintain pumping capacity when needed during emergencies or if the BPSs are off-line.

- ✓ Completed design and bidding and commenced with construction of a pump replacement project at the East Henrietta BPS in the Town of Henrietta. This project consists of replacement of Pump Nos. 1 and 2, rehabilitation of the motor for Pump No. 2, installation of new 12-inch discharge isolation butterfly valves, and modifications to existing piping at the station.
- ✓ Initiated planning and design of an improvements project at the Industrial Street BPS in the City of Rochester. This project consists of replacement of Pump No. 1 and its variable frequency drive (VFD) with a new 350 horsepower (hp) pump and VFD, replacement of existing pump suction and discharge piping and valves, replacement of the existing bypass piping valve, and other associated improvements to reverse the direction of flow through the BPS.
- ✓ Assisted Genesee County's consulting engineer with completion of construction of the new Golden Road BPS in the Town of Chili, which is a component of the Genesee County Phase 2 Water Supply project to increase supply to Genesee County. Startup of the new BPS is anticipated in spring 2024.
- ✓ Assisted Genesee County's consulting engineer with completion of design and bidding, and initiation of construction of improvements to the North Road BPS, Morgan Road BPS, Riga BPS, and Scottsville BPS, which is a component of the Genesee County Phase 2 Water Supply project to increase supply to Genesee County.
- ✓ Completed rehabilitation of motors, bases, and concrete foundations for Pump Nos. 1 and 2, and installed a new 50 hp VFD at the LaSalle Parkway BPS.
- ✓ Completed replacement of the existing 250 hp VFDs for Pump Nos. 3 and 4 at the North Road BPS.
- ✓ Completed rehabilitation of the 250 hp motors for Pump Nos. 3 and 4 at the North Road BPS.
- ✓ Completed rehabilitation of the 250 hp Pump No. 4 at the North Road BPS including replacement of pump bearings, seals, and shaft sleeves.
- ✓ Completed installation of a new 75 hp VFD for Pump No. 2 at the Harris Road BPS.
- ✓ Completed installation of a new 40 hp VFD for Pump No. 3 at the Pavilion BPS.
- ✓ Completed rehabilitation of Pump No. 3 at the Moseley Road BPS including replacement of pump bearings, seals, and shaft sleeves.
- ✓ Initiated design and purchase of equipment and materials for improvements to the Pavilion BPS.
- ✓ Purchased a new 500 hp, 480-volt motor and VFD for Pump No. 2 at the Lee Road BPS. Installation is anticipated to be completed in 2024.
- ✓ Completed preventative maintenance inspection and testing on the medium voltage electrical equipment at the Mount Read BPS.
- ✓ Coordinated with Rochester Gas and Electric to replace the existing buried natural gas service piping to the Lee Road BPS.

Treatment Plants

Shoremont Water Treatment Plant

- ✓ Completed construction of the West 1 Plant Improvements – Phase 2 project that consisted of rehabilitation of Filter Nos. 9 through 12 including replacement of the underdrain, backwash water troughs, surface wash system, filter media, and associated appurtenances.
- ✓ Completed design of the West 1 Plant Improvements – Phase 3 project that consists of improvements to Filter Nos. 9 through 12 including replacement of valves and actuators, replacement of effluent rate of flow controllers, installation of filter-to-waste piping, electrical improvements, and other associated improvements. Construction is anticipated to be completed in spring 2025.
- ✓ Completed construction of the 2023 GAC Replacement – East Filters Phase 2 project that consisted of replacement of the granular activated carbon (GAC) media in Filter Nos. 1, 3, 5, and 7.
- ✓ Completed design and bidding of the GAC Replacement – West 2 Filters project that will consist of replacement of the GAC media in Filter Nos. 13 through 16. Construction is anticipated to be completed in late summer 2024.
- ✓ Completed rehabilitation of the post-filtration sodium hypochlorite disinfection storage and feed system for the East, West 1, and West 2 Plants.
- ✓ Completed replacement of the existing 24-inch Backwash PRV System isolation gate valve.
- ✓ Completed replacement and upgrade of the programmable logic controllers (PLCs) for West 2 Plant Filter Nos. 13 through 16.
- ✓ Continued with planning and procurement of materials and equipment for replacement and upgrade of the PLCs for the East and West 1 plants Filter Nos. 1 through 12.
- ✓ Initiated evaluation of the Fluoride Chemical Storage and Feed System.
- ✓ Completed preventative maintenance inspection and testing on the medium voltage electrical equipment at the Low Lift Pump Station.
- ✓ Coordinated with Rochester Gas and Electric to replace the existing buried natural gas service piping.

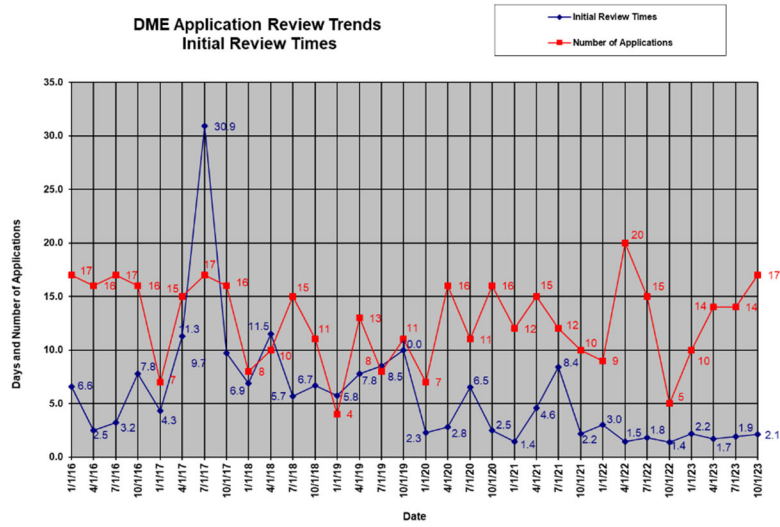
Webster Water Treatment Plant

- ✓ Initiated rehabilitation of the Sodium Permanganate Chemical Feed System equipment at the Lake Water Pump Station.
- ✓ Initiated evaluation of the Fluoride Chemical Storage and Feed system.
- ✓ Initiated planning for upgrade of the Emergency Disinfection Gaseous Chlorine Feed System including conversion to an all vacuum system and installation of a new dry-type scrubber.
- ✓ Initiated planning for replacement of the electrical conduit in the Filter Gallery.

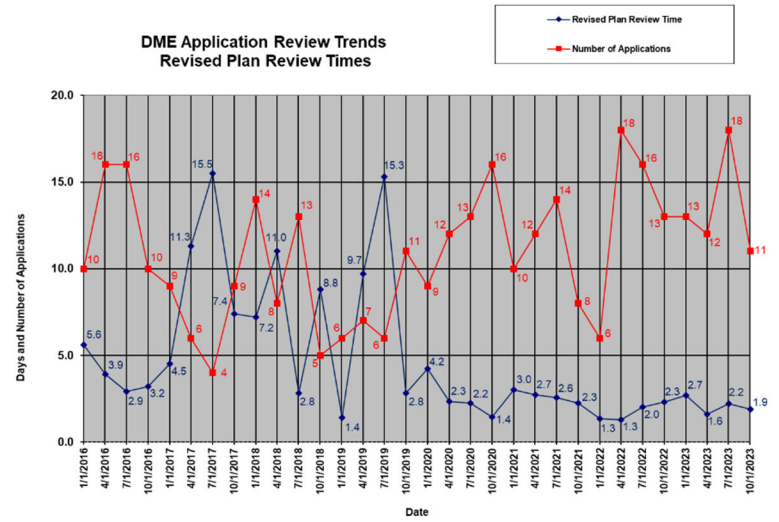
Other Facilities

- ✓ Initiated construction of lead pipe loop testing facilities at the Wisconsin Street building (former BPS and storage facility) to support a distribution system joint corrosion control treatment study with the City of Rochester Water Bureau.
- ✓ Completed replacement and upgrade of electrical distribution panel PP-1 at the East Side Operations Center.
- ✓ Designed, bid and substantially completed the construction for the 2023 Roof Replacement project. This project included the replacement of approximately 8,500 square feet of asphalt shingle roofing system at the Brockport Water Treatment Plant in the Town of Hamlin and the replacement of approximately 2,300 square feet of asphalt shingle roofing system at Scribner Road Pump Station in the Town of Penfield.
- ✓ Substantially completed the construction of the 2022 Roof Rehabilitation project. This project included the replacement of 1,650 square feet of modified bituminous built-up roofing system at the Low Lift Pump Station Number 2 in the Town of Greece and the removal of existing asphalt shingle roof and installation of 1,150 square feet of standing seam metal roofing system on the Shetler Road Pump Station in the Town of Richmond.

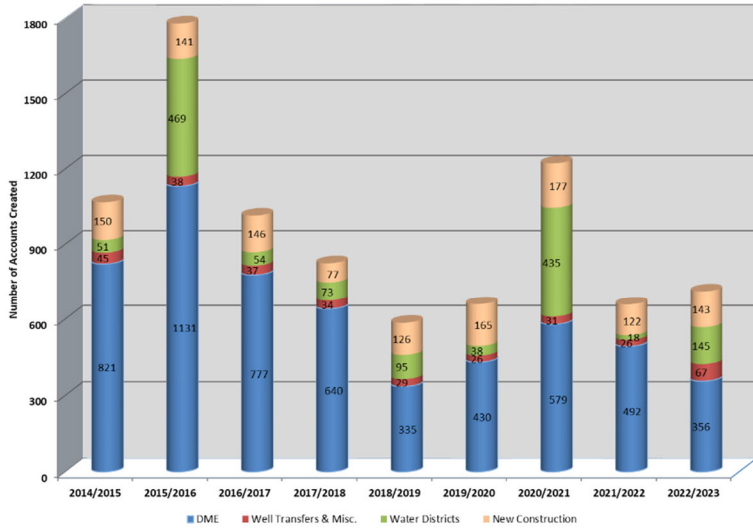
**DME Application Review Trends
Initial Review Times**



**DME Application Review Trends
Revised Plan Review Times**



CIS Account Creation



Total Number of New Service Accounts

